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GREEK ASTROLOGY

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Translated with Additional Notes,
Extended Bibliography, New Index
and Short Biography of Bouche-Leclercq

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Preface

This book began as a chapter of my *Histoire de la Divination dans l'Antiquité*, revised and improved, within the limits of time and place (inevitably a little uncertain) which define classical "antiquity." The subject has long stimulated a lively curiosity in me. However, in a general study on the methods of divination, I was not able to discuss its developments in more detail than I gave to other methods. I was not able to go to the heart of this selva oscura. I contented myself with an overview and with clarifying some practices provisionally. A new burst of curiosity brought me back after about twenty years. I had the firm goal of finally uncovering this strange association – unique in the history of humanity – of scientific reasoning and hidden faith. I had the hope of grasping the basic ideas which supported the whole, and of noting the stages through which a fierce logic pursued the secrets of the future.

I have not changed my methods at all, neither in research nor in explanation. It consists, for research, of returning as close to the sources as possible. I hope to recover the state of mind in which what later seems unintelligible or foolish is seen to be the product of simple reasoning, perfectly intelligible. For explanation, it consists of retracing the road already used. Let me say that I have been encouraged to persevere here by the statements which I have been able to make earlier. I have followed, not very closely, but with sufficient attention, sporadic inquiries into folklore. I have never encountered any fact about divinatory practices, any usage, however bizarre it might be, which could not re-enter easily into the framework which I have traced for Greco-Roman divination, and not find there its explanation. The human mind is always the same. One can say this more easily of questions of faith, where it works with a very small number of ideas, than for other questions. It does not create mystery voluntarily. It encounters mystery in the course of metaphysical speculations, from the inability to comprehend the infinite. However, on this side of the boundary, there is no mystery which has not forgotten its intellectual genesis, the more or less sinuous route by which this or that practice or belief issued logically from earlier beliefs or practices. Superstitions are survivals whose reasons for being we no longer understand, but which were in their times (which can often be rediscovered) very reasonable. What is true of superstition in general, is all the more reasonable for astrology. It tried to attach itself in some fashion to the exact sciences, to "mathematics," the most adventurous acts of the human imagination. Astrology, now dead – I believe that it is, in spite of tentative efforts recently made to revive it – has been treated with a disdain which no one would show for questions of infinitely less historical importance. One may say that it was misrepresented because of the trouble it had caused its adversaries at other times, to those who, not knowing how to refute it, began to hate it. Letronne, suspecting some "astrological ideas" in the details of the zodiac of Esneh. He judged that "this distinctive feature had some connection with astrology which hardly justified the trouble it would take to discover it." He stated that, once deprived "of the purely astronomical character which one had thought in them," these zodiacs "were no more than the expression of absurd reveries, and the still lively proof of those weaknesses which have most dishonored the human spirit." He leads us to think that he would have "the courage to go through the books of ancient astrology." He lost patience, however, before he was able to divine the enigmas of these zodiacs. "We are no longer able to do so," he says, "and we will not be able to do so for a long time. It is even doubtful that anyone will undertake a project whose results would have so little future scientific usefulness." The prediction is brave and the motive, admirable. If by scientific usefulness Letronne means practical usefulness, it is necessary to reject completely all those fields of study which occupy nine tenths of scholars and which interest few if any of the rest of humanity, beginning with his own work. Does he recognize a scientific usefulness in all which increases our knowledge of reality, of what is or has been? If so, does he pretend to separate, as unreal, intellectual and psychological facts, ideas, beliefs, systems? They provoke action by means of thought, which has engendered facts. In a certain sense thoughts are more real than the facts themselves.

I state willingly, and even with pleasure, that few people today care about astrology. If it is still living and active in the Eastern countries, in our own, it belongs to the past and interests only historians. This is no reason for them to be uninterested. One may have long believed and believe still that divination in general and astrology in particular have taken little place in history. No doubt, one may say that the oracles and the predictions of diviners intervene at all times to provoke or impede, to

hasten or delay the gravest actions. One may assume, however, that they were, for heads of state or commanders of armies, more pretexts than reasons. They were easy ways of using the credulity of the masses, and that affairs would have turned out the same, more or less, without their intervention. This is a point of view which may have seemed rational to the philosophes of the eighteenth century, but which has become, as we say today, *passé*. It is especially false when applied to astrology, which never had much effect on the masses. However, thanks to its scientific prestige, to the implacable rigidity of its calculations, it had all which was needed to become a faith for their rulers. Astrology realized, from time to time, the dream of the doctrinaire Platonists and Stoics. It took in hand (sometimes) those great levers which are the minds of kings. Who knows how many plans, effecting millions of people, which it has hindered or favored? When it effected the thoughts of an Augustus, a Tiberias, a Charles V, a Catherine de Medici, a Wallenstein or a Richelieu? The historians ought, in my view, to research more carefully than they have before now the traces of this impact. They ought not to persuade themselves facilely that it had a negligible effect. They need not go very far to encounter, in the week, the indelible trace of an astrological idea incorporated in the religions based upon Judaism.

In any case, the study of astrology and of its history interests, in the first place, those who seek to know humanity, in analyzing its collective works. It deals with the most spontaneous and most active of its faculties, the faculty of belief, and to create reasons for belief. Letronne silenced the religious polemic sustained by the false antiquity of the Egyptian zodiacs. Afterward, he declared that from now on, reduced to astrology, the subject no longer offered "any truly philosophical goal for research." I do not know just what he meant by philosophy. However, but I avow forthrightly that the history of astrology – i.e., of the formation of its doctrines – seems to me, in many respects, the great portal to the history of astronomy. They are intimately mixed. It is not, or it is not solely, because astrology has conserved the conquests of astronomical science. Nevertheless it did so during the centuries when astronomy was at risk of being forsaken, even forgotten, by appropriating its calculations as a base. It was not only because, among adventurous speculations, it posed questions of physics and celestial mechanics, by pretending to have resolved them, to which they were not led by the pure geometry of Greek astronomy. I want to speak of its real originality, of the association and reciprocal penetration of heterogeneous elements. I want to write of a faith which speaks the language of a science, and of a science which could find only in a faith the justification of its principles. It is fascinating that someone as intelligent as Ptolemy "believed" that one could "know" exactly what the temperament of Saturn was, for example. Moreover, he thought one could discover by observation the part which came from Saturn's influence, in the complexity of physical, intellectual, and moral aptitudes of beings alive on the earth. He also believed that Saturn's influence was itself collected and delivered all at once, the way an image is stamped onto a coin blank. Ptolemy somehow was able to think this view was not religion but based on experience. Yet he himself knew and taught how large the number of facts in each horoscope were. He knew how rarely, as a result, that observation of analogous cases served as a basis for a legitimate induction. That such a man could believe all these things – this is marvelous and shines a light, it seems to me, in a choice example, into the depths of the human soul.

In the faith of this savant who believed in order to know, one easily discovers that eternal desire, the need to believe what one wishes to be true. However, what people covet even more strongly, pursue more obstinately, is knowledge of the future, both in this life and in the next. Foreknowledge of the next life is the realm of religions, while of the present life it belongs to divination. Other methods more or less erase the line of demarcation. They do not pretend to find out the lot of individuals after death. They openly support religious faith, by demanding messages from the gods, and not just from the gods. By means of dreams and necromancy, they get messages from the dead as well. In short, all methods of divination other than astrology, are "divine" revelations, extensions of human intelligence. Astrology alone equivocated. It hypocritically separated itself more and more from the religious ideas which begot it, in wishing not to "divine" but to "foresee." It took its life force from the most convenient place, the leader of the natural sciences, astronomy. The reason astrology seduced so many cultivated minds was that it pretended to be a scientific form of divination. It substituted forecasts based upon knowledge of the laws of nature for revelation, and boldly called these forecasts a mathematical certainty. However, despite its pretensions, it remained a faith. Even without analyzing it closely, it may be seen as such. First of all, it was religious in its stubborn and victorious resistance to the assaults of logic and last of all, in the means which it used to propagate

itself.

I have just spoken of hypocrisy, but weakly and I apply it only to astrology as a collective work, not to individual astrologers. I weaken it more by saying unconsciously, constitutionally, hypocritical. Nevertheless, I do not want to press respect too far and violate my own honesty in turn. More than once, not only have I been forced to declare inept those fantasies which do too much violence to common sense. Indeed, I have felt I had to call my astrologers charlatans. I do not wish to extend this epithet to all astrologers. To the contrary, I am convinced that those beliefs later judged to be the most irrational were, in their own time, very worthy of belief, and nearly demonstrable according to current ideas. Save for several bursts of impatience I have been harsh only to the creators of the apocryphal books, who were the founders and anonymous apostles of astrology. Firmicus, the true believer, has suffered a little from my anger. I know perfectly well that I am guilty of anachronism when I judge them according to scruples which they did not have. I know that one could see the practice as no more than a standard literary pose. One could excuse them for their zeal, or even praise their modesty. However, I just feel incapable of indulging these frauds, even when they thought they were working in a good cause. Those who disguise themselves as Enoch or Daniel, Apollo or Sibyl, Nechepso and Petosiris, always hide a villainous action under their mask, it seems to me.

In any case, I think the time has come to distinguish the cause served by such means from the cause of science. It is time to show how, under its scientific clothing, astrology remained a religion. Now that everyone in the world is trying (and always with great incompetence) to define science and religion, whether to treat them as twin sisters or opponents, it is good to retain this exterior criterion. One does not forge evidence save to prove what one cannot demonstrate, and what one cannot demonstrate is not science.

However, it is enough to try to understand the sort of interest which I have found in divination. It is a domain which, within the limits indicated above, I believe I have gone through completely. I have not seen it as an exercise in pure erudition. It is also and especially an occasion to meditate upon the problems which is the honor and the torment of our species to care about. It is perhaps a dull chore to count the historical threads and points of attachment of the cobwebs hanging in front of the great illusions in which winged imaginations, avid for supernatural light, get caught. It is not a labor without compensations, however. One may speak of the enigmatic καθάρσις of Aristotle, of the "purification" or peace produced in the soul by tragedy, according to the philosopher. Likewise, one may speak of another spectacle, also tragic. It is the long effort made, in vain, by human intelligence to go far beyond its limits, encouraging the desire to know the unknowable. It does more. It gives us in exchange the certainty that, what we cannot know, we do not know. Moreover, we are not obliged to know. It is this certitude, and not, as Montaigne says, "ignorance and uncertainty," which it is "a sweet and weak pillow upon which to rest a well-made head."

I have tried to base this synthesis upon patient analysis. For astrology in particular, this led to the distinction of two general methods. They were concurrent and, in certain respects, incompatible. Besides my general synthesis, there is room for detailed studies which will be aided, it pleases me to hope, by this overview. Their first result – which I applaud in advance – will be to rectify the mistakes which I have made. In the end, they will open new sources of information. Large numbers of astrological manuscripts still sleep in the libraries. The Greek texts which I have used were printed in the sixteenth century. They have a great need of revision by our philologists. The latter are beginning, moreover, to bring their attention to this subject, and I will be happy to contribute to bringing it here. Beyond the Greco-Roman or Occidental world is the Arab world, refuge of astrology in the Middle Ages. Farther beyond is India and the Far East. This is a vast field for enquiry, which I do not despair that the Orientalists will engage with, in their turn. They will tell us if it had been planted by Greek propaganda, which is beyond doubt for the Arabs. Or they will tell us if these peoples had submitted directly, like Greece itself, to the influence of Mesopotamia. They will even have the pleasure of adding to the work of erudition the study of an astrology still living. They may at least study an astrology still surviving in old habits turned into ceremonial. One thing has so far, I suppose, repelled their curiosity or prevented its birth. It is that a book of astrology is a veritable grimoire for one who does not know the meanings of the technical terms and the theories represented by this vocabulary. I have good reason to think Oriental astrology fed from the same basic ideas and practices as Greek astrology. I will perhaps encourage them to grapple with its arcana, in short, to explain more easily the enigmas and incoherent metaphors of the Vedas.

This they can only do if they avoid the singular idea that this sort of research offers no scholarly interest. This is bequeathed by a rather recent tradition and is playing with words.

A *compte-rendu* of the Académie des Sciences recorded the shipment of an engraved marble called the Bianchini Planisphere. It stated that the interpretation of this astrological document was hardly within the competence of the Academy. The reporter said maliciously, "It is not as if the history of human folly were not a large part of knowledge, and unfortunately much of what we know may be reduced to it; but the Academy has better things to do." Fontenelle thought so, no doubt, in writing these lines, in his *Histoire des oracles*. However, it is not as an affectation of modesty that he puts science above "knowledge" in another place. Each to his own taste. The men of science, in the strict sense of the word, those who study nature, have better, i.e., other, things to do than study history, in which all the rest of "knowledge" is rooted. Still, let us look at one who has passed the limits of scientific usefulness traced by Fontenelle, to the great benefit of all. I speak of the creator of thermochemistry, the man whose works have opened a new road for the study of Nature, M. Berthelot. He has found time to occupy himself studying the history of alchemy, which meets at many points, and often mirrors, the history of astrology.

One should not take my conclusion for a paradox. One does not waste his time who studies how others have wasted theirs.

Signs and Abbreviations

I renounce any encroachment upon the domain of the paleographers in giving here the various forms of the astrological symbols. So often in the manuscripts they replace the names of the signs, the planets, and the "lots." The same is true for the abbreviations and ligatures which represent the names of the four "centers" of the zodiac. The use of this sort of stenography is the main cause for alterations in the texts. It seems useless to discourse upon the little-known origin of these signs. They were fabricated, like the Egyptian hieroglyphs, by simplifying the drawings of the zodiacal images or the attributes of the planets. For the latter, I am content to volunteer the current explanation, which assimilates ♄ to the sickle of Saturn, ♃ to the first letter of the names of Zeus or to a symbol of the lightning bolt. ♀, ♂, and ♁ are assimilated to disks, one traversed by the lance of Mars, the second equipped with a handle, the third with the caduceus of Mercury on top. I give below the signs and abbreviations used in this work.

SIGNS OF THE ZODIAC

- ♈ Aries the Ram (Κριός - *Aries*)
- ♉ Taurus the Bull (Ταύροος - *Taurus*)
- ♊ Gemini the Twins (Δίδυμοι - *Gemini*)
- ♋ Cancer the Crab (Καρκίνος - *Cancer*)
- ♌ Leo the Lion (Λέων - *Leo*)
- ♍ Virgo the Virgin (Παρθένος - *Virgo*)
- ♎ Libra the Scales (Χηλαί - Ζυγός) - *Libra*
- ♏ Scorpio the Scorpion (Σκόρπιος - *Scorpius*)
- ♐ Sagittarius the Archer (Τοξότης - *Sagittarius*)
- ♑ Capricorn the Goat (Αιγόκερων - *Capricornus*)
- ♒ Aquarius the Waterbearer (Ύδροχοος - *Aquarius*)
- ♓ Pisces the Fishes (Ιχθυες - *Pisces*)

PLANETS

Luminaries (τὰ φῶτα)

- ☉ Sun (ἥλιος - *Sol*)
- ☾ Moon (Σελήνη - *Luna*)

Planets proper

- ♄ Saturn (Φαίνων - Κρόνος - *Saturnus*)
- ♃ Jupiter (Φαέθον - Ζεύς - *Jupiter*)
- ♂ Mars (Πυρόεις - Ἄρης - *Mars*)
- ♀ Venus (Φωσπόρος - Ἐωσπόρος - Ἑσπερος - Ἀφροδίτη - *Venus*)
- ☿ Mercury (Στίλβων - Ἑρμῆς - *Mercurius*)

OTHER SIGNS OR ABBREVIATIONS

Hor. – Horoscope or Ascendant (Ὠροοσκόπος – Ὠροοσκόπος - Ὠροσκόπος or Ὠροονομος
[Ὠρα or μοῖρα] - ἀνατολή - *ascendants*)

Occ. – Occident (δύσις - *occidens*) [Descendant].

MC. – Superior culmination, passage to the meridian (μεσουράνημα - *medium caelum*) [Midheaven, Medium Coeli]

IMC. – Inferior culmination (ἀντμεσουράνημα - *imum medium caelum*) [IC, Imum Coeli]

♈ – Ascending node of the lunar orbit (ἀναβιβάζων) or Head of the Dragon (*Caput draconis*) [North node].

♏ – Descending node of the lunar orbit (καταβιβάζων) or Tail of the Dragon (*Cauda draconis*) [South node].

⊕ – Lot of Fortune [Fortuna].

[The glossary to Neugebauer and van Hoesen gives glyphs for other "lots." LJN]

The signs of the aspects are found only in the figures to which they relate, as well as the "Lot of Genius." For the various forms of the signs mentioned above and for the paleographic abbreviations, see the photographic facsimile of "Abbreviations grecques copiées par Ange Politien," by H. Omont (*Revue des Études grecques*, VII [1894], p. 81-88). The signs for the "nodes" in it are the reverse of those given above. They indicate the hemisphere which the star at the node is leaving, rather than the one it is entering. Usage varies upon this point, leading to confusion. Until the paleographers make a decision, I will follow the usage of the Bureau of Longitude. As for the figures in the text, they come neither from the manuscripts nor what one may call the pictorial monuments, save figure 42, the Lion of Commagene.^{***} They are schematics meant to illustrate the text and – save for the zodiac figures taken from Flamsteed's *Atlas Coelestia* (cf. p. 130, 1) – I am entirely responsible for them. I had them engraved to my own taste and I am very happy to be freed by zincography from any other intermediary transcription.

The abundance of notes will not, I hope, frighten anyone, save readers for whom the book is not meant. At first, one thinks those books willfully indigestible whose authors have taken pains to sort their materials and reject from the beginning the didactic explanation of citations, remarks, discussions and accessory considerations, to keep at once their precision and their evidence. The Index permits one to rediscover ideas and facts buried in the foundations of the building, for the use of those who wish to judge its solidity for themselves. As for the plan, I have renounced logical divisions and subdivisions, books, parts, sections, etc. Out of an excessive concern for clarity, they miss the target. The reader will distinguish easily, without such instruction, the Prolegomena (chapters 1-3), Astrology proper or the description of celestial mechanics (ch. 4-11) Apotelesmatica or astrological fortune-telling (ch. 11-15) and the historical Epilogue (ch. 16).²

I have the pleasure, as I lay down my pen, of thanking those who have readily and many times guided my research the Conservateur de la Bibliothèque de l'Université, M. J. de Chantpie, who has given me more than one bit of good advice, and M. Ém. Chatelain, who, at the library of the École des Hautes-Études, has done the same.

^{***} In the original French text figure 24 is followed by 24 bis, [24 again], this has been renumbered 25 in this text and the normal sequence follows. The Lion of Commagene is therefore figure 42. Some of the illustrations still carry a small number left from the original. KM.

Chapter One

The Precursors

Astrology was an Eastern religion, which, transplanted to Greece, a land of "scientists" and rationalists, took on the allure of science. Intelligible as a religion, it was stamped by astronomy with principles, measurements, arithmetical and geometric speculations, also intelligible. However, they were the products of pure reason and not just the complex mixture of feelings and ideas, which are the usual logic of religion. Using both methods of reasoning resulted in a bastard combination, fundamentally illogical, but using a special logic. It invented demonstrations similar to those of science, but using imaginary axioms based upon religion.

This combination, which one would think unstable, proved, in fact, to be very strong. It was flexible enough to adapt itself to all surrounding beliefs, flattering religious sentiment and attracting atheists even more strongly. Astrology may not have been accessible to the ordinary person, who was not able to comprehend even its most basic facts, and thus it was deprived of the support of the masses. Attacked as science, proscribed as divination or even as magic, anathematized as religion or as the negation of religion, astrology resisted all arguments, all edicts, all anathemas. It even managed to make a come-back in the Renaissance, accommodating (the final proof of flexibility) modern beliefs, when the earth literally escaped. The movement of the earth, which reduced it to the status of a planet, was a shock to the framework of astrology. Only astronomy was left standing, turning the servant into the mistress.

It was in Greece that the Ancient Near Eastern soul of astrology supplied itself with the instruments of persuasion, impregnated itself with philosophy, and armored itself with mathematics. It was from there that astrology began its trip through the Greco-Roman world, a marvel to some, a scandal to others, but a preoccupation to intellectuals. It used the most diverse epithets and was complex enough to deserve them all. It was ready to mingle with all the sciences, to invade all religions, everywhere planting illusions which long seemed incurable.

It took no more than a century to turn Near Eastern astrology into Greek astrology. The first was infused into the second, but kept, as a mark of its origin, the name "Chaldaean" or "Egyptian." Mesopotamian astrology was introduced to the Greek world by the Babylonian priest Berossos, at the beginning of the third century BCE. It found the ground already prepared by a series of precursors. Astrology took root in a seed-bed of pre-existing intellectual debris, doctrines and systems. Powerless to create a scientific world-view, they served well enough to teach certain general principles. They were the necessary substrata for a demonstration of a sort of common sense evidence, vague enough to serve as a medium connecting the more incoherent parts of astrology disguised as a science. These principles, in the long run, led to two which contained all the others the essential unity of the universe, and the mutual dependence of all its parts.

The astrologers were identical with the philosophers. It is useless to waste time saying there is no trace of astrology in Homer, and it is not yet possible to say whether or not Hesiod's calendar of lucky and unlucky days includes sidereal influences. We think it useless, too, to ask the questions whether the early philosophers used Near Eastern traditions, what sources they used, or which ones circulated from this to that author. These questions cannot be answered at present.

The Physicists

Little is known of Thales. His name, like that of other ancestors of science or faith, served as a label for those who wrote apocryphal writings³ and stupid legends. These people did not hesitate to go back to the most remote sources and claim that Thales had been a disciple of the Egyptians and of the Chaldaeans (Mesopotamians). Aristotle does not seem to have more than an uncertain tradition about Thales' doctrines. Later, people cited a very large number of works from the Milesian philosopher. He became the father of science in general, mathematician, geometer, astronomer and astrologer (synonymous terms for a long time).⁴ He was able to predict a solar eclipse and to explain it. It is the commentators and those writers who dealt with many subjects in the late era who invoke his name most frequently and who analyze his opinions in the greatest detail.⁵ The only proposition

which one may attribute with any assurance is that "All is water,"⁶ or that only water is transformed by its own, immanent, vitality. "All" includes the stars. From the beginning, Greek science or "wisdom" affirmed that the universe consisted of a single substance, from which it deduced logically the solidarity of all things.

It means little to know that Anaximander, disciple of Thales, took for the unique substance of the universe an element more subtle, indefinite in quality and quantity. It does not even matter if it was a single substance or composed of different elements.⁷ His doctrine was basically that of Thales, with one advance important for future astrological beliefs. He taught, according to Aristotle, that the infinite substance "enveloped and governed all things."⁸ This envelope which "governs" is, no doubt, the sky, always moving, "eternal," first cause of the birth of all things.⁹ For Anaximander, as for Thales, the stars are the farthest emanations of the cosmic fermentation, of which the earth is the sediment. He assimilated them, it seems, to circular furnaces, rolled through space by the same breezes or vapors. There was no reason not to call them "celestial gods,"¹⁰ as the Mesopotamians did. Science was mixed with faith. Here we have the germ of the equivocal language of astrology in the future. We also see an idea appear in Anaximander which probably was not new and which became completely banal. It was that animals, including the human race, were animated within the humid element by the heat of the sun, dispenser and regulator of life.

With a more realistic outlook, Anaximenes took comparable doctrines to the same conclusions. He began to state precisely the most important astrological dogmas, the similarity to humanity and, of the part and the whole. The universe was a living being, in which life is sustained, as in a human being, by the respiration or ceaseless circulation of air, the common essence of things.

The school of the Ionian "scientists" remained extremely faithful to its mechanistic cosmology. It always affirmed the unity (in substance) of the cosmos. The cosmos was formed from one unique substance and lived in the varied degrees of condensation and evaporation. From them it would derive thought, intelligence or will, the grouping and movement of bodies. These first precursors of the natural sciences pressed on to metaphysical conclusions. In this way, they forged the arguments of mystics and aided the discoverers of occult connections between the most disparate things.

There was even more reason for imaginations in love with marvels to take up enthusiastically with Pythagoras. The Neo-Pythagoreans and Neo-Platonists so amplified the character, the biography and the doctrines of the sage of Samos, that it is impossible to separate reality from fiction. Pythagoras traveled wherever there was something to learn. He went to the priests of the Egyptians, the Mesopotamians, the Jews and the Arabs. He also visited the Magi of the Persians, the Brahmins of India, the Orphic initiators of Thrace and the Druids of Gaul, so that his philosophy might form a synthesis with any doctrines imaginable. The Pythagorean legend overwhelmed the followers of the master, too. It enveloped in its mirage that collection of pedantic phantoms, the "mathematicians," congealed in the ecstasy of the learned science (μάθημα)¹¹ We are reduced to accepting nothing as genuine other than the propositions discussed by Aristotle. Even the Pythagoreans of Plato are Platonists before all else.

The basis of Pythagorean doctrine was an obsessive notion. It was the cult of harmony, of proportion, of the solidarity of all parts of the universe, of harmony as intelligence, conceived as number. Likewise, it was a cult of sensibility as music, rhythm, vibration simultaneous and consonant with the grand All. Number was even more than that for the Pythagoreans it was the true essence of things. What we call matter, spirit, Nature, God, is all Number. A constituent member of Number is Unity (μονάς), which is itself composed of two properties also known as left and right, female and male, etc. The purpose is to make unity itself a harmonic association. As such, it is real and living. The goal is to explain why the even is inferior to the odd (which is also male) and the left is opposed to the right. It also explains why the curved line is opposed to the straight (which is the origin of light and Good), while the even produces the opposite qualities. Of all the traditional superstitions¹² made to seem more likely, few rely on these strange axioms more than the speculations about the finite and the indefinite. Putting the finite in the odd, and perfection into the finite is to replace several questions with one which can be solved. The Pythagoreans loved mysteries and they found a certain pleasure in changing the meanings of common words. They designated the indefinite, the imperfect, the bad, with the word ἄρτιος (even), which ordinarily meant "decent," or well-proportioned. Likewise, they labeled the finite, the good, with the word περίσσοος (odd), which literally means "superabundant," or disproportionate. There was no greater mystery than the perfection of the number ten, basis of the

decimal system. Those who seek the solution in the ten fingers are counting wrong. It is necessary to know that the number ten, is, after one, the first number which is both odd and even (ἀρτισπερρισσός). That is, it is even in itself, but the sum of two numbers, the same and both odd. The "decad" is the key to all the mysteries of Nature. Without it, Philolaus says "all will be unlimited, uncertain, invisible." One can already understand an astrologer speaking of the marvelous properties of the decans (arcs of 10°).

Pythagoreanism has been an inexhaustible mine of combinations calculated to intimidate and to silence common sense, used by adepts of the occult sciences in general and of astrology in particular.¹³

In general, this bastard posterity of Pythagoras replaced his genuine disciples. They took, with their heritage, the title "mathematicians." The school of Pythagoras placed the world firmly in the midst of arithmetical and geometrical equations. It covered the sky with calculations and figures, translated into intelligible harmonies, moral ones, political ones, theological harmonies, each more abstruse and unprovable than the last. Making the seven planetary orbs into a celestial lyre¹⁴ playing the seven notes of the scale in proportion to their respective distances, is only the best known, and the simplest, of its inventions. It was harder to find ten spheres, necessary for the perfection of the universe. In order to increase the number of the heavenly spheres, these intrepid zealots were the first to move the earth from the center of the universe. They placed it opposite a counter-earth, both moving around a central hearth which they could not see. This ancient chimera was like a badly aimed projectile which reached its target by a happy ricochet. It encouraged Aristarchus of Samos and Copernicus to revolt against the dogma that the earth did not move. Imagination does sometimes take the lead in science. Columbus would probably not have braved the Atlantic if he were not convinced that, on the "terrestrial" globe, the earth had to occupy more space than water.¹⁵

In constructing the universe with theorems, without care for observations, the Pythagoreans surpassed the boldness of the astrologers. The latter seem eclectic and prudent by comparison. Not only did the Pythagoreans attribute special qualities to numbers themselves and to geometric figures.¹⁶ They also located these diverse qualities, types, causes and substances in visible things, in different parts of the universe. Beaming from their chosen places in proportion and following mathematical directions, these living forces created meeting places. They marked the tissues of concrete reality with their specific imprints.¹⁷ Separation, mixture, proper moment (καίρος), proportions, the whole arsenal of astrological postulates is already there. The principal members of the tool kit were already forged. The astrologers had to limit the numbers of combinations which could be calculated. They also had to disqualify certain patterns, such as the square, which seemed antagonistic to the triangle and the "decad." The triangle was the favorable figure or aspect (σχῆμα) par excellence, while the decad defended itself poorly against the hegemony of seven and twelve. We will see it re-appear later, in the thirty-six astrological decans, whose name was derived from "decad." Likewise, we will see it once again in the famous quadrature (τετρακτύς) of the Pythagoreans, the ultimate reason for things and "source of Eternal Nature".¹⁸ Astrology took rather less from Pythagorean astronomy. The doctrine of the movement of the earth was directly contrary to a necessary postulate of astrology. The natural explanation of eclipses – already given by Pythagoras – was a nuisance to those who would make them instruments of revelation. Reincarnation and palingenesia (rebirth of the universe) were indifferent to astrology. Astrology was exclusively concerned with this life, and could fit with all the theories about other modes of existence.

The disciples of Pythagoras sometimes forgot the earth for the sky. The school of Elea surpassed them, in an opposite sense, in the state of mind favorable to the growth of astrological ideas. Xenophanes thought the stars (including Sun and Moon) were simply meteors, vapors exhaled by the earth, which caught fire at one horizon, and went out at the other. The earth was big enough to produce several at the same time. Perhaps each clime (zone of latitude) had its own. These rockets were renewed each day, seemingly eternally. It was inside them that astrology placed the generative forces, from which they tried to calculate the effects upon the earth.¹⁹ Finally, the Eleatic doctrine par excellence, the idea that the universe is one immobile thing, its multiple parts and movement pure illusion, negated astrological dogma in advance.

Heraclitus held an opposite principle, one nearly unintelligible to the ordinary person. In the relative stability of appearances, he saw merely an illusion hiding perpetual changes in the substance of things. For Heraclitus, it is true to say that there is no thing, because a being is never fixed. It is

always becoming something else, without ever stopping. It is movement through the network of sensible forms. Like all the Ionian philosopher/scientists, he saw the different states of matter or the universal substance, as due to different degrees of condensation or rarefaction. It mattered little to him whether the normal state was in the middle of the series or at the far end. Heraclitus began with an even more subtle state. He thought fire was the moving and moved element, generator and destroyer par excellence. For him, the stars were braziers floating on top of the winds because of their natural lightness, fed by vapors from the earth. The Sun, in particular, was very small, but closer than the other stars. It regenerated itself each day, because it was put out each evening by the fogs of the West.²⁰ Heraclitus believed that the stars were not part of the universal flux. The Sun still excited life on earth. What was called life, soul, reason, intelligence, was a fire ignited from above.²¹ This characteristic of Heraclitus' doctrine is a completely astrological theorem. The physics of Heraclitus would become one of the fortresses of astrology, after being adopted by the Stoics and purged of the inconsistent paradox of the celestial bodies.

All those philosophers whom we have just reviewed were at war with common sense. They disdainfully called it "opinion" (δόξα). Those who put the explanations of their ideas into verse did not plan on having the audience of the Homeric rhapsodies. Empedocles, on the contrary, changed a good part of his pride into vanity. He loved to take on the glamor of a prophet. No doubt, if astrology had existed in his day, it would have made quick progress in his hands.

Substituting four different elements (earth, air, fire, water) for a single, unique, substance, more or less condensed, did not matter metaphysically, any more than it would today. However, the system of Empedocles, by putting diversity into the beginning of things, required less mental effort than the monism of his predecessors. The variety of possible mixtures was still the protean disguise of the unique substance. Moreover, this system had the advantage of explaining, in a simple fashion how bodies could move each other at a distance. This proposition was of capital importance to astrology. After Empedocles, the tendency was to explain action at a distance by reciprocal penetration. Penetration became easier when the bodies were similar to one another. The influences were imagined as effluvia (ἀπορροαί - ἀπορροαί) or jets of invisible molecules. Guided by an elective affinity, they left one another by pores also invisible. They tended to produce, on each side, a mixture of the same proportions, and thus, of the same properties. Light, for example, is a material flux which takes a certain amount of time to go from an emitting body to a receiving body. One cannot imagine a theory better able to explain the "influence" of the stars on earthly actions.²² It also explained the influences they also exercised on each other, as they met on their way to the earth. The astrologers gave a great deal of attention to these kinds of action, and gave them the names "contact" (συναγή) and "separation" (ἀπορροαί).

For Empedocles, the universe (κοσμός) was the product of an indefinite series of compositions and decompositions. They were brought about by the forces Love and Strife, Attraction and Repulsion. Life and movement were born from the conflict of these two primordial forces. When one of the forces gets the upper hand, it pursues its work until the intimate combination of the elements (or their separation) produces complete immobility, the death of Nature. However, this repose did not last. The victorious force was exhausted by its effort, while the conquered force re-generated itself. The cosmic brawl went on in the opposite direction²³ engendering a new universe. It, too, was destined to meet its end in the exclusive triumph of the energy which sustained it. It goes without saying that the present universe is the work of Strife. Moreover, due to the fortunate immobility of the spherical universe, it is approaching complete dissociation. Empedocles had doubtless been embarrassed in giving other souvenirs of the Golden Age. However, poetic commonplaces protected him still, especially, in the eyes of a poet like himself, the value of claiming divine revelation from the Muses. Moreover, imagination took a bigger place in Empedocles' work than did pure logic. He was one of those who find words easier than reasons. The legend which makes him into a professional fraud does not exaggerate an obvious trait in his character much.²⁴ Without stopping to excavate his cosmology for the debris of old myths, Greek or foreign, we will note in passing the ideas later exploited by astrologers. The first, crude, efforts of Nature the Creator, formed monsters by the accidental joining of various species. This explained the strange creatures in the constellations,²⁵ the dragons, chimeras and centaurs from mythology. They suggested to Empedocles his own description of the early earth. This is no longer due to Earth, the universal Mother. She is still at the center of the universe, held there by the pressure of the celestial orbs which turn around her. She no longer gives birth to the stars,

however. Nor does she surpass the Sun in light, which is a segment of the universal effluvium projected upon the Sun. It was as a precursor of atomistic physics that Lucretius admired Empedocles.²⁶ Leucippus and his disciple, Democritus, brought back to science the notion of the qualitative unity of a universal substance. The four elements were just collections of atoms of the same substance, but with different shapes and sizes. They retained a pre-eminence for fire, the generator of life and thought, which the astrologers gave (naturally) to the stars. Fire was not (like the other elements) a mixture of different molecules. It was a “casting” of homogeneous atoms, the smallest and most round, able to penetrate all other bodies, even the most compact. The genesis of the universe, or rather, of universes (for they, like us, saw no more than a small part of the universe) is, for the atomists, a mechanical effect of the fall of the atoms. This movement produces circular vortices, from collisions and ricochets of atoms. Each vortex was isolated from the others by a spherical shell, which was formed and immobilized by contact with a resistant medium. Inside it, the atoms sort themselves out and pack themselves together in the order of density. The logic of this system required that the biggest, most active, mass of fire, the Sun, be the farthest from the center. This, indeed, is what Leucippus taught. We are told that he put the moon closest to the earth, the Sun in the circle farthest from the earth, and the stars between them.²⁷ Democritus, however, seems to have imagined the boldest theories. He wished to reconcile the doctrine with common opinion and with the indisputable fact that the solar hearth is the one from which we feel the most heat. He theorized, they say, that the Sun was once a sort of Earth, tending to immobilize itself in the primordial vortex. This first deposit, however, supplanted by the more rapid growth of our Earth, was dragged along by the celestial movement. It filled itself with fire as it increased its vitality and enlarged its orbit. Thus the Sun remained close to the earth, which fed the Sun with its vapors, in return for its light and heat. The same theory was used to explain the proximity of the moon and its lesser heat.²⁸ In the end, these two stars, which the astrologers called “the luminaries” [lights] (τὰ φῶτα) to distinguish them from the other planets, were separated from the others. They were re-attached to the Earth with the strongest links, by which they reproduced, with another dose of fiery atoms, the molecule's composition. This theory supported certain astrological postulates. Without doubt, popular opinion gave a preponderant effect to the two luminaries. However, the doctrine of Democritus showed how that action, stronger in quantity, was also stronger in quality because of stronger affinities. In the end, though, atomism was not completely favorable to astrology. If the astrologers proper were not happy with the Epicureans, the heirs of Democritus' physics, in revenge the Abderan philosopher, Aristotle, became the patron of the alchemists. They (fundamentally) were just astrologers who had moved from the observatory to the laboratory.

At the same time as the atomists, Anaxagoras (a little older than Democritus) used (as they did) the efforts of their predecessors to improvise a cosmogony. It differed from theirs only in its metaphysical principles. For the unique essence of the Ionians, the Eleatics, and the atomists, Anaxagoras substituted an infinite number of simple bodies, not just four elements, as had Empedocles. Without ever being completely disengaged from the whole mix, they revealed their specific qualities in compositions where one or another dominated. He also agreed that the universe came into being as a result of properties immanent in the one true substance. However, he began the series of causes with a first cause, an Intelligence (Νοῦς) which gave the first push to the machine. Evidently, he did not mean by this to go back to popular thinking, which assumed that an artifact required a maker. Nor did he want to return to the simplicity of the Near Eastern cosmogonies. Socrates reproached him for not using this Intelligence to explain the presence of order in the universe. Instead, he substituted “air and ether and water and other silly things”.²⁹ Others called him the “scientist” and the mechanic par excellence.³⁰

We are not able to figure out, due to the contradictions in the sources³¹ whatever tiny difference there may have been between the “pure substance” or spirit of Anaxagoras and the intelligent fire of Heraclitus. However, the intervention of this world spirit or soul was considered a denial of the theory that the universe was created by the automatic play of natural forces. This was the death blow to Ionian physics. It was established that this much-vaunted physics, which claimed to find the ultimate reason for things, had not succeeded in piercing the mystery. Its mechanism was not sufficient in itself if one sought the cause for movements in something other than the properties of the unconscious substance. In other words, one looked to the domain of spiritual forces or the will. This was a domain off limits to science and accessible only to faith. Some winged spirits make free with this line of

demarcation without noticing it,³² having shot up in a career already cleared of debris. They made, in turn, their own universe, with confident improvisations and interpretations of the divine plan. The place has been made ready for Plato's Demiurge, planet-gods and daemons.

Finally, after two centuries, Hellenic science seems to come full cycle. It came back to where it started, religious belief. To use a word which is not fashionable, one may accuse it of bankruptcy. Its ill-coordinated efforts went through all fields of knowledge at once. It took part in a war against "opinion." Once it destroyed common sense, however, it had nothing to put in its place but unproven claims. The various systems destroyed each other with their conflicting claims. The sophists concluded that nothing was certain, and that anyone was free to deny or affirm anything he or she liked about any subject. Why search for the real, the true? As Heraclitus and the Eleatics showed, with opposing methods, we find only deceptive appearances. Even the witnesses of our senses find nothing that cannot be challenged. "Man is the measure of all things," Protagoras said. In other words, each person makes his own truth, conforming to his own interests. The one who is a master in the art of living is able, without being fooled by his own opinion, to impose it upon others, by eloquence, or, if need be, by force.

II

The Socratics

With Socrates, we open a new era. Socrates has a reputation for defeating the hydra of sophistry and rescuing endangered morals. It is not that he intended to defend even a bit of science or tradition.³³ On the contrary, he destroyed all that had been affirmed before, including the Sophists. In declaring, however, that he knew nothing, he invited all good-willed people to seek true science. They could certify, in the name of a divine revelation, that which they would find, and which would preserve morality as well. He thought that human reason could not know any other object not in itself. As a result, future science should forbid the vain researches on which it had wasted its time the study of external nature. If man was no longer the measure of all things, in Socrates' eyes, he remained the measure of those all things which he could know. The limits of his nature marked the limits of his knowledge.³⁴ Beyond that, he taught them to see the unknowable, the mystery of the divine, which the human spirit cannot penetrate save by Revelation. We know how Socrates deprived the sciences of practical use, particularly the cosmogonic theories on which the philosophers had exercised their ingenuity till then. Xenophon said

*"In general, he avoided paying too much attention to the celestial bodies or the laws by which the Deity directs them. He thought these secrets impenetrable to men. One would displease the gods by wishing to probe the mysteries which they did not wish to reveal. He said that one ran the risk of going mad from pushing speculation too far. Anaxagoras had gone mad with his speculations to explain the procedures of the gods"*³⁵

This was the cry of all the moralists in the Socratic tradition. They pretended to isolate Humanity from Nature, and said that, of all the sciences, astronomy was the most proud and the most useless. Horace demanded what good it did Archytas to "traverse the heavens, since he died anyway?"³⁶ Bossuet said much the same, later. "Miserable and audacious mortals, we measure the course of the stars ..., and after these hard researches, we are strangers to ourselves!"³⁷ Malebranche, too, writes "why should we take sides in the quarrel over whether Saturn has a ring or a bunch of little moons?"³⁸ Socrates accepted that astronomy was useful for regulating a calendar. Otherwise he mocked people who, even if they knew what went on in the sky, "could not predict the weather."³⁹ How would he have welcomed astrology, if he had known of it, and it was demonstrated to be a revelation to him? It claimed to be useful for knowing humanity.⁴⁰ We do not know. However, it is good to note that it was his most faithful disciples, the most narrow minded moralists, and the most closed to useless science, that is, the Stoics, who introduced astrology into the sanctuary of practical astronomy. If Socrates brought philosophy from heaven to earth, as people have repeated since Cicero, he did not keep it from going back.⁴¹

The great beginners are never system makers. They are people who have collected all their energies in a unique sentiment, a powerful will. It must be one capable of agitating others by the force of their will, and of making an imprint. This impulse is transformed into divergent movements, connected only by a common starting point, visible from many different directions. After Socrates, anyone who proposed to use knowledge to achieve virtue and who did not esteem science because of its moral efficacy was a Socratic philosopher.

Purified of indiscreet curiosity, Socratic philosophy had killed the scientific spirit without reaching its own goal. Morality was not the object of science. The exercise of a supposedly free will escaped, by definition, the rigid restraints of natural laws which science sought to establish. In wishing to associate and even confound incompatible intellectual proceedings, the Socratic moralists were obstinate. They pretended to demonstrate the indemonstrable. Their systems ended by absorbing the religious dogmas which they replaced. The vast and poetic synthesis which Plato made from encyclopedic knowledge converted into moral dogmas was already a religion. After finally returning, in every sense, to the problem of pure morality, public and private, Plato also wanted, like earlier sages, to write a treatise on Nature. He took care not to attribute it to Socrates, here reduced to the audience of the Pythagorean philosopher Timaeus.⁴² *Timaeus* may be the last work of Plato. It is also, the one where the habit of affirming without proof displays itself most complacently, and where the enfeeblement of rationality is most noticeable. Later, the *Timaeus* became the breviary of all adepts of mystical doctrines, sciences and arts. They tortured and denatured and commented upon it without cease. The astrologers were not the last to use the arguments of the *Timaeus*. They had an embarrassment of riches to choose from, for the whole system is filled with support for their postulates.

First of all, the universe is one body. The Demiurge has collected into its sphere all existing matter, the totality of each of the four elements. (They differed only in the geometric shapes of their molecules.) Thus there is no exterior obstacle, shock or resistance which may be a cause for its disorder or destruction. What is more, the universe was a living being, whose organs were all in solidarity with one another. They were connected in a harmony so perfect that the vast body was forever "exempt from age and illness." This living being had for its principle of life and movement a soul, composed proportionately of three elements, spiritual, physical and mixed. The soul was created before the body, which it enveloped and penetrated. It contained seven parts, ordered and subdivided from left to right (the daily motion). The material essence gave to the seven interior circles an opposite movement, around a different axis, inclined to the first. This movement, combined with the first, describes whorls through space, with various speeds, alternately rising and setting. Plato did not know more names than Sun, Moon, Venus and Mercury for these circles or wandering stars (planets). "As for the rest, since people did not know their revolution, save for a little bit, they did not give them names."⁴³ Only the earth did not take part in the general movement given by a blow to the round machine. It was pierced and riveted in place by the unmoving axis which formed the hinge upon which the universe turns.

All these stars, fixed and moving, and the earth itself, "the most ancient of gods born inside the sky,"⁴⁴ are living, immortal, gods. The Demiurge did not want to take a direct role in perishable things. Once the stars were created, he gave to the "organs of time," the planet-gods, the task of finishing the universe by themselves. They did so by fashioning mortal beings. He contented himself with giving them souls of an inferior quality in order to animate these mortal beings. Later, he condescended to expose his designs and justify them to Providence, and then distribute the souls by lot among the stars. As far as one can tell from the perhaps deliberate obscurity of the text, the souls are stationed in the fixed stars before descending to the lower spheres. There, the planet-gods occupy themselves with making material homes for them. Copying the universal model of which the cosmos and they themselves are copies, these gods made spherical bodies in which to house the souls. Unfortunately, this spherical envelope needed a vehicle (*ὄχημα*) to carry it and to protect it from the shocks which it encountered rolling around the surface of the earth. The gods, without a model to copy, imagined a mechanism appropriate for their goal. In this way, Plato exposes the naiveté of his physiology. The lung is an example, permeable to air, refreshed by beverages. It refreshes, in turn, the heart, for which it provided a cushion. The spleen is another. It wipes clean the mirror-like surface of the liver, upon which the gods made messages for the soul to appear. The intestines, twisted around themselves, lengthen the trajectory of the food, in order to give people time to think. In order to give life to the vehicle for the intelligent soul, the gods were obliged to take a sample of the same substance. They

used it to make two other, more material, souls, one lodged in the chest, the other in the belly. They took care to separate the three lodgers within the body with barriers, the diaphragm and the neck. The sense organs were not forgotten. The theory of external sense perception goes beyond all the rest in the unexpected.

Plato did not decide to explain whether each planet-god made inhabitants for its own domain, or whether they all spent their time making inhabitants to live upon the earth. Since Anaxagoras and Philolaus had already put inhabitants upon the moon, it is likely that Plato peopled all the other planets. However, the plurality of worlds did not please the astrologers. They wanted to concentrate the full effect of stellar energies upon the earth. Also, the commentators upon the *Timaeus* profited from Plato's embarrassed reticences. They made him counter-sign the theory most favorable to the astrological thesis, that terrestrial humanity is the product of collaboration by the planet-gods.

The Platonic myths have, in their vague contours, a certain grace. One is free to believe that the Master himself did not take them completely seriously.⁴⁵ However, transformed into dogmas by the pedantic faith of the Neo-Platonists, they are childish in a way which makes one smile. One such person thought that he knew that the souls descended from the upper regions via the Milky Way, where they learned to suckle milk.⁴⁶

Another person commented on the tenth book of the Republic, where we already find an account of the itinerary of the souls. He knew where the openings were for the souls to come and go. Those going down used the (warm) Tropic of Cancer, and those going up after death used the (cool) Tropic of Capricorn.⁴⁷ They went down full of vital warmth and returned chilled. This descent or fall of the souls was combined with metempsychosis or reincarnation and the theory of reminiscence or anamnesis. It gave a marvelous account of the actions of the planets, not only upon the human body, whose every part they built, but upon the soul. The soul traversed their spheres, or stopped among them. It arrived upon the earth completely charged with all it assimilated en route. At the same time, the return of the souls to the stars they came from allowed another theme, catasterism, or transfer to the stars.⁴⁸ This became very fashionable, and placed in the sky a collection of images, to the great benefit of the astrologers. Acting at a distance, the images penetrated earthly doings with their effluvia.

When the mysticism unchained by Plato threatened to destroy the human reason from which it came, the master did no more than temper the fervor of his disciples with an enigmatic smile. His name was invoked for all purposes with that of Pythagoras by the astrologers, magicians, theurgists, alchemists, kabbalists, and demonologists of all nations. It served to cover the weirdest foolishness ever produced by brains intoxicated with mystery. All those unattached souls which the Demiurge broadcast throughout the universe became daemons, active wills. Their obsessive intrusion replaced the notion of natural law for those minds which had gone back to the intellectual level of primitives.⁴⁹

Let us leave the *Timaeus* and its commentators, however. All of Platonism was ready to convert to astrology. Plato's sky is covered with models of all that exists on earth, models themselves copied from the divine Ideas. The whole machine is a vast wheel, whose axle, on a spindle of steel, rested upon the knees of Necessity. From there the souls fall to the earth, sifted, sorted, branded by the movement of the orbs. The orbs turn inside the wheel with a sonorous hum, vibrating in unison in an eternal harmony.⁵⁰ Plato already spoke like an astrologer when he said, in Symposium, that the male sex is produced by the Sun, the feminine sex by the earth, and the Moon takes part in both.⁵¹

We could eliminate Aristotle from the history of the precursors of astrology without inconvenience. However, the prince of ancient science was one to whom all doctrines tried to accommodate themselves. It was Aristotle who fixed, for centuries, the theory of the properties of the elements of matter. This theory became the basis of Ptolemy's astrology, and permitted him to explain, scientifically, the nature of the astral influences. Aristotle accepted the four elements which Empedocles had declared simple bodies. However, he considered each to be a combination of two sensible qualities from the four revealed to the sense of touch, i.e., hot, cold, dry, and moist. Thus, the union of warm and dry produced fire. That of warm and moist produced air. Cool and moist combined into water, while cold and dry became earth. These are all the combinations possible. The combinations of warm and cool or dry and moist do not take place because of a simple subtraction of energy. Each of these pairs are able to uncouple and recombine into other binary associations, making the elements change into one another.⁵² This was a proposition of great consequence, not because the opposite claim discouraged the astrologers, who gleaned something from every system, but for the alchemists. Aristotle thus assured for his doctrine the advantages of two conceptions, till then

opposed. One affirmed the unity of substance, the other kept the diversity in quality of the elements. Hot, cold, moist, dry returned until satiety in astrologers' discussions. They served to disguise the religious character of astrology, since such discussion passed for reasoning about first principles among them.

The cosmography of Aristotle⁵³ was the height of astronomical science in his time. He eliminated cosmogony by maintaining that the universe had no beginning. Otherwise, he adopted and modified the system of spheres, imagined long before by the Ionian physicists, and developed by Eudoxus and Callipus. He got rid of the musical harmony of the spheres of the Pythagoreans. He relaxed the connections of solidarity which he found established between the stars and earthly beginnings, when he rebelled against the tyranny of numbers and geometric figures. He did so by attributing to each living being an individual soul, its own motor, which had in itself its own reason for existence and pursuing its own goals.

The general spirit of Peripatetic philosophy is to replace mechanical impulsion with will power, the final cause for the efficient cause.⁵⁴ It is basically the opposite of the scientific spirit, because it is Socratic. As such it was not favorable to astrology under the form of an exact science. All spontaneity had the effect of upsetting mathematical calculations. For another thing, it did not love mystery or the incomprehensible. Theophrastus, who was one of the first to hear of the Chaldaean astrology taught by Berossos, did not take it seriously. He found this method of predicting "the life and death" of each individual, not just basic communal things,⁵⁵ to be "marvelous". However, we all know what "marvelous" meant coming from the pen of a Peripatetic. Nevertheless, the astrologers succeeded in avoiding quarrels with Aristotle. This was despite the line of demarcation which the school of Aristotle drew between the upper world, incorruptible and immovable, and the sub-lunar world, in spite of the "quintessence" or the special element of the celestial bodies. As they did with other schools, they took what they found useful, and ignored the rest.⁵⁶

There is no room to stop for Epicurean physics, which is just atomism reduced to fit the Socratic measure, that is, seen from the viewpoint of morality and human interests. We note only that the Epicureans, with their concern for free will, rejected all forms of divination and never practiced astrology. They said nothing about its fatalism. On the other hand, they taught nothing about astronomy, and their spirit was absolutely closed to Pythagorean mathematics.⁵⁷ We see the threshold of the school of the Stoics. They were also Socratic, and moralistic to the bitter end. Precisely for that reason, they found in astrology the most useful part of the science of celestial movements.

The founders of Stoicism, Zeno and Chrysippus, sought a physics which could be turned into a moral system. They chose that of Heraclitus, rejuvenated with a few touches from Aristotle's physics.⁵⁸ They took care not to let in Pythagorean abstractions or the spiritual essences which Plato associated, and Aristotle combined, with bodies. They repeated at every opportunity that all which exists is corporeal, as did their comrades, the Cynics, and the Epicureans. We know things because of contact with our sense organs. Each sense was disturbed by those particles which seem similar to those of which it is composed. They arrived, in this way, by the shortest route, at the rendezvous of all the Socratic philosophies, the theory of the microcosm, image and summary of the universe.

The Stoics said we could not understand the universe if we were not put together in the same way. They, too, thought that Man is the measure of all things. If humanity was similar to the universe, then the universe was similar to humanity. It was a living being, endowed with sensibility and reason. They were infused in the mass of its being under the form of subtle molecules of fire or air. The fire molecules established a perfect sympathy between all its members. This sympathy was not an occult power, a mysterious faculty. It was a mechanical consequence of the fact that there was no single point of view in Nature. A movement by any of the Being's parts must have some repercussion for the entire universe. One must not forget this dogma of universal sympathy when one hears of a Stoic saying that lifting a finger disturbs the equilibrium of the universe.

We cannot explain how the Stoics managed to combine a gross realism with a very pure morality. It was in spite of contradictions and paradoxes stubbornly maintained by people who had their goals marked out in advance. The only ones surprised are those, deceived by the sounds of words, who believe the dignity of humanity is attached to the distinction between two substances endowed with contrary qualities. We do not say that this morality was impractical, for Epictetus and Marcus Aurelius show otherwise. Above all, we should not forget that the first Stoics hoped to convert nations and kings. From its beginnings, Stoicism did not stay shut up in the class-room. It made a

noise in the world. We must remember just how large an influence it could put at the service of astrology. There came a time when the parvenus who were cutting up Alexander's empire into kingdoms felt vague impulses to take up Stoicism. It was (never forget) the fashionable philosophy. Antigonos Gonatus corresponded with Zeno. He attended some of Zeno's lectures, and he brought home a pair of Zeno's disciples, when he could not get their master. One of them, Persaeus, became the teacher of the prince royal, Halcyoneus. Sphaeros, a disciple of Cleanthes, was called to Alexandria by Ptolemy III Euergetes. Later, he became the intimate adviser of the reformer-king, Cleomenes of Sparta. These court-preachers were persuaded that the Sage knew everything. They wrote, with envy, treatises On Kingship, in order to teach the art of ruling philosophically.⁵⁹

In this manner, they invited respect for popular religion. They especially respected those behaviors to which the vulgar clung most, that is, the many divinatory proceedings used to communicate with the gods. How far they were honest with themselves, we do not know enough to say. If they did not have the naive faith of the people, they believed deeply that it was useful for morality. Religion, properly expurgated, seemed to them a method of teaching morality appropriate to the popular mind. Myth, allegory, parable were not lies, they thought, along with others. They were merely the veil, more or less transparent, for truths which ordinary people might not accept completely bare. The Stoics worked conscientiously to lift the veil for the initiates. In the course of their exegeses, they performed work which serves to excuse, after they inspired, our modern mythographers. We will only raise the explanation of sidereal myths. They did not, perhaps, discover all at once that the conflict of the Homeric gods was a deformed memory of a conjunction of the seven planets.⁶⁰ However, one need not doubt that Apollo was the Sun for them, and that Artemis or even Athena was the Moon. Likewise, for them, Apollo, surnamed Loxias, was also the obliquity of the ecliptic. One of his obscure oracles that of Pythios, said that the obliquity caused the putrefaction which was associated with damp hot weather and which stopped with dry hot weather. Moreover, outside all allegory, they taught that the stars were living beings, much superior to humans in intelligence. By virtue of universal sympathy, the planets caused human destiny. The earth was also a goddess for them, Rhea, Demeter, or Hestia, the venerable Mother of the gods. Their faith on this point was sincere enough to become intolerant. When Aristarchus of Samos was clever enough to maintain that the earth went around the Sun, Cleanthes, Scholarch at that time, accused him of impiety. He wanted to have Aristarchus condemned by the Athenians. Indulgent towards the buffooneries of mythology, they were not so towards "atheists." These clamors, perhaps, delayed the triumph of Aristarchus' ideas for twenty centuries and affirmed the basis of all astrological calculations.⁶¹

One thing particularly predestined the Stoics to guarantee astrological speculation and to seek reasoned demonstration. It was their unshakable faith in the legitimacy of divination, of which astrology was just one variety. They never wanted to give up on a line of reasoning which their adversaries labeled a vicious circle. They said "If the gods exist, they talk to us; since they talk to us, the gods must exist."⁶² The idea that beings of superior intelligence would not communicate with human beings seemed nonsense to them. Ordinary people sought to know the future only to avoid the announced dangers. They fell into a contradiction, in which they thought to change what was already certain at the moment the gods foresaw it. The Stoics, however, exhausted themselves in vain efforts to reconcile logic, which led to complete fatalism, with practicality, which demanded useful warnings from divination. If the future is conditional, it cannot be foreseen. If it can be foreseen, it is because the conditions are already fixed, in which case there is no place among them for free actions. Liberty escaped by definition into necessity, which led to a decision made in advance. This argument torments metaphysicians today as well. It acquired a singular energy in the system of universal sympathy.

The Stoics valiantly accepted the consequences of their principles. They served to demonstrate the reality of Providence and the certainty of divination. The Stoics went into ecstasies at every turn over the beauties of the order of the universe, due to the punctual accomplishment of a divine plan, as changeless as it was wise. They were no less firm, however, in rejecting the moral consequences of fatalism, especially "lazy reasoning" (ἀγὸς λόγος) which always concluded in letting the inevitable happen. Chrysippus performed prodigies of ingenuity in loosening, without breaking, the bonds of Necessity. He distinguished between necessity proper (ἀνάγκη) and predestination (εἰμαρμένη – πεπρωμένη). He likewise distinguished between the "perfect and principle" causes and the "adjutant" causes. He even found a distinction between causes inevitable in themselves and "confatal" ones, which were inevitable by association. He sought to distinguish, from the point of view

of fatality, between the past and the future. In the past, contrary things are truly impossible. In the future, contrary things are also impossible in fact, but may perhaps be thought of as possible.⁶³ In the final count, the Stoic school did not succeed in saving the liberty of the Sage, which consisted of freely willing whatever the universal Intelligence did. The Sage exercised less of that liberty, the less he knew of the divine plan, and the shorter the time he knew it. As Seneca put it, ⁶⁴ he must walk in the path traced by destiny rather than be dragged. The astrologers, who had to satisfy a less resigned clientele, were more accommodating.⁶⁵ However, they did not want to exaggerate the malleability of Destiny, upon pain of rendering their predictions hazardous and problematic. They kept the serene resignation of the Stoics in reserve, as a last resort against overly-pressing objections. The great teacher of astrology, Ptolemy at first accorded a certain scope to human liberty when he taught predestination rather than absolute necessity. However, he concluded by saying

*"And even if events take place necessarily, let us not forget that the unforeseen lends itself to excesses of joy or sorrow; whereas advance knowledge allows us to habituate and appease the soul, by causing it to consider the present as an elongated future, and to prepare to accept peacefully and tranquilly all which comes to pass"*⁶⁶

We will always appreciate the large part which the Stoics took in elaborating the dogmas of astrology by clarifying the dogmas themselves. It will be more difficult to estimate the influence which astrology exercised upon Stoicism in return. Astrology was imported to Greece at the very time that the Porch was forming.⁶⁷ However that is a question we will leave to the historians of philosophy. One thing is certain, that it was Chrysippus who recognized the "Chaldaeans" as allies. He was impressed by their examples of fatalistic problems. He re-touched (after his own fashion) the terms of certain astrological propositions, in order to make them irrefutable. For example, Cicero reports, "if someone is born at the rising of *caniculus*, that person will not die at sea."⁶⁸ It is remarkable that the vogue for the Stoa, to which we just alluded, coincided with the spread of the ideas which the Chaldaean Berossos brought from the East.

Voluntary or not, the alliance of astrology and Stoicism was due to force of circumstances. Each strengthened the other by reciprocal influence lacking in other doctrines equally preoccupied with knowledge and foresight. Zeno and Berossos were not just contemporaries. If it is true that they each had a memorial statue in Athens,⁶⁹ perhaps in their lifetimes, we may say that the popular instinct had already divined what we have demonstrated, with greater pains, and less grace.

Chapter Two

Mesopotamian Astrology

The conquests of Alexander broke down the barriers which separated peoples and civilizations. The older peoples who had been vanquished did not defend themselves against the curiosity of the Greeks. Rather, they found a patriotic consolation in displaying for them the antiquity of their traditions and in treating them as youngsters who had much to learn. The Hellenes took up the role of neophytes. They were truly amazed at the perspectives that were opened for them by the sacerdotal archives. Their critical sense did not revolt, neither against the most baroque legends, nor against the most untrue chronological falsehoods. All the old furniture had the savor of novelty for them. They were astonished that they had not until that time known how recent their most ancient memories were, compared to others' records. Moreover, they suspected that their own sages and "lovers of wisdom" had profited, without telling, from these treasuries of accumulated experience.⁷⁰ The Egyptian priests had no trouble persuading Herodotus, a century earlier, that Greek civilization was an Egyptian graft. It was enough to paint before their eyes the hundreds of centuries of history, as the priest Manetho did later, with a view to instructing the Alexandrians and inviting them to be modest.

What Manetho did for Egypt at the beginning of the third century BCE, the Mesopotamian priest Berossus, his contemporary, did for Mesopotamia. He wrote a history of Mesopotamia in Greek, supposedly done in homage to Antiochus I Soter. Doubtless, he made much of astrology, the pride of his country and caste. It had played so intimate a role in its history as counselor of kings and guardian of the cycles of Babylonian chronology.⁷¹ Suddenly, Mesopotamia supplanted (for a moment) Egypt in public favor. Astrology, above all, piqued the Greeks' curiosity at just the time that Berossus installed himself on Kos. He had done so in order to teach the medical students whom the fame of the Asclepiads had drawn to the home of Hippocrates. He opened a school and formed disciples. Among them, Vitruvius cites Antipater and a certain Achinapolus (Athenodorus?), who had the idea of applying the methods of horoscopy, not to birth, but to conception.⁷² Clearly, the seed fell on fertile soil. Astrology had been immobilized for many centuries in a hieratic civilization. It became the subject of discussion, re-worked and transformed by the inventive genius of the Hellenes.

It was at this time, about 280 BCE that we place the birth of Greek astrology, without assuming that the Greeks had never heard of astrology before that year. If the Persians had brought astrologers with them at the time of the Persian Wars, it is more or less likely that these Mesopotamians were among many adepts with whom the Persians had brought fire and blood.⁷³ We have nothing of Berossus save extracts and analyses of suspect authenticity. Moreover, we would not want to limit, in even an approximate fashion, the contribution of Mesopotamia to a science which kept the Mesopotamian name, "Chaldaean," despite the concurrence of Egyptian traditions. Berossus put into circulation all which he was able to take from the archives of Babylon and Nineveh. Otherwise, those libraries on clay have only recently been retrieved from their debris. Only since the modern discoveries have we been able to get an idea of the lessons of the Mesopotamian professor.⁷⁴

By the time of Berossus, the Greek philosophers had already created plausible cosmographical systems, and had spaced the celestial spheres at harmonic distances. The astronomers of Alexandria were beginning a descriptive inventory of the sky and were starting to apply to astronomy the rigorous methods of geometry.⁷⁵ More than one listener would have been tempted to take the exaggerated claims of the Mesopotamians as infantile foolishness or senile drivel. Instead, however, they were intimidated by the enormous mass of observations which were supposed to support the jumble of legends. The debate over the respective pretensions of Mesopotamia and of Egypt to priority in the matter of culture, a debate which has lasted down to the present,⁷⁶ was genuinely interesting in those days. Berossus, if we believe our authors, crushed all objections with the weight of his numbers. He spoke of observations made in Mesopotamia over 490,000 years. Simplicius (at the time when the world fell back into infancy) was not afraid of the number 1,440,000 years⁷⁷

Doubtless, serious people had reservations. Cicero thought that the Babylonians were braggarts. Diodorus defended his belief in a fabulous antiquity. He was convinced, as George Syncellus says, that Berossus and Manetho had bid against each other, at the expense of common

sense.⁷⁸ However, even the less credulous were convinced that they were dealing with a very ancient tradition, if the cosmogony or cosmography of the factual observations kept their value. The delicate point in astrology, as in all forms of divination, was to establish a connection between the sign and the thing signified. Unless it were divinely revealed, this connection could only be known from experience. The experience became proof from repetition. Berossos may have given his students lists of eclipses like those which we find at Kuyunjik, with references to the events which followed. If so, he also gave them a high idea of the time it would have taken to insert the observations of eclipses for all the days of the year.

By surveying what is known today of the doctrines of the Mesopotamians, we can get an idea of what Berossus taught.⁷⁹ According to the Mesopotamians, sky and earth are the two parts of a Chaos monster, Tiamat. Tiamat was engendered within a limitless ocean, whose waves bathe the top of the sky as well as the bottom of the earth.⁸⁰ From the body of Tiamat, split in two, the demiurge Bel-Marduk made two vaults, one over the other. One was the celestial cupola, the other, the foundation of the earth. They were connected at their base by a circular seawall which kept the waters of the cosmic ocean from penetrating the space within. Like the earth, the sky does not move. There were no turning spheres in between, as the Greeks imagined there were. The stars were balls of fire which formed in the waters outside the sky. They entered and left by means of openings in the edge of the sky, at the level of the horizon.

The stars followed routes already traced across the sky. They were inhabited and led by the eye of Bel, who watches them and rules them from the height of the pole. Others were part of the aquatic band belonging to the god Ea, whose throne was in the south, under the sea. However, of all of them, those who follow “the Way of Anu,” the Universal Father, placed at the Pole of the Ecliptic, held the most important offices. They are the five planets or “interpreter” stars, plus the two great luminaries, the Moon god, Sin, and the Sun god, Shamash. They are called this because, unlike the other stars, they are not fixed to a certain place, and a regular route. They “announce future events and interpret the plans of the gods.”⁸¹ These privileged stars are led, the planet Dapinu 𒂗 by Marduk; the planet Dilbat 𒂗 by the goddess Ishtar; the planet Kaimanu 𒂗 by Ninurta; the planet Bibbu 𒂗 by Nergal; and the planet Mushtabarru – Mutanu 𒂗 by Nabu⁸²

In order to go further with our survey of Mesopotamian cosmography, it will be necessary to use the suspect help of the Greek authors. We will especially use Diodorus, a guide whose competence the Assyriologists have long doubted. He is our only alternative to striving to find confirmation in the cuneiform inscriptions for what he says about the “Chaldaeans” of his own time, that is, the cosmopolitan astrologers, Greeks performing the Mesopotamian art.⁸³

Beneath the planets⁸⁴ whose movements are the proper materials for astrological calculations, are placed thirty stars, whom the Chaldaeans call the advisor gods. Some of them watch places on the surface of the earth, the others watch places below the earth, always inspecting everything, what people do on earth, and what happens in the sky.⁸⁵ Every ten days, one of them is sent, as a messenger of the stars, from the upper to the lower regions, while another is sent back up, from the subterranean places to those above the earth. They are regulated in their courses in this way, imprisoned in a perpetual wheel. Among these gods, there are twelve chiefs, who each rule over a month in the year and over one of the twelve signs of the zodiac. Through them, the Sun, Moon, and five planets travel each one with different speeds.

*“Outside the zodiacal circle, they determine the position of twenty-four stars, some of them in the north, some in the south. Those which are visible deal with living beings, the others with the dead. They are called the judges of the universe. Beneath the stars already mentioned, the Moon circles. We are told it is brought close to the earth by its weight, passing along its route in the shortest time, not only because of its speed but also due to the shortness of its orbit. Concerning the fact that the Moon shines by borrowed light, and that it is eclipsed by the shadow of the earth, they say much the same as the Greeks do”*⁸⁶

Let us stop considering, for now, the foolishness of these Chaldaeans which Diodorus repeats and which inspired him with such a high regard for their science. From the time of Berossus, we have explicit testimony⁸⁷ that the Mesopotamians taught that the Moon, home of the great god Sin, was a

ball, bright in one part and dark in the other. This explained phases and eclipses. Two centuries later, they pretended to have known from time immemorial what the Greeks had just learned. It was Diodorus who added that the "the boat-like and hollow" ⁸⁸ shape of the earth seemed authentic. He, too, added the half confession of ignorance which his Mesopotamians make on the subject of predicting solar eclipses.⁸⁹

We do not pretend to make sense of Diodorus' text. We will leave it in confusion, deprived of authority and reduced to the value of an uncritical improvisation, lacking even chronology. Let us now move on to the "Chaldaeans" of the second century of our era, the authors of the "Chaldaean Oracles," going back to the remotest antiquity and overflowing with divine wisdom. We cannot repeat too often at this point that, be they Mesopotamians, be they Egyptians, we are not dealing with witnesses to indigenous Mesopotamian documents.

The Mesopotamian documents teach us that, of the two main workers of Nature and Destiny, the Sun and the Moon, it is our satellite, bearing the name Sin and of the masculine sex, which takes the first rank. The Sun comes later.⁹⁰ The Greeks, like the Egyptians, took another viewpoint and gave primacy to the Sun. However, we know that the astrologers took the liveliest celestial bodies as the principle subject of their homage. That is, they took the one which completes its course most quickly and shows the most variety in its changes. Even for the Greeks, it was the Moon and not the Sun which rules the calendar and, through the calendar, religion.⁹¹ Sin was the revealer god, par excellence. From the moment when his face, luminous, bright, full, turns his dark face to humanity, his intention to give humanity a sign is evident. In effect, each eclipse had always been followed by important events, whether plagues, famines, wars, or earthquakes. Nevertheless, the priests finished by discovering that even the spontaneous movements of the god Sin followed each other in a certain order and formed a closed cycle or saros. More rarely, but causing more terror, the god Shamash would also hide his face, a redoubtable sign which could not be accurately predicted.

The person who professed Mesopotamian astrology would cite the accumulated observations of the royal astrologers to his wondering audience. They addressed their reports to kings from the towers of Borsippa or Nineveh. They noted the lucky and unlucky hours, the approaches, encounters and occultations of the planets and stars along with the earthly consequences of these celestial events. Our Assyriologists decipher the documents with great difficulty, struggling at once with the uncertainty of the readings and the willful obscurity of the sacerdotal metaphors.⁹² It is questionable which stars are "fixed" ⁹³ which "speak" to another star or are in opposition with it.⁹⁴ Each observation repeats a prognostic formula. For example "The land's crops will prosper"; "joy for the master of the household and for the country" or "floods," "locusts," "the king will lead his armies into a neighboring country," "the troops will march," "the cities will be oppressed by soldiers," or "during this year, women will bring boy babies into the world," "Justice reigns throughout the land." We still find these and other affirmations in our almanacs, but they had the attraction of novelty to the first adepts of astrology imported from the Near East. Here and there in this jumble we find modes of interpretation and dogmas which will be familiar in Hellenized astrology. For example, the star Manma (Mars?) is in opposition to the star Battaba (Twice-as-big). It is "good for the king," whose weapons probably destroy the greatest opponents. The same star is in opposition to "the star of the Fish" – this means many fish will be available in the land. The same in opposition with Mercury (?) Means the king "rests in his land," perhaps due to the equilibrium of two equal and contrary influences. Due to an opposition of Mars and Venus "that year, for six months, the king will stay at home." Mars opposed to Jupiter meant "ruin for the country," due to conflict between the two great powers. The astrological dogma that the planets have a sex which depends on their position is affirmed in a conclusive example "Venus is female at setting; Venus is male in the East" (p. 196).

Predictions taken from eclipses of the Moon are particularly numerous. The royal astrologers sometimes seem to be disappointed in their calculations about the syzygies. They note from time to time "the Moon arrived before the calculated time, an eclipse took place" (p. 216). Or again, "contrary to the time calculated, the Sun and Moon were seen together. A strong enemy will ravage the country; the king of Akkad will be thrown down by his enemy" (p. 288). In most reports, the question involves the Moon setting and a planet "fixed in its place." Thus, "the Moon sets and Mercury is fixed in its place the king of Phoenicia ⁹⁵ falls and his enemy "sacks the country" (p. 221). A tablet (pp. 222-223) contains observations of eclipses of the Moon for each day of the month Tammuz, from the first to the fifteenth, with precise details of the course of the phenomena.

"On the first day of the month, if there is an eclipse and it begins in the south with light (a partial eclipse?), a great king will die. In the month of Tammuz, the second day, an eclipse took place, beginning in the north with light, king against king. In Tammuz, the third day, an eclipse took place, beginning in the east with light, rain and floods. In Tammuz the fourth day, an eclipse took place, beginning in the west, the crops in Phoenicia (are lost?). In Tammuz, the fifth day, an eclipse took place and the great star is ascending famine in the land. In Tammuz the sixth day, an eclipse took place, and it is white (?) the Moon receives prayers. In Tammuz, the seventh day, an eclipse took place and it is black the Moon sends nourishment to Phoenicia. In Tammuz, the eighth day, an eclipse took place and it is dark blue a morsel of land and field...(?). In Tammuz, the ninth day, an eclipse took place, and it is yellow-green devastation of enemy territory. In Tammuz, the tenth day, an eclipse took place, and it is pale yellow Akkad is?.... In Tammuz, the eleventh day, an eclipse took place, and the Lord of light went on his way the treasure of the land is pillaged (?). In Tammuz, the twelfth day, an eclipse took place and the watch was finished...In Tammuz, the thirteenth day, an eclipse took place and moved to the south.... In Tammuz the fourteenth day, an eclipse took place and moved to the North... In Tammuz, the fifteenth day, an eclipse took place and moved the East."

The general prediction for the whole month is this "In Tammuz, from the first to the thirtieth day, if an eclipse takes place, the altars will be destroyed, cities will be sacked, and the king will have peace."

After reading this strange document, we may well ask if it is not the work of a mystificator. We may wonder, too, who is the victim, the king of Mesopotamia or the modern Assyriologist? The months of the Mesopotamian year were lunar months, beginning at the New Moon and divided into halves by the Full Moon.⁹⁶ We must admit that at this era, the Mesopotamian astronomers do not seem to have noticed that eclipses only take place at the syzygies. Lunar eclipses take place at the Full Moon, or opposition, solar eclipses at the New Moon or conjunction. In assuming that eclipses were possible on each day of the month, they award themselves a certificate of ignorance ⁹⁷ unknown, no doubt, to the Chaldaeans of Diodorus, so expert on the causes of eclipses (see above, p. ???.) They may even have regulated their calendar so badly that the full Moon, normally fixed at the fifteenth, had coincided at different times with all the days of the month, if such a thing is credible. The author of another report (p. 239) affirms that eclipses always took place on the fourteenth, fifteenth, sixteenth, twentieth and twenty-first of the month. It is to be feared that this writer did not understand the causes of eclipses any better than the other one, but at least he reached less absurd results. If we subtract from these lists of eclipses the days of the month which render them unintelligible, there remains a sort of astrological grammar. It is a classification of presages, ordered by color and the course of the shadow across the lunar disk. Perhaps, if we wish to speculate, the first author composed something else and a copyist badly misunderstood the work.⁹⁸

When there were no eclipses, lunar haloes, brighter or dimmer than the horns of the crescent Moon, were omens. It seems, too, that the royal astrologers committed or assumed errors in calculation which transformed these regular events into significant prodigies. We have seen that they often found the Moon "before his time" at the moment of an eclipse. In a report probably destined for Aššurbanipal, the astrologer spoke of watching for an eclipse of the Sun, which did not take place.⁹⁹ Instead, there was a conjunction of the Moon with a planet.

"To the king, my lord, his faithful servant, Mar-Ishtar. On the 27th day of the Moon disappeared. On the 28th, 29th, and 30th, we observed the lunar node eclipse the Sun. The time came and the eclipse did not take place. The first day, when the day of the New Moon of Tammuz waned, the New Moon was visible above the planet Jupiter, as I had already announced to the king, my master I was not mistaken. At the hour of Anu, the Moon seemed to decline, on the circle of Regulus, but its crescent was not lost in the haze of the horizon"¹⁰⁰

Elsewhere, the "chief astrologer" stated in one of his reports "the Moon is seen on the 286th day, which had appeared on the first prosperity for Akkad, bad luck for Amurru" (p. 228). This is probably a prediction created in order to produce an effect, at a time when Amurru, so often named in

the tablets, was in perpetual hostilities with the kings of Babylon and Nineveh.

Most of tablets are signed without qualifications. A certain Nabua calls himself "Assyrian" and Ishtar-nadin-Habal gives himself the title "chief of the astrologers of Arbela." It is a curious fact, that it took such an astrologer, from the time of Aššurbanipal, to declare in his report of observations that he had restored them in "conformity with the terms of a tablet which no longer exists," entitled "The Illumination of Bel'." Mesopotamian astrology already had its scholars and lived on its past.

There is not one of these ancient documents which touches at all on horoscopy, the prediction of an individual's destiny from the stars' positions at birth. Doubtless, this argument from silence does not disprove the tradition which credits the invention of the methods of horoscopy to the Mesopotamians. However, it confirms for us the opinion that astrology began by formulating predictions for peoples and kings, before assuming that the stars occupied themselves with every person on earth. Perhaps it was Greek logic, rigorous and democratic, which made it condescend, later, to care about ordinary people. It made the lie of the Mesopotamians, that they used observations from thousands of centuries of analyzing children's experiences, even bigger.¹⁰¹ In order to find a Mesopotamian theme of geniture (what is today called a horoscope) we must come down to the Parthian period, that is, to the time when the Near Eastern peoples imitated the Greeks. Also, the ones we know are written with a concision which betrays a certain indifference to this sort of observation

"Year 170 of Demetrius, month of Adar, night of the 6th, at the beginning of the night, the Moon was in front of the Horn of the North ¹⁰² a cubit away. On the 6th in the morning, a small baby boy was born under his sign. The Moon was at the beginning of Gemini, the Sun in Pisces, Jupiter in Libra, Venus and Mars in Capricorn, Saturn in Leo."

Another, more summary still, says

"Year 170, 4th of Nisan, the equinox in the house, it is announced that a baby boy is born under Jupiter"
¹⁰³

that is, Jupiter was rising throughout the night (ἀκρόνυχος).

Later, we will compare the dryness of these documents with the minute precision of the horoscopes erected by the Greeks with the full resources of a perfected practice. We must now return to the time and the supposed disciples of Berossus. We will try to determine the meeting point of Greek and Mesopotamian astrology. In other words, we wish to appreciate, if we can, who gave what to whom, beyond the general idea and the impulses which sustained it. The question is a very complex one, for the Greeks themselves, rather than sorting things out, simplified the story outrageously and attributed the whole astrological toolkit to Near Eastern peoples, Egyptians or Mesopotamians. This is a mirage which dissipates when confronted by authoritative texts. Eventually we will be able to convince the reader that, nine times out of ten, the Mesopotamians and Egyptians honored by these witnesses are simply Greek astrologers disguised as the trustees of an archaic doctrine. This is a demonstration which we will make little by little, and which will be definitively proven, we hope, by the last chapter.¹⁰⁴

We will go straight on to the principle question, by researching the origins of the masterpiece of the astrological toolbox. The zodiac is the instrument of Greek astrology, the scale upon which are marked the positions of the planets and to which the angles of the polygons, which determine the "aspects" are applied. It is the public register of the domiciles of the planets and of their other fiefs. Finally, and above all, it was a repertory of all kinds of influences, propagating the qualities and aptitudes symbolized by the signs (ζῳδία - *signa*). There is no doubt that the Mesopotamians of the Arsacid period knew the zodiacal foot-ruler. The horoscope cited above is the proof. It is less certain, indeed, it is quite doubtful, that the zodiac was known to the older Mesopotamians and even more so for the Egyptians, whom the Greek tradition was pleased to associate with it. In order to simplify the problem, which passes beyond our competence on many points, let us try to eliminate, after examination, the pretensions of the Egyptians.

The origin of the zodiac is a question which exercises the imaginations of the erudite at least as much as their knowledge. Many things seemed to turn the debate in favor of the Egyptians. They

include the largely animal figures of which it is made and the hieroglyphs which represent these figures. There are also the discovery of four Egyptian zodiac reliefs (two at Denderah, one at Esneh, one at Akhmim) which some believed went back to remote antiquity. There is the fact that the Egyptians had from time immemorial a solar calendar divided into twelve equal parts and regulated by the rising of the constellations. Finally, there are the many texts which claim the Egyptians first invented astronomy and astrology and affirmed particularly that the Egyptians had divided the zodiac into equal twelfths by means of the clepsydra (see below). However, it has been proven beyond doubt that the Egyptian zodiacs are all from the Roman period and freely imitate the Greek zodiac. At one blow, all the extravagant suppositions based upon their supposed antiquity are destroyed.¹⁰⁵ We accept today, if we have no other objection, the 24, 000 years it would take for the equinoxes to go through the entire zodiac. This should allow us to calculate the age of those zodiacs which place the vernal equinox in Taurus, by the precession of the equinoxes. However, we may smile at the anti-biblical zeal of Dupuis, who, moving the equinoxes and solstices, reclaimed the 13, 000 years needed to move the ecliptic 180°. The carelessness of the creator of the Esneh zodiac, an artist of the time of the Antonines, unchained this flotilla of hypotheses, which, by disquieting the biblical exegetes, turned a scholarly discussion into a religious quarrel.

As for the texts which attribute the invention of the zodiac to the Egyptians, they represent the scholiasts of the late era, who bear witness naively to their own ignorance. Macrobius explained at length how it was that the Egyptians divided the zodiacal circle into equal twelfths with the aid of clepsydras.¹⁰⁶ He did not notice that his procedure, good for dividing the equator into twelfths, gave very unequal divisions of the zodiac. He was a complete stranger to calculating the ἀναφοραί, the estimation of oblique ascension in degrees of right ascension. Servius seems to have meant to speak of oblique ascension, that is, the unequal arcs of the zodiac which mount from beneath the horizon in equal times. However, he seems to have confused spaces and times of ascension. He asserted that the Egyptians divided the zodiac into twelve equal parts, but that the Mesopotamians admitted only eleven signs and one inequality which went from single to double.¹⁰⁷ By the time of Servius and Macrobius, there had been six centuries in which the Greek astrologers had been “Chaldaeans” or “Egyptians.” We ought not to apply these unsurpassed texts to the Egyptians of Egypt or the Chaldaeans of Mesopotamia.

The Egyptologists agree, moreover, that we may find many of the names of the constellations and the decans in the documents or even evidence that constellations were imprisoned in the reliefs. However, these constellations were allotted to very different parts of the sky, and they were not chosen over others because of their brightness. We know that the ruler of the Egyptian calendar was Sothis or Sirius and its neighbor Orion, which is not part of the zodiac. The same is true of the decans, which the Greeks later put into their zodiac. They were freely and unequally spread around the edge of the sphere, especially in the region of the equator. In a word, there was no Egyptian zodiac. We may easily concede that the Egyptians, little interested in the path of the planets, were not preoccupied with their oblique route and adopted a year regulated by the rising of the equatorial constellations.¹⁰⁸

For the opposite reason, the Mesopotamians used a lunisolar year, with the Moon as the principle regulator, and attributed a great influence to the planets. They had good reason to distinguish, among all the constellations, those which sheltered the wandering stars. If the Moon was always the principal object of their attentions, then the stages of its path ought to have gotten special attention. One would expect the number of stages to equal the number of days in the sidereal revolution of the Moon. Logic suggests an original Babylonian zodiac with twenty-eight pigeon-holes or lunar mansions such as we find among the Hindus or the Chinese. It would have been a zodiac devised with, and in addition to, the solar zodiac of twelve steps.¹⁰⁹ We are not able to say if the recent discoveries have completely satisfied logic upon this point. Nor can we say what rapport we may find between a true lunar zodiac and the twenty-eight “normal stars.” Unequally spaced, the Mesopotamian astronomers of the Arsacid period used them mark the route of the planets¹¹⁰ what we seek is a solar zodiac from ancient Mesopotamia. The Greek zodiac is composed of two completely distinct elements. The first is the signs (ζῳδία) or constellations which we find spread along the ecliptic or the route of the Sun, irregular in position and unequal in brightness. The second element is the artificial partition of the band of signs into equal twelfths (δωδεκατημόρια). The last element is the more important of the two and the specific mark of the Greek zodiac. It is clear that, if we remove it, we will find references to zodiacal constellations in Mesopotamian and Egyptian uranography. They will be under different names, and

(when we know) with different images. In order to know if the Greeks imitated either, it is enough to look for analogies between the characters attributed to corresponding constellations on either sides.

As for the twelfths, the question seems clear. Even in the era of the Arsacids, the Mesopotamians, enemies of invisible abstractions, had not yet divided the zodiacal constellations into equal segments.¹¹¹ We may conclude, all the stranger, that they did not know the uniform twelfths in times when they were free from all Greek influence.

There remain the signs or figures. Contemporary Assyriologists – or the more prudent of them – have not found in the ancient documents a complete series of zodiacal constellations comparable to the Greek ζῳδία. However, they describe a Ram, a Bull, Twins, a Scorpion, a fish-shaped Goat corresponding to Capricorn, and two Fish, or fish-men, connected by a string like those in the Greek zodiac. Moreover, while there may be no Leo, we find a solar deity, Nergal, called Lion, and the stalk of wheat held by the Greek Virgo is very Semitic. The presumed positions of these groups of stars upon the sphere seem to indicate that their names are metaphors suggested by the temperatures of the corresponding parts of the solar year. Thus, thirty centuries before our era, the Spring equinox was in Taurus. The Bull was then the symbol of Marduk, the springtime Sun leaving the waters of winter but still half in them.¹¹² The winter signs are all watery, beginning with Scorpio, which corresponds to the Fall equinox. Scorpio seems to have been a monstrous scorpion-man, who, according to the cosmogonic legends, had helped Tiamat to resist the demiurge Bel-Marduk. The epithet “Lion” fits well with the ferocious Sun of mid-day. Finally, Virgo may not have been the sign where one finds the Sun at harvest-time – this would be February in Mesopotamia – but, on the contrary, the sign which rises and smiles on the harvesters as the Sun sets.¹¹³

The Mesopotamian zodiac roughed-out in this way was subdivided and completed later. Perhaps it was part of adopting the lunisolar calendar, which required at least twelve compartments. The mis-arrangement of the old system caused by the precession of the equinoxes may have motivated modification. Thus, noticing that the equinox had left Taurus (2450 BCE), the Mesopotamians intercalated, between Pisces and Taurus, a new solar symbol, Aries, to mark the Spring equinox. They also moved the rear part of Scorpio to the Fall equinox, where the prototype of the Greek Sagittarius stands.

As pleasing as these hypotheses may be ¹¹⁴ they are not always without gaps. They explain badly either the absence of a sign consecrated to the summer solstice or the nature of this sign. Later it would become the model of the Greek Cancer, that is, an aquatic animal, completely displaced from the point where the Sun attains its greatest strength. The explanation of the sign of the Twins is not improved when one recognized in the “Great Twins” the hypostases of the solar god Nergal, symbolizing the mixed character of spring-time.¹¹⁵ In searching Mesopotamian legends for evidence of the high antiquity of the zodiac, ingenious scholars have had the idea of considering the poem of Gilgamesh in twelve cantos as the model or perhaps the interpretation of the zodiacal cycle.¹¹⁶ In effect, the first image which attracts attention is the divine bull, Marduk, coiffed with the “horns of sovereignty.” The Bull is the first sign of the zodiac. The ninth sign, Scorpio, appears in the ninth canto of the poem, when the hero Gilgamesh meets the scorpion-men. They guard the gate of the Flood, explaining the sign of Aquarius, the eleventh sign of the zodiac. There need to be more reasons than these adventurous conjectures. We cannot yet admit that the Mesopotamians have “catasterized” the heroes of the poem or that the poem put the signs of the zodiac into action.¹¹⁷ In short, the one impression which, to an outsider, seems clear in these shadows, is that we are right to suppose an impact made by Mesopotamia. This is in spite of civilized Greece finding, in an anthropomorphic religion, sufficient reason for the zodiac, and considering that the Greeks themselves recognized the fish of the Euphrates in the sign of the fish. It was from Mesopotamia, doubtless, that the initial impulse came, the idea of enclosing groups of stars into animal shapes, and the first rough sketch of Greek uranography. With the promptness and fertility of their imagination, the Greeks did the rest. They decorated the sky in their own fashion, without knowing or caring where the decorations came from. Popular instinct, followed by the work of the mythographers, attached all these catasterisms to the national mythology and thus effaced or rendered unrecognizable the exotic characters which had given them their origins.¹¹⁸ Even if all the versions of the Greek zodiac were Mesopotamian, we could still claim for the Greeks the construction of the zodiacal circle or ring. Traced geometrically across the constellations, it was the ideal foot-ruler, whose regular twelfths were given the names, but not the dimensions, of the groups of stars which it passed through.¹¹⁹

Construction of the zodiac was the last part of the work of assimilation and invention. The ancient navigators, disciples of the Phoenicians, had no need for the Pleiades, whose rising invited them to go to sea. They gave their attention to the Pole. Homer mentions “the Pleiades, the Cowherd slow to set, the Bear, also called the Chariot, which turns in place as it watches Orion, and alone does not bathe in Ocean.” He knows, too, the star “called the Dog of Orion, which is very bright, but which is an unfortunate sign, for it brings burning heat to unhappy mortals.” Hesiod, who taught farmers to know their seasons, was preoccupied with the rising of Arcturus and Sirius. Where did these names come from? The Greeks called the little Bear “the Phoenician” (φοινίκη), otherwise known as “the tail of the Dog” (Κυνόσουρα). However, Hesiod already knew the legends which called the Bears and Arcturus (also called the “Guardians of the Bear” (Ἀκτοφύλαξ), Arcadian heroes raised to the stars. Who made Orion into a hunter, with his dog Sirius, pursuing the Pleiades or pursued by the Bear and killed by the Scorpion? Cassiopeia (Κασσιόπεια) carries a Phoenician name. But Sophocles unites her with the Nereids and Andromeda in a Greek mythological drama. We will see later just how varied the tapestry was upon which the zodiac was embroidered.¹²⁰

The zodiac became necessary to the Greeks when they began to observe the courses of the Sun and Moon, or even the planets more closely. It was not received all in one piece, nor was it manufactured all at one time, according to a master plan. It was not perfected until the time of Hipparchus, when, in order to have twelve signs, the Claws of the Scorpion were separated and made into the Scales (see below). A reference hidden in the compilation of Pliny, tells us that Cleostratus of Tenedos, towards the end of the sixth century BCE, introduced Aries and Sagittarius.¹²¹ We do not know if he were drawing upon Mesopotamian traditions and if he found the zodiac there already complete. The division into equal twelfths, which did violence to Nature, was not done until later. It was done when observers were armed with instruments of a certain precision, instruments unknown before the rudimentary diopter of Eudoxus.¹²²

One thing is certain, the Greeks did not need to be initiated by Berossus into the arcana of astrology in order to cover the sky with symbolic figures, drawn in great detail. Aratus of Soli, a contemporary of Berossus, had fixed forever the iconography of the stars. We know, however, that he did no more than versify a treatise with the same name (Φαινόμενα), composed nearly a century earlier by Eudoxus of Cnidus. Now, this guide to the celestial museum indicated in which part of the symbolic body, head, throat, shoulders, right eye, left eye, one would find the stars. It tells what attitude the figure is in, facing right, lying, kneeling, turning to the front or the back, up or down. Thus the Greek astronomers prepared, without any doubt, all the varieties of pretexts for the astrological speculations of the future Greek “Chaldaean.”¹²³

We will be briefer on the Mesopotamian laws of events about the planets. In order to distinguish the planets from the stars, especially the slower moving planets, one needs observations gathered over long periods of time. In order to have even an approximate idea of their revolutions, the work of several generations is needed. The Greeks were philosophers – isolated, improvising savants. They were unable to borrow the facts which they needed to build their cosmographical systems from neighboring older peoples. Democritus knew that there were mobile stars. However, (as we are told by Seneca)¹²⁴ he did not know the number or the route. This (let it be said in passing) makes the famous music of the spheres of Pythagoras very suspect, as an anachronism. Plato knew the planets. However, although all the celestial provinces bore mythological names, the three upper planets remained anonymous stars. Eudoxus was the first who (as ever, according to Seneca) “brought from Egypt to Greece” the tables of planetary movements.¹²⁵

By the time of Seneca, Babylon and Mesopotamia were no more than memories. Egypt, living and active, had prevailed in its pretensions to priority in the matter of civilization, thanks especially to Alexandrian falsifiers. The names “Chaldaean” and “Egyptian” are somewhat interchangeable when we speak of astrology. We are able to substitute the one for the other without scruple. Or, to conciliate everyone, we may say that Eudoxus brought from Egypt ideas which had been imported from Mesopotamia.

What was this scientific booty? Which doubtless arrived at just the right time for Plato to construct his cosmogony? Probably it was things that the Greeks were not able to improvise, such as data about the routes, sometimes direct, sometimes retrograde, of the planets, and of the lengths of their revolutions. It was from this information that Plato – or perhaps the Pythagoreans before him¹²⁶ – had derived the oldest order of the planets to be known and accepted in Greece. They applied a

very simple principle, the knowledge that the distances between the planets and the earth must be in direct proportion to the length of their revolutions. The moon was at the foot, and Saturn at the top, of the ladder.

It is not certain that this purely mechanical principle had not escaped the intelligence of the Mesopotamians and the Egyptians. No one later failed to credit them with the attributions adopted by the Greek philosophers and astronomers. The principle was that the Egyptians and the Mesopotamians had invented everything. We saw earlier (p. ??) that the Mesopotamians arranged the planets in an order whose reason escapes us, perhaps according to their dignity or presumed size. In Egypt, leaving out the Sun and the Moon, we find, for the five planets, eight different orders. None of them conform to the order of distances.¹²⁷ Would this notion of distance not have been foreign to the ancient Mesopotamians and Egyptians? Read on a little further. Was this superimposed scale, which Greek science had used to separate the steps with immense intervals, not directly contradictory to the primary assumption of astrology? Astrology assumed direct contact between the planets themselves and between the planets and the stars. The stars served as the planets' flocks, their homes or resting places. Astrology was invented by people who believed that all the stars, fixed and moving, were the same distance from the earth. They circulated among themselves, exchanged their sympathies and antipathies, combined their influences. They ambushed one another, awaited one another, passed one another, saw one another at all points of the route. They followed the rules of an etiquette and a sort of trajectory which became the height of absurdity when transported into a world expanded and reshaped by Greek science. What surprised us most in the course of this study was that the astrological faith was implanted in Greece and there resisted daily, in this implantation, the most obvious sacrifices which it imposed on reason.¹²⁸ Religious and rational after its fashion in Mesopotamia, this faith remained religious in Greece, under its scientific mask. We dare not find it unreasonable, when the Stoics (half Greek, half Near Eastern) had certified that it was not.

We have had plenty of occasions to meet Mesopotamians and Egyptians on our way. In order to close, provisionally, the list of Eastern influences, we need do no more than research the names which the Greeks gave the planets. As with the signs of the zodiac and the constellations in general, astrologers and astronomers used the same nomenclature. The names Φαίνων (Phainon) for Saturn, Φαέθων (Phaethon) for Jupiter, Πυροείς (Pyroeis) for Mars, Φωσφόρος (Phosphoros) for Venus, Στίλβων (Stilbon) for Mercury, are qualities which have a very clear meaning in Greek. Are these translations of epithets attributed to the Mesopotamian planet-gods? It is possible, even probable for the planets other than Venus.¹²⁹ Because of its brilliance, Venus always attracted attention. Even before Homer, it bore the name Ἑωσφόρος (Ewsphoros), which Plato kept.¹³⁰ The name Phosphorus is a compromise which dates to the time when the Morning Star (Ἑωσφόρος) and the Evening Star (Ἑσπερος Hesperus) were recognized to be the same, that is, to the time of Pythagoras. Upon these epithet-names (also used by the astronomers) the divine names were superimposed, or perhaps bracketed. They were the true astrological names, applied to the planets. They produced there a space for the entrance of star worship into Greek theology. Like a plundering expedition, they took their human souls from the old mythological images of Kronos, of Zeus, of Ares, of Aphrodite. This was the *raison d'être* for the legends which composed their biographies. This plundering took place slowly and by detours from the first idea¹³¹ which had been to attribute the ownership or patronage of a planet to each of the gods. Nevertheless, the identification of a divinity and a star was never so complete that the correct expressions "star of Kronos," "star of Zeus," etc., fell into disuse.¹³² The national mythology resisted the attractions of Mesopotamian astrology, even as adapted to Greek thought by the author of *Timaeus*.

If there is room to suppose that the attribution of the planet Mercury to the god Hermes, an attribution already known to Plato, is due to the influx of Mesopotamian ideas – perhaps coming via Egypt – there is all the more reason for the association of Ares, Zeus, and Kronos with the three upper planets. Ares was never a popular god, and Kronos had supposedly retired from the world of the living. It was the learned who, digging around in Greek mythology to find images which could be assimilated to these exotic models, made the comparisons and pressed the analogies. Let us remember here that no one deployed allegorical exegesis with more virtuosity than the Stoics. Asiatics for the most part, they had been, moreover, the first disciples and collaborators of Berossus. We will admit, therefore, without insisting for more, that the attribution of the planets to deities chosen as rough equivalents of the Mesopotamian gods had already been done by the Stoics. At least it was justified by them. In a

word, they soldered physics and mythology together, adapting to the needs of learned astrology.¹³³ Ishtar and Nergal easily found their equivalents in Aphrodite and Ares. The equivalence was all the more exact for Aphrodite was herself an Oriental deity, proceeding from Ashtoreth or Astarte, the Syrian Ishtar. The planet of Marduk was assigned to Zeus, not without a noticeable change in his character. The moral sense of the Hellenes had attributed to the “father of gods and men” a serenity and clemency which the redoubtable Babylonian demiurge had never had. The adapters had more trouble finding equivalent characters in the Greek pantheon for Nabu and Ninurta. How did Ninurta the irresistible, who at his pleasure unleashed the storms and the fertile showers, become the wise and morose Kronos? The reasons do not lack doubts they are all the more numerous for being clear. Ninurta is an ancient solar god, the first-born of Ea, replaced by the hegemony of Marduk. It was rather like Kronos, belonging to the archaic generation of Titans, being replaced by Zeus. Ninib stood for the sun on the horizon, rising or setting – especially setting – and Kronos supposedly lived in the Fortunate Isles, on the far shore of the Western Ocean.¹³⁴ Finally, Kronos had affinities with the ideas of generation and paternity, promoting his assimilation with the Latin god Saturn, the god of seeds and sowing. He drew near as well to Ninurta in this way, as also in the wisdom mixed with dissimulation found in elders. The assimilation of Nabu to Hermes, which had been made lightly,¹³⁵ had to be revised and accepted by the Stoics. Like Ninurta, Nabu was a deity in decline. Once the first in Borsippa, he ceded primacy to Marduk, the favorite of the Babylonians. Like Ninurta, he was a fecund god, but with many restrictions. His planet, rarely observable at our latitudes, was for the Mesopotamians a blaze which gave rise to the epithets “unfavorable,” “arsonist,” “recalcitrant,” “enemy,” “liar,” “leopard,” “fox,” etc. The fox makes us think of the cunning Hermes. We must not forget Hermes Psychopompos, the carrier of fire-wood and of souls, was still a redoubtable god. However, it is certain, on the other hand, that the Greek astrologers created the image of Hermes-Mercury as ingenious, thoughtful, and skilled in the art of charming with words. These aptitudes which were hardly found in the “Sparkler” (Στίλβων) of the Mesopotamians.

The characters of the planets were the foundations of all the astrological inductions, even more than those of the signs of the zodiac. The connection which they made between Mesopotamian theology and Greek mythology was the doctrine which made it a sovereign influence. It was the horoscope of Greek astrologers which fixed the ambiguities which had operated in the gaps. The chart thus drawn up remained vague and supple. This allowed the astrologers to enter or re-enter all those variations which they drew from their own experiences or from as-yet unused Mesopotamian or Egyptian traditions.

Let us sum up and make a final draft, before going further on, of the conclusions drawn from these prolegomena. Greek astrology – seemingly a method of divination using astronomy as its medium – Greek astrology, we say, was sustained by Mesopotamian astrology. Mesopotamian astrology furnished it with all or part of the zodiacal signs and the planetary images, the most indispensable of its instruments. We cannot know if Mesopotamian astrology itself, at the era in which it thus grafted its doctrine onto a new trunk, had itself incorporated Egyptian traditions. Perhaps it had mixed in Egypt with local traditions, which were then imported from Egypt to Greece long before our era. There had been active relations between Egypt and Mesopotamia, but they throw no light on these questions, rendered insoluble by the incoherence of the witnesses. It is thus prudent to remain, in the search for origins, with Mesopotamian astrology. If we would have an idea of the genesis of astrology, we must abandon the whole phantasmagoria of the endless centuries of observation and experience alleged by those who profess astrology. Experience does not destroy the works of faith. Mesopotamian astrology rested upon the primordial foundations of all religions. It rests upon animistic logic, which believes that all is moved by wills, spirits, and upon the sentiment which demanded that these powers be principally concerned with humanity. The nature of the country, the climate, the existence of a priestly caste curious about things inaccessible to ordinary people, turned that logic and this sentiment towards the stars. There religion housed its gods, among whom it distributed its imaginary affinities according to brightness, color, position, speed. I was going to say, it housed there the habits of the wandering stars, the kings who people the stars, and the divine characters issued from the same creative imagination.

Here we stop the search for causes, going ever farther back. We have more to preoccupy us, heading forward, beginning with the autonomous development of Greek astrology.

Chapter Three

Basic Principals of Astrology

The simple astrology of the Orientals, hardly separate from the religion which gave birth to it, needed a great effort to rationalize it. The stars were the gods or their vehicles, from which they surveyed the world. It went without saying that the gods had both the will and the power to intervene in affairs upon the earth. There was no difficulty in conceiving why and how the gods did what they did. They did things because they could and they pleased. The Near Eastern spirit did not even pose the question which gave trouble to the logic of better endowed peoples. This was the impossibility of converting wills supposedly free, even capricious, into natural laws, whose effect is presumed to be necessary and identical throughout. Nevertheless, astronomy gave birth to the idea of order, of regularity. The Chaldaean priests based their predictions of the future precisely upon experience. They were not able to separate their calculations from the postulate which gave them all their value, that the same causes must produce the same effects. In any case, they seem to have refused to make the concessions needed to abandon a religious conception of the universe for a mechanistic scientific view. The planetary movements, in their eyes, were the sum of unforeseen behaviors. They did not always arrive precisely at the calculated rendezvous, in their encounters with the fixed stars. The fixed stars, too, did not always come to their positions by precise measures. The Chaldaeans do not seem to have ever made scientific discoveries able to trouble their traditional faith. We do not know what made them study the sky. It is likely, however, that they believed that they were coming closer to the gods when they installed their observatory atop a ziggurat of seven stages.¹³⁶ Their pious routine preserved them from subversive theories which elsewhere enlarged the world. These theories made the producers of sidereal energies recede to enormous distances. At the same time they shrank the target at which the celestial forces aimed, humanity and its home.

Chaldaean astrology was offered precisely to minds already familiar with these vast perspectives. They were armed with dialectic and no longer accustomed to belief. Astrology was presented as a long-verified collection of facts, whose rational explanation was unknown. The pleasure in finding theories for facts thought to be certain, in transforming a raw mass of traditions into a rational science, must have had singular attraction for the Greeks. They had a taste for both discussion and novelties. They alone were able to do the work to satisfy an intellectual need which their predecessors had not felt. It was among them that astrology became a science, a "mathematics," resting upon a certain number of fundamental principles. A period of universal consent gave these the value of axioms. We will see later how and with what success these propositions were defended against opposing arguments.¹³⁷ For the moment, it will be enough to formulate and render an account of their solidity in measuring the extent of their jurisdictions. The most general principal merely states that the stars exercise a preponderant influence upon the earth and its inhabitants. This proposition had no need to be demonstrated for the adepts of the mystic philosophy issuing from Plato and Pythagoras. The stars were gods, even divine creators of terrestrial organisms. Whether this influence could be known and distinguished from all others was a less important question. The questions were easily resolved. The divine action could be known in a variety of ways, from revelation made expressly by the gods themselves to revelation in Nature, which is reason modified by experience. The "scientists," if any still remained, were aware of an argument by which, thanks to an equivocal account, astrology took credit for all good things. Was not the Sun, in the eyes of all, the regulator of all animal and plant life? The Moon, to which antiquity attributed many influences beyond the tides,¹³⁸ did it not move all things and beings on earth? Moreover, why should what was true of the Sun and the Moon not be true, in proper proportion, of the stars, fixed or wandering? The planets, after all, were just small suns and remoter moons.¹³⁹ The fixed stars indicated the stages of the solar year by their heliacal risings and settings. Their presence was accompanied by the changes of the seasons, the heats, the cold spells, the winds and rains. Whether they were, for the theoreticians, signs or causes of these phenomena,¹⁴⁰ the practical result was the same. Moreover, before they had a suspicion of the mysteries of Chaldaean astrology, the Greeks had spontaneously roughed-out a science of the sky. It was called meteorology and was supposed to predict the variations and accidents of the atmosphere. This science (also called "prognostics") was founded upon the observations of workers and sailors.

Aristotle had recently added chancy predictions drawn from the appearance of comets.¹⁴¹ Greek meteorology was thus already traveling on the same road when it met Mesopotamian astrology, and its contribution was joined to modes of divination already recommended by the new doctrine.

The initial postulate of astrology was obvious to mystics, plausible and to a certain degree acceptable to the scientists. It became a dogma to the Stoics, who were both mystics and scientists at the same time. The dogma contained for them the ultimate reason for all things, the foundations and sub-foundations of religion and morality. It offered comparisons and analogies able to serve as demonstrations. The influence of the stars upon the earth became for the Stoics a particular case of the "sympathy" or solidarity of all parts of the universe. It was a solidarity not just ideal or moral but material, the substance of Being. It was realized at every moment by an incessant exchange of molecules or of propagating motions. The Stoics knew that the Earth sent sparks of intelligent fire to the stars on high. With Thales, Parmenides and Heraclitus, they thought that Earth nourished the stars with its vapors.¹⁴² The heavier vapors fed the lower stars, the more subtle ones mounting to the higher spheres. This matter returned to the Earth as heat and light, the celestial effluvia which lit and sustained the mysterious flame of life on its surface.

Once universal solidarity is admitted, it follows logically that the effluvia transport with them the qualities of the source whence they come. The point of their arrival tended to be assimilated to the point of their departure. To make the demonstration more clear, let us cease to spread our attention over the whole universe.¹⁴³ Let us concentrate upon the being who has always been and will always be, in his own eyes, the center of the universe, Man. We arrive quickly at the conclusion that Man, fashioned by the incessant action of the cosmic influx, made to resemble the universe, must be a universe in miniature, a microcosm. The doctrine of universal sympathy became the inexhaustible food of the astrological faith and the justification for its stranger fantasies. It thus condensed, specified, interested human egotism. It flattered human pride, and projected the human image upon the whole world. After all, the proposition could be reversed, like a mathematical equation. Astrologers were permitted to search the human body and the human soul for correspondences of all sorts. They sought them between the members of the body, the faculties of the soul, and the planets and signs of the zodiac. An imprudent logic had drawn its deductions out to the point where it found itself dispossessed of its right of control. It was obliged to work with the caprices of an unbridled imagination.

To this central fortress of astrology, each philosophical system carried its own stone. We have seen the implications drawn from the mechanical theory of effluvia. Platonic spiritualism reached the same goal by a more direct route. Plato had raised the imitation of divine prototypes to a dogma, from on high to here below on the staircase of Being. Philo added the witness of the Bible to that of Plato. According to the Bible, God created Man in His own image. Man is a copy of the Universe, which is itself a copy of God. For non-Jews, it was already in *Timaeus*. We may divine with what zeal the mystics developed these facts, profiting in addition by the connivance of the "scientists" or materialists. They replaced effortlessly the molecules of the effluvia with the souls and spirits, which they had in plenty. Finally, the theory of the microcosm had the advantage of satisfying the pure dialectician, who conceived of knowledge as an identification – or at least an assimilation – of subject with object.¹⁴⁴ Notice, moreover, how a mass of analogies and metaphors, of reasons none of which are conclusive and many of which are inept, give the illusion of a demonstration in form. It was an illusion all the more tenacious for having a bit of truth as the point of departure, but one turned over and viewed upside-down. The truth is that Man, unable to conceive of anything as not human, had made God or the gods in his own image. From this he was easily able to retrieve all the analogies of which he was the unconscious and unique author.

So, then, according to the Greek philosophers and astrologers, the stars exercise influences resulting from their own image upon those beings which submit to them. They exercise them either mechanically or by a completely different mode of action. Between this belief and the application, an enormous postulate hides under dissimulating phrases. Once accepted, it paralyzes all further resistance from reason. The disciple who did not require his master to demonstrate to him the real existence of the many properties from which the doctrine composed the astrological and zodiacal characters, who took as established fact the physics or physiology or psychology of the stars, was no longer following the thread of reason. He could find no logical reason to contest the force of expansion and the assimilating virtue of the sidereal energy. Action at a distance was as little explained by the theory of effluvia as gravitational attraction is for moderns. It is a force whose effects are known, but

whose nature is not.¹⁴⁵ In the last resort, we defer to those who still have scruples about the enormous statistics based upon so-called facts amassed by the Mesopotamians, Egyptians, Magi, and other fictional beings. The Greek astrologers attributed their own inventions to them so willingly – and with good reason.

Once the first hurdle had been cleared, the others came more easily. The Near Eastern astrologers thought the planet-gods were endowed with free will. We can understand easily that the action of these stars was variable and depended upon the whim of the moment. The bad ones might be mollified and the good ones accidentally angered. This basic principle always remained the strongest foundation of Hellenistic astrology. It was rectified with difficulty by Platonism, and greatly tamed by Stoic religiosity. Nevertheless, the Stoics, having inherited the physics of Heraclitus, changed the wills of the gods into natural laws. It was no simple task to explain how the action of even one star might be modified or reversed. It was done by means of movements, of phases, of positions and respective orientations of the stars. It was here, we believe, that the Greeks did their original work, and left their teachers, the Mesopotamians far behind.

All the reasons invoked amount, over-all, to relationships of position, measured by angles. Consideration (auxiliary, but still very important) was also given to right versus left, high versus low. The relationships of the stars with the earth continued. Probably, one did not count those below the horizon,¹⁴⁶ but there was no angle at which they have no effect. Likewise, there is no angle which did not engender reactions (reciprocal, sympathetic, or antipathetic) which profoundly modified the stars' influence upon the earth. Given the number of planets and of signs of the zodiac, it became impossible to calculate the positional relationships between each planet and each sign with all the other planets and signs. The astrologers agreed to count only some of these relationships or “aspects” (*σχήματα* – *σχηματισμοί* – *adspectus*). The others were considered nonexistent. The Babylonian astrologers, who did not care much about geometry, seem to have noted only the conjunctions and oppositions of the planets. As for the stages or intermediary angles, there is no question (even implicitly) of them for the stages of the Moon, the lunar month was, it seems, divided into six periods of five days each. It was, without a doubt, the Greeks who imagined regular polygons inscribed upon the zodiacal circle. It was they who attributed specific attributes to the rays shooting along the angles, generated by each polygon. Their reason for being we will research later.¹⁴⁷ The theory of aspects was a singular mixture of refinement and naiveté. It assumed that the planets were placed upon the same zodiacal circle and occupied, when they were in aspect, the points of a polygon. Naive, too, to say no more, was the reason given by Porphyry to explain the limitations of the number of aspects to four (diameter or opposition, triangle or trine, square, hexagon or sextile), or five, if one counts the conjunction. He was able to say, like Ptolemy,¹⁴⁸ that this was decreed by the laws of geometric harmony. One might even, like pseudo-Manetho, invoke revelation. “Untold and infinite in the ether are the figures of the stars as they cross in their paths with many detours. I explain those chosen by the gods.”¹⁴⁹ Porphyry prefers to suppose that “each star sends out seven rays (does he mean only seven rays?), one straight forward, three to the right, three to the left”¹⁵⁰ This is not a theory. It is a dogma invented after the fact, in order to justify the practice of the “aspects” and to honor the number seven. It is not certain that it is derived from the graphic sign with eight branches used by the Mesopotamians to represent the stars. It might not be a mistake to attribute these geometric constructions to the infusion of Pythagorean doctrines into astrology.

We have seen how an adept of astrology could arrive at a faith which did not conflict with logic. It was by taking as demonstrated whatever was not absurd a priori. There must have been mathematicians who took these celestial mechanics completely seriously and who thought it completely reasonable to take into account the angle from which a ray left before it reached its goal.¹⁵¹

We hate to conclude that this display of mystico-mathematical science was completely a facade. Behind the scientific camouflage erected by the Greek astrologers, the true workers of destiny were always the living gods, well- or ill-disposed, according to the incidents of the route and the chances of encounters. The planets were completely anthropomorphized. They “rejoiced” in their houses, where they gave and received hospitality. They saw one another, understood one another, pursued one another, attacked one another, passed one another. They observed the so-called geometrical laws, in reality psychological laws, of an etiquette. It assured that they retired from pre-eminence after they shifted right or left of one another. It made them change their behavior when they passed one another on one side or the other, or when they were blocked between two other stars. It

made them behave differently when they were in the cortege of a chief who is or is not of their party.¹⁵² As real scientists became more rare, Greek astrology became less constrained. It forsook the combinations of cold and warm, dry and wet for emotions, mechanics for psychology, and the science it pretended to be for the religion it actually was beneath its mask.

Mechanics or psychology had to be applied to its proper object, divination by the stars or ἀποτελεσματική. The admiration inspired by “horoscopy,” the masterpiece of Greek astrology, made people forget that this method, the most contrary to all common sense, was not the first application of these principles. We have not yet found in the ancient Mesopotamian documents any trace of a horoscopic chart. Only predictions looking briefly at countries, peoples, sovereigns are known (see above, pp. ??-??). It is probable that the astrologers started with this fact. They realized that the destiny of individuals depended to a certain degree on influences exercised on their country or their nation. Then they began to respond to clients who asked them if a moment was or was not favorable for a given enterprise. This sort of calculation, known under the name of “elections” (καταρχαί) or opportunities, was the normal occupation and food of popular astrology.¹⁵³ It contained the seed of horoscopy, which came from it and which returned to it in the state of a hybrid combination, as we will see at the proper time and place. Birth was, in effect, an act whose opportunity depended on the state of the sky as well. However, this initial act was the preliminary condition for all the others and determined them in advance. To the extent that sex, native vigor or weakness, social condition or the fortune of parents decide the future, the astrologers were led to concentrate their attention on the moment of birth. This caused all the influences which could be calculated to be done at this moment. Thus was formed something which one might call the fundamental dogma, not of astrology in general, but of the astrological method called horoscopy. It was much reinforced by philosophy, by recourse to the theory of the microcosm and to subtle distinctions between virtual and actual.

There were, in fact, many arguments to force recalcitrant good sense to admit that the destiny of the individual was not solely influenced by the state of the sky at the moment of birth. It was absolutely fixed in advance, in every detail. Much as a seal gave shape to the wax into which it was pressed, or a die did to the coin blank, so the sky at birth stamped a person's destiny, instantly. Astrology was thus divided against itself. Horoscopy tended to suppress the system of elections, which organized the whole period of existence into a continuous series of causes corresponding to a continuous series of effects. Also, the horoscopic dogma was the most often attacked, and the worst defended, of all the procedures suggested by the theoreticians of astrology. Once its partisans abandoned it, the war was lost. No one tried any longer to distinguish the destinies of individuals, to explain how each person had a different share of good and bad fortune, the state of the sky being at each instant the same for all in the same place. The debates over this subject will occupy us enough later on. What is important, for now, is to research how the procedure established itself and how it was used.

The first part is (we will speak of it farther on) the great importance of birth, as the beginning and datum point of life. This is a case where one never fails to invoke the adage *principis omen inest*. Another idea, religious, philosophical and popular at the same time, is the idea that each person's destiny is known in advance to the divine intelligence. It exists as a result of the state of conception, of the plan, having come to pass. All divination rested upon this postulate, and all systems of predestination came from it. The Platonic system of the κλήρος or lot chosen by the soul before its incarnation, was often invoked in support of the dogma of horoscopy. It doubtless contributed to the formation of the practice, as it later served to defend it. Alleged to be a free choice (a moralist's scruple with which the astrologers did not bother), the Platonic κλήρος represents a complete schedule, similar at all points to a birth chart.¹⁵⁴ Briefly, anyone who admitted predestination – and it was an opinion more or less shared by everyone – accepted the basis of the doctrine. Those who did not need to have a scientific explanation had no more objections to make.

In revenge, the scientific explanation was to be difficult enough. It was the reason some astrologers replaced explanation with an affirmation of fact, which they assumed would be admissible, even obvious. Ptolemy himself was content to say that the mixture or temperament which constitutes us is the first principle for us. This principle implies, if not every detail, at least the over-all plan of existence. He compares the action of the stars to that of an archer, who, by the act of an instant, produces all the consequences of the arrow arriving at the target.¹⁵⁵ For him, as for all astrologers after him, life is a movement whose direction, force, in consequence, length, depends on the initial impulse,

the “launching” (ἄφεςις). The only exception is resistance encountered in its course. In these obscure questions, comparisons become reasons and metaphors are as good as arguments. These take the place of honor in the logic of our practitioners. Another, already mentioned, that of the seal, based upon a chain of reasoning which Gregory of Nyssa must have borrowed from a subtle dialectician, in order to refute it. What constitutes the personality, the individuality, is a certain collection of qualities, a unique collection, distinct from all others and always similar to itself. Since the stars perpetually change their position, it is not possible to form a unique, invariable, collection for more than an indivisible moment. It was necessary, therefore, that

“just as, in pressing a seal, the engraved image reproduces itself in the wax, so the human life receives the impression of the power projected by the stars at the precise moment they meet each other with their effluvia, and follows the particular nature of that point. The life starting contains in itself a portion of the effluvia which gushed at the same moment at which life began”.¹⁵⁶

With these grand words and the grain of truth which seasons the whole doctrine affirming fate in birth, the “horoscopists” extracted themselves from the affair. One may even say, from the point of view of pure theory, that their opponents avoided the debate. They repeated constantly that neither conception nor birth take place in an instant. If they did, the astrologers would find it impossible to grasp, on the wing, the corresponding state of the sky. However, they left this as an abstract theorem.

The “horoscopists,” working with a momentary sighting of the sky, were obliged to “observe the hour” and to make a mark upon the face of the cosmic clock. They chose the intersection of the zodiac and the eastern horizon as their datum point upon the clock face. This was the *horoscope* proper (ὠροσκόπος), what is called the Ascendant in modern English. As the point of departure for all the other divisions of the circle of geniture, [birth or natal chart] the Horoscope acquired a major importance. However, learned astrology never gave the same sovereign influence as popular opinion, which makes the word “horoscope” a synonym for “birth chart.” Let us introduce one more conjecture in a subject which is already much encumbered with them. We will suppose that the calculations for erecting the birth chart for a single moment and taking into account all the stars at once, replaces an idea much more simple, popular, and religious. This is the knowledge that a baby which is born has for patron, for master of its destiny, the star which is also born, that is, which rises at the same moment. In the hands of astrologer-astronomers, it became an abstraction, the “degree indicating the hour” (μοῖρα ὠροσκόπουσα). In any case, if the horoscope is the best known of astrological constructions, it must not be forgotten that it is part of a particular technique. It was not all of astrology and without it, astrology would still have been able to satisfy the greater part of its clientele.

To sum up, the principle dogmas of astrology are rooted in the following propositions

1) by virtue of universal sympathy or solidarity, the stars exercised over the earth an action in harmony with their nature, in proportion to their power. This was especially true for human kind which has affinities with the entire universe;

2) this action was exercised by effluvia or currents of force moving in straight lines, and tended to assimilate the recipient to the transmitter, the point of arrival to the point of departure;

3) it depended on the positions of the stars, whether relative to the earth or to the other stars. The type of action was necessarily complex, because it is modified, in quality and quantity, by concurrent influences. They might even reverse it;

4) the combined actions of the stars produced, at each moment, a variety of opportunities which might be used gradually, as they presented themselves (the system of elections or καταρχαί);

5) the action worked upon the moment of birth with an intensity which fixed destiny irrevocably. From that moment, it was independent or nearly so of later opportunities (the system of natal chart interpretation or horoscopes).

These principles are enough to make the consequences understood in what follows and in the proceedings to which they are applied

Chapter Four

The Planets and their Characters

It is obvious that the Sun and the Moon attracted the attention of ancient peoples first. Later the more attentive observers distinguished the planets from the fixed stars, those torches which had their own movement opposite from the daily motion of the sky. The fixed stars did not take, in astrology, an importance comparable to that of the planets. This was due to their very fixed nature, their lesser brilliance, and their supposedly greater distance. The planets were made expressly, so the philosophers said, to agitate matter and to disseminate life.¹⁵⁷ Greek astrology even had the habit of eliminating from its calculations the influence of constellations other than those in the zodiac. That is, those which did not find themselves in the route of the planets, and which did not draw any particular virtue from relations with them were ignored.¹⁵⁸ The planets, to the contrary, ranked just after the two "luminaries" (φῶτα – φωστήρες). [Lights] The Sun and Moon were included in the traditional number (seven) of the planets, when they were not distinguished as chiefs and subordinates.¹⁵⁹ While enumerating the planets, we will try to outline the psychic characters or psychic forces which the Greek imagination placed upon them.

I

Planetary Mythology and Physics

☉ The Sun (ἥλιος – *Sol*). – It is pointless to insist upon [debating] the primacy of the Sun. It had been recognized in the religions founded upon the cult of Nature, as well as by the poets and pantheistic philosophers.¹⁶⁰ We will only remark that this primacy did not seem as evident in the mature religions. They had been fashioned by theologians who gradually superimposed abstract concepts, directing wills, upon the Sun's material sovereignty. We are told that even in Mesopotamia, the Sun god Shamash came after the Moon god Sin (see above, p. ??). Doubtless this was from the viewpoint of astrological usefulness. In Greece, where common sense made the decision, precedence between the two Lights was not reversed in that way. However, the Sun was nearly expelled from religion by a more completely humanized rival, Apollo. The old Titan, son of Hyperion or Hyperion himself, was replaced by an Olympian, a prophet-illuminating intelligence. At the moment when astrology grafted itself onto Greek mythology, Helios had only one sanctuary in the Hellenic lands, the island of Rhodes.

The astrologers avoided difficulties and raising scruples.¹⁶¹ They kept the Sun's name, leaving each person free to give whatever epithet and mythical attribute was convenient. Ptolemy used only scientific expressions in describing the planet's characteristics. He hoped to remove astrology from any connection with religion. The four qualities of Aristotle (hot, cold, dry, wet) were enough for Ptolemy to define and diversify them. For him, the Sun was a mass of heat, the largest in nature, associated with a lesser degree of dryness.¹⁶² This dryness was too small for the Sun to be a fire and to produce the destructive effects of the burning element.

☾ The Moon (Σελήνη – *Luna*). – One may say without exaggeration that there always has been and always will be a sort of natural astrology. It is one created spontaneously by common opinion, an astrology independent from that of the Mesopotamians, Egyptians and Hellenes. The Moon is its object, its subject, its center, its motor.¹⁶³ It was not just a celestial body which so exercised the imagination of the ignorant – and even the learned – over-excited by the continuous metamorphoses of our satellite. All terrestrial life, plant and animal, the movements of water and atmosphere were dependent upon the phases of the Moon and followed the rhythm of its steps. Even the formation of certain minerals, such as sal "ammoniac,"¹⁶⁴ in the eyes of the ancients, were dependent on the Moon. One could write a book, a large book, on world-wide traditions about the Moon. It would be big even if one left out the mythological personifications, the invocations of the poets or the fantasies of people who amuse themselves by writing on the appearance and manners of the Selenites. Whatever facts, real or probable, were disseminated in this collection of superstitions served to accredit the rest.¹⁶⁵ The Moon is also a protagonist of a very learned astrology.¹⁶⁶ The Greek astrologers abandoned the

Mesopotamian masculine image of the star for the Greek conception, which made Selene or Mene into the daughter or wife of Helios. The reasons were mythological, which they did not admit, and also for reasons said to be scientific. One was from gynecology (menstruation), and others were said to be from general science. It was a common opinion of all the “scientists” that masculine energy was analogous to heat, while the feminine function had strong affinities with humidity.¹⁶⁷ It remained only to demonstrate the humid nature of the Moon. The arguments presented themselves in crowds. The humid coolness of the night was one. The action of the Moon upon bodies of water, not only the sea, but also rivers, which, according to Ptolemy, wax and wane with the Moon, was another. Finally, there was the humid decay engendered, it was believed, by the influence of the Moon, especially when waning.¹⁶⁸ These were proofs so strong no one dreamed of questioning them.

Nevertheless, the Moon did not represent the Feminine in itself. In Hellenic symbolism, the Moon divinities were definitely of the feminine sex, but sterilized by virginity. Moreover, it was a slightly ferocious virginity, which even had some virile tastes. A woman was completed only by motherhood, and the Mother par excellence was not the Moon, but the Earth. For Plato, the Moon was an androgyne, who “participated in the earth and the Sun.”¹⁶⁹ Ptolemy did no more than transpose these ideas when he said that the Moon took its humidity from the earth and received from the Sun a bit of its warm virtue.¹⁷⁰ However, the astrological sex of the Moon was never vague. It was the head of the feminine planets.

After the “luminaries” come the planets proper, which we will list in the order of their dignity. That is, they are listed according to their hierarchy in mythology, which is in accord with their distances from the earth.

♄ (Φαίνων – Κρόνος – *Saturnus*). – Ptolemy contents himself, first of all, with noting the two principle characteristics of the planet in saying that it was cold and dry. It was cold because it is far from the Sun, dry because it was even further from the earth.¹⁷¹ He imagined, evidently, that the astrological role could be explained by coldness and dryness. Moreover, he affected to have no need of mythology to explain the reason for this coldness and dryness. Let us leave this embarrassed scholar and his supposed physics and go on to research the true reasons.

The slightly livid brilliance and the slow movement of Saturn are the first facts which worked upon the imaginations of the Mesopotamians. The Greeks, as we said above, merely substituted Kronos for Ninurta. Perhaps the Mesopotamians represented Saturn as an aging, cooling, slowing Sun.¹⁷² Since their time, the astrological image of the star was that of an old man, prudent, grave, a little sad. He was able to do harm without being fundamentally malevolent, one in whom intellectual aptitudes predominate over the physical faculties. The idea of primacy is attached to his age, and also that of paternity. This included contradictory elements attending on paternity. It was conceived as the effect of generative power, which did not fit well with age. On the other hand, the idea of generative force, of potency, was also attached to the image of Kronos and especially to the Latin Saturnus. Moreover, as each idea was pushed to its limit, Kronos was also the god who destroys his own works. A simple play on words, Orphic or Stoic originally, identified him with Time (Χρόνος or Chronos).¹⁷³ The scythe with which he had mutilated his father Ouranos he also used to harvest all which grows on the earth. From this came an incoherent and divergent series of associations of ideas, from which the astrologers took what suited them. They created a powerful, redoubtable, personality for the star, who sat enthroned in the highest part of the sky and pressed down irresistibly on the celestial levers. His pre-eminence was not in doubt.¹⁷⁴ The Greeks maintained it, justifying it by a reason that might have led to an opposite conclusion. For if it is the highest in the sky, it is also the farthest from the earth. However, the scientists and the mystics vied in repeating that Saturn was the highest. The former said that the purest, most intellectual, elements rose to the upper spheres. The latter said that the intelligence and the dignity of the stars grew in proportion as they approached the sphere of the fixed stars and the abode of the Divinity. Saturn thus became the head, the brain, of the planetary world.¹⁷⁵ Also, it was the one who traveled most majestically, and was least obedient to the irrational element, the cause of retrogradation.

The logic of the scientists ought to have led them to admit that Saturn had a fiery nature. Fire was the element which, because of its lightness, occupied the higher parts of the universe. This did not matter to the astrologers, who clung to the cool, crabby, old man. We have seen how Ptolemy, who derived heat and light from the Sun, justified this coolness. There was no contradiction on this

point.¹⁷⁶ We are not able to say as much of the other quality which it pleased Ptolemy to join to the first one, dryness. The legislator of Greek astrology doubtless did not do this without much thought, for it ran counter to many analogies and arrangements older than his theory. Perhaps he wished to impose his theory, according to which the earth is the unique source of humidity, as the Sun is of heat. In each case, he failed. The common opinion was that Saturn was cool and dried. In the zodiac, Saturn had Capricorn and Aquarius as its signs, they are cool and dry.¹⁷⁷ In the “houses” of the archetypal chart it is lodged in the Lower Midheaven, the lowest house, a place often symbolizing water.¹⁷⁸ Even at the superior culmination, it is the patron of gardeners and water-carriers of all sorts.¹⁷⁹ Much as it provoked rain when passing through its houses, so it excited cold humors in the human body, intestinal fluxes, pituitary action, etc.¹⁸⁰ It did the same to the celestial bodies it encountered. Some believed that the Moon, when Saturn passed it, produced rheumatism and dropsy.¹⁸¹ Finally, the most divergent theories on birth and death agree on lodging humidity in Saturn. This was because water was the principle generator in the physics coming from Thales and the extinguisher of the vital fire in that of the followers of Heraclitus.¹⁸² All these incoherent ideas went into forming the image of Saturn,¹⁸³ whose very name, “the Shining” seems to be a euphemism.

♃ (φάεθων – Ζεύς – *Jupiter*). – The brilliant planet which bears the name of Jupiter received from the astrologers all the panegyrics – the very same ones – which Zeus, “Father of gods and men,” received from his devotees. Jupiter is a naturally beneficent and benevolent planet. This distinguished him from the Babylonian Marduk to his advantage. If only his influence existed, earth would be Paradise. Firmicus believed that it would make humans “immortals.”¹⁸⁴ Ptolemy translated this psychological description into the language of a physician. He had the most of the essentially temperate nature of the planets, warm and humid. He was placed, as a golden mean, between the ice of Saturn and the fires of Mars. He also attributed to Jupiter the property of exciting “fertile winds.”¹⁸⁵ Where these vapors and moist breezes came from, Ptolemy does not say. Perhaps it was from Marduk that Jupiter inherited these attributes. In the third tablet of the Babylonian Creation Epic, we read that Marduk, on his way to fight Tiamat, looses a terrible hurricane, “the four winds, the seven winds which he engendered.” Farther on, Marduk is called “the god of the good wind.”¹⁸⁶ In so far as he was the god of the atmosphere, of rains and storms, the Greco-Roman Jupiter lent himself to the assimilation.¹⁸⁷ As for “fertile” winds, this is a bit of debris, washed ashore, from a very widespread superstition. We will see farther on that the astrologers attributed a special orientation to the three superior planets and to Venus, corresponding to the four cardinal directions. North belonged to Jupiter and the north wind, Boreas, supposedly had a generative virtue which sometimes spontaneously impregnated female animals.¹⁸⁸

In any case, Ptolemy gave to Jupiter the epithet which best defines his type of influence in saying that he is “temperate” (εὐκρατον ἔχει τὸ ποιητικὸν τῆς δυνάμεως).¹⁸⁹

♂ Mars (Πυρόεις – Ἄρης – *Mars*) – In exchange, the astrologers exhausted the resources of vocabulary to define the powerful action of “the flamboyant,” of “the redoubtable” (θεῖος) Mars. His red light (prime cause of these chimerical imaginations) was the color of blood, and his journey resembled rapid bounds followed by short retrogradations. The Mesopotamian god Nergal, god of war, of disease, of death scattered with full hands, found in Greek mythology a similar portrait. Meanwhile, there was a tradition, perhaps Egyptian in origin, which substituted the debonair Herakles for the strong, brutal, Ares.¹⁹⁰ The astrologers took much from the caprices of Mars. They found the endless approaches of Mars to Venus too convenient not to make the image of the bloody ravager prevail. Manetho addresses him in eloquent terms¹⁹¹ as the tyrant of the human race and the troubler of all nature.

♀ Venus (Φωσφόρος – Ἑωσφόρος and Ἑσπερος – Ἀφροδίτη – *Lucifer* and *Vesper* or *Vesperugo* – Venus. – Mythology inevitably associated the name of Mars with that of the fair adulteress, the voluptuous goddess, Ishtar, Astarte, Aphrodite. This association also existed in the Mesopotamian tradition. It was, moreover, as fatal in the eyes of the astrologers as it was criminal in the eyes of the moralists.¹⁹²

As a feminine planet, Venus had a temperament like that of the Moon. The difference was that the coolness of the Moon was replaced by a warmth that turned its humidity into a generative fermentation.¹⁹³ Ptolemy compared Venus to Jupiter in her “temperate” personality and in noting a predominance of humidity in the mixture. He tried, with difficulty, to give a reason for this humidity,

which was based upon the sex of the planet. He thought that the warmth of Venus came from the Sun, of whom she was an acolyte. Her great size, attested by her brilliance,¹⁹⁴ allowed her to store large quantities of humid exhalations from the earth, which was nearby.¹⁹⁵ We will not insist on further embarrassing a savant who wanted to emancipate himself from astrology.

This astrological Venus absorbed and distorted the ancient myths which made the morning and evening stars into two handsome young men. One was the son of Aurora and Cephalus, both of them loved by Aphrodite. The identity of the two was recognized, we are told, by Pythagoras or Parmenides, and introduced into the current of popular thought by the poet Ibycus.¹⁹⁶ The bonds of love imagined by the old poets between Aphrodite and her lovers ended in intimate union when the personalities of the two youths disappeared. Astrology did not care to revive their memory and thus put in doubt the sex of the planet.

☿ Mercury (Στίλβων – Ἑρμῆς – *Mercurius* – Even closer to the Sun, the twinkling¹⁹⁷ star took the name of Hermes, after having been the object of litigation between he and Apollo.¹⁹⁸ Mercury was not a faithful copy of his Mesopotamian prototype. He had a protean nature, unstable, “prompt to change in both senses.”¹⁹⁹ This was due both to the speed of its movement and to the multiple influences from neighboring planets to which it submitted. Evidently Greek mythology overwhelmed the exotic gifts. Ptolemy ingeniously explained, by combinations of basic principles, how Mercury might dry things and moisten them at the same time. It was precisely because the heat of the Sun made it avid for the moisture with which it saturated itself when it neared the lunar sphere. Mythology was the sole reason for the multiple qualities. These included the lively intelligence, the artistic sense, the eloquence, even deceptiveness, which Mercury possessed and engendered. The astrologers hardly added anything to this picture, already complex, beyond his uncertain gender. They needed that for the symmetry of their classifications. Their Hermes was a “hermaphrodite.” He changed his sex when he changed his position, or even his company.

Sex according to position is but one of the many arcana of astrology. We will gain a better understanding of them by grappling with the many classifications used. The astrologers used them to multiply, diversify and subdivide the planetary influences.

II

Classification of the Planets

With his combinations of hot, cold, moist and dry, Ptolemy created a simple classification of the planets into benefic and malefic, male and female, diurnal and nocturnal.²⁰⁰ Warmth and humidity were the “generative and active” principles, while cold and dryness were the “destructive and passive”²⁰¹ ones. The planets in which warmth and humidity predominated, ♃, ♀ and ☾, were beneficent. Those which were cold or burning and dry at the same time, such as ☿ and ♂, were malefic. The Sun had a mixed character, as did Mercury. Mercury was always indifferent and conformed itself to the temperament of the other planet with which it was associated.²⁰²

The sex of the planets was determined by the degree of humidity. A predominance of humidity produced the feminine sex, as in the case for ♀ and ☾. Mercury remained capable of being either sex, as it was formed by an equal mixture of dryness and wetness. The other planets were masculine. In short, the superior planets were male and the inferior planets were feminine, save in the dubious case of Mercury. This should have made the lovers of mystical harmonies rejoice, in a time when there were not many “feminists” to protest against the inferiority of the female sex. The individual sex or physique was modified by supplementary dryness or moisture. The planets gained moisture or dryness from their momentary positions, which gave them a “cosmic” sex. The planets “masculinized” and “feminized” themselves in two or even three fashions:

1) by virtue of their positions or “phases” (φάσεις) in relationship to the Sun. The planets which rise in the morning before the Sun make themselves more masculine (ἐῷοι καὶ προηγουμένοι). Those which set in the evening after it (ἑσπέριοι καὶ ἐπόμενοι) make themselves more feminine.²⁰³

2) by virtue of their positions relative to the horizon. It was taken for granted that the stars rose in the East charged with humidity. They dried out and became more masculine in rising from the horizon to the superior culmination. Likewise, they became more feminine while descending into the

West. This system seemed reasonable enough.²⁰⁴ The astrologers ended by deciding that, below the horizon, there was also a dry quadrant and a moist quadrant. Each was opposite an upper quadrant of the same quality.²⁰⁵

3) according to the sex of the signs which they occupy. This is a particular example of the reciprocal action which the planets and signs were supposed to exercise upon one another.²⁰⁶ Cosmic sex had a great importance in astrology. Without it, the astrologers, with only two female planets, would often be embarrassed in explaining the production of this or that sex in their birth charts.

Warmth, which is masculine, is also diurnal, since it is associated with the idea of light. Humidity, by an analogy of the same type, is nocturnal. The diurnal (ἡμεριναί – *diurnae*) planets belonged to the party or sect αἰρεσις²⁰⁷ – *conditio* – *sectae*) of the Sun. The others (νυκτεριναί – *nocturnae*) belonged to the party or sect of the Moon. They were like two antagonistic clubs, each with its own tastes, its preferred offices, its distinct part of the world. The day planets, satellites (δορυφόροι) of the Sun, had the same tastes as their leader. They rejoiced (χαίρουσι – *gaudent*) at rising in the daytime and at setting at night.²⁰⁸ As a consequence, they were favorable for daytime births. They were particularly pleased when in the masculine signs of the zodiac. In a general way, they liked the eastern part of the world. The nocturnal or lunar sect had exactly the opposite preferences.²⁰⁹

The astrologers, ready to sacrifice everything to symmetry, wanted to equalize the effect of the two sects. To succeed, they destroyed the correspondence postulated between the masculine quality and the diurnal quality. With Mercury playing a variable part, there remained four planets to divide between the Sun and the Moon, three of them masculine. Ptolemy found that the problem had been resolved in an intelligent fashion. In the solar clan, the chilly Saturn tempered the heat of Jupiter and the Sun. Meanwhile Mars, passing into the lunar clan, brought warmth and dryness into that cold and wet society. It must have taken a great necessity to separate the two malefic planets into two groups. Ptolemy avoids admitting that Mars, rather than Saturn, had been taken from his element and put into another by the mythological attraction of Venus. This reason did not exist for him.²¹⁰

We have seen that in learned astrology, excellently represented by Ptolemy, the powers of the planets are related to their physical constitutions. These were modified by their presumed relationships with the Sun on one hand and the earth on the other. The relationships were affected by their relative distances. The system thus acquired an apparent cohesion, with the order of the planetary orbits or spheres the foundation of the whole theory. It is therefore necessary to examine this question of distances further. It was a topic of interest common to the astronomers, preoccupied with real distances, and to the astrologers, who were concerned solely with the relative distances.

III

Arrangement and Movements of the Planets

As has been said above, we have no way to know if the Mesopotamians were ever interested in the physical arrangement of the planets between earth and sky.²¹¹ We cannot repeat too often that astrology found it best to assume that the planets were in direct contact with one another. The interjected distances, by reducing encounters and contacts to simple effects of perspectives, tended to destroy the basic axioms of astrology. In Greece, where astronomy preceded astrology, the astrologers were not able to deny the interposition of the celestial spheres, nor to ignore the related opinions. They had to embrace science so that it would not be turned against them.

The simplest, and at the same time, the most scientific, way to estimate the distances of the planets from the center of their circular movement, was to suppose the radius of their orbits were proportional to the length of their revolution. Now, there is no doubt that the Mesopotamians did not know the duration of the planets' revolutions. They did not teach them to the Greeks, who had no old observatories nor astronomical archives of their own. It seems, then, that the Mesopotamians could have arrived by themselves at an approximate idea of the distances. However, they would have had to decide to abandon the archaic conception of the planets rolling along the surface of the celestial vault. Moreover, the simplest ideas are not always the most easily accepted. To make the distances proportional to the lengths of the revolutions, a postulate must be admitted which is not evident in itself. This was that the planets moved with the same absolute speed. Moreover, the differences in their angular or apparent speeds were solely due to the different sizes of their orbits.²¹² This principle

of celestial mechanics, debatable even for the “scientists,” was not necessarily applicable to the living and intelligent gods of the Platonists and Stoics. Finally, there were other theoretical principles which one might prefer. The atomists of Leucippus' school did not believe they were reasoning poorly in thinking that fire must rise because of its specific lightness. They concluded, in consequence, that the brightest star, the Sun, must be farthest from the Earth.²¹³ When he wrote his *Republic*, Plato had classed his “spindles” or planetary orbits to establish a perfect correspondence between the size of the orbits and the presumed size of the planets. The Sun circled just below the fixed stars, then, from top to bottom, the Moon, Venus, Mars, Jupiter, Saturn, Mercury. It was a geometric idea which took a quadrant resting its base upon the sphere of the fixed stars and its point on the Earth for the scale of sizes. However, the system assumed very unequal speeds for the planets, which confused the pleasing order. Plato himself renounced it. In the *Timaeus*, he adopted an order conforming to the length of the revolutions. The passage from the *Republic* mentioned above was corrected, either by Plato himself or by his editor. It was done in a fashion which suppressed the contradiction between the two successive opinions of the master.²¹⁴ The order followed by the author of the *Timaeus* became the classic order. From bottom to top, it was ☾ Moon, ☉ Sun, ♀ Venus, ☿ Mercury, ♂ Mars, ♃ Jupiter, ♄ Saturn. The order was borrowed either from the Pythagoreans (disciples of the Egyptians), or from Anaxagoras.²¹⁵ It was approved by Eudoxus (always following the Egyptians). It is the one upon which Aristotle, Chrysippus and Eratosthenes speculated, the one which we find upon the Table of Kesinkto and the Didascalia of Leptimus.²¹⁶ There were no doubts, save on one point, a favorite for half-witted arguments. That was the relative position of the two acolytes of the Sun, Venus and Mercury. Mercury was placed farther from the Earth, doubtless because of its lesser brilliance.²¹⁷ A correction, perhaps due to Heraclides of Pontus, reversed the place of these two planets. It gave the order ☾, ☉, ☿, ♀, ♂, ♃, ♄. This passed for being especially “Pythagorean,” although it was otherwise just as Platonic as the other.²¹⁸

This order, which always had its partisans,²¹⁹ was replaced by another system. Accepted by the astronomers from the time of Hipparchus, it was law for the astrologers. It put the Sun in the middle of the scale of distances. Whence came this system? It offered a desirable symmetry, and was suspect, in consequence, of being based upon mystical reasons. It assembled the votes of the greatest astronomers, perhaps of Archimedes, of Apollonius of Perga,²²⁰ of Hipparchus, certainly of Posidonius, of Geminus and of Ptolemy.²²¹ We have seen above (p. ??) that Alexander of Aetolia knew it already. The confusion of witnesses does not allow us to seriously give the credit for the invention to the Pythagoreans, to the Egyptians, or to the Mesopotamians. The modern scholars have decided in general on the Mesopotamians – the real Mesopotamians, not the Chaldaeans of fiction. They use the pretext that the astrological constructions of the “houses” (οἶκοι), especially that of the “week,” are based upon this order. Also, astrology was created by the Mesopotamians.²²² They were duped by the confusion, so carefully maintained by the interested parties, between the Chaldaean-astrologers and the Chaldaeans of Mesopotamia. They forgot that the system is also peddled as “Egyptian” on the faith of the apocryphal books of Nechepso and Petosiris. Moreover, they take completely seriously as an historical witness the “Chaldaean Oracles.” These fabricated in the second century of our era by the “theurgists,” whose word was faith for the Neo-Platonists. The Oracles tell how the Demiurge, after making the planets in a confused ice, threw the Sun into the middle. This obliged them to arrange themselves and to advance or move retrograde, following its prompting. We must leave these stories to the admiration of a Proclus. Before the theurgists revealed these lovely things,²²³ one could only invoke Pythagorean harmony and the providential plan which had put the Sun into the middle of the planets as the heart is in the middle of the body. The Mesopotamians did not enter competition with the Pythagoreans and the Egyptians until fairly late,²²⁴ in the fashion of the third thief. Moreover, their system was too complicated to take part in the con-game.

However, if one means by “Chaldaeans” the astrologers – the Greek astrologers – this tradition symbolized and summarized a genuine fact. It was the knowledge that Greek astrology, obliged to accept a scale of distances, chose one that fit its theories. It was by putting the Sun in the middle position that Ptolemy separated the hot and the cold. In his *Harmonics*, he tried to draw from this another demonstration of the malefic influence of Saturn and Mars and of the benefic influence of Jupiter and Venus. It was an arithmetical demonstration, in the manner of Pythagoras. On the one hand, the Sun was the source of “sensitive” life, the Moon, the source of “vegetive” life. On the other

hand, there were six harmonic relationships possible between these two stars and the planets. It showed that Jupiter sustained these six relationships with the Sun and most of the others with the Moon. Also, that Venus corresponded in the same way with the Moon, and in most of the others with the Sun. Saturn and Mars were hardly in rapport with one another at that time, in the way Saturn was with the Sun, or Mars with the Moon.²²⁵

The lovers of mystical correspondences did not hesitate to discover all sorts of relationships in the so-called Chaldaean order. Some were with the human body (see below), others with the spontaneous stratification of the elements. The Sun had, above and below it, two triads of elements symmetrically grouped by attraction, both groups of triads rejoiced in the Sun, the common member of the two groups.²²⁶ Thus, the Sun being hot, dryness was represented by Mars above, Mercury below. Humidity was represented by Jupiter above, Venus below. Coldness was represented by Saturn above and the Moon below. Also, they knew how to disguise, under all sorts of false natural reasons, the artificial character of these symmetrical arrangements.

We believe we are authorized to reclaim the planetary orders for Greek science. These include Plato's order, falsely called Egyptian, as well as the other one, falsely called Chaldaean. Therefore, there is all the more reason not to search the banks of the Euphrates and the Nile for the authors of the solutions given to the most delicate problems of what we may call astronomical philosophy. These problems were brought to the attention of the astrologers by Ptolemy. The intervening solutions, like the consequences, were hardly known to any but astrologers. This is the reason for which we were not able to avoid throwing a summary glance over the debate raised by a fact mysterious to the ancients, the oscillating movement of the planets. They now followed their proper movement (West to East) and then moved backwards in their orbits or in an arc of a slightly divergent circle. We know what complicated circles rolling within one another Eudoxus and Aristotle used to explain the phenomenon. The invention of epicycles, due to Apollonius of Perga, simplified the gear-work. With the eccentric circles of Hipparchus and the corrections in detail brought to the system by Ptolemy, epicycles grew into a definitive solution. Ptolemy was not a little proud of his part in the collaboration. We can understand that he showed, in his astrology, concern for the "stations" (στηριγμοί), for the forward movement (προποδισμός – προήγησις – πρόσθεσις) and for the backward movement (ὕποποδισμός – ἀναποδισμός – ἀφ αἰρεσις) of the planets.²²⁷ To appreciate the nature and degree of a planet's influence, an astrologer needed know not only if it was left or right of the Sun. To know if it was moving forward, or back and at what point it was on its epicycle was also important. Ptolemy posed the principle the planets have their maximum energy when "they are rising and in addition are moving forward" (ἀνατολικούς καὶ προσθετικούς τὰς ἰδίας κινήσει). They have their minimum when "they are setting and moving retrograde" (δυτικούς καὶ ἀφαιρετικούς).²²⁸ The reason, according to him, is that the epicycle is divided into four quadrants. The first quadrant, being in conjunction with the Sun at the first station, is humid. The second is warm, the third, which leads to the second station, is dry and the fourth, cold.²²⁹ It would be naïve to debate with an astrologer. However, it seems that Ptolemy, in order to introduce his theory of epicycles into astrological speculations, knowingly committed gross errors of logic. I suspect that desire to disguise his paradoxes accounts for some of the obscurity of his language. Let us leave to one side the acolytes of the Sun, Venus and Mercury. Let us take examples from the upper planets, the only ones to whom the complete theory of retrogradations apply. In the theory of epicycles, the planet revolves from East to West upon the epicycle, while the orbit carries the epicycle. The planet is farthest from the earth when it is on the same meridian as the Sun, "under the eyes of the Sun" ([ἀστήρ] ὑπ' αὐγὰς – ὕπαυγος – ὕπαυγής – συνοδικός – ἀφανής – *combustus* – *absconsus*).²³⁰ It is "burning" at that time, and one cannot see where it gets the moisture it pleases Ptolemy to provide in the first quarter of its course. As the planet gets farther from the Sun and closer to the Earth, it warms up, which is surprising, to say the least. Starting from its perigee, the moment when it rises at the same time as the Sun sets (ἀκρόνυχος), it begins to dry out, in the humidity of the night. It cools off as it comes closer to the Sun, which makes no sense. The simplest explanation of these unintelligible reasons is that Ptolemy has copied the "phases" of the planets from those of the Moon. This in turn is adapted from the symbolism of the quadrants of the zodiac. He did not remark, perhaps deliberately avoiding remarking, that the assimilation is a contradiction of physics. At the conjunction (New Moon), the Moon is below, not above, the Sun. It is obscured (humid) and not "burning." It becomes brighter and one may maintain that it warms proportionately as it gets farther from the Sun. Likewise, one may say that it cools, as it dims, when it approaches the Sun. Transported

to the upper planets, these expressions become absurd.

This is not all. Ptolemy affirms that the action of a planet is reduced to a minimum during the retrogradation. This is the time when it is, in fact, closest to the earth. All this seems to be a clumsy veneer, hastily done and feeble. Despite Ptolemy and the praiseworthy efforts which his commentators made to understand him,²³¹ this tidbit did not become part mainstream astrology. It was elsewhere that he had to seek a reasonable motive, i.e., one plausible at first sight and sufficiently in accord with common sense. The true reason is that imagination was the source. Imagination represented the planet as hesitating, slowing its forward movement, until it stopped in front of an invisible obstacle. Then people imagined it moving backward slowly, as if with regret. Finally, as if released from constraint, the planet shot forward again, with a speed as if from a slackening of accumulated resistance. One may concede that the star, while it submits to that constraint, may be considered enfeebled or saddened. If it is malevolent by nature, one may imagine it more exasperated than usual, and for that reason, although feeble, all the more dangerous. We do not find a better reason, but we will find others. Rather, we will find various disguises for the same idea among the theories put forth by the philosophical dispensary.

Along with the Pythagorean Alcmaeon and the “mathematicians” in general, Plato taught that the planets have a proper motion, contrary to the motion of the sphere of the fixed stars. The proper movement which partook of the least pure element introduced by the Demiurge into the bodies and souls of the planet-gods. The goal of the Creator was to use the planets as instruments for measuring time. He wanted to punctuate the duration in periods or “years” longer and more varied than the daily rotation of the starry sphere.²³² It was not operated by a mechanical movement,²³³ but a movement which was conscious and voluntary, although rigorously circular. Thus, there was no difficulty in explaining the retrogradation, which are just as regular and just as voluntary as the forward movement. The planets are obedient at once, and in a convenient way, according their own temperaments. This led them in a direction counter to the “First” and universal motion. It also led them to follow the superior Reason which made them divide and even – during retrogradations – reverse this movement. Proclus never grew tired of repeating that he had no need of recourse to eccentric orbit. Admitting an eccentric was nearly an impiety, and the theory of epicycles was “a pretty notion,” but an error, denied by the sacred text of Plato.²³⁴ This was no impediment to maintaining the astrological dogmas. He even knew the effects which were produced upon living beings in the sublunary world by the direct and retrograde movements, the changes in height and in latitude and speed of the celestial archetypes.²³⁵ The planet which “subtracts,” in other words, moves retrograde, removes some of the vitality from things which submit to its authority.

The grain of mystical madness which worked on the brains of the Platonists did not enter the school of Aristotle. The master kept the habit of calling the stars divine beings. He believed them animated, endowed with reason and obedient to final causes. In fact, however, he treated them as moving bodies subject to mechanical laws. In what concerns their distances and their relative speeds, he was in agreement with the “mathematicians.” In other words, he accepts the tones of the Pythagorean lyre. The alternating movements, direct and retrograde, the displacements in depth (βάθος) and in latitude (πλάτος), were explained by a great number of directing circles. They included corrective circles, isolating circles, which each have as motor a special soul and turn in a motion both equal (ὁμαλῶς) and circular, as traditional dogma desired. Aristotle did not have the ability to give the system a perfect unity. It lacked the unity of a general direction of motion, a unity suggested by the unique impulsion of the “first mover,” but contradicted by the facts. His disciples believed that this had to work or that the master failed. They invented or borrowed the theory of “retardation” (ὑπόλειψις).²³⁶ The planets did not move counter to the movement of the starry sphere. They simply moved more slowly in the same general direction of East to West. They seemed to go more quickly in the opposite direction the more they slowed down. Thus, the Moon is the slowest of all the planets, and Saturn is the fastest. This was an easy thing to understand, because Saturn is the closest to the exterior sphere which powered the whole. The Moon was the farthest from it.

This doctrine was developed, adapted to the competing systems of eccentrics and epicycles, by the Peripatetic Adrastus of Aphrodisias, who lived in the time of the Antonines. It had already been refuted by Geminus.²³⁷ Adrastus²³⁸ succeeded in accounting for the appearances by making the planets turn on their epicycles in the same sense as the sphere of the fixed stars. It was good geometry but bad physics. He forgot one appearance, the principal element of the problem. When the planets

move retrograde (which Adrastus calls forward motion), they seem larger. As a consequence, they are closer to the Earth. Adrastus' theory makes them move retrograde when they near their apogee.²³⁹

In any case, the astrologers had already found a reason explaining why the action of the planets became feeble during retrogradations, when the planets were closest to the earth. It was drawn from this paradoxical system. The Peripatetics, however, did not work for the astrologers. One need not mention their "dogma" here. This accounts for the disarray of the vocabulary of the scholiasts. Torn between two opposing conceptions, they do not know if they mean "advancing" or "moving retrograde" when they speak of fast and slow planets.²⁴⁰

It is time to consult the astrologers properly so-called, "Chaldaeans" whose masks fooled no one. Now, these Mesopotamians had noticed a fact which the inventors of epicycles and eccentrics had not. The stations and retrogradations of the planets had a strict relationship with the movement of the Sun.²⁴¹ They were on the road which would lead to the discovery that the planets revolved around the Sun and that the phenomenon to be explained were pure appearances. However, they stopped along the way.²⁴² They thought that the planets were led by the Sun.²⁴³ Depending on the position which it occupied relative to them, it pushed them from behind. It did this mechanically, exercising its power via certain angles or "aspects," like all astrological influences. For the farthest and largest planets, such as Saturn and Jupiter, the Sun's push was not strong enough to change the direction of movement when in trine aspect, when the Sun is about 120° right or left of the planet. On the other hand, a lighter, closer, planet, such as Mars yields to a moderate push exercised at the square aspect, that is, at an angle of 90° left or right. At least Pliny assumed it did. The planets are like tennis balls which the solar racket hits back and forth, from West to East and East to West.²⁴⁴ In order to make the system comprehensible we must turn to a graphic representation [figs. 1 and 2.] of the apparent movements of the upper planets, compared with the simultaneous positions of the Sun. In addition, it will give the reader the same understanding as Ptolemy or his commentators. The compass rose translates the Greek of Porphyry or Paul of Alexandria, and is not, I think, an inconvenience. The Subject is as relevant to astronomy as to ancient astrology.²⁴⁵

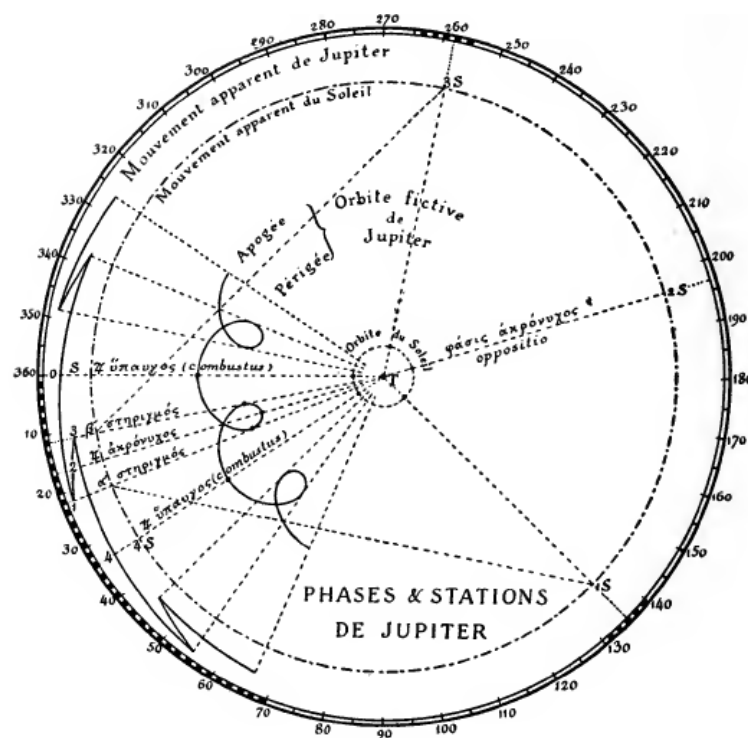
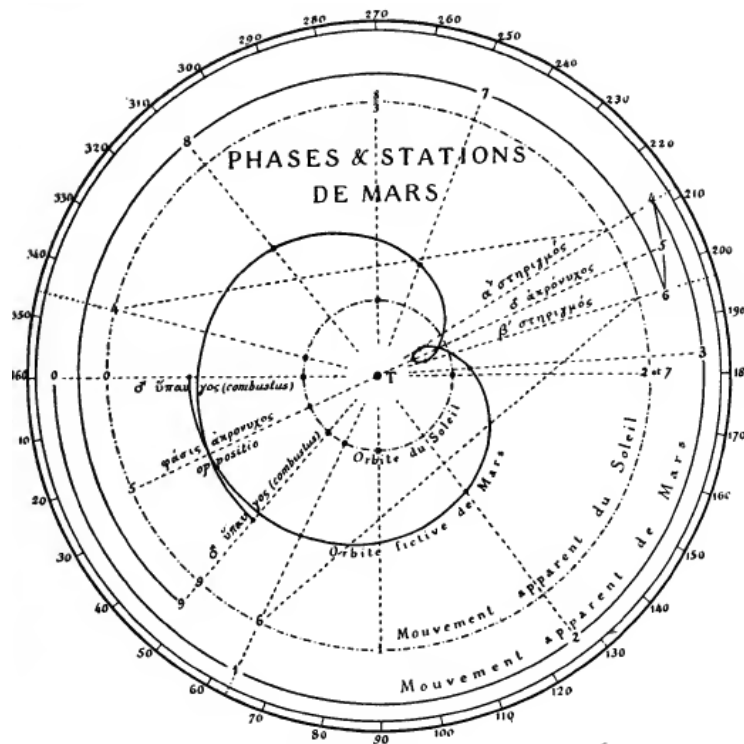


Fig.1. Movement of Jupiter

The "Chaldaean" system accounted very well for the weakness and bad mood of the planets during their retrogradation.²⁴⁶ Thwarted, they avenge their humiliation and use their remaining energy for evil deeds.



We are tempted to attribute to the authentic Mesopotamians, or to revivers of their old Near Eastern superstition, the baroque idea of assimilating the lunar nodes to the planets and noting them in horoscopes. There were two nodes, the ascending (Ὠ ἀναβιβάζων [συνδεσμός]) [north node] and the descending (Ὶ καταβιβάζων) [south node] of the lunar orbit, which make an orbit of the ecliptic in eight years. Ptolemy did not know of these fictional planets. Perhaps he did not wish to know. Tertullian, however, a half-century later, already speaks of the influence the astrologers attribute to them.²⁴⁷ The Greeks of the Late Empire, and especially the Arabs, made much of the ecliptic nodes, called the head Ὠ and the tail Ὶ of the Dragon. The notoriety of the Dragon among the Greeks of Asia and the Arabs is in itself an indicator. We know that the pole par excellence for the Mesopotamians was the pole of the ecliptic, which is in the Dragon. The Dragon ought to have been Anu himself. For the Gnostics of whom the author of the *Philosophoumena*²⁴⁸ speaks, the Dragon was a monster who surveyed the entire universe from on high, rising and setting. From this came the idea of stretching its head to the East and the tail to the West. The inventors of the *Chaldaean Oracles* (contemporaries of Ptolemy) were also interested in the Great Dragon. It was probably they who charged themselves to show that it had been created in this position. The Demiurge made it even before the signs of the zodiac and the planets.²⁴⁹ How and why the head of the Dragon was assimilated to the ascending node of the lunar orbit²⁵⁰ (supposedly in the East) and the tail to the descending node, we are not obliged to find out. One possibility is that all primitive peoples believed that the Moon was swallowed by a dragon when it was eclipsed.²⁵¹ The head of the Dragon, at any rate, was well-placed at an ecliptic node. As the nodes move fairly rapidly, quicker than Saturn,²⁵² it is not surprising that the astrologers took them into account. They had right of place, influencing the planets as if they were planetary entities, with their own temperaments, their own sympathies and antipathies.

However, the moment has come to think of the planets as not drawing all their power from their intrinsic qualities. Their powers depended in large part on their respective positions and on the collaborators which they encountered at the different stages of their journey.

Chapter Five

The Zodiac, Road of the Planets

By the zodiac (Ζωδιακὸς κύκλος – *Signifer*), we mean a band on the celestial vault. It is big enough to hold all the planetary orbits, inclined at various angles to the center line or *ecliptic* (ὁ διὰ μέσου κύκλος). The ecliptic is the route of the Sun, itself inclined at about 24° to the plane of the equator. Its name came from signs (ζῳδια) or imaginary figures, named for real constellations spread along its route.²⁵³

The enquiry, started earlier, on the origin of the zodiac made us question the Egyptians, who (if we count numbers instead of weight of evidence) get the most of the votes. The illusion which gave them what we may call a posthumous honor is largely due to Alexandrian forgers. In part this was because the zodiac was supercharged at a certain epoch with new figures or “decans,” whose origin is incontestably Egyptian. Otherwise, it was due to the bad habits of compilers, who multiplied the witnesses without multiplying their value. On the other hand, the Mesopotamians kept some rights to the original idea of a construction which had been regularized and adapted to astronomical and astrological usage by the Greeks. The Mesopotamians were mostly interested in the planets, and they had to note the stages in their course. The Egyptians, eyes fixed upon the risings of the constellations proper in order to regulate their calendar, chose the most brilliant ones. They had no reason to concentrate their attention on one limited circle. Poor in first magnitude stars, it drew all its value from the fact that it marked the route of the “wandering stars.”

Besides current practice, Greek astrology had rejected, in the chapter on superfluous curiosities, the study of the sphere called “barbaric.” Greek astrologers wanted to reserve for themselves all the interpretations of omens drawn from the planets and from the signs of the zodiac.²⁵⁴ At all events, they tried to limit its tasks. It was due to the taste of its theoreticians that the jumble of Oriental traditions re-entered, little by little, into the compartments which they had drawn.²⁵⁵

The chief fact which dominated the study of the zodiac is its obliquity, that is, its inclination to the equator. Its plane, traversed obliquely by the **axis of the universe**, participated in the daily rotation of the sky. It also had a motion of its own, however, leftward and oscillating, which long exercised the ingenuity of the Greek mathematicians. This obliquity would not long have escaped observers endowed with enough patience, if they were to set limits to their study of the Sun's course. The distinction between the two poles in the hemisphere (above) is for us a guarantee that their science was not at fault on this point. The Greeks never suspected that the Egyptians had ignored this thing.²⁵⁶ As for the Greeks, they did not know which of their compatriots first had the idea of the obliquity of the ecliptic and by whom he had been influenced. That honor is sometimes given to Thales, supposedly a student of the Egyptians and the Mesopotamians. Sometimes it is given to Anaximander, who supposedly made this discovery at a known date.²⁵⁷ Sometimes it goes to the inevitable Pythagoras, at least if it was not Oenopides of Chios, who may have measured the angle of the inclination.²⁵⁸ The Greek philosophers could hardly not have known of it. Nor were they short of reasons for explaining a purely visual phenomenon, the inclination of the pole of the universe relative to the horizon. The physicists imagined that the disk of the earth, poorly held up by the thin air or softened by the heat of the Sun, sagged in the middle.²⁵⁹ Similar improvisers were not able to avoid explaining the real fact of the obliquity of the planets' route relative to the equator. Their tentative explanations were the next thing to an admission of ignorance, however. They do not seem to have understood the situation, which was that the Sun and the planets followed the track of a great circle of the sphere. They represented the Sun as heading north, until, at a certain point, it was pushed back by the air, which it had compressed as it advanced. The force of this pressure once spent, it began its northward movement once again. It continued oscillating in this way between the two Tropics, as between the walls of a cage.²⁶⁰ This bizarre theory was a corollary of the preceding. The icy breath of Boreas which repelled the Sun was the reason the humid heat accumulated in the South, which unbalanced the earth.²⁶¹ Other scientists thought the Sun, feeding upon the vapors of the Earth, could not always follow the same parallel without using up its food. It thus changed latitude so as not to go hungry. It was difficult to find a mechanical agent to explain these displacements in latitude. In the end, the physical need was not enough to transform into sensations and will. These physicists belonged, in

reality, to an opposing camp, the fans of final causes.²⁶²

The “finalists” themselves had an embarrassment of choices of all sorts of providential reasons. The causes of obliquity of the ecliptic were the effects produced and desired. The variety and alternation of the seasons, and a more perfect mixture the elements was the mission of the planets. They found themselves acting as whisks with their movements, sometimes backward, sometimes forward. Their oscillation in latitude was even more whisk-like.²⁶³ Someone even had the idea that the obliquity of the route of the planets was necessary to the equilibrium of the universe. This equilibrium which would be destroyed if the movement of the planets collided with that of the sphere of the fixed stars.²⁶⁴ Did not the old legends preserve the memory of cosmic catastrophes, produced, no doubt by bad equilibrium? The Egyptians priests had told Herodotus that the Sun had reversed its course four times in 11,340 years.²⁶⁵ In Greece, some said that the Sun, which otherwise followed the general motion of the universe, had reversed its course during the “Feast of Thyestes” or “of Atreus.”²⁶⁶ Could it not have also changed the direction of its course? The legend of Phaethon enlarged the field for such hypotheses. Certain “Pythagoreans” thought that perhaps the Milky Way was the older course of the Sun. It had been scorched during that memorable conflagration, and abandoned since then. The atomist Metrodorus of Chios was also of this view.²⁶⁷ These adventurous speculations show well that the free spirit of Greece was not exclusively made from cold reason. That is all we wish to say. Even a scholar could find himself in a state of mind favorable to the blossoming of astrological faith.

The circle of the ecliptic cut that of the equator at two points, following the diameter common to the two planes. These two points, called equinoctial, marked two of the cardinal (κέντρα – cardines) points of the zodiac. The ends of the perpendicular diameter mark the solstitial points or the tropics. One may use, at will, one or another of the equinoxes or solstices as the point of departure for the division of the zodiac. The Greco-Egyptian tradition was attested by the majority of the Hellenic calendars. It made the year begin at the Summer Solstice. In consequence the division of the zodiac also began there. Later, perhaps after Hipparchus, the astrologers and astronomers, giving in to Mesopotamian habit, also Roman, placed the first degree of the zodiac at the Spring Equinox, in the sign of Aries.²⁶⁸

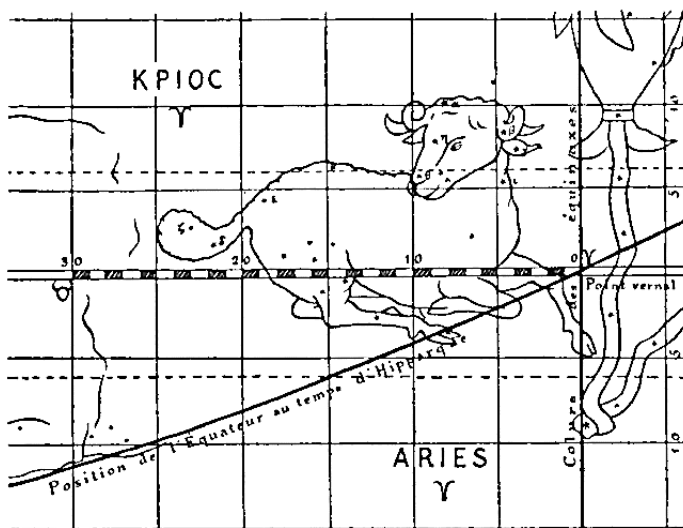
Description of the Signs

We will consider the signs one by one. They are mere words to astronomers, but concrete realities, living and active, to the astrologers. At least they were to those who did not seek, as Ptolemy did, to turn their celestial menagerie into a collection of metaphors.²⁶⁹

♈ The Ram (Κρίος – *Aries*). – At the head of the flock of the signs marches the Ram. [Fig. 3] We are told that he was given this post of honor by the Egyptians, worshipers of Amon, and for excellent reasons. Ptolemy, who had little taste for Aries as leader.²⁷⁰ He preferred to invoke the generative virtue of the spring season, which, according to him, the Ram symbolized as the first of the masculine signs. This lame explanation fits the season but not the animal. For Ptolemy himself, when he considers the planets, associates the feminine sex with the humid principle. The mythographers found a better explanation. For them, the Ram was the famous ram of the Golden Fleece. It had carried Phrixos and Helle, and allowed the young girl to fall into the waters of the Hellespont. It may also have been the ram over which Atreus and Thyestes quarreled or even the ram which led the thirsty followers of Bacchus to the springs of the oasis of Amon.

The Ram of the zodiac is represented lying down, head to the West, but face turned back, in such a way that the neck sticks out beyond the horns.²⁷¹

Fig 3. Aries. The Ram

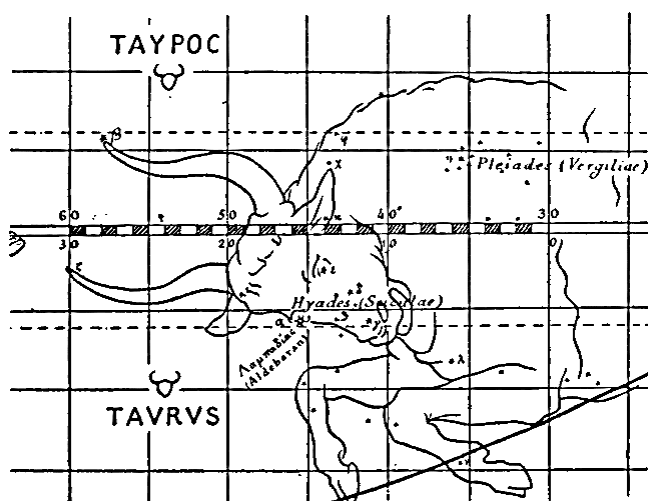


It is easy to anticipate the general character of the Ram and those under its influence. The most naive associations of ideas, those which best represent the logic of the first astrologers, are those collected by the poet Manilius.²⁷² The subjects of Aries work in wool and make their fortune in the clothing industry.²⁷³ However, these merchants resemble in other ways, too, the mythical ram which was submerged more than once by the waves and was finally skinned for its Golden Fleece or the living rams which are often sheared. That is, they have sudden reverses of fortune and become breathless from the hope of repairing them. Timidity is mixed with foolishness. Sudden

outbursts of anger²⁷⁴ are represented by the horns of the ram. A small, bleating, voice is also among traits to which anyone may add according to his fantasy.

♉ The Bull. (Ταῦρος – *Taurus*). The astrological bull does not much resemble its living model. [Fig. 4] One must search the Near Eastern traditions to find the reasons for the infamous deformities to which it has been subjected, especially the affront which removed his sex. Manilius treats him as an ox and makes him patron of laborers. Other astrologers go further. All keep the name "Bull" but classify him among the feminine signs. It embarrassed those who tried to give reasons. The mythographers thought that the Bull was the one whose shape Zeus had taken on to carry Europa across the sea from Phoenicia,²⁷⁵ the bull of Pasiphae²⁷⁶ or the cow Io,²⁷⁷ or even, in despair, the bull Apis.²⁷⁸ Something which appears throughout these legend is that the Bull of mythology is not a supernumerary. He is the vehicle of a lunar deity whose horns symbolize the crescent and which corresponds to the type Ishtar-Astarte-Aphrodite.²⁷⁹ Also we will see further on that the astrologers made Taurus the domicile (οἶκος) of Venus and the place of exaltation (ὑψωμα) of the Moon. Those who sought the simplest reasons observed that the Pleiades (*Vergiliae*) and the Hyades (*Suculae*) formed two groups surpassing in importance the brilliant, but unique, Eye of the Bull.²⁸⁰

Fig 4. Taurus. The Bull

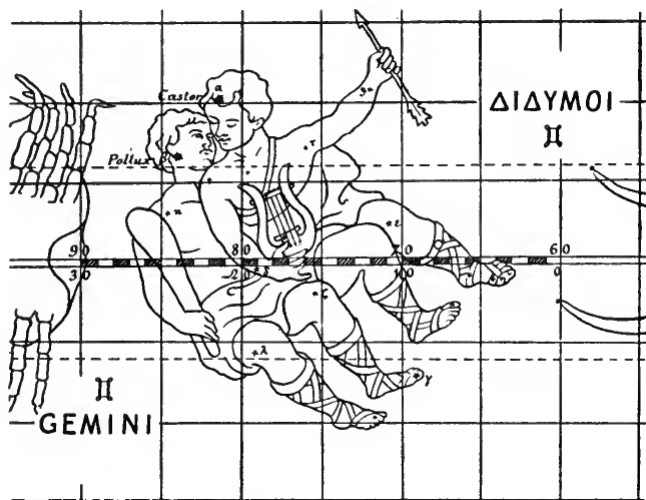


Their mythical sex was never equivocal. But no one understood any longer why, given the uncontested predominance of the feminine sex, the sign kept the name of the Bull, which became a courtesy for a monstrosity. This name, so tenacious, probably came from Babylonia.²⁸¹

The zodiacal Bull was shown as large, but cut-off at mid-body, the arguable aspects of his sex plunged beneath the water. There was no room for the rear part. Taurus, facing the opposite direction from Aries, was fastened onto it rather like the two-headed bulls in Persian art. The result is that Taurus seems to darken as it encounters the daily motion and lets itself be pulled from behind. This visual detail was far

from negligible for the astrologers. Added to the ambiguous sex of the animal, it gave rise to a very unedifying deduction about the habits of Taurus' clients.²⁸²

Fig 5. Gemini The Twins



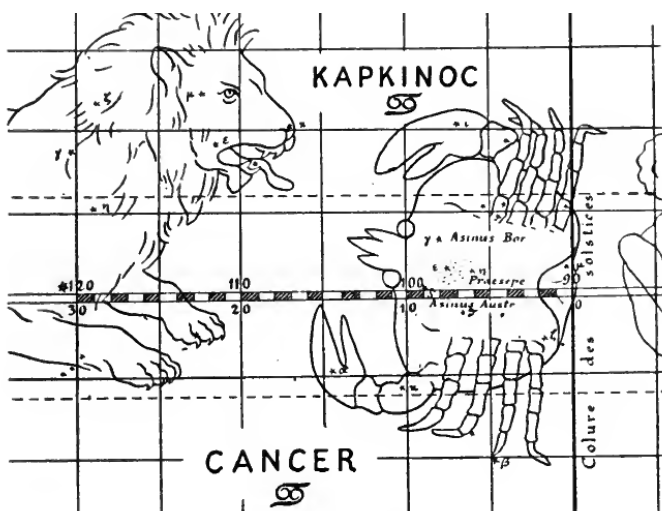
II The Twins (Δίδυμοι – *Gemini*). Right where the Mesopotamians placed their Great Twins, hypostases of Nergal, the Greeks also placed two young men, drawn from their mythology. [Fig. 5]²⁸³ The most wide-spread opinion is that they were the *Dioscuroi*, Castor and Pollux, whose names rest upon the two brightest stars in the constellation.²⁸⁴ Others see Apollo and Hercules²⁸⁵ – a tradition which prevailed in the end. Yet others see Apollo and Bacchus, or Hercules and Theseus, or Zethos and Amphion or the two young favorites of Demeter, Iasion and Triptolemos, or even the Cabeiri of Samothrace. The essential requirement to satisfy the Mesopotamian tradition was a pair of brothers or friends.

The Twins are shown standing or sitting, feet forward,²⁸⁶ Castor (or Apollo) closer to Taurus, Pollux (or Hercules) closer to Cancer, the Crab.

The Twins, according to Manilius, are two lazy musicians, who prefer the lyre and the flute to the trumpet of war. Or maybe they are scholars who began with astronomy (the study of the celestial lyre) and finished with mathematics.²⁸⁷ One would not have thought the Gemini were so in love with Pythagorean harmonies. No doubt Apollo was enough for all the music. As for Hercules, he was present only to explain the presence of his neighbor, the Crab.

☊ Cancer or Crab or Crayfish (Καρκίνος – *Cancer*). This famous crab was the one which, in the swamp of Lerna, bit Hercules on the foot. For this exploit, it was transported to the sky by Hera, the irreconcilable enemy of the hero.²⁸⁸ The two stars called the donkeys (ὄνοι – *Asini*), which shine upon the carapace of the crustacean, also have their own legend

Fig 6. Cancer. The Crab



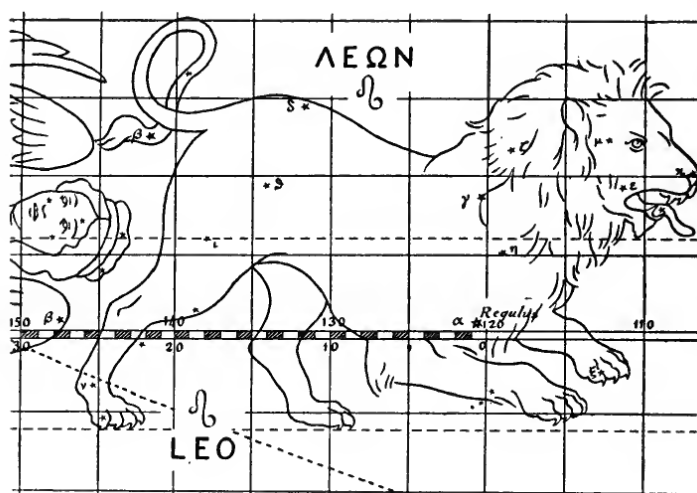
We do not know where the Greeks got this zodiacal image. [Fig. 6] Later, we find an explanation in terms of natural symbolism. The Sun, coming to the Tropic, moves backwards, like the Crab.²⁸⁹ The unknown designers of the zodiac did not have that much intelligence, and it is even more doubtful that the summer solstice was in Cancer in their time. There is even greater difficulty in establishing an association of ideas between the dry season and an aquatic animal. It suggested to erudite moderns that the zodiac had shifted 180° since it was constructed. This may have been the case with the fantasy that, while Mesopotamia is dry in June, the heliacal rising of Cancer and

Sirius announces the beginning of the annual Nile flood, in Egypt.²⁹⁰ The astrologers agree in making Cancer a feminine sign. However, they did not agree on the species of crustacean. For some was a sea crab, for others, a fresh water crab or a crayfish.²⁹¹ This occasioned some differences in predictions.

Manilius lets us guess why the Crab produced avid businessmen and unscrupulous speculators. Nevertheless, he gives a clue in saying that these men of affairs send their fleets from

one end of the world to the other.²⁹² They based their operations upon the element where the Crab lives.

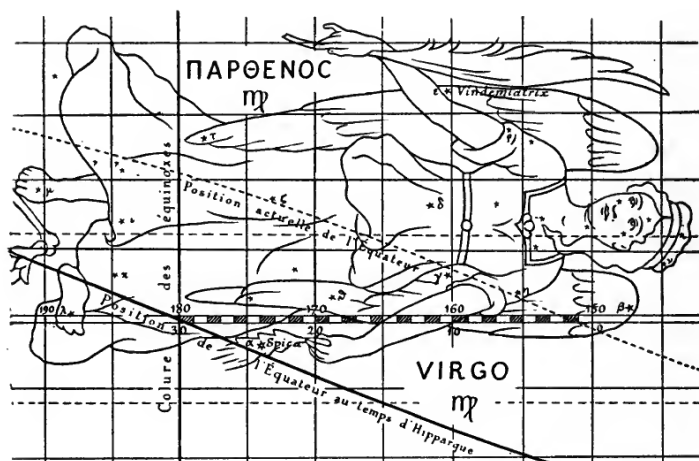
Fig 7. Leo. The Lion



♌ The Lion (Λέων – *Leo*). The assimilation of the terrible Sun of Summer to Leo was something done in Mesopotamia and it was not abandoned in Greece. For the Greeks, Leo was the lion which Hercules had strangled in his arms or clubbed at Nemea. [Fig. 7] It regained its life in the sky through the attentions of Hera. It lacked no member; it advanced fiercely, feet upon the ecliptic, in the direction of the daily motion.²⁹³ Just as the lion is the king of beasts, the star which shines in the lion's heart is the "little king" (βασιλίσκος – *Regulus*), and the Lion has a notable place in royal birth charts.²⁹⁴ Manilius contents

himself with less ambitious predictions. According to him, Leo produces bold hunters, entrepreneurs of wild animals for entertainers and of livestock. They were people simpler than others and with no more malice than a baby.²⁹⁵

Fig 8. Virgo The Maiden

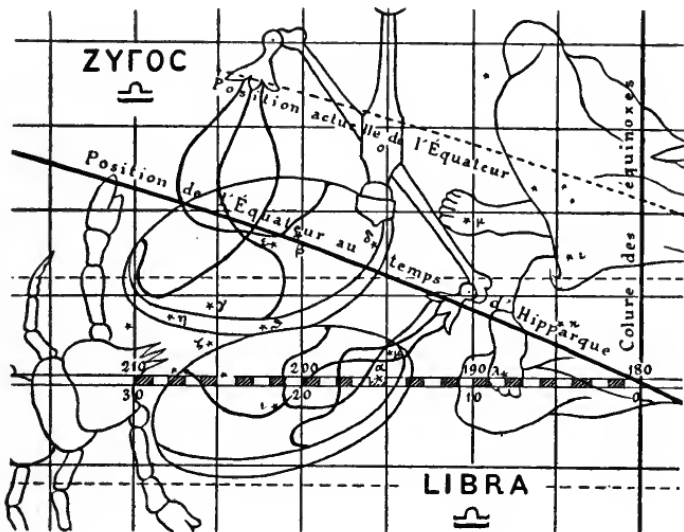


♍ The Maiden (Πάρθενος – *Virgo*). One searches in vain in the Babylonian documents for an image similar to that of Virgo, a winged woman, lying head forward, on the zodiacal circle. [Fig. 8] ²⁹⁶ The Greeks, on their side, dug through all the corners of their mythology to give her a proper name and a genealogy. She was Astraea or Justice, Δίκη (daughter of Zeus and Themis or of Astraios and Aurora), who, everyone knows, was exiled from the earth. Or perhaps she was Demeter, or Fortune, or Atargatis, or Isis, or Erigone, the unfortunate daughter of Icarus.

Perhaps she was even a certain Parthenos, invented by some lover of facile etymologies.²⁹⁷ The legend of Astraea took up much space in Aratus and his imitators or commentators. The developments of the Golden Age were attributed to her as well as the actual spite of humanity. Erigone's legend furnished all the elements of a drama including Virgo (Erigone), Arcturus (Icarus) and Sirius (the dog of Icarus). Recourse to Demeter was motivated by the grain stalk (Στόχυς – *Spica*), the brightest star in the constellation.

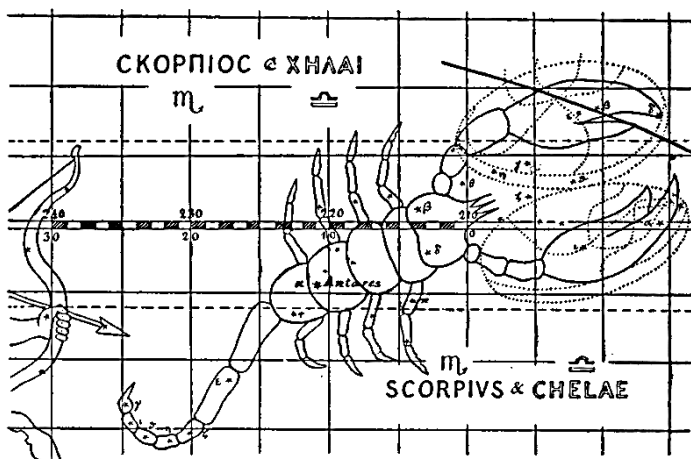
For Manilius, Virgo is Erigone. He makes her a sort of schoolmistress. She forms eloquent people, savants, stenographers who could copy every word with the pen. She pushes away timidity when she makes a mistake. He forgot for a moment to explain the grain stalk which the Maiden held in her left hand. It may have had a connection with harvest, much as another group of stars, the vinedresser (Προτρυνγητήρ – Προτρύγετος – *Vindemiatrix* – *Provindemia* – *Vindemiter* – *Antevindemiater*), is connected with the vintage and the Bacchic legend of Erigone.²⁹⁸

Fig 9. Libra. The Balance



with Justice. In this case it would have been a more than average irony to compare the symbolic instrument of justice with the pinchers of the Scorpion.³⁰¹ This change, insignificant for the astronomers, was of great consequence in astrology. The Scales represent moderation, justice, the rule of law. It makes legislators, orderly and systematic minds, influences one would not find in the pinchers of the Scorpion. Also, it was the Scales and not the Pinchers that the astrologers, Romans in their hearts, judged to be protective sign of Italy.

Fig 10. The Scorpion and the Claws or Scales



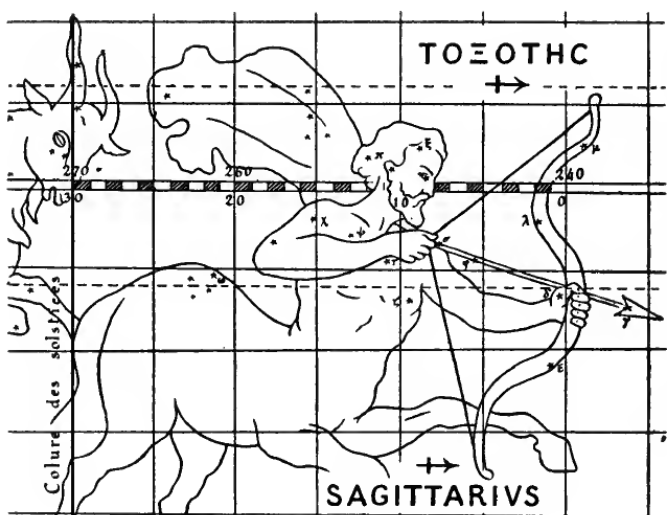
rational explanation saw the sting of the Scorpion and the arrow as lightning bolts. The pretext was that there were many storms in October and November.³⁰³ It was a chimerical deduction, based upon more-than-dubious fact, and, in any case, unique to a particular clime. Lightning or not, Scorpio had few peaceful clients. He created fighters, vandals, gladiators, fencing-masters and other sorts of quarrelsome people.³⁰⁴

♐ The Archer (Τοξότης – *Sagittarius*). Most of the mythographers saw the Archer or Sagittarius as Chiron the Centaur.³⁰⁵ [Fig. 11] However, there were scholars who objected that the Centaurs did not know how to use arrows. Besides, there was already a constellation Centaurus. According to the poet Sositheus, Sagittarius was the symbolic portrait of a certain Crotos. He was a friend of the Muses, a good horseman, and prompt as an arrow, or serving to amuse the Muses with his talented archery. In short, he was a copy or caricature of Apollo. Also, one cannot pass on without remarking that the representation, whether two-footed or four-footed, always stands on the legs of a horse. Due to the addition of a sort of flying cloak, Sagittarius is classed among the “winged” signs.³⁰⁶

♎ The Balance (Χηλαί or Ζυγός – *Chelae* or *Libra*). The constellation of the Scorpion, which seems to come from Mesopotamia, takes up more than one twelfth of the zodiac. The Greeks distinguished between the pinchers or the claws (Χηλαί) of the celestial animal and the Scorpion proper. In the first century CE, people came more and more to replace the pinchers with a new name, the Scales. [Fig. 9/10]²⁹⁹ Why a pair of scales? Perhaps because, from a graphical point of view, it was easy to turn the claws into the pans of the Scales.³⁰⁰ The motive usually invoked was that the Scales, corresponding to the equinox, make day and night equal. The idea of the Scales may also have been inspired by the legend which identifies Virgo

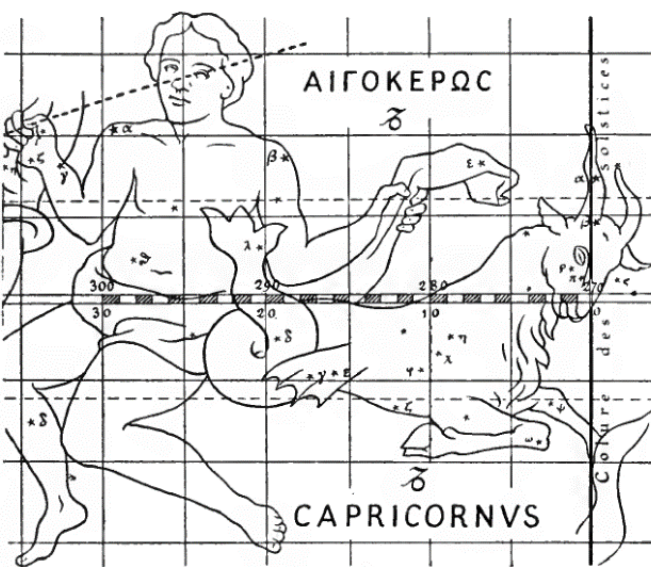
♏ The Scorpion (Σκορπίος – *Scorpio* – *Scorpius* – *Nepa*). The Scorpion [Fig. 9/10] was thus cut short to the profit of the Scales. The Greeks thought it was the scorpion which, sent by Gaea or Artemis, killed the great hunter, the too vain or too valiant Orion. The mythical scene still played itself out in the sky, where the two actors found themselves transported. As the Scorpion rose, Orion plunged beneath the horizon.³⁰² The Greek legend was a doublet of the one about Cancer (above, p. 136). It seems to have been an imitation of the Mesopotamian legend of the hero Gilgamesh, attacked by the scorpion-man, guardian of the Sun. The so-called

Fig 11. Sagittarius. The Archer



Manilius believed that Sagittarius engendered horsemen, animal-tamers able to “disarm tigers, calm angry lions, and speak with elephants.” All of them were vigorous people, with a sure eye and an inscrutable heart.³⁰⁷

Fig 12. Capricorn. The Goat



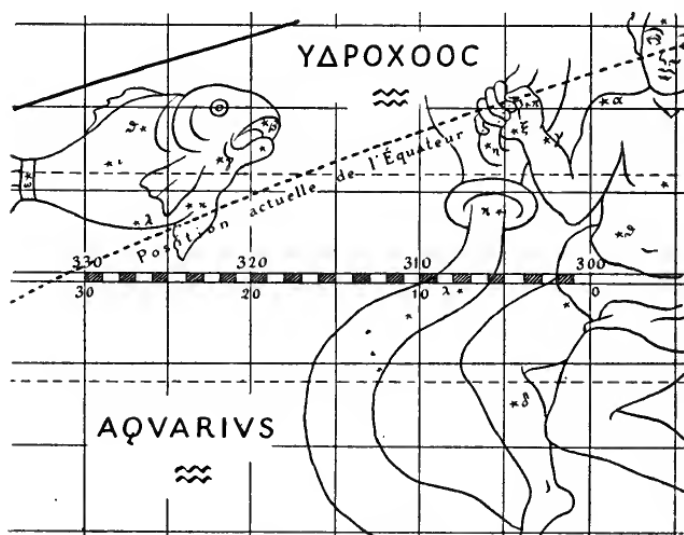
Υἱὸς (Αἰγόκερος – *Capricornus*). Like Sagittarius, Capricorn may have been one of the monsters which swarmed in the fertile waters of the Babylonian cosmogony [Fig. 12]. The Greeks had some trouble finding an equivalent in their mythology. Pan or Aegipan was available, with his horned head. He was said to be a milk-brother of Zeus, suckled like him by the goat Amalthea. However, the astrologers had decided that this sign, small and dim, was aquatic and feminine. The first requirement was satisfied by combining the image of Pan decidedly changed into a buck, with that of Triton. As for the latter, a monster's degree of monstrosity did not make much difference.³⁰⁸

The fish-tail of Capricorn, symbol of the winter rains, hardly prepares the mind to accept the prognostics of Manilius, who selected

randomly from various traditions. For him, Capricorn is the chosen place of fire (Vesta) and the patron of all metallurgy.³⁰⁹ From this came an association of ideas which led the astrologers to put the exaltation of Mars, god of iron and fire, in Capricorn.³¹⁰ We can visualize what he thought when he added the clothing business to the metal arts. Evidently, Capricorn looked to him like “Father Winter,” bundled up in blankets and leaning over his fireplace. Yet, he thinks of the goat and the fish when he considers the character of the individuals born under this sign, rather than their livelihood. They are petulant people, with equivocal habits in youth (under the goat, the anterior part), more tranquil ones in age (under the fish).³¹¹

Ἰχθυόεσσα (Ἰχθυόεσσα – *Aquarius*). Mesopotamian mythology represents the neighborhood of the Winter solstice as flooded,³¹² but it has no pictures of anything resembling Aquarius. [Fig. 13] He was, for the Greeks, perhaps Deucalion watching the Flood waters flow down. Sometimes he was Cecrops offering water to the gods, in place of the wine he did not know. Again, perhaps he was Aristaeus obtaining the beneficent rains from the gods.³¹³ He is represented in the form of a young man emptying an urn on the side toward Pisces, and bathing the Southern Fish in its element.

Fig 13. Aquarius. The Water-bearer

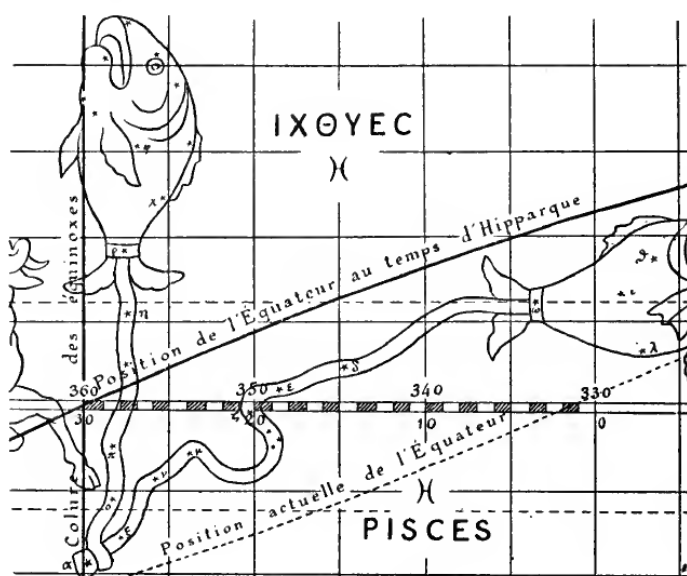


By virtue of the “parentage of professions,” Aquarius produced hydraulic engineers, who dug canals or built bridges. They also measured the passage of time with water clocks or celestial movements. Finally, they did not hang on to money, but never became rich or poor.³¹⁴

✠ The Fish (Ἰχθύες – *Pisces*). Greek mythology seems to disdain fish, which is surprising for a people of sailors and fishermen. [Fig. 14] Only the dolphin got a little attention and a bit of benevolence. Fish, on the contrary, play a large role in Syrian and Mesopotamian legends. The Greeks themselves left a visible trace of the eastern origins of the Fish of the zodiac. They say

that once they had been Aphrodite and her son, pursued by Typhon, who threw themselves into the Euphrates and were turned into fish.³¹⁵ Another story was that Typhon came from an egg pulled from the Euphrates by the fish.³¹⁶ The author of the *Aratea* called the Fish “the two gods of Syria”.³¹⁷

Fig 14. Pisces. The Fishes



The reference to the Euphrates did not stop certain mythographers from changing this legend into a Greek one. They sent it out to sea, like the legend of Aphrodite herself, born from the foam of the sea. For Manilius, the Fish are the fish of the sea, and the water from their neighbor, Aquarius, is salt-water. There is no shortage of seamen born under the sign of the Fish, from the simple fishermen to navigators who set their courses by the stars to the commanders of navies.³¹⁸ The aphrodisiac character is also found in the voluptuous and mobile temperament which the poet attributes to them. The fecundity which distinguishes the astrological Fish from the real ones is also an aphrodisiac quality and which had been in the end, the reason for all these legends.

Later, the idea of fishermen fooling, and pirates surprising, their prey caused the clients of Pisces to be given the characters of foolish loudmouths, without scruples.³¹⁹ This was all the more surprising since fish are mute.

The constellation fills a large space and was separated into the Northern Fish, turned towards the pole, and the Southern Fish, facing west. Between the two, there was a floating string which the astrologers did not hesitate to use in their predictions.³²⁰

We here return to our point of departure, to Aries. We have gone down a road containing, thanks to Manilius, the first associations of ideas, still foreign to mathematics. They escape, in a certain measure, the labored complications of scholars and pedants. There remains for us, before going any further, to review all the varieties of classifications drawn by the astrologers from the preceding descriptions. Physiological, psychological, moral, esthetic, they serve to define the qualities which might be imputed to the different categories of signs.

II

Classifications of the Signs.

Most classifications are based upon the appearance of the figures. Nothing shows with more certainty the fundamental and incurable ineptitude, based upon naiveté, of the astrologers. They were people who took the products of the most capricious fantasy as works of nature, able to cause natural connections. However, nothing, too, affirms more clearly the independence of Greek astrology, from the point of view of practical use. One detail changed in a zodiacal figure modified a whole series of deductions and correspondences, used in a hundred ways, and above all in medical astrology. We know now that, while there may have been Near Eastern influences, the Greek sky had its own physiognomy and imagery.³²¹

Let us approach (seriously, if possible) the zodiacal zoology established by the analysis of Hellenic imagery.

I – From the point of view of bodily form, the signs were;

1. Human (άνθρωπόμορφα – άνθρωποειδή~ – *humana*) or animal (θηρώδη – *ferina*), the composite sign of Sagittarius being on the boundary of the two types. The animal signs divided into terrestrial animals (χερσαῖα) or quadrupeds (τετράποδα). There were also amphibians (ἀμφίβια), aquatic, living in the sea (θαλάσσια) or fresh water (ποτάμια). One might distinguish also those that walk (βαδιστικά) from those that creep (έρπυστικά) and those who fly (πτερωτά). However, these classifications are not excluded by the preceding ones. Of the four human signs (♊ ♋ ♍ ♎), Virgo ♋ is “winged.” Sagittarius ♐ is also winged, as are the Fish ♓. Their fins apparently count as wings! The same goes for the classification into signs endowed with voices (φωνήντα), semi-vocal (ἡμίφωνα) and voiceless (ἄφωνα) signs, which intermingle with the animal and human signs. A separation was also made between the reasonable signs (λογικά) and the signs deprived of reason (ἄλογα), the animal signs. These last subdivide into tame or domestic signs (ἡμέρα) and ferocious ones (ἀνήμερα).³²²

2. Fertile signs, whether begetting (πολύσπερμα), or begotten (πολύγονα, στειρώδη – ὀλιγόσπερμα – ἄσπερμα) or common.

3. signs whole or mutilated (μελοκοπούμενα – ἀπόκοπα – ἡμιτελῆ – *debilia*), such as Taurus, with only half a body, the blind Crab,³²³ Scorpio, which lost its pinchers to Libra, and Sagittarius, which seen in profile has only one eye. “Thus,” the good Manilius says with comic solemnity,

*“the universe consoles our afflictions by carrying them to the stars. It teaches us by example to bear patiently our losses, since the whole progress of destiny depends on the stars and the stars themselves are born with infirm members!”*³²⁴

4. Simple (ἁπλᾶ – *simplicia*) signs and double signs, whether connected, like the Gemini, or separated, like Pisces, or heterogeneous parts (*biformia* – διφυεῖς, like Sagittarius or Capricorn. The insufficient erudition of Manilius here confuses the signs that are double figures with the ones which are double by position (*duplicia* – δίσωμα – διπλᾶ). The latter are those which precede the equinoctial or tropical signs and share in their nature. Basically, it is in the logic that one finds the agreement of position and figure. However, the mythology must give way to the geometry, and it is geometry which requires Virgo to be a double sign. With a little more savoir-faire, Manilius would have included this sign within the rule. He could have remarked that it is, in reality, double, composed of the Woman and the Stalk of Grain.

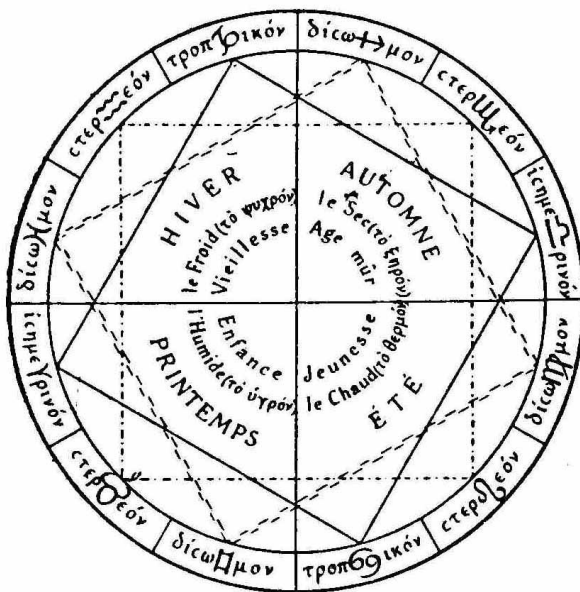
II. – From the point of view of their attitude, the figures are flexible. The signs are standing, sitting, lying down, walking or running, turning up or down, back or forward, etc. Thus, Manilius knows that Cancer and Scorpio are lying on their bellies and the Fish are on their sides.³²⁵ From the point of view of their inclination relative to the horizon, they are upright (ὀρθά – *recta*) or stooping (πλάγια – *obliqua*). This is a distinction which is often confused with the preceding ones.

The learned Ptolemy disdained all the naïve assumptions of the older astrology. He admits no classifications other than those which were based upon the geometric positions of the signs relative

to the duodecimal division of the circle. This was a position which, according to Ptolemy, determined their “nature.”

First, he divided the signs into three groups. Each contained four signs, equidistant, and with similar functions.

Fig 15. The symbolism of the squares and the zodiac signs.



They are;

1) the “tropical” or cardinal signs, subdivided into tropical signs proper (τροπικά) and the equinoctial signs (ισμερίν);³²⁶

2) the signs called “solid” (στερεά – *solida* – *simplicia*), were so-called, it seems, because they made the changes of temperature begun by the preceding tropical sign certain;

3) the signs called “bicorporeal” (δίδωμι – *biformia*). Placed between a preceding “solid” sign and a following “tropical” sign, they took part in the natures of both. Each season, represented by a quadrant of the circle, had thus a tropical beginning, a solid middle, and a composite ending, where it is possible to sense the approach of the following season.

From the way in which Ptolemy justifies these divisions, one can easily see he had gotten the whole business from someone else.³²⁷ Moreover, he had

strained his ingenuity to find plausible reasons for it. Which sign did not submit to the influence of its neighbors? The explanation of the term στερεός is no less labored. All this raises suspicion of an adaptation after the fact. It was probably done by geometers who wanted to force certain characteristics upon the signs by grouping them into regular polygons. The cardinal signs submit themselves to geometry by position. Of the eight remaining signs, three genuinely bicorporeal signs (♊, ♎, ♋) found themselves at three corners of a square. Virgo became bicorporeal to fill up the fourth angle. The four signs which formed a third square were a little less “simple,” in antithesis with the preceding ones. They could have been double, if the geometry had required. In the last place are the interventions of the rationalists, who pretended to find profound reasons for the fantasies of their predecessors.³²⁸

It was once again geometry which truly decided the sex of the signs, contrary to mythology and with pliant invention. The rule was that the sexes alternated signs, beginning with the first sign, which was masculine. As in the Pythagorean doctrine, the odd numbers were female.³²⁹ This may have been the reason for substituting Aries for Cancer as the first sign. One could not make Cancer masculine without making Leo feminine or Virgo masculine. That must have seemed absurd even to astrologers capable of compromising the sex of the Bull.³³⁰

Greek astrology, then, knew only geometric sex in the zodiac.³³¹ However, one may apply geometry in several ways. Sex from fixed position may associate with or substitute for sex from accidental position. This gender identity varies with the position itself. For example, one may take for the first sign – the horoscope or rising sign – and obtain a new distribution of the sexes in the zodiac.³³² Moreover, according to a theory explained earlier, the stars became more masculine as they dried out in the quadrant reaching from the eastern horizon to the meridian. They did the same in the quadrant diametrically opposite. It was logical to consider the signs temporarily in these two quadrants (both odd-numbered, one and three) as masculine. The same signs would count as feminine in the others.³³³

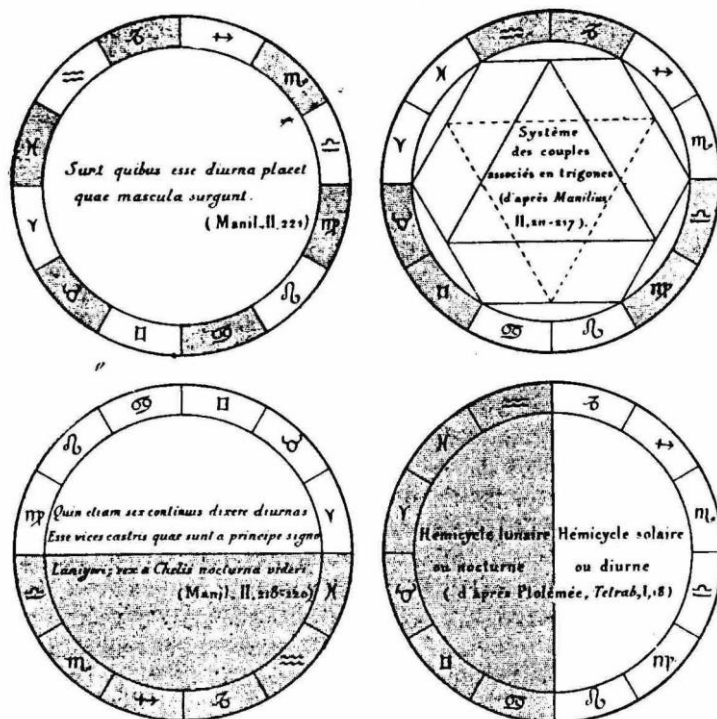
Sex has an enormous importance in astrology, even in the zodiac. This is because of the sympathies and antipathies which it engenders, not only between the signs, but also, and especially, between the signs and the planets. Thus, it is a general rule that the Sun and the masculine planets are more favorable in masculine signs. The Moon and the feminine planets are more favorable in the

feminine signs.³³⁴ All these are speculations which the Oriental astrologers never dreamed of, since they had only one feminine planet.

We have seen how the Greek astrologers had equalized the two sects (αἰρέσεις), solar and lunar, day and night for the planets. They used two feminine planets and one androgynous one. They applied the same system, this time without difficulty, to the signs of the zodiac. The masculine sex was associated with the idea of warm dryness, and the feminine sex with cool humidity.³³⁵ Therefore there was no need to declare the masculine signs diurnal – that is, more “joyous,” more effective, during the daytime – and the feminine ones nocturnal. It is one system, the most simple of all, which Manilius meant to speak about.³³⁶ He preferred another, more mysterious, system, which assumed that the association of signs by triangles was already known.³³⁷ This led to making each clan, day and night, half masculine, half feminine.

These two systems, purely arithmetic and geometric, had the disadvantage of colliding head-on with a simple, popular, idea. It was that the day and night signs are not spread out, alternating, in twelfths around the circle. Rather, day signs and night signs each filled a hemisphere. The Alexandrians made Nechepso and Petosiris speak of it, invoking the ancient Egyptian tradition. This tradition gave half the sky to the hours of the day and to their protective deities, and the other half to the hours and to the gods of the nights. There is only one absurdity to brave, that of drawing a line of demarcation. The line changed each hour, labelling the signs on one side “diurnal” and “nocturnal” on the other one. This absurdity did not frighten away the astrologers. Taking Aries as the point of departure, they decided that all the signs between Aries and Libra were exclusively “day” signs. The rest were “night” signs.³³⁸ They flattered themselves for being in accord with Nature in this way. The summer signs, those which presided over the longer hours, were diurnal, while the winter signs were nocturnal.

Fig 16. The day and night signs (four different systems)



However to represent the system graphically at repose and to put the diurnal hemisphere above the horizon, one must have Aries setting. That goes contrary to the association of ideas which would put the beginning of things in the East.³³⁹ Ptolemy's solution was to eliminate the distinction between day and night signs from astrology. In other words, he oriented the signs in another way, and placed the day and night signs in a different order. He admitted six day or solar domiciles (οἶκοι) for the planets, from Leo to Capricorn inclusively, and six nocturnal or lunar domiciles. They are similar to those in Firmicus, who was the most faithful adherent of the Egyptian tradition.³⁴⁰

We have only looked at the intrinsic qualities of the signs, those which did not depend on the influences of others. These are no more than the rudiments of astrological grammar. It is

now necessary to grapple with the rules of syntax, the combinations of the signs between themselves and those, yet more complicated, of the signs with the planets.

Chapter Six

Combinations of the Signs of the Zodiac

In classical astrology, the relationships of the signs with one another were ruled exclusively by geometry. The geometry is no more than a veil to hide less abstract reasons, associations of ideas which the learned did their best to disguise. Fortunately for us, they were betrayed by the neophytes. Manilius, whose imagination refused to be imprisoned by mathematics, thought of the mutual relationships of the signs as human ones. As in the universe of Empedocles, it is Love and Discord which activated the zodiac.³⁴¹ By looking, the signs were filled with desire or hatred which they exchange and which cross one another from all points of the circle. Alas! As one may see easily and often upon Earth, it is Discord which dominates. Friendships are no more than alliances against common enemies, always rickety, full of ulterior motives and treachery. Once the imagination is let loose on this subject, it knows no limit. Anything is a pretext for leagues and counter-leagues. Disorder, already visible in the sketch of Manilius,³⁴² leads to the dispersion of every intelligible motive in the extravagant compilation of connections which Firmicus borrowed “from the Books of Abraham”.³⁴³

To remain on the side of the point before the exercise of reason becomes impossible, we will occupy ourselves with combinations based upon the elective affinities ruled by geometry. When everything is considered, we find two general ways of associating the signs, and, with the signs, the planets³⁴⁴ by parallel lines and by the sides of regular polygons. One is common to both astronomers and astrologers, the other, used by astrologers alone.

I

Association by Parallel Lines

The associations of parallel lines are always between pairs. They operate in two directions, parallel to the axis which joins the equinoxes and parallel to the axis which joins the solstices. The astronomers associate in pairs (κατὰ συζυγίαν) those signs having the same latitude or zone (ὁμόζωνα – σύζυγα) in other words, placed on lines parallel to the equator (the axis of the equinoxes). The relationship which these signs have with one another is that, when the Sun is in either of the two signs, the days and nights are of the same length. The astrologers, for whom the signs are living beings, accommodated this classification to their own ideas. They said that the signs placed in this way “looked at” and “saw” one another (βλέποντα [ζῶδια]), from above and from below the disk of the Earth, intercalated into the center of the circles. Ptolemy called them “equipollated” (ἰσοδυναμοῦντα) because of the equal lengths of the days and nights. He assumed that the name “seeing” was given them because they rise and set at same points of the horizon.³⁴⁵

The oldest astrologers, who considered the signs as a group, had Aries and Libra look at one another, and arranged pairs of “viewers” on each side of the equator. A result of this arrangement was that the tropic signs, Cancer and Capricorn, were not paired, (ἄζυγα – ἄζωνα – ἄβλεπτα) and did not look at anyone. They were blind or “could not see themselves.”³⁴⁶ The rule already cited associated signs of the same sex, and it was, as already said, a harmonic condition.³⁴⁷ However, the astronomers threw this pretty work into disarray. From the time of Hipparchus, they advised placing the cardinal points, no longer in the middle of the tropical and solstitial signs, but at the beginning. Rather, in spite of the astrological scruple about the μεσεμβόλημα (below, p. ???), they put them between two signs. At one blow, the whole system of correspondences was changed. Aries found itself face to face with Virgo, not with Libra. Cancer, rather than being “blind,” was the counterpart of Gemini, as Capricorn was of Sagittarius.

Fig. 17 Shows the difference between the older and newer systems.

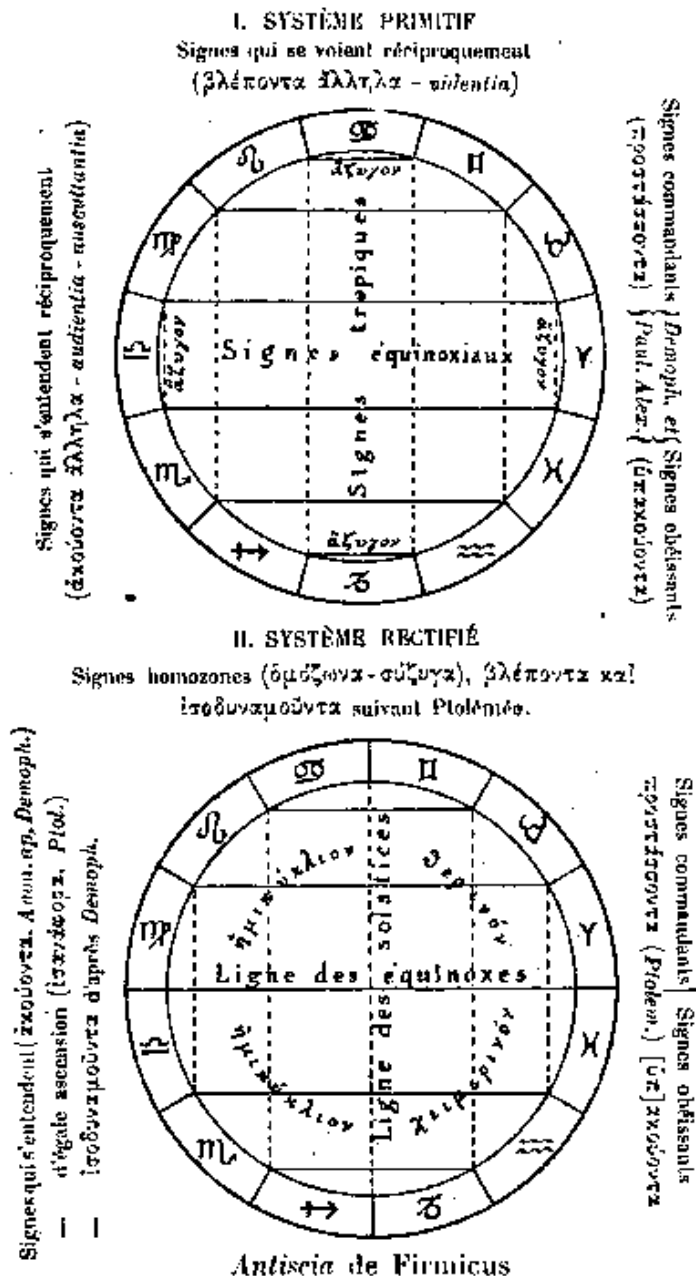


Fig. 17. Déplacement des rapports entre les signes.

The new system of correspondence, applied to each degree of each sign, is that which Firmicus calls the method of antiscia. He explained it following Dorotheus of Sidon, taking pains to insist on the capital importance of the *antiscia* for predictions. In the construction of the "homozones," satisfying to the astronomers, there was a radical vice which scandalized the astrologers. The association of two neighboring signs, necessarily of different sexes, was an astrological heresy.³⁴⁸ This inconvenience was reproduced in the complement of the degrees, if one observed exact symmetry. The odd-numbered degrees were masculine according to Pythagorean doctrine. They found themselves associated by the parallels to even-numbered degrees on the opposite side. This could not be understood by Fronto, an astrologer nevertheless very expert in his art. For that reason, Firmicus assures us that "his study of the antiscia was ineffective."³⁴⁹ Dorotheus of Sidon corrected the construction by reserving an empty degree. This was done in such a way that the first degree corresponded with the twenty-ninth degree of the opposite sign, the second with the twenty-eighth, and so on. The rule which required the parity of being was thus observed.³⁵⁰ The parallel lines following those *antiscia* degrees to exchange their rays³⁵¹ would find themselves slightly inclined to the axes of the zodiac. Moreover, the circumference of the circle would have twelve disqualified degrees. However, the

inventor of this *tour de force* had found, Firmicus responds, the road to the truth.

The signs on the same parallel see one another, and sympathize by means of their eyes. Those situated symmetrically, in a perpendicular sense, hear one another and sympathize with their ears. Evidently, the astrologer began by supposing that these signs, separated by the disk of the earth, were not able to see one another. Since the axis of the ears is parallel to that of the eyes, their infantile reasoning did not lack a certain logic. The system of the seeing signs included two signs which looked at nothing; the ordinance of the hearing signs included two signs without ears, or with no one to listen to, Aries and Libra.³⁵²

The astronomers and scientific astrologers who had upset the system of seeing signs upset the other system, too, by introducing scientific reasons. They affected to interpret ἀκούειν – *audire* as obedient, and divided the signs. Some command (προστάσσοντα – *imperantia*) – those in the Northern Hemisphere. Others obey (ἀκούοντα – ὑπακούοντα – *audientia*) – those in the Southern Hemisphere. Those in the north command, because they lengthen the days, while those in the south diminish the

days.³⁵³ There was yet another reason. The signs of the northern hemisphere rise more slowly, thus more majestically, than the corresponding signs of the southern hemisphere. They were “of the greater ascension.”³⁵⁴ However, this reason disappeared when the astrologers changed the placing of their cardinal points to the beginnings of the signs. Then signs of the same latitude, north and south of the equator, became signs of equal ascension (ισανάφορα). Thus confusion of ideas and of languages was introduced, the same words serving for two sets of rules. It goes without saying that the learned Ptolemy called the signs of equal ascension the “commanding and obeying” signs.³⁵⁵

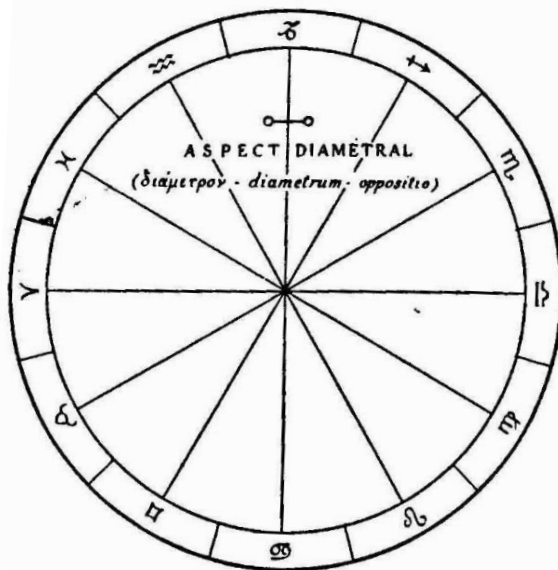
One cannot say that the system of the antiscia would have been applied here, to suppress associations between the neighboring signs. The savants persisted in imposing this heresy, and had to be accommodated. They even tended to increase the resources of astrology. For example, one could reserve to neighboring signs the profit of the principle of equality and of perfect reciprocity which was applied formerly to the rule of the viewers, the listeners, the *antiscia*. One established for the others an alternation of superiority and inferiority, founded upon the right and the left for each couple, on the comparative length of the parallels joining each of the different couples, etc.³⁵⁶ As for the system of *antiscia*, it loans these combinations to the rival and better known system of the polygonal aspects.³⁵⁷

II

Polygonal Associations or Aspect

We have already said (p.???) that geometry refuses to cover the anarchic combinations which Love and Hate produce in the sidereal world described by Manilius. We will be obliged to separate, in a like manner, these unintelligible fantasies from the polygonal associations which the poet tried to introduce as well. These associations or configurations (σχήματα – σχηματισμοί – συσχηματισμοί – *configurationes* – *adspectus*) are the instruments par excellence of scientific astrology. Its collaboration with the Pythagoreans gave it the prestigious name of “mathematics.” The improper name “aspect” (ὄψεις – *adspectus*) prevailed in Latin. It reminds us, here as well, that the rigidity of mathematics did not keep imagination from cultivating metaphor. The angular relationships, which are supposedly measured only with a compass, were humanized. One may also say the signs associated by configuration “see” each other reciprocally or “give witness” to one another.³⁵⁸ Finally, as a transition

(and reason for confusion) between the system of association via parallel lines and that of polygonal groupings, there is the diametrical aspect. It belongs to both categories, and even figures unduly in the second.



The number of configurations or aspects was at first three, the diameter or opposition, the triangle or trine aspect, and the tetragon or square aspect. It was made four by doubling the triangle, which gave the hexagon or sextile aspect [figure 21].³⁵⁹ The signs which do not communicate via one of these “lines” are called “inconjunct” (ἄσύνδετα – *inconjuncta* or ἀπόστροφα). They include the neighboring [semi-sextile] signs, (see above, p. ???, 1) and those which are separated by five or seven signs. [Inconjunct].

Let us see in what measure geometry and psychology have collaborated in defining the properties of the figures, and if both always agree.

Fig 18. Diametrical (opposition) aspects

1) Opposition or the diametrical aspect (διάμετρον – *diametrum*). It was the oldest aspect interpreted by the astrologers. The Chaldaeans of Babylon and Nineveh observed the risings of certain

stars and planets with the simultaneous settings of certain others. This is a coincidence which corresponds roughly to diametrical opposition. Once the relationship had been established by diameter, was it sympathetic or antipathetic? For each point of view, there were reasons whose conflict produced hesitation and uncertainty. The “Chaldaean” tradition answered the question in favor of sympathy. In it, the opposed signs or planets saw each other, not at a distance, but face to face, and as a consequence, worked together. Moreover, all associations presupposed sympathy, and above all the diametrical aspect. It is the “aspect” par excellence, in the true sense of the word.³⁶⁰

The partisans of the opposing tradition – more Greek perhaps than the other – reasoned differently. Moreover, they had the association of ideas that represent the word “opposition” on their side. The opposite stars are antagonists. Psychologically, they were adversaries lined up for battle, materially, they were the weights which each pulled down the two extremities of the beam of a balance scale. Manilius, who borrowed with both hands and wanted to reason as well, was very embarrassed. He remarked that the opposite signs moved in contrary ways and that one rose as the other set. They had incompatible habits. Clearly the burning Cancer and the icy Capricorn were not on good terms. However, Aries and Libra had nearly the same office and Pisces “loved the same laws” as Virgo. “Nature prevails over place.”

Nature here is first of all gender, followed by the three qualifications given above (pp. ???-?? and Fig. 15). All the signs associated by the diameter were of the same sex and the same quality. The natural affinity attenuated the geometric opposition. Completely weighed down, Manilius ended by concluding that “hatred is very common between opposing signs”.³⁶¹

Ptolemy, himself, hid his embarrassment under a display of Pythagorean science which greatly intimidated his scholiast.³⁶² He invoked the angles and the harmonic lengths of the chords. After this, he concluded in a peremptory tone, that if the opposing signs are “homogeneous” (of the same sex), they were especially opposed.³⁶³ He protected himself well by saying that, even in his musical harmony, the tones represent the octave, i.e., the most perfect of accords. He did not want to recall that he himself attributed the same nature to opposite quadrants, a diameter apart.³⁶⁴ He wanted to make great use of this principle – applied also to the theories of “places” (below, Chapter 9) in his “universal apotelesmatica.” [All types of astrological chart]. One can understand that he did not

succeed in imposing the theory of the discordant diameter. Pseudo-Manetho evidently rallied to the opposing tradition when he said “such are the effects produced by the planets in conjunction with the Sun alone. Their effects when in opposition to the Sun are similar.”³⁶⁵ When there is a contradiction of some sort, one is sure to find it, enrolled without remark, in the incoherent repertory of Firmicus. In effect, Firmicus affirms that diametric radiations are always menacing.³⁶⁶ Further on, he explains that Saturn puts itself in accord with the Moon or the Sun when it finds itself with either of them in diametric opposition.³⁶⁷ Finally, the Chaldaean tradition was revived by the author of the Hermippus. He was of the view that, given the virtue of the number seven, the aspect which unites the first and the seventh sign is the most sympathetic and the most favorable of all.³⁶⁸

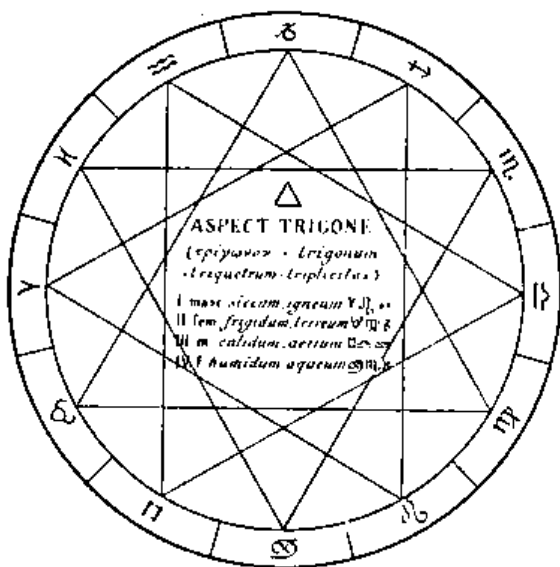


Fig 19. Trine aspects.

2) On the other hand, all the astrologers agreed in considering the association of signs three by three, in trine aspect (τριγωνον – *triangulum* – *triangulum* – *triquetrum*), as the effective and beneficent figure par excellence [Fig. 19].³⁶⁹ The one reason which Ptolemy gives is that the triangle re-unites signs of the same sex. It is a reason which he rejects for the diameter and which he invokes once again for the hexagon.³⁷⁰ As for the reasons which he overlooks, we will find them in religion and in Pythagorean speculations. We know the role played in Near Eastern religions by the triads of gods

(Father - Mother - Son), symbols of perpetual life through generations.³⁷¹ Since we have spoken earlier of the properties attributed to numbers and figures, we will dispense with discussing them again. The number three, the triad, is the smallest whole number which contains both odd and even, as the triangle is the simplest surface, the generator of all the polygons. Finally, the triangle is the only perfect association (once the diameter is excluded). It is the only one in which each sign communicates directly, left and right, with the associated signs. We have seen already how the so-called Chaldaean theory of the planetary retrogradations, suggested by faith in the power of the triangle, served to prove that faith.

Fig 20. Square Aspects



3) The quartile or square aspect (τετράγωνον – *quadratum*) is nearly universally noted as an antipathetic or unfavorable aspect. It includes two signs of each sex, and the signs which are of the same sex are in opposition along a diameter. Ptolemy declared it *ἀσύμφωνος* for this reason, and Firmicus noted it has a “malign influence.”³⁷² However, this sentence was open to appeal, and there were good reasons for changing it. The square comes from the normal division of the circle into quadrants. The signs with the same function, the “cardinal” or “tropical”, the “solid” and the “bicorporeal”, signs, are all associated by the square aspect.³⁷³ This “relationship” if it did not have the friendship which reigned in the triangle³⁷⁴ might compensate for the antagonism coming from the mixture of the sexes. Also, the square, in the theory of the twelve places (below, Chapter 9) becomes a happier figure. Moreover, the stars which look from one *cardo* to another (along the equator or

diameter) acquire a particular energy. Manilius supports every opinion in turn. He awards antipathy in fact to the square and he refuses in theory a sympathetic character. One can see even better, in the face of all the affinities, what disqualifies the square. It did not come from the Pythagorean mathematicians. The square had a good role with them and did not decrease the inferiority of the even numbers. The scruple did not come from the Greeks, nor the Romans nor the Etruscans. The division into quadrants was among them the normal outline of the temple. Perhaps one must here suppose some Chaldaean superstition, the same, one might say, which kept the Oriental astrologers from dividing the lunar orbit into quadrants. It is not a very likely hypothesis and is countered by the usage of the week, which may be considered as a quarter of a lunar month.

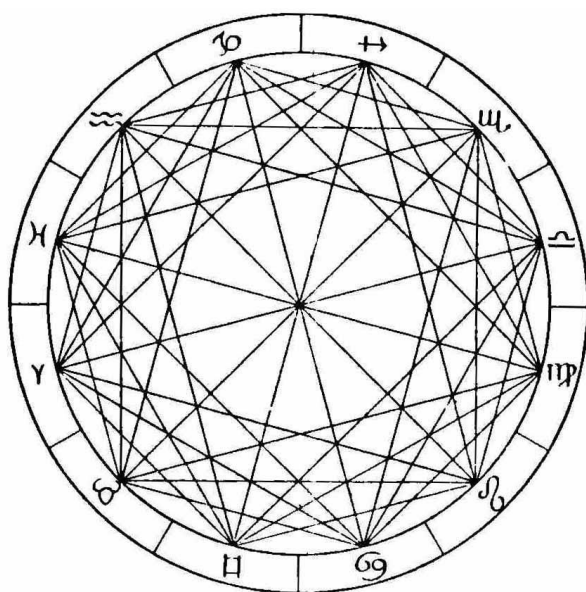
4) The hexagonal or sextile aspect, which connects all the signs of the same sex, has the same properties as the triangle, but to a lesser degree.³⁷⁵ It was, in short, a superfluity, unknown to Geminus, to Cicero, to Sextus Empiricus. Certain later astrologers, such as Manetho, persisted in not using it. They were doubtless little touched by the geometric perfections of the hexagon, which broke down into six equilateral triangles and which Providence had given as a model to the honeybees building their wax cells.³⁷⁶

Fig 21. Sextile aspects



of the polygon, the closer that side is to the center of the circle. The center here is the Earth. The influence shooting forth along the side of the triangle impregnates our atmosphere for a longer period than the ray following a more open angle. The square's or the hexagon's rays ricochet along the circle a greater distance from the center. As for the diameter, "it strikes directly and the blow is more sure"³⁷⁹ There is only one flaw in this ballistic theory, which is beside the question. The astrological "configurations" did not express the relationship of the stars between themselves. The unknown author who had imprinted Manilius with his reasoning doubtless did not make this mistake. This correction once made, the aforesaid theory gave a good enough account of the radiation exchanged between the stars in the various figures. It did not explain the quality, which remained occult.

Fig 22. All aspects



The theory of aspects was the most admired creation of learned astrology and the basis of all its calculations. It was based, in the last analysis, on the occult properties assigned to numbers and figures by the Pythagoreans. These properties were repeated ad nauseam by all the mystics and all the defenders of astrology. Monad, dyad, triad, tetrad, pentad, hexad; life, intelligence, movement, soul, body, etc.; this responds to all and drowns the objections in the noisy flood of words.³⁷⁷ Whence the response, which, in effect, affirms that "the sides of the triangle are the souls of cosmic things?" Or that "the square engenders the cube, which is the semen of the earth".³⁷⁸ One seeks, nevertheless, a mechanical explanation of the astrological figures, in speaking of the idea that their energy decreases from the diameter to the hexagon. The greater the arc of the circle subtended by the side

There is a more simple explanation of the diminishing energy of the figures, from the diameter to the hexagon, one that is human and can be understood by ordinary people. It is that the association becomes more lax as the participants become more numerous.

Left and right – a human enough distinction – modifies the value of each figure, that is, the quality of the relationship. The right side of the signs is the direction of the daily movement, the left side, the direction of retrograde motion. The star with another to the right, i.e., placed to the right of its connection, has a superiority over the planet on the left.³⁸⁰

In fact, the association by aspects is more often applied to the planets. This was in spite of the fact they did not remain fixed, once and for all, in the same place, but could change the combinations. It rarely happened that the planets occupied all the angles of a polygon. They are generally in aspect two by two. There are some which are between the angle that subtends the chord of the polygon. We must not imagine that the triangles and squares of the planets form permanent societies, with a full

membership. It was, on the contrary, under the form of eternal leagues, animated by unchanging sentiments, that poetic astrology represented the configurations inscribed upon the circle of the zodiac.³⁸¹ Why did the signs associate if not to share their sympathies and hatreds? If the concord was not perfect within the leagues, the normal state between them was war. The triangle presided over by Aries (♈ ♈ ♈) attacked the one presided over by Libra (♎ ♎ ♎), but without success. The animal group is defeated by the human one. The contrary would have astonished the good Manilius, who believed in the superiority of intelligence to force. The animal group also stampeded, due to sexual antipathy, against the feminine triangle presided over by Taurus (♉ ♉ ♉). The squares fight as much as the triangles. A very sad thing is that a given sign, as member of a square, becomes the enemy of those which had been allies in the triangle, and vice versa. In the end, the signs are complete egotists. They are suspects and traitors to their momentary allies. *** It is needless to add that these celestial hatreds reproduced themselves upon Earth, where their real effect was. They were perpetuated from generation to generation by the ceaseless rush renewing the passions from on high.

Scientific astrology did its best to calm this melee. However, it kept the principle, applied only to triangles. They were triangles peopled by the planets, in which they are installed virtually with rights of property. Among other uses, this bizarre device served principally to account for the diversity of ethnic groups which peopled the earth and the antipathy growing from this diversity.³⁸² It rejected, as unintelligible or contradictory, the relationships which Manilius believed he found between the triangles and distant friendships. He related to the distances which separated the three signs of a triangle and the three degrees of kinship, agnation, cognation and affinity. Mathematical astrology also rejected the relationship between the hexagon and hospitality.³⁸³ The acquisitions which it made for others largely compensated for these voluntary sacrifices. Moreover, it is not certain that the remains of these systems have not been placed again in the theory of the “places” substituted for the zodiac.

Manilius, in the course of his explanation, hindered himself with scruples which he had borrowed from the geometers and which weakened all his inductions. He had always thought of a sign as a single unit. Therefore, he was poorly advised to declare that the geometric figures did not work unless they are exact. The exact figures he gave said the angles subtended by the chords are exactly 180° for the diameter, 120° for the triangle, 90° for the square and 60° for the hexagon.³⁸⁴ However, it is not the signs which correspond in this way but the degrees within the signs. Manilius had been calculating by whole signs (ζωδιακῶς – πλατικῶς – *platice*) without noticing it. He had gone to calculating by degrees (μοιρικῶς – *partiliter*), which weakened the older practice.³⁸⁵ To be logical, he would have had to go to the end and announce, as some astrologers did, that the figures may have been regular, but were nevertheless ineffective or effective in a bad way. This happened when the angles of the polygons fell upon the lines separating the signs, the cusps (μεσεμβόλημα), according to the nitpickers.³⁸⁶ In reality, the poet was fooled by the complications of the subject. He did not consider that the calculation by degrees could not be applied usefully to the planetary configurations but that he had no need to do so. He was solely concerned with the zodiac, yet he destroyed in this way the individuality of the signs.³⁸⁷

***** B-L here appears to have misunderstood that each sign belongs in a group of four that share the same quality (Cardinal, Fixed or Mutable), at the same time as each also legitimately and permanently belongs in a different group of three that share the same element, (Fire, Earth, Air, or Water). A man may be both tall and French. He does not cease to be French when he joins his tall friends to play basketball nor change height when he has lunch with his countrymen. Neither group is inclined to consider him a traitor because he has associations with the other. Tall and French coexist, as do Cardinal and Water, Fixed and Fire and other possible combinations. KM.**

Applied to the planets, the *σχήματα* have the purpose and the effect of replacing the real presence of a planet. They carry its action to places where it is not present. The astrologers thus concentrated the influences of planets in other parts of the zodiac, on one small part of it, whenever they pleased. For example, in calculating the length of a person's life, that period was enclosed within a certain quadrant of the zodiac. It might be necessary to have a "deadly" (ἀναιρετικός) planet, such as Mars or Saturn, shoot its ray along the side of square or a diameter and thus end a life. This substituted for the presence of the planet itself. One may admit meanwhile a difference in energy between the real presence of a planet and its virtual presence by aspect. A rule formulated by a scholiast of Paul of Alexandria says the latter was half as strong.³⁸⁸

The polygonal aspects, of which we find no trace in the Mesopotamian or Egyptian documents, dominate the theory and practice of Greek astrology. This geometry, accessible even to average minds, held out against scruples which led to the perfecting of methods. It made the construction of the mobile houses or places (see below) very difficult. These were fastened to the zodiac with calculations taken from trigonometry. There were discussions between the partisans of the older procedures, content to consider the signs as units (ζωδιακῶς) and those who wanted the exact correspondence of degrees (μοιρικῶς).³⁸⁹ The discussions failed, nevertheless, to bring about an intrusion of the calculations based upon the unequal movement of the different parts of the zodiac. This inequality was caused by the obliquity of the ecliptic relative to the celestial equator. The astrologer Antigonos of Nicaea did not demonstrate (as far as we know) that the regular polygons were nearly always in disagreement with the natural clock face formed by the plane of the horizon and the plane of the meridian. He proposed to estimate the sides of the polygons, no longer in degrees of the circle, but in units of time (χρονικῶς). He wished to use equal portions of twenty-four hours lasting through one complete revolution of the circle of daily movement. He knew, moreover, the habits of the astrologers too well to have confidence that they would accept the reform from him. He promoted the teaching under the name of a venerable "Egyptian" Phnaes, already known, or invented for the occasion. In spite of his precautions, it had only rare users. Calculating by the length of the "ascensions" (ἀναφοραί) remained outside the system of the aspects.³⁹⁰

In short, the zodiacal polygons represented fixed reactions if one does not consider more than the signs. They served largely to evaluate the varying alliances of the planets accidentally housed in the signs. We have seen the role of the planets increase. We have also seen the proper powers of the signs pass to another level in the associations between signs and planets.³⁹¹ One is tempted to call the associations the invasion and occupation of the signs by the planets.

Chapter Seven

Combinations of the Signs and the Planets

The zodiac, let us not fear to repeat, draws all its importance from the fact that it marks the pathway of the planets (*stellae*), and particularly of the Sun. Its constellations (*sidera*) filled the role of regular stages rather poorly. They are unequal in size and spread North and South of the ecliptic, well beyond the space needed to hold the orbits of the planets known to the ancients. It was, then, through a sort of illegitimate excrescence of the doctrine that the zodiac was identified with signs (*ζώδια*). These were substitutes for the real constellations, losing the character, the independence, and the dominance which they showed in Manilius' poem.³⁹² Without the planets, the zodiacal constellations had no right to the honor which went to the bright constellations, those best known to farmers and sailors. Thus, the astrology which one might call zodiacal was destined to atrophy with time. For the scientists, the signs were only "twelfths" (*δωδεκατημόρια*). The zodiac itself, discredited by the precession of the equinoxes, was replaced by independent gradations (those of the "houses" and the "lots," which were adjusted to the hour of each birth chart). It risked being relegated to the antique shop, if it had not had the good fortune of being converted into planetary domains. At a certain period, under the influence of the "Egyptian" tradition, it was regenerated by the invasion of the "decans."

In the calculations of learned astrology, the fixed stars were only small change. Serious astrology claimed to follow the movements of the planets and to note their positions at each moment. The stars were too high, too pure, too estranged from worldly affairs, to be rivals with the planets. It was a question for philosophical debate. When, the signs and planets collaborated, did the harmony come from the sharing of the stars' influence among the planets? Or, on the contrary, did the stars participate in the natures of the planets and accommodate themselves to their temperaments?³⁹³ The astrologers decided this question in favor of the planets. It was by assimilation to the planets that they understood the nature of the fixed stars.³⁹⁴ This work of assimilation they pursued and achieved for the zodiac. They fixed the dominant influence of the planets there, permanently, under the form of property rights, of virtual presence, of desired preference.

This division of the property rights of the "householder" (*οικοδεσπότης*) planets in the zodiac is not the strangest idea in astrology. That honor belongs to the division of the zodiacal influences over the earth's surface. However, it is one of the most curious and perhaps the most difficult in which to find motifs which can be understood.

Classical astrology, of all the systems which it was able to elaborate, adopted, and used at the same time three principles. The first was domiciles (*οἶκοι* – *domus*) and the second was exaltations and debilities (*ὑψώματα* – *ταπεινώματα* – *altitudines* – *dejectiones*). Terms or limits (*ὅρια* – *finis* – *termini*) were the third.

I Planetary Domains

1) *Domiciles of the Planets* (*οἶκοι*) – At the time when it was believed that the planets traveled through the midst of the fixed stars, it was natural to imagine that each planet (thought of as a god) might prefer one of the stages along its route. To use the astrological expression, the planet "rejoiced" (*χαίρειν* – *gaudere*) in it particularly.³⁹⁵ Greek science disturbed the principle which led to, and justified, the theory of the planetary domiciles. It put space between the planets' orbits and moved the fixed stars far away.³⁹⁶ In consequence, it is not in Greece but in the Orient where we must seek the origins of the system. This is not to say that it was imported completely finished and accepted without change. The principle was known for a long time, and remained for some time unused or used differently, in a way the Greeks judged less reasonable. Greek astrology was elaborated by scholars and they were aware of an objection which made some later eclectic astrologers reject the whole system of domiciles. It was, says the author of the *Hermippus*, an idea from people who were completely ignorant "how could something that never stopped make one particular place its domicile?"³⁹⁷ On the other hand, the scholars found that they themselves were not able to neglect a fact from popular belief. It placed the months, that is the signs of the zodiac, under the patronage of certain deities, among them,

inevitably, the planet-gods. This idea was sometimes affirmed, in the most explicit fashion, by the names of the months. This is the case notably for the Roman calendar, where we find the names of Janus, Mars, Juno, perhaps even, with the help of a little good will, of Venus (Aphrodite = *Aprilis*) and of Maya, mother of Hermes-Mercury. The astrologers were not able to do less than the Etruscan haruspices, who distributed their thundering deities among the parts of their celestial temple.³⁹⁸ Only they seem not to have, at first, any way of keeping out non-astrological deities and of peopling the twelve compartments of their zodiac with the seven planets. Doubtless, there was a period of hesitation and groping about during which the inventors had free rein.

We meet one of the trial combinations in a curious passage in Manilius. It was a combination which did not join the standard toolkit of astrology, but which was founded upon the same associations of ideas and the same geometrical rules influenced by astrology. It was a zodiac in which the twelve great gods were seated, paired by a diameter, beginning with Leo. As the king of beasts, the Lion is under the “tutelage” of Jupiter, king of the gods. His spouse, Juno, was opposite him in Aquarius. Neptune naturally took the fish, and his opposite, Ceres, found in Virgo (the stalk of grain) a lodging convenient by nature as well as conforming to the diameter rule. Apollo, one of the Twins, is truly at home in Gemini and the huntress Artemis installed herself opposite in Sagittarius. Venus had the domicile given her in all the systems, Taurus. At the other end of the diameter, Mars favored the malevolent Scorpion. The industrious Minerva spun the wool of Aries and the legend that she had excited the desires of Vulcan (Hephaestos) placed him in Libra. Mercury found in Cancer the equivalent of the tortoise from which he had once made a lyre, and Vesta, her hearth in the hearth of winter in Capricorn.³⁹⁹

The absence of Saturn, who had no place among the twelve great gods, was enough, in itself, to make the system improper for astrological use. However, Mars and Venus occupied the places where the astrologers put them. These were not chosen randomly.

The system of exclusively planetary domiciles appeared complete and definitively in the Egyptian papyri of the Antonine era and in Ptolemy. There was even an agreement between the two rival traditions. If one claimed Egypt as home, the other inevitably claimed Mesopotamia. In all events, Firmicus supposed that the “Babylonians” assigned the signs which are ordinarily called the “exaltations” (ὑψώματα) of the planets as their domiciles. Of course, there is no reason to trust Firmicus.⁴⁰⁰ In this case, the dispute was reduced to a quarrel of words, an exchange of epithets. The two forms of properties (οἶκοι – ὑψώματα) had comparable values.

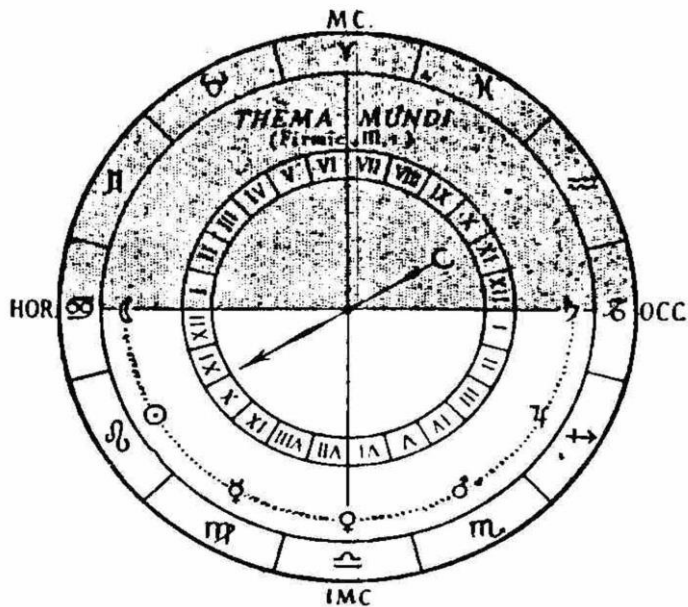
However that may be, let us see how the astrologers fixed the domiciles of the planets. Perhaps they followed “Nechepso and Petosiris.”⁴⁰¹ The preliminary objection already mentioned above was “why are there domiciles?” They responded that the planets themselves chose the domiciles or that they had been assigned by the Demiurge at the beginning of the world. When movement was given to the mechanism, the Moon was in the Horoscope – that is, rising, in the middle of Cancer. The Sun was in the middle of Leo and Mercury in the middle of Virgo. Venus was in the middle of Libra. Mars was in the middle of Scorpio, Jupiter, in the middle of Sagittarius and Saturn, in the middle of Capricorn.⁴⁰² The Egyptian origin of the *Thema Mundi* or Birth Chart of the Universe [Fig. 23] betrays itself at first sight by the day and hour. They are marked as on the face of a clock or a sundial.⁴⁰³ This was the Egyptian New Year at the beginning of Sothic cycle, signaled by the heliacal rising of the Sothis (Sirius). It coincides with the rising of the second half of Cancer.

Thus, the afore-mentioned constellations rested in the domiciles in which the planets also found themselves at the creation of the world. This was according to the Egyptian tradition, put into circulation by the Alexandrians. One can well understand why the authors of the system put the Sun in Leo. The position was required by the heliacal rising of Sothis. All the other positions were determined from this one, by following the order of the signs and the Pythagorean (Stoic, Platonic) order of the planets.⁴⁰⁴ One may convince oneself by inspecting Fig. 23.

Firmicus seems not to doubt that there was a relationship of some sort between the *thema mundi* and the order of the domiciles⁴⁰⁵. On the other hand, he indulged in the most extravagant considerations of the geometric relationships between the respective positions of the planets and the two “luminaries” in the *thema*. He mingled the system of single domiciles with the system of double domiciles and stirred the whole with the force of geometry, the geometry of aspects. He added reminiscences of the times when the royal power was transmitted from one Pharaoh to another by marriages with the princesses of the blood.⁴⁰⁶

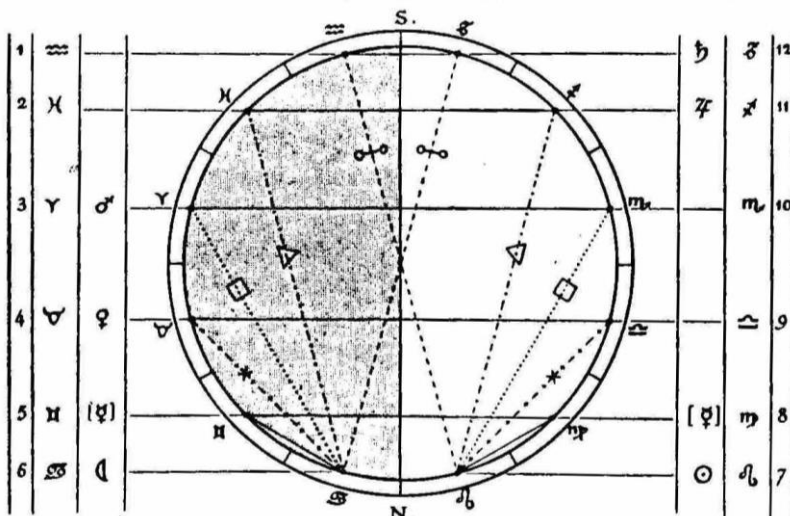
The “Birth Chart of the Universe” or *Thema Mundi* explained that the planets each had one domicile. However, the astrologers wanted the signs to be completely occupied. For that reason, they thought of doubling the domiciles of the five planets proper. The two “luminaries” each kept to one domicile. They were very ingenious people, and they were not embarrassed to justify an arrangement, which they were obviously inventing, with the tyranny of numbers. They began by affirming that the planets had one domicile for the daytime and another for the night.

Fig 23 Thema Mundi (Chart for the beginning of the universe)



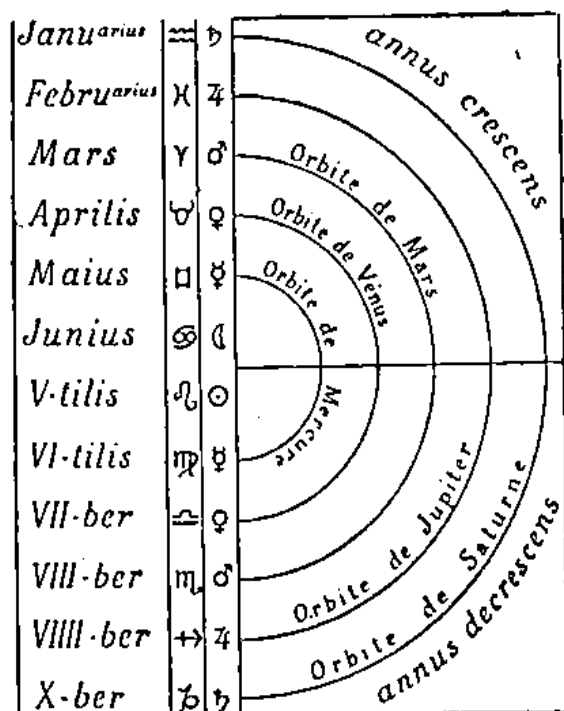
Given this situation, we find it rational that the Sun, which is Day itself, would not have a night domicile. Likewise, the Moon, torch of the night, would not have a daytime domicile. The other planets divide the ten other domiciles among themselves. As a consequence, they each have two apiece, one solar or daytime, the other, lunar or night-time. Here, logic was somewhat violated, for, apart from the androgynous Mercury, the planets all have their αἵρεσις, their sect, well established. One cannot see why, having taken one domicile on the side of their leader, they would also take one on the other side.⁴⁰⁷ But if logic was not satisfied, the taste for symmetry was.

Fig 24 Planetary houses



The grave Ptolemy was charged with finding reasonable motives for a system which he did not invent, but which he wanted to appear reasonable in his own eyes. By denying, like the Peripatetics, that the universe had a beginning or an end, he avoided recourse to the *thema mundi*. However, he kept the traditional order from Leo to Capricorn, the framework of the six daytime domiciles. The same disposition, repeated from Cancer to Aquarius, gave six nocturnal domiciles, as may be seen in figure 24.

Fig 25.



Ptolemy found it completely natural for the planets to be arranged in the order of their distances from the Sun and the Moon.⁴⁰⁸ He made the observation that this organization satisfied all the requirements of logic. The Sun could not be better placed than in the signs closest to our zenith (κορυφή), those where the luminaries acquired their greatest power. The same was true for the Moon. Cancer (although holding the Solstice) was attributed to the Moon, because it is a feminine sign. The Sun took Leo. The diameter separating Cancer and Leo separated the two hemispheres, the lunar domain and the solar domain. Saturn is relegated, because of its cold nature, to the “cold and wintry” signs⁴⁰⁹ of Capricorn and Aquarius. Since they share again the malicious character of Saturn, they are in diametrical opposition, Capricorn with the lunar domicile, Aquarius with the solar domicile. Jupiter, source of fertile breezes (see left) loved the “breezy and fertile” signs, Sagittarius and Pisces.⁴¹⁰ They were found at the point named earlier near the domiciles of Saturn and in trine aspect

(that is, a beneficent one) with the domiciles of the Sun and the Moon. The neighboring signs in descending order, Scorpio and Aries, are no less well-adapted to the character of Mars. By their bellicose nature and their relationship via square aspect – that is, malefic – they are also adapted to the luminaries. Venus, temperate and fertile, rejoiced in the “most fertile” signs, the Claws (Libra) and Taurus,⁴¹¹ joined by a sextile aspect to the domiciles of the luminaries. Finally, the two remaining domiciles, next to those of the luminaries, could not be other than those of Mercury, the acolyte of the Sun. The similarity of character between Mercury and Gemini, on one hand, and Virgo, on the other, could not help but appear to whoever looked into them.⁴¹²

Such is the masterpiece of logic which, once consecrated by Ptolemy, was universally accepted. There was no variation, and it was known even to the profane.⁴¹³ We have no need to add to the alleged motives of Ptolemy in order to resolve a question which he did not pose, but which was important to practitioners. If a planet had two domiciles, which did it prefer? Answer the domicile which had the same sex as the planet. One thus arrived at a list of preferred domiciles in the *thema mundi*. It may have served to discredit the supposed Egyptian tradition to the advantage of the rival Chaldaean one. I do not know the list which Dorotheus of Sidon⁴¹⁴ passed off as Chaldaean. However, it is certain that the supporters of the Chaldaeans fabricated their own *thema mundi*. It had the advantage over the Egyptian *thema* of explaining the origin of the double domiciles, and probably, in addition, those of the ὑψώματα.⁴¹⁵

The system of domiciles was not exhausted, far from it. Every association of ideas served to connect the signs and the planets. Venus had at least as many rights in Pisces as in Taurus. It was only geometry that took it from her bower to the profit of Jupiter. Manetho knew that Saturn “rejoiced” in Capricorn, Aquarius, Leo, Libra, and Aries, and he called these signs the “domiciles” of Saturn.⁴¹⁶ Two of these supplementary hostelries thus given to Saturn figured in the system of ὑψώματα. It had been invented to multiply the domiciles under another name, places where the planets are proprietors (οικοδεσπότες).

2) Exaltations and Depressions (ὑψώματα – ταπεινώματα [ταπεινώσεις – κοιλώματα] – *altitudines – dejectiones*). – By the ὑψωμα of a planet, the astrologers meant that sign where a planet gains, or begins to gain, its greatest strength. It was a particular degree within a sign. The degree diametrically opposite is the ταπείνωμα.⁴¹⁷

This definition is not good enough to distinguish between the ὑψωμα, *hypsomata*, exaltation from the domicile (for one also says that a planet is strongest in its own house), but at least it is clear. One should not rely on astrologers to explain it. The only one who might have been able to remove the

confusion in the term ὕψωμα exaltation was Ptolemy. But he preferred not to. Instead he wanted to hide his embarrassment, and used his authority to hide the incompetence of his predecessors. The excuses he uses are so bad, he must have known how incoherent they are. He was like a lawyer making a bad argument even though he knows better.

To make this reproach against Ptolemy intelligible, we must try to clear up the terminology which led to the ambiguity. We must trace a line of demarcation between astronomy and astrology, a line which Ptolemy erased at his pleasure.

The astronomers meant by ὕψος (ὕψηλότης – ὕψωμα – *altitudo*) or altitude

1) The northern declination of the planets – the North being the “pinnacle” of the universe. It was declination relative to the equator, for the Sun, relative to the ecliptic for the other planets. [Celestial latitude]. The southern declination was ταπεινῶμα. The orbit of a planet was divided into quadrants by a line between the nodes and a second line perpendicular to the first line. One said that the planet moving from the ascending node to the North was “going up the rise” (ὕψως ὑποῦσθαι). From the North to the descending node, it was “going down the rise” (ὕψος ταπεινοῦσθαι). From the descending node towards the South, it was “going down the descent” (ταπεινῶμα ταπεινοῦσθαι). After that, it “went up the descent” (ταπεινῶμα ὑποῦσθαι) to rejoin the ascending node.⁴¹⁸

2) When the astronomers had invented the eccentrics and the epicycles, they also called the place where a planet is farthest from the earth, its “apogee,” ὕψος – in contrast to βάθος. The “perigee,” which is the βάθος, is also and more usually called the ταπεινῶμα.⁴¹⁹

There is thus a double sense for each of the ὕψος or ὕψωμα and ταπεινῶμα, a dangerous ambiguity for which the astronomers are responsible. The astrologers, in turn, used the same words and gave them a third meaning. It became attached to the others we know not how. Perhaps they believed they were following a chain of a reasoning begun by the astronomers. The professional “Chaldaeans” were ignorant enough for this. A planet in “exaltation” in the first sense of the word is at its closest approach to the vertical plane of the universe.^{***} It must emit its energies most energetically, “exalting” its influence. In “exaltation” in the second sense, at apogee, the planet is closest to the earth, no doubt. However, one may suppose that the planet “rises” because its own vigor is increasing. This elevation adds to its dignity, causing to planet to rejoice in its power, in short, becoming more or less prepared to take action.⁴²⁰ “Υψωμα” thus signifies exaltation, increase in energy. This is the astrological sense of the word.⁴²¹

Table of Dignity and Debility

PLANÈTES	DOMICILES		EXALTATIONS ET DÉPRESSIONS			
	solaires.	lunaires.				
☉	♌ (m.)		♏	19°	♌	19°
☿		♍ (f.)	♎	3°	♍	3°
♂	♊ (f.)	♋ (m.)	♏	21°	♏	21°
♂	♊ (m.)	♋ (f.)	♏	15°	♊	15°
♂	♌ (f.)	♏ (m.)	♊	28°	♏	28°
♀	♍ (m.)	♎ (f.)	♊	27°	♎	27°
♀	♎ (f.)	♋ (m.)	♎	15°	♋	15°

^{***} Elsewhere in the text B-L used the phrase “plane of the universe” to refer to the celestial equator.
KM

One searches in vain in the astrological *ὑψώματα* for some relationship between their positions and those which the astronomers called by the same name. Thus, while the maximum northern declination of the Sun is at the Solstice in Cancer, its apogee is in Gemini, while the astrologers put its *ὑψωμα* in Aries. Pliny, who read quickly and confused astrologers with astronomers, found part of an explanation for this third list of exaltations. To avoid confusion, he called them *sublimitates*. The exaltation forming the apogee is an “*apsidus superior*” in relationship to the Earth taken as center. However, the “sublimity” is an “*apsidus superior*” in relationship to the center of eccentric orbit of the planet.⁴²² If I understand correctly what Pliny wanted to say, the *altitudo* is situated on a first eccentric. The *sublimatas*, the astrological *ὑψωμα*, is upon a second eccentric. The line connecting the apsides of the second eccentric does not coincide in direction with the same line in the first eccentric.

Ptolemy understood better than anyone else that it was chimerical to seek explanations in celestial mechanics and the geometer’s hand compass.⁴²³ First, he passed silently over the notation of the degree, which recalls the pretense of making the exaltation into a geometric point. He contents himself with considering the entire sign where each planet is exalted, just as if he were dealing with the domiciles.⁴²⁴ Is there even an exaltation of energy which moves? Or an astronomical “rise”? Ptolemy does not choose one or other, but uses each motif, depending on circumstances. Thus, the Sun has its *ὑψωμα* in Aries, where it “begins to rise” to the North, and has its *ταπείνωμα* in Libra for the opposite reason.⁴²⁵ This is an astronomical motif, more or less disengaged from its true meaning. For Saturn there is a physical reason. The cold Saturn being the antithesis of the Sun, one attributes the opposite positions to it, *ὑψωμα* in Libra, *ταπείνωμα* in Aries. “For, where the cold increases, the heat diminishes and where the heat increases, the cold diminishes.” However, neither the Sun nor Saturn had their *ὑψωμα* in places where their energies were at their maximum. The *ὑψωμα* of the Moon is placed in Taurus, because, after conjunction with the Sun in Aries, it “began to grow” in Taurus. Moreover, it is the first sign of the lunar triplicity.⁴²⁶ Jupiter attains its maximum energy – which, this once, is even the *ὑψωμα* – in Cancer. This is because it has the property of exciting “the fertile winds of the North”, and because Cancer is the northernmost point of the zodiac. This is a chimerical reason, no doubt, invented solely for the sake of the cause.⁴²⁷ Jupiter had its *ὑψωμα* in the North, whence come the refreshing breezes. The burning Mars was its antagonist. It ought to have its maximum power in the opposite sign, Capricorn, where it is deepest in the South, that is, closest to the horizon. Thus, this strange logic arrived at its goals by associating the idea of cold with the North and both with the northern tropic, placed in the (torrid) Cancer. Thus Mars burned at its ease in Capricorn⁴²⁸ and was quenched (relatively) in Cancer. The humid Venus exalted its natural qualities in Pisces, “where the beginning of the humid spring is announced”. Ptolemy excluded mythology from his book and he wanted none of the legends of the Oriental goddess. He disdained equally to state an incompatibility, at the other end of the diameter, between Venus and Virgo. Virgo, where Venus becomes depressed, fits very well, on the other hand as the exaltation of Mercury, which is “a little dry (ὀπρόξηρος)” and, as such, is put out in Pisces.

For Mercury, the *ὑψωμα* is identical to the οἶκος, one of the domiciles. The two systems, otherwise parallel, joined here. Porphyry gives an unanswerable reason. It was that Mercury, enfeebled by its frequent settings, was exalted in its domicile.⁴²⁹ It was a valetudinarian, and was very much at ease in its own home. Porphyry had discovered the geometric reasons, which are also “natural,” for the order of the *ὑψώματα*. He remarked that the day planets (☉ ἢ ♃) had their exaltations in trine aspect with their domiciles (one of their domiciles chosen arbitrarily). The night planets, “due to the weakness of their radiation”, had the two in sextile aspect. One may see the gradation of the energy. Mercury stays at home, the night planets carry their rays at 60°, and the day planets at 120° from their domiciles.

The cold, the heat, the dryness, the humidity and the geometric figures hid their own stupidity from these pretentious savants. They sought to consolidate the traditions with which they began by accepting a state of mystery. They believed it reasonable to impose the obligation of leading their reasoning to a goal marked in advance.

The debris of all the fantasies which had not found a place in the partition of the οἶκοι and the *ὑψώματα*⁴³⁰ served to fabricate the system of the planetary triangles. One worked one’s way little by little towards incomprehensibility, which achieved its full flourishing in the system of the ὅρια, the terms.

3) Triangles (τρίγωνα – *triplicitates* – *triquetra*). – We have seen that the zodiac was divided into four triangles or triplicities. Each of them had a sort of collective individuality. The component signs were of the same sex and sometimes – as with the “human triangle” (♈ ♎ ♊) – of the same nature. The astrologers, seeking affinities between signs and planets, had the idea of framing the planets in the triangles. Then they determined the properties of the triangles from those of the planets in which they have thus implanted their influences. This construction supports the whole scaffolding of “universal apotelesmatica”.⁴³¹ Because of that, it has such importance that one would want to untangle the internal logic, if there is one. I want to give one of those explanations which Ptolemy gives in the style of an oracle.

The first and not the least strange property of the triplicities was to have a particular, specific, orientation. The reason for this cannot easily be found in the positions of the triangle. Each triangle touches the circle at three points and each point has a very different orientation. The reason for the orientations, in their simplest forms, is given to us by Geminus. He was an astronomer who completely disdained astrology. Nevertheless, he still cites “the Chaldaeans” from time to time.⁴³² The orientation of a zodiacal triangle is determined by the direction taken by the winds when the Moon occupies one or another of the signs of the zodiac.⁴³³ The theory has a meteorological origin and is supposed to be based upon observation. Thus the first triplicity (♈ ♎ ♊) is northern (βόρειον) because, if the Moon is in one of its three signs, and Boreas [north wind LJV] rises, one may predict that it will be breezy for several days.⁴³⁴ Notus blew as many days when the Moon occupied the signs of the Southern (νότιον) triplicity, composed of ♋ ♏ ♌. The same was true for Zephyrus and the Western (ζεφυρικόν) triplicity, composed of ♈ ♎ ♊. Likewise, it was true for Apheliotus [southeast wind LJV] and the eastern triplicity (ἀφελωτικόν), that is, ♋ ♏ ♌.

It is useless to debate the facts alleged as reasons for the classification. They were chosen by the unknown authors of the system of planetary triplicities. The authors merely substituted the planets for the Moon as authors of the winds. They assumed that each of the planets (or some of them) had, by nature, the property of pushing the air in a certain direction. It is not necessary to follow each link in the chain of reasoning. What the astrologers believed was in accord with logic and opinion. The philosophers were unanimous in thinking that the proper movement of the planets, opposite to that of the universe, had as goal or as effect the agitation of the elements and particularly of the air.⁴³⁵ It is not absurd to admit the action that each of them exercised over the preferred direction, especially from the point of view of the philosophers interested in final causes. There were uncontrollable assumptions which attributed to the winds an influence over sexual procreation,⁴³⁶ and it was considered that the planets themselves had gender. One cannot, therefore, consider it impossible to conclude that the winds were caused by the planets. Boreas produced males and Notus produced females. It was not absurd a priori to think that Boreas was excited by the chief of the masculine planets, the Sun, or by its chief lieutenant, Jupiter.⁴³⁷ Likewise, it was reasonable to think Notus was excited by the Moon or by the planet it most resembles, Venus. The astrologers divided the two “luminaries” to attribute to them a universal influence. They did not hesitate to attribute a specific influence with which Jupiter agitated Boreas, or Venus stirred up Notus. Finally, the doctrine of the orientation of the planets must find a support in the tradition of the “very learned” Egyptians. They gave the planets the titles of the Star of the East or of the West.⁴³⁸ Recourse to the Egyptians was the supreme argument for the astrologers, which they counted upon to close the mouths of their opponents.

It was thus sensible that, for all sorts of reasons, four planets would have authority over the four cardinal points. Jupiter was for the North, Venus for the South, Saturn for the East, Mars for the West. The hybrid Mercury was set aside on this occasion.⁴³⁹ Freed by the lovers of providential harmonies to seek whatever ultimate motive, the two favorable planets were associated with the meridian. The two unfavorable planets were associated with the perpendicular axis and each pair connected by a diametrical aspect (opposition).

We are able now to follow Ptolemy with a chance of understanding him. We even have a change of catching him red-handed in an inconsistency, the habitual sin of the eclectic astrologers. In order to control and evaluate his contribution, we also have the competing versions of Dorotheus of Sidon and of Paul of Alexandria.⁴⁴⁰

To understand what follows, see first the figures summarizing the texts of Ptolemy and Dorotheus of Sidon.

Fig 26. Planetary triplicity according to Ptolemy

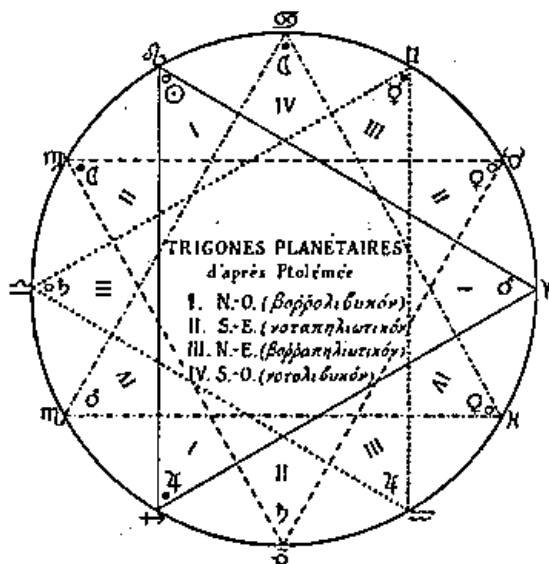
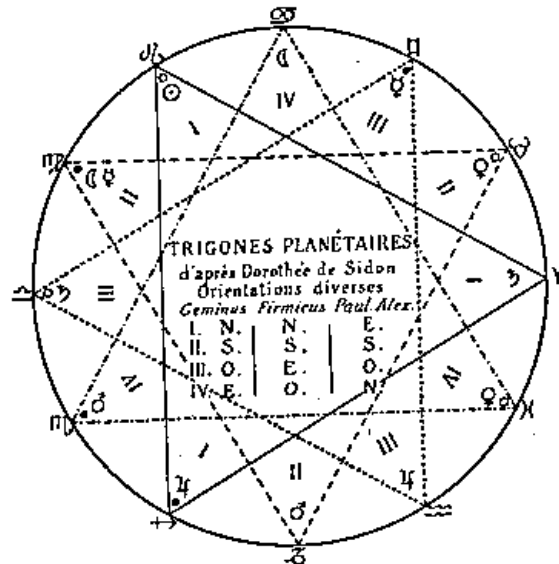


Fig 27. Planetary triplicity according to Dorotheus of Sidon



A. Northwest Triplicity (βορρολιβυκόν), the first triplicity, ⁴⁴¹ composed of masculine signs (♂ ♉ ♈). – A preliminary observation, which applies to all the triplicities, is that each of them is governed in the daytime by one of the two (or three) titular planets. During the night they have another, the governance (οικοδεσποτία) ⁴⁴² corresponding to a major influence in the given period of time. We will not insist upon the reason. The affinity of the day and the night with the diurnal and the nocturnal “sect” (αἵρησις) of the planets is sufficient reason. We would not protest if the rule were always observed.

Thus the first triplicity, including three domiciles, those of the Sun (♌), of Jupiter (♃) and of Mars (♂), as well as the ὑψωμα of the Sun (♌), is collectively dominated by these three planets and governed by the Sun during the day. The ruler of the night would have been Mars, on whom the astrologers had inflicted the nocturnal αἵρεσις. However, astrological providence evicted the malefic planet and arbitrarily substituted the benefic planet Jupiter. Since the Sun does not have its own orientation, the orientation of the triplicity is determined by Jupiter and Mars. The triplicity is “borrholybic,” between the North (Jupiter) and the West (Mars) ⁴⁴³

B. Southeast Triplicity (νοταπηλιωτικόν), the second triplicity, was made up of the feminine signs (♀ ♊ ♋). This feminine triplicity ⁴⁴⁴ contained a sign (♊) which was, at the same time, the domicile of Venus and the ὑψωμα of the Moon. It could only be ruled by the Moon during the night and Venus during the day. The third place was debated. Capricorn was, at the same time, the domicile of Saturn and the ὑψωμα of Mars, and Mercury had its domicile in Virgo. The suppositions balance themselves. Ptolemy, who cared little about the “sects,” decided for Saturn, while Dorotheus, who lodged Saturn in the first triplicity, opted for Mars with Mercury as its supercargo. [Mercury for Virgo only. KM]. With Venus and Saturn, Ptolemy decided the orientation of the triplicity, between the South (Venus) and the East (Saturn). In the system which eliminated Saturn, the triplicity became or remained “southern” (νότιον) ⁴⁴⁵.

C. Northeast Triplicity (βορραπηλιωτικόν), the third triplicity, made up of masculine signs (♂ ♊ ♈) and the “human” ones. This human triplicity includes both a domicile (♊) and a ὑψωμα (♊) of Saturn, which was the reason this planet was ruler of the daytime. It also included a domicile (♈) of Mercury, which, diurnal or nocturnal at will, exercised rule over the night. To which should we give the third place? Libra is a domicile of Venus. However, astrological ethics excluded Venus from a masculine triplicity and Ptolemy absolutely needed a planet to mark the North. Instead, he installed Jupiter, good, complacent, Jupiter, under the pretext that it belonged to the same “sect” as Saturn. In

this way, the planets of the triplicity are made diurnal, and the triplicity itself is orientated to the Northeast. Paul of Alexandria does not usually bother with these fine points and even seems to ignore the “oriental” character of Saturn. This time, however, he remains faithful to the Chaldaean tradition of Geminus. He declares the third triplicity to be “Western.”

D. Southwest triplicity, (νοτολιβυκόν), the fourth triplicity, composed of feminine signs (♊ ♋ ♌ ♍). The prolific signs accumulate in this triplicity. Venus has its ὑψωμα (♋) there. The Moon has its domicile (♊). Jupiter has its ὑψωμα (♋), plus a domicile (♋). Mars also has a domicile (♋). All of this left nothing but embarrassment for astrologers in quest of feminine, nocturnal, planets. Jupiter, although the best provided, is eliminated⁴⁴⁶ It was a compensation for the honor taken from it in the third triplicity, where it could not work.^{***} Mars, so poorly treated in the first triplicity, could not be pursued throughout. Dorotheus gave it a rulership, but a lesser one, that of the night. The other was devolved upon Venus. The ill-will is evident. If Venus is feminine, Mars is more qualified to rule during the day, even though already ranked, despite itself, in the nocturnal or lunar sect. The Moon contented itself with third place, doubtless because, in the eyes of Dorotheus, the ὑψωμα of Venus has priority over the domicile of the Moon. Ptolemy did not want to disqualify Mars even more, for he needed it, as well as Venus, because of its mixed orientation. However, he left Mars only an honorific rulership, extending over day and night.⁴⁴⁷ The effective rulership is exercised by its συνοικοδεσπότης, Venus in the daytime, the Moon at night. The accursed planet is thus bridled by its acolytes. All these tergiversations do not explain how the “notolybic” triplicity of Ptolemy became, in Paul of Alexandria, the “septentrional” triplicity. The simplest explanation is that the dissident astrologer did not have another orientation available. One may remark, in any case, that the summit of the triplicity, Cancer, is genuinely at the northernmost point of the zodiac.

We will meet the zodiaco-planetary triplicities again. The way their influences are spread across the whole of the inhabited earth will show with what great care the astrologers have made these orientations. In the process, we will pursue the development of astrological practices, which became more and more complicated. Ideas drawn from the domiciles and the exaltations played a role in the construction of the triplicities. Likewise, the recourse to domiciles and exaltations, to triplicities, will be thrown into obscurity by the grand arcana of the ὅρια.

4) Confines or terms (ὅρια – fines – termini). We mean by ὅρια or terms, certain fractions of a sign separated by interior boundaries. They were distributed within each sign between the five planets⁴⁴⁸ by virtue of properties of domains representing their specific influence. They were equivalent to the real presence of the planets.⁴⁴⁹ These properties are of unequal extent. They were unequal within a given sign and unequal from sign to sign for a given planet. There is one prime mystery connected with the “terms”. The planets which possess them are arranged in an order which varies from sign to sign. They do not fall into any discernable pattern or into a series known and intelligible, whether within a sign or within a group of signs. Even the most learned astrologers were baffled. Ptolemy, for once, did not only not understand (which happened more than once) but did not even pretend to understand the terms. Ptolemy found himself in the presence of two systems. One was absolutely capricious but generally accepted, on the faith of the “Egyptians”. The other was more intelligible, but guaranteed solely by the “Chaldaean” tradition, which inspired less confidence, especially in Alexandria. Ptolemy was more embarrassed than usual. He made objections about one system and criticized the other. He ended by proposing a third, which he dared not admit was his own. Instead he pretended he had found in an old book, eaten by time, mutilated and in parts indecipherable. He claimed that this third system, contained in the old book he owned, was the true Egyptian system, purged of the errors and maladroit corrections which had disfigured it. It was based upon “natural” reasons and in accord with a large amount of experimental evidence.

**** There is some confusion here. Jupiter, being masculine, was in fact given a position in C, the masculine Northeast (Air) triplicity. It was taken from the feminine Venus. Jupiter does not need and does not get compensation in D, which is the feminine southwest (Water), triplicity. To maintain the logic of sect Jupiter must be eliminated from Water. Dorotheus then compensates Venus for her loss of position in Air, (where she has a rulership), by granting her day rulership of Water, (where she has an exaltation). Ptolemy allows Venus only to share rulership with Mars by day, (the Moon shares rule with Mars at night). KM.*

This section in Ptolemy is a psychological document of great value. He shows us the state of mind of believers and the means (well-known to the writers of apocrypha) which one used to inspire faith. Finally, when one knows that Ptolemy, in spite of all his precautions, failed to replace the old Egyptian system with the new one, supposedly the older, the demonstration is complete. It appears from this fact, as well as from others, that the pleasure of understanding spoiled that of belief. Faith not only did not fear mystery, but sought it out, seeing in it the specific mark of divine works and of revealed truths.

Look first at the "Egyptian" system (doubtless that of Nechepso and Petosiris). It was the only one known to Dorotheus of Sidon, Firmicus, and Paul of Alexandria,⁴⁵⁰ [See 1. – Table of the ὅρια (Egyptian system)] and became law for all those who held to classical astrology. In all systems of ὅρια, there were two main things to consider, the order (τάξις) of the planets and the number of degrees (ποσότης) attributed to them. Ptolemy was not satisfied with either the order or the number.

☿	♂ 6	♀ 6	☿ 8	♂ 5	♂ 5	= 30
☿	♀ 8	☿ 6	♂ 8	♂ 5	♂ 3	= 30
☿	☿ 6	♂ 6	♀ 5	♂ 7	♂ 6	= 30
☿	♂ 7	♀ 6	☿ 6	♂ 7	♂ 4	= 30
☿	♂ 6	♀ 5	♂ 7	☿ 6	♂ 6	= 30
☿	☿ 7	♀ 10	♂ 4	♂ 7	♂ 2	= 30
☿	♂ 6	☿ 8	♂ 7	♀ 7	♂ 2	= 30
☿	♂ 7	♀ 4	☿ 8	♂ 5	♂ 6	= 30
☿	♂ 12	♀ 5	☿ 4	♂ 5	♂ 4	= 30
☿	☿ 7	♂ 7	♀ 8	♂ 4	♂ 4	= 30
☿	☿ 7	♀ 6	♂ 7	♂ 5	♂ 5	= 30
☿	♀ 12	♂ 4	☿ 3	♂ 9	♂ 2	= 30

1. Table of the terms (Egyptian system)

The order ought to have been similar to the three types of property already listed, the domicile, the triplicity and the exaltation. In each sign, the first place was given to the planet which possessed the most prized right or the greatest sum of rights. The following places were assigned in the same way, following the gradation of titles. Ptolemy showed that the order of the ὅρια did not follow any precise rule other than that of the titles. The ὅρια was sometimes in a domicile, sometimes in a triplicity, sometimes in an exaltation, sometimes in a sign without any right whatever. Thus, Mercury figured in the first rank in Capricorn, where it is a complete stranger. In Aquarius, where it had no right of triplicity, it dispossessed Saturn, which had both domicile and triplicity. These denials of justice had as their cause, generally, the philanthropic desire to diminish the authority of the malefic planets. This

sentiment had also pushed the "Egyptian" astrologers to trim the number of the ὅρια devolved upon these planets.⁴⁵¹

The quantity (ποσότης) was the total of the partial sums allowed to each planet. It represented the number of years of life which the aforesaid planet gave to the person born under its influence, that is, when it is "master of the chart."⁴⁵² Ptolemy, who did not much believe in this way of determining lifespan, found these evaluations arbitrary. However, he was not able to reject completely the authority of the Egyptians and he was not allowed to rectify the distribution.⁴⁵³ Anyway, to what do these years of life, which determine the arrangement of the planets, correspond? What is the natural reason, if it is one or another of the confirmed experiments invoked by the Egyptians?⁴⁵⁴ Some had imagined that these numbers represented the "anaphoric period" of each planet. This is (taking a chance on this hypothesis)⁴⁵⁵ the time which it takes the two signs which are the two domiciles of a planet to rise above the horizon. Usually it is expressed in degrees of the equator. Ptolemy, who feels he is upon his own ground here, treats these people with the disdain which they deserve. He knew that the figures describing the ascension times vary with latitude. These figures, false at all latitudes, could never be made to fit the traditional assessments, not by any expedients, refinements, or lies. Ptolemy, however, contented himself with this negative result, and then stole away. We must go to his scholiasts to find at least an index to help in understanding. Demophilus said that the reason for the unequal division of the ὅρια was "the complete periods of the planets."⁴⁵⁶ These complete or achieved periods were the cycles calculated by the Mesopotamians of the Seleucid period.⁴⁵⁷ They served to determine in

advance the positions of the planets throughout the whole of their respective cycles. The explanation of Demophilus evidently represents the general opinion of astrologers. Others also say that the years of life imparted by the planets are equal to the length of their periods (big, small, or in between). We have already been told that the number of years is equal to the sum of the ὅρια. Only, he must admit a very large postulate and admire more than ever the providential harmony of the world. In all the systems of the ὅρια, the sums of these periods is precisely equal to 360° of the circle. Ptolemy recoiled from this sacrifice imposed upon his faith, or rather, upon the public face of his faith.

♄	♌ 8	♍ 7	♎ 6	♏ 5	♐ 4	= 30
♅	♍ 8	♎ 7	♏ 6	♐ 5	♑ 4	= 30
♆	♎ 8	♏ 7	♐ 6	♑ 5	♒ 4	= 30
♇	♏ 8	♐ 7	♑ 6	♒ 5	♓ 4	= 30
♈	♐ 8	♑ 7	♒ 6	♓ 5	♈ 4	= 30
♉	♑ 8	♒ 7	♓ 6	♈ 5	♉ 4	= 30
♊	♒ 8	♓ 7	♈ 6	♉ 5	♊ 4	= 30
♋	♓ 8	♈ 7	♉ 6	♊ 5	♋ 4	= 30
♌	♈ 8	♉ 7	♊ 6	♋ 5	♌ 4	= 30
♍	♉ 8	♊ 7	♋ 6	♌ 5	♍ 4	= 30
♎	♊ 8	♋ 7	♌ 6	♍ 5	♎ 4	= 30
♏	♋ 8	♌ 7	♍ 6	♎ 5	♏ 4	= 30

2. Table of daytime terms (Chaldean system)

The same rule of quantity presided over the construction of the table of the Chaldaean ὅρια,⁴⁵⁸ even though the partial sums are somewhat different. The “Chaldaeans” have reacted against the optimism of their rivals, it seems, and given the greater part to the malefic planets. The principle fault that Ptolemy found in the Chaldaean system was its mechanical regularity, the opposite extreme from the intemperate irregularity of the Egyptian system. It consists of giving the same division of signs to the signs within the same triplicity.⁴⁵⁹ The planet which is master of the triplicity is placed at the head. Then comes the planet which is master of the next triplicity, the two masters of the third triplicity and, finally, the master of the last triplicity. The number of degrees are uniform. The first planet has eight, the last has four. Each block of ὅρια is subdivided in an order – unchanging and unexplained ♄, ♅, ♆, ♇, ♈. It was to maintain this series that, as an

exception, in the human triplicity (♄ ♅ ♆), the two planets which were the masters of the triplicity, Saturn and Mercury, occupy the two first places. Mars, which ought to have been in the second rank as master of the following triplicity, is relegated to the third. Finally, Saturn and Mercury – only these two – switch places throughout all the signs, depending on whether the chart is for the daytime or nighttime.⁴⁶⁰

Ptolemy, aided by his old book, wanted to give a rational order to the Egyptian system, less regular, but more flexible and more comprehensive than that of the Chaldaean system.⁴⁶¹ He took into account, all at the same time, the ὑψώματα, the triplicities and the domiciles, three sorts of titles whose values decreased in the indicated order. A planet which possessed two of these titles went ahead of a planet which had only one of them. With an equal number of titles, a benefic planet ranked ahead of a malefic one. Exceptions are Cancer and Leo, which are the domiciles of the Sun and the Moon. There, the Moon is replaced by Mars, which belongs to the lunar or nocturnal sect (αἰρεσις), and the Sun, by Saturn, which is a diurnal planet. For the number of degrees occupied by each planet, the rule is more reassuring. (Ptolemy's quantities do not change the total). It consists of giving an advantage to beneficent planets, every time that the astrology does not have its hands tied. They are tied by the predominance of a planet with two titles enthroned, whether in the sign in view, or in the quadrant containing that sign. Ptolemy allowed 7° to Jupiter and Venus, as against 5° to Saturn and Mars. Mercury, always a hybrid, got 6°. In the end, when we apply the rule to the same totals as in the Egyptian tables, we see that Ptolemy still used aberrant quantities. He added or subtracted them here or there for rather obscure and complicated reasons. The share of the planets with two titles may be augmented with a degree taken from the portion of the others. On the other hand, sometimes he takes a degree from Saturn or even from Jupiter, on the pretext that their movements are so slow that they

do not need such a large number of ὅρια.⁴⁶² Finally, one ends, in this way, at a rule which corrects the errors of detail without changing the total value possessed by each planet. One may see this in the following table

3. Table of terms (system of Ptolemy)

☿	♈ 6	♀ 8	♊ 7	♂ 5	♉ 4	= 30
☿	♀ 8	♊ 7	♈ 7	♉ 4	♂ 4	= 30
☿	♊ 7	♈ 6	♀ 7	♂ 6	♉ 4	= 30
☿	♂ 6	♈ 7	♊ 7	♀ 7	♉ 3	= 30
☿	♉ 6	♊ 7	♀ 6	♈ 6	♂ 5	= 30
☿	♊ 7	♀ 6	♈ 5	♉ 6	♂ 6	= 30
☿	♉ 6	♀ 5	♈ 8	♊ 5	♂ 6	= 30
☿	♂ 6	♈ 8	♀ 7	♊ 6	♉ 3	= 30
☿	♈ 8	♀ 6	♊ 5	♉ 6	♂ 5	= 30
☿	♀ 6	♊ 6	♈ 7	♂ 6	♉ 5	= 30
☿	♉ 6	♊ 6	♀ 8	♈ 5	♂ 5	= 30
☿	♀ 8	♈ 6	♊ 6	♂ 6	♉ 4	= 30

Egyptian and Ptolemaic System

$$\text{♉ } 57^\circ + \text{♈ } 79^\circ + \text{♂ } 66^\circ + \text{♀ } 82^\circ + \text{♊ } 76^\circ = 360^\circ$$

Chaldaean System (with ♉ and ♊ switched)

$$\text{♉ } 78^\circ (\text{day}) \text{ or } 66^\circ (\text{night}) + \text{♈ } 72^\circ + \text{♂ } 69^\circ + \text{♀ } 75^\circ + \text{♊ } 66^\circ (\text{day}) \text{ or } 78^\circ (\text{night}) = 360^\circ$$

Out of 360°, the Chaldaean table gives an average of 141° to the malefic planets, and 219° to the three others. The Egyptian table lowers the part of the malefic planets to 123° and increases the allotment of the others to 237°. The greater part of the difference between the two systems is carried by Saturn, who is the prime mover of Mesopotamian astrology, as we have already seen.

The question of ὅρια was perhaps the one which most divided the astrologers, at the time when Ptolemy intervened in the quarrel. Even non-professionals, such as Sextus Empiricus, had heard of their quarrels.⁴⁶³ "Apollinarius", Demophilus says, "is in disagreement with Ptolemy over the distribution of the ὅρια, and

both disagree with Thrasyllus, Petosiris, and other older writers".⁴⁶⁴

We do not know if it is necessary to place among "the ancients" the unknown author of a system which differed from the preceding systems, not only in the details of distribution, but in its basic principle. It gave the Sun and the Moon a part in the distribution of the ὅρια. This is the system "following the heptazone" which has been preserved for us by Vettius Valens.⁴⁶⁵ Let us look at the arrangement. The Sun, having three titles to property in the zodiac, to wit, a domicile, [♈] an exaltation, [☿] and a triplicity [the remaining sign of the fire triplicity being] (♈), would have 3° in each sign. The Moon, with a domicile, [☿] an exaltation, [♊] and two [fellow] triplicities (♈ and ♉), had 4°. Saturn, with two domiciles, [♉ and ♈] an exaltation, [♊] and [the other member of] its triplicity is (♈), had 4°. Jupiter, with two domiciles, an exaltation, and two triplicities (☿ and ♈), had 5°. Similarly Mars, [including] its triplicities (♈ and ☿), had 5°. Venus, [including] its triplicities (♈ and ♉), had 5°. Finally, Mercury, [with one sign counted as domicile, (♈), and one as exaltation (♈)], [plus the two other signs of] its triplicity, (♈ and ♈), had 4°.^{***} When the quantities were fixed in this way, the order of the triangles is set in such a way that all the signs in the same triangle have their terms in the same order. The first place goes to the day ruler (τριγονοκράτωρ) of the triangle, the second to the night ruler. The third and fourth places are assigned in the same way, to the two rulers of the following triplicity. The fifth and sixth are assigned to the rulers of the triplicity after that. The seventh and last is assigned to the remaining planet. However, logic requires that the day rulers rule only during the daytime, and give power to their nocturnal colleagues for the night-time. There was therefore a change of rulership (save for Mars) each day and each night. There were two symmetrical tables, which I insert for curiosity's sake.

^{***} Glyph errors have been corrected. Clarification is based on Mark T Riley's translation of Valens. KM

I. "Opia diurnes."

☿	☉ 3	♈ 5	♀ 5	☾ 4	♁ 4	♊ 4	♂ 5	= 30
♅	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	☉ 3	♈ 5	= 30
♁	♁ 4	♊ 4	♈ 5	☉ 3	♈ 5	♀ 5	☾ 4	= 30
♊	♈ 5	☉ 3	♈ 5	♀ 5	☾ 4	♁ 4	♊ 4	= 30
♋	☉ 3	♈ 5	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	= 30
♌	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	☉ 3	♈ 5	= 30
♍	♁ 4	♊ 4	♈ 5	☉ 3	♈ 5	♀ 5	☾ 4	= 30
♎	♈ 5	☉ 3	♈ 5	♀ 5	☾ 4	♁ 4	♊ 4	= 30
♏	☉ 3	♈ 5	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	= 30
♐	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	☉ 3	♈ 5	= 30
♑	♁ 4	♊ 4	♈ 5	☉ 3	♈ 5	♀ 5	☾ 4	= 30
♒	♈ 5	☉ 3	♈ 5	♀ 5	☾ 4	♁ 4	♊ 4	= 30

II. "Opia nocturnes."

☿	♈ 5	☉ 3	☾ 4	♀ 5	♊ 4	♁ 4	♈ 5	= 30
♅	☾ 4	♀ 5	♊ 4	♈ 5	♁ 4	♊ 4	☉ 3	= 30
♁	♀ 4	♁ 4	♈ 5	☉ 3	☾ 4	♀ 5	☉ 3	= 30
♊	♈ 5	☉ 3	☾ 4	♀ 5	♊ 4	♈ 5	☉ 3	= 30
♋	☉ 3	♈ 5	☾ 4	♀ 5	♊ 4	♈ 5	☉ 3	= 30
♌	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	☉ 3	☾ 4	= 30
♍	♁ 4	♊ 4	♈ 5	☉ 3	☾ 4	♀ 5	☉ 3	= 30
♎	♈ 5	☉ 3	☾ 4	♀ 5	♊ 4	♈ 5	☉ 3	= 30
♏	☉ 3	♈ 5	☾ 4	♀ 5	♊ 4	♈ 5	☉ 3	= 30
♐	♀ 5	☾ 4	♁ 4	♊ 4	♈ 5	☉ 3	☾ 4	= 30
♑	♁ 4	♊ 4	♈ 5	☉ 3	☾ 4	♀ 5	☉ 3	= 30
♒	♈ 5	☉ 3	☾ 4	♀ 5	♊ 4	♈ 5	☉ 3	= 30

System of the terms (heptazone system)

I daytime terms, II, nighttime terms.

The mathematicians who fabricated this card game did not ask to what the partial sums correspond. Nor did they ask what replaced the "compatible periods" which were supposed to be the ultimate reason for the other systems. They put the distribution of the years of life into disarray, since the planets had their energies diminished. The Sun and the Moon were exceptions, admitted to the distribution and conveniently parceled out. Vettius Valens himself disapproved of this baroque invention, as did many others.

In the end, the practitioners remained faithful to the Egyptian *ōpīa*, which the memorable verse of Dorotheus had fixed in everyone's memory. They did not accept even the discreet touching-up of Ptolemy, who was forced to pay his own expenses for this production.⁴⁶⁶ They had good reason to defy the astronomer who took them for ignoramuses. He betrayed their cause by avowing that all of zodiacal astrology needed to be re-done, from foundation to roof, with the real equinoxes and the real solstices as the reference points.⁴⁶⁷

II The Decans

Ptolemy did not succeed in discrediting a certain number of combinations which he judged inept, futile and without "physical" reason.⁴⁶⁸ Among the systems which he included in a final, general, unwelcome, category, without doing them the honor of listing them, there was one which not only survived his disdain, but which developed a sort of autonomous theory, and ended by becoming a parasitic excrescence upon the body of classical astrology. It is a question of associating the thirty-six decans with, or better, of the substituting them for, the twelve signs of the zodiac. Here we have no business with geometrical lines, the fantasies of mathematicians, but with a religion. It slipped into astrology disguised with an arithmetical name. Once in place, it threatened to expel the manipulators of numbers with the virtuosi of the compass. It was because he recognized the religious nature, the anti-scientific spirit, of the system of the decans, that Ptolemy made not the least reference to them. If he hoped to send these spirits left over from the time of the pharaohs back to the magicians and makers of amulets,⁴⁶⁹ he fooled himself one more time. The decans, once introduced to classical

astrology, kept a place which, in the eyes of some, was the place of honor.

The generic name of “decans” (δεκανοί – *decani*) needs no definition. It comes from the circumstance, completely secondary and accidental, that these thirty-six deities each occupy an arc of 10°. They are spread at regular intervals over the contour of the sphere and are designated also by the vague name of “figures” (πρόσωπα)⁴⁷⁰ or characters. This accidental circumstance is nevertheless characteristic. It shows that these Egyptian spirits slid themselves into the Greek zodiac disguised as one more of those divisions which the astrologers loved to multiply. It let them cover every point of the sphere with diverse influences for them to choose from. There were combinations of all sorts. They were divisions, sometimes of the planets among the signs – like those described in this chapter. Sometimes they were of signs within other signs, organized in different ways. They sometimes followed the “natural” order of the planets or the signs. Sometimes they followed the order of the triplicities, and cut the signs into smaller and smaller fractions. These might be thirds, sevenths, ninths, tenths, even thirtieths, that is, bordering on the simple degree (μονομοίριαι)⁴⁷¹ The division which served as pretext for the introduction of the Egyptian “decans” was another of these arithmetic games, perhaps more interesting than the others because it represents at once the triad, the decad, and finally, above all, the famous Pythagorean τετρακτύς, the number thirty-six. It was found, in addition, to correspond to the thirty-six decades of the Egyptian year, and found a cosmic significance in this fact.⁴⁷²

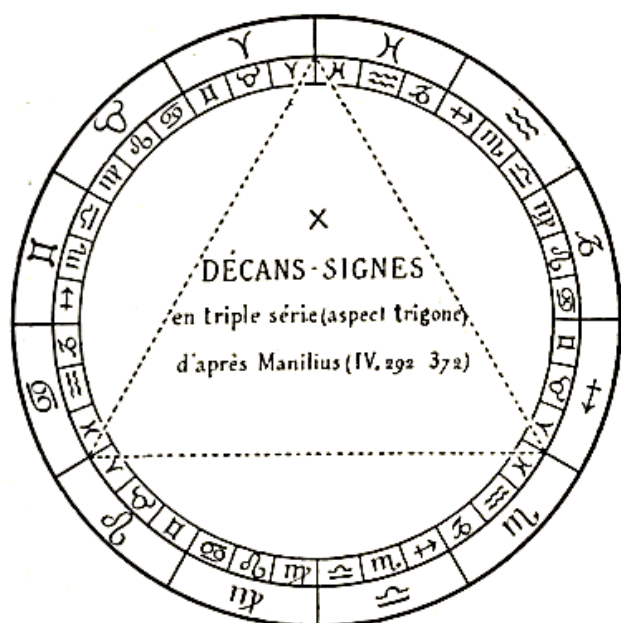


Fig. 27. Les décans de Manilius¹.

Fig 28. The Decans of Manilius

Manilius knew the system, whose origins did not interest him much.⁴⁷³ For him, it consisted of a three-part division of each sign.⁴⁷⁴ In dividing Aries, which received Aries, Taurus, and Gemini as decans, each third of the sign is attributed to a zodiacal constellation named in the usual order. When the series filled four signs, or twelve thirds of signs, it started over. To minds preoccupied with mathematics, this disposition gave the greater than average satisfaction of stating that the signs associated by the trine aspect have their own decans. In consequence, they are in perfect harmony.

See the disposition of the decans of Manilius, placed in the signs to which they belong.

Simple as the combination of the zodiac with itself may have been, Manilius seems to have felt respect for a similar mystery. It added to the reciprocal actions and reactions of the signs. This led to a secret alteration of the proper temperament of these signs, dangerous to the uninitiated.⁴⁷⁵

We do not know if Manilius knew of any other system of decans. He may not have wanted to deal with the planetary decans. He may even have mistaken these last for planetary domains the same size as decans. There is no reason to weaken a witness who served as an indicator concerning the origins of the decans. In fact, however, the system of decan-signs belongs to Manilius, and there is no hint of it after him.⁴⁷⁶

However, the system which found such an enigmatic echo in his poem, combined with the twelve houses of the Greek zodiac, became the system of the decans proper. It connected the Egypt of Manilius' day to a more ancient tradition, going back to the era of the pharaohs.⁴⁷⁷ The ancient Egyptians had a fixed idea which contained the germ of a special astrology. Introduced to Greek astrology, it there engendered, in effect, divergent methods connecting well or ill with those coming from the Chaldaean tradition. The methods were based upon the idea that each division of time, great or small, had its own protective spirit. Each was the property of a god of some sort, a χρονοκράτωρ.

We have seen this idea come up before, in the distribution of the degrees of the circle in ὅρια. That was said to be, and may genuinely have been, from Egyptian tradition, incorporated into astrology by the Alexandrians (the so-called Nechepso and Petosiris). We will find bits of this idea everywhere. The place it holds is big enough for the pretensions of the “Egyptians” as inventors of astrology, somewhat counter-balancing the pretensions of the “Chaldaeans.” The Egyptians, from the time of the pharaohs, had thus planted all sorts of spirits along the daytime and night-time route of the Sun. They disputed with the Sun the right to be called the masters of the times. The Sun got passage from them by means of magical charms⁴⁷⁸ and when the Sun set, they ruled over the world in its place. The most powerful were those who were attached to stars, constellations or parts of the Sun. They were the “lamps” (*xebs* - *xabs* - *xabsu*) or the “groups” (*xet*), the future decans.⁴⁷⁹ This route of the Sun was not, as the Greek ecliptic was, a great circle of the celestial sphere, an oblique upon the equator. Instead, it was a large band, reaching from one tropic to the other, with the equator forming the middle line. The diurnal circles, parallels to the equator, which geometrically described the route Sun from one solstice to another, fill up, in effect, the whole of this zone. This was for an infantile reason, doubtless, but logical in its way. The stars which rose and set at the same points of the horizon as the Sun were considered as the Sun's path. The Egyptians cataloged the stars to suit themselves. They followed the witness of their eyes and did not exclude, for theoretical reasons, any group of stars which attracted their attention. They always began or ended the list with the names of *Sah* (Orion) and *Sopdet* or Sothis (Sirius), always paired.⁴⁸⁰ One can count twenty constellations in the nine lists conserved on the pharaonic monuments and composed between the nineteenth and thirtieth dynasties.⁴⁸¹ These constellations, whether undivided – the rarest case – or divided into two or three parts, formed in this way the homes of the decan-spirits. The spirits had the same names as their constellation-homes and were more or less identified with them. Thus the constellation *Kenmut* included the decans *Tpa-kenmut* (point of Kenmut), *Kenmut* and *xr-kenmut* (navel of Kenmut). The constellation *xont* had five or even eight decans, called the “point,” the “height,” the “bottom,” the “table,” the “edge” of *xont*. Orion had four decans, and so on. The Hellenized “Egyptians” exaggerated at their pleasure. They proceeded to dissect the signs of the Greek zodiac, after the fashion of anatomists, for the greater glory of medicine and of astrological ethnography. The total of decans obtained in this way, in the pharaonic era, is forty. This is not yet the fateful number of thirty-six, corresponding to thirds of the zodiacal signs or the sum of the degrees of the circle in groups of 10°.

This number, thirty-six, appeared in the Greco-Roman era. That is, it appeared at the moment when Greek astrology appropriated the older traditions, since it was desired that all traditions be equally old. However, it imposed a fixed framework upon them, mutilating them to make them fit. Certain decan names replace others, and certain pairs of decans contract into a single celestial personage. At the same time, these gods took on a more concrete individuality by adding to their names a concrete form, an image (προσωπον – *facies*) or ideogram. From now on, this made their personalities independent of their names.⁴⁸² The system of decans was thus created and put in harmonic relationship with the thirty-six decades of the Egyptian year. Each decade thus had its own χρονικάτωρ.⁴⁸³ The name *decanus* appears for the first time in Manilius but there may have been a similar name earlier. However, this is not yet, or not necessarily, an astrological machine used to brew up numbers and fabricate predictions. The decans were gods who had a right to homage from others besides astrologers. One might invoke them even on behalf of the sovereign.

An inscription from Ombos says

“The great disk of the Sun moving through the sky during the day, finished his course in the West as the god Atum. Then the Moon took possession of the sky The decans appeared behind the Sun. They walked in a circle, they relieved each other in turn. They appeared after his setting, at their hours, according to the seasons. O you, souls of the divine stars, who rise to promise benefits, make the son of the Sun to rise, the lord of the diadems, Ptolemy living forever, the friend of Ptah and of Isis, as you rise yourselves”⁴⁸⁴

The rival of Ombos, Tentyra (Dendera), invokes with no less fervor

“The sublime and grand and very great gods, the protective stars which follow Sothis through the sky,

*the rising stars which rise to the East of the sky, who give their protection to the gods of Tentyra, the Messengers of Her Majesty (Isis-Hathor), who exterminate whoever jumps over their water (i.e., acts contrary to their will) and bestow their protection on the city of Tentyra."*⁴⁸⁵

There can be no doubt. The decans are actually the stars, the fixed stars, which each in turn, according to the seasons, "rise in the East into the sky at the setting of the Sun. This translates exactly the term *ὠροσκόποι* (οἱ λαμπροὶ λς' ὠροσκόποι) by which the decans are designated in a Greco-Egyptian astrological papyrus of the second century CE.⁴⁸⁶ At this epoch, the decans were already entering into astrological calculations – at least in the practice of the astrologers who claimed the Egyptian tradition.⁴⁸⁷ They were not Hellenized, that is, transformed into signs of the zodiac, like Manilius' decans. They appear with their Egyptian names. Already, the fabricators of Hermetic books had speculated upon the decans. They gave them a purely spiritual and intellectual nature, which gave them hegemony over the universe. In thus detaching them from the constellations in which they had been embodied, one helped the needy astrologers, who sought to house them all in the pigeon-holes of the Greek zodiac. Hermes Trismegistus⁴⁸⁸ explained to his son Tat (Thoth) or Asklepios that he "illuminated" the zodiac and held it suspended obliquely between the two tropical circles. Moreover, above it there was a middle road between the zodiac and the outer circle of the universe. Upon this road, Providence placed the thirty-six decans, "vigilant guardians, inspectors of the universe" and regulators of its movements. They are "impassible" (ἀπαθεῖς), not stopping to move retrograde, as the planets do, in their always even course.⁴⁸⁹ They are not struck by the Sun's rays, which make "the other stars" submit (πάσχουσιν).⁴⁹⁰ This did not keep them from exercising, even upon the earth, a very great power. Their energies were infused into a large number of spirits⁴⁹¹ who emanated either directly from the decans, or indirectly from the vassal planets. These spirits carried out the orders which they got from the decans. None of the usual subjects of "universal" astrology – coups d'état, seditions, epidemics, famines, tidal waves, earthquakes – took place without their intervention. Even individual charts, under the immediate domination of the planets, felt the influence of the decans who managed the planets.

Trismegistus does not say that the decans, "inspectors of All" were in the zodiac, since they were above it. Nor does he say that they were in the same plane as the zodiac, for it seems that their proper habitat was the whole tropical zone. This, after all, is in accord with the Egyptian tradition. However, since he assumes them to be invisible and bodiless, it became easy to put them into the zodiac and to distribute them among its twelve pigeon-holes, without paying attention to the constellations outside the zodiac which still bore the same names.⁴⁹²

Since the zodiac was the route of the planets, the decans fixed upon this circle inevitably established relationships with the planets. These relationships were sometimes based upon elective affinities, sometimes upon geometric relationships. From the viewpoint of the mathematical harmony of the universe, these were the equivalents of elective affinities. The work of adaptation seems to have been done, or at least finished and popularized, by Teucros of Babylon, doubtless a member of the "Chaldaean" tradition. Discredited by the success of the "Egyptians" and by the vogue for Nechepso and Petosiris, it took its revenge upon its rivals in this way and fought them with their own weapons. What were the combinations preached by Teucros? Demophilus, who reviewed them in his own book,⁴⁹³ did not preserve the ideas very clearly. Perhaps the extracts which remain of his scholar have been accidentally trimmed. As far as I can understand, the system superimposes three sorts of influences upon the zodiac. They were those of the decans and those of the constellations which rise at the same time as the decans (παρاناτέλλοντες). Finally, they were those of "characters" or "figures" (πρόσωπα), which were coupled with the planets, and were often confused with them. This triple series of agents seems composed of the decans and the hypostases or emanations of the decans. The decans were on high, the paranatellonta were at the level of the zodiac, and the planetary "figures" were below the zodiac.

Suppose (Demophilus said) that the zodiacal circle is divided into thirty-six segments of 10° (δεκανοί). Under these decans are found the stars mentioned as paranatellonta of the zodiac. There are also the figures of the seven planets, which have a certain affinity with the planets to which they are attributed. Suppose the Sun is in Aries, at the tenth degree, first decan, figure of Mars. Since we have said that the

*Sun indicates psychic attitudes, you will find the personality of the subject to be virile, irascible, bellicose, ambitious, and other traits of this sort. Suppose now that the Sun is in the twentieth degree of Aries, second decan, figure of the Sun. The subject will be ambitious, glorious, but no longer bellicose. Let us place once again the Sun at the thirtieth degree of Aries, third decan, figure of Venus. It presages an effeminate soul, with a feminine form, shameful habits, lascivious and so on. See how a single sign conceals three differences, no less, for the psychic qualities.*⁴⁹⁴

In this passage, the scholiast (or whoever made the extracts) has forgotten the tripling of each of these “three differences.” He spoke of the influence of the planetary hypostases, which differed in nothing from the planets themselves. All this metaphysic was part of a false principle. Most of the decans were themselves older than the zodiac and the “*paranatellonta*.” Confused and incoherent as it was, there remained only one idea, equally false, but clear. It was that the decans of the zodiac were the planets themselves. They were rigged out in “figures” which they did not know in earlier times but which preserved their traditional temperaments.⁴⁹⁵ The adapters trampled upon the Egyptian tradition which they pretended to assimilate. It was completely by chance that, now and then, their planetary decans resembled, in some trait, their Egyptian prototypes. The first decan of Cancer was Sothis (Sirius), a star already assimilated to Isis.⁴⁹⁶ They should have begun by identifying it with Venus, a feminine planet at the head of a feminine sign. Then they should have let the succession of sevenfold series slip at the same time. This succession would have led the Sun to the first decan of Aries, which held its ὕψωμα. Next would have come the Moon to the first decan of Taurus, where it was equally exalted. The year would have ended where it had begun, with a decan of Venus, the beneficent Venus, which had thus found, to the great joy of mortals, two neighboring decans. However, for this to happen, it was necessary to put the beginning of the year at the heliacal rising of Cancer, Egyptian-style. That is doubtless something which Teucros of Babylon or whatever “Chaldaean” made the adaptation did not want. Teucros (or whomever) wanted to begin the year with Aries, in the Chaldaean and Roman fashion, which the brazen-faced and insatiable “Egyptians” pretended to have also invented.⁴⁹⁷

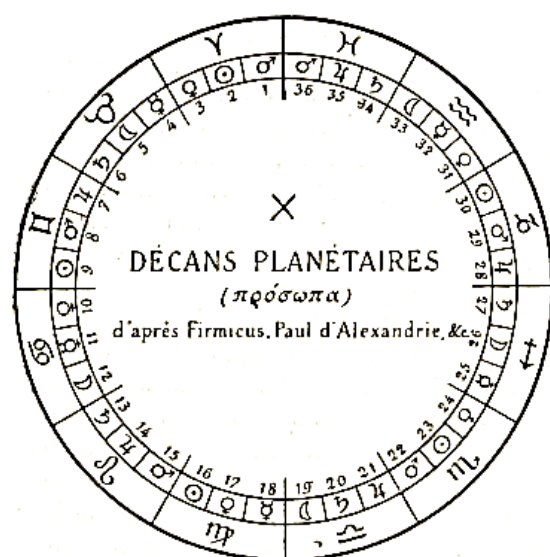


Fig. 28. Les décans planétaires.

Tableau des Décans planétaires en séries hebdomadaires.

♈	♈	♈	♈
♉	♉	♉	♉
♊	♊	♊	♊
♋	♋	♋	♋
♌	♌	♌	♌
♍	♍	♍	♍
♎	♎	♎	♎
♏	♏	♏	♏
♐	♐	♐	♐
♑	♑	♑	♑
♒	♒	♒	♒
♓	♓	♓	♓
♈	♈	♈	♈
♉	♉	♉	♉
♊	♊	♊	♊
♋	♋	♋	♋
♌	♌	♌	♌
♍	♍	♍	♍
♎	♎	♎	♎
♏	♏	♏	♏
♐	♐	♐	♐
♑	♑	♑	♑
♒	♒	♒	♒
♓	♓	♓	♓

Fig 29 Table of Decans

However, the equation of Sothis with the first degree was a fixed point of reference, very well-known, which no one wanted to change. Therefore, the adapter had to follow the series back towards Aries, whose first decan was found to be affected by Mars, like the last decan of Pisces. The astrologers always found a reason after the fact for their voluntary fantasies or for the requirements of geometry. They alleged an excellent one to put Mars at the head of Aries, which was itself the “head of the universe.” It was that Aries was the domicile (οἶκος) of Mars and that

the bellicose planet had the same tastes as the surly and bellicose Ram.⁴⁹⁸

Whatever the case, this rule is the one which prevailed and is the only one of which the authors speak. Look at the canons of the planetary decans, according to the contemporary lists of Firmicus, of Paul of Alexandria, and of Demophilus [Fig. 29 and adjoining table]⁴⁹⁹

Among other properties and secret affinities, the adjoined list offers this particularity. The horizontal lines follow the descending order of the planets. At the same time, the vertical columns give the order of the days of the week, going from the first to the last decans. This would have been troubling to the joy of the mystics. Nor is it the right moment to explain the order of the hebdomad or the week,

and to demand the key to this arcanum from a mathematician.

The combination of the decans with the planets was law for the inheritors of Greek astrology, Arabs, Persians, Hindus. I leave to others the chore of finding out if it was by their hands that the system was supercharged by supplementary figures, one for each degree of the circle.⁵⁰⁰ This conjuror's trick, which denatured the Egyptian "gods" ⁵⁰¹ absorbed the planet-gods of the Mesopotamians and the Greeks. However, whatever may have been the conjurors' success, the partisans of the true Egyptian tradition remained, and they took their revenge. Firmicus had already given a list of the decan-planets and boasted of their "infinite power." He decided further on, not without a certain religious trembling, to reveal certain secrets. The "ancient theologians" had enveloped them in a willful obscurity, for fear that they would be read by the unworthy. He reveals a system in which the decans are really the Egyptian gods, with Egyptian names and disengaged from all associations with the planets which, in the rival system, pretended to serve them. These decans are in the zodiac and are distributed three by three within the signs. This effaces without words the traces of their real origin. However, they are unequal in extent, ⁵⁰² did not neighbor each other, and are separated by empty spaces. These were the unoccupied degrees (*partes vacuae, vacantes*, as opposed to the *plena*, the full degrees) where they did not exercise their beneficent influences. According to Firmicus, Nechepso, the "thrice just emperor of Egypt and thrice good astrologer," attributed to the decans all power of distributing health and illness at their pleasure. He also taught the art of using some decans to heal the wounds dealt by others.⁵⁰³ The medical gods are, in all religions, the last to lose their clientele. The astrologers charged themselves not to let them be forgotten, and to make money using the mysterious prescriptions of Nechepso. They even used the Egyptian names of the decans to meet the requirement of magic words, that is, to be unintelligible. Since the names were no longer understood, they were distorted each time they were copied. No one should be surprised to find many variants in the table below (pp. ??? _???). It already represents a choice made from even more numerous variants in the Egyptian lists, known and unknown.⁵⁰⁴

There is one more mystery to consider, if not explain, in the system of decans presented by Firmicus. The decans, we have said, were not contiguous, but separated by empty spaces. These spaces were generally smaller than the decans, since the circle counts 205 "full" degrees against 155 "empty" ones. They were not only unequal among themselves like the decans but unequally distributed among the signs. A most bizarre phenomenon, they are thirty-eight in number, as opposed to thirty-six decans. In effect, the year began with an empty sign in Aries and ended with an empty sign in Pisces. The alternation of empty and full is likewise interrupted between Taurus and Gemini by the contiguity of the two decans. They are interrupted between Gemini and Cancer and between Libra and Scorpio, by the juxtaposition of the two empty ones.⁵⁰⁵ Evidently we are dealing with some Egyptian superstition. The zodiacal circle carries there, perhaps, the mark of the two cuts (or solder joints if one prefers). One corresponds to the beginning and end of the Egyptian year (the rising of Sothis), the other, to the beginning and end of the Chaldaean or astronomical year. One may say that the adapters of the system found the cut made in the Egyptian mode. They then did the same with the point where the Chaldaean mode would have placed the line separating the old and new years. As for the two neighboring empty spaces between Libra and Scorpio, it is either a pure fantasy or a copyist's error. What use could one imagine for a large empty space between Gemini and Cancer? Would one want to give a sort of elasticity to the circle? To be able to insert protective daemons for the five epagomenal days of the vague year? Or, at need, for the intercalary day of the fixed or Julian year? This is a problem which we will leave dormant, with some others which are neither soluble nor interesting.⁵⁰⁶ It is prudent to renounce the search for the reasons. Probably they were just the fantasy of the astrologers and their need to hold on to their clientele via the love of the mysterious. It would be naive to compare the tables of Firmicus with a chart of the zodiac to see if by some chance the parts noted as "empty" did not correspond to the places without stars. It would be equally naive to begin the same examination on the lists in Hephaestion of Thebes, which know nothing of empty spaces between the decans. His decans' dimensions measure exactly 10°. However, he also cites the quantity, in each sign, of "brilliant degrees" (λαμπραὶ μοῖραι), whose number varied between four and seven. The idea of "brilliant" parts or full and empty parts in the zodiacal constellations may have come from watching the sky, but one should not bet the farm that any of them were taken from Nature. The people who attributed sex – and many other properties ⁵⁰⁷ – to each degree of the circle did not have to count on Nature.

Accursed Degrees

I. *Partes damnandae*, d'après Manilius :

Υ	 4..... 6..... .. 12..... 14..... .. 17. 18..... .. 21..... 21. 25. . . 27..... ..
♊	 9..... .. 13..... .. 17..... .. 21..... 24..... 26..... 28..... 30.
♈	1. 3..... 7..... .. 15..... .. 19..... 21..... .. 25..... 27..... 29.....
♉	1. 3..... 6..... 8..... .. 11..... .. 15..... .. 22..... 25..... 27..... 29.....
♊	1..... 4..... .. 10..... .. 15..... .. 22..... 25..... .. 28..... 30.
♈	1..... 4..... 6..... 8..... 11..... .. 21..... 24..... ..
♉	 5..... 7..... .. 13..... .. 18..... .. 24..... 27..... 29. 30.
♊	1. 3..... 6..... .. 15..... .. 22..... 25..... .. 28. 29.....
♈	 4..... 8..... .. 12..... .. 16..... .. 20..... 24..... 26..... 28..... 30.
♉	 7..... 9..... .. 13..... .. 17..... 19..... .. 25..... 27.....
♊	 11..... 13..... 15..... .. 19..... 21..... .. 25..... 29.....
♈	 3..... 5..... 7..... .. 11..... .. 17..... .. 23..... 27.....

II. *Ακαμπτα μοῖραι*, d'après Héphestion :

Υ	 3..... .. 19..... .. 26..... 30.
♊	 3..... 5..... .. 10..... .. 28..... 30.
♈	 6..... .. 10..... 21..... .. 30.
♉	 8. 9..... .. 15..... 20..... 22..... 26.....
♊	1..... 4..... 5..... .. 16..... 20..... 26..... 30.
♈	 10..... .. 17..... 20..... 26..... 29.....
♉	 12..... .. 17..... 23..... 30.
♊	 7..... 10..... 14..... 20..... .. 30.
♈	 4..... 6..... 10..... .. 18..... 26..... 29.....
♉	 6..... .. 12..... 15..... .. 24..... 30.
♊	 11..... .. 17..... 20..... 25..... 29.....
♈	 8..... .. 15..... 20..... 23..... 25..... 30.

Firmicus seems to say that the system of decans with full and empty spaces came from Nechepso and Petosiris, but that they had left it “enveloped in obscure circumlocutions.” This would be best explained by Manilius knowing of the system, but not understanding it. Another explanation is that he retained fragments which he used in his own fashion, that is, inappropriately. He also gives a table of parts, not “empty” but “evil” (*damnandae*). They were evil for reasons which taxed his ingenuity to find. They had too much cold or heat, moisture or dryness.⁵⁰⁸ However, where do these defects come from, and why are they distributed in this way? This is the god's secret, which he chooses to reveal.⁵⁰⁹ To reach this degree of confusion, the poet must not have bothered to survey the vocabulary of physics. In any case, his system is optimistic, for of 360°, only seventy need be feared. The empty degrees of Firmicus, just as redoubtable, are more than twice as numerous, that is, number more than 140.

In the end, it may be Manilius who best follows the true tradition. The division of good parts and bad, bright and dim, full and empty, sowed accidents and holes throughout the zodiac like the “wells” of the goose game. They came into being independent of the system of the decans,⁵¹⁰ which would not have been called “decans” if they had not each occupied 10° of arc. The mixture of empty places with decans is one of those dozens of inventions produced by the dreamers who hid behind the convenient names of Nechepso and Petosiris. What survived the disdain of Ptolemy was the organization of the decans, with or without planetary “masks” (πρόσωπα). These were the warrior decans, masters of the parts of the human body as well as of the plant and mineral pharmacopeia. We will have many opportunities to discover these partners of the signs of the zodiac in their diverse roles, at once older and younger than the signs.⁵¹¹ For the moment, we will look back at the planetary domains. These are traditions which the Mesopotamians, the Persians, the Arabs, and the Indians persisted in assimilating with the decans. Let us seek to get an idea of their relative values.

PAPYRUS LXXV ET CLXX Greek Papy.	PHARMACUS (et variantes) [Seslignu]	PARTAS Parsia	PLANETES (planetas)	HERMES TRISMÉGISTE (et variantes) [Summe]	HERMES TRISMÉGISTE (et variantes) [Summe]
* Kpov... (Υ)	Senator	V	♂	1	Αστυς
+ Kpov... (Υ)	Sanacher	IV	♂	2	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	3	Σελς
* Kpov... (Υ)	Senacher	IV	♂	4	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	5	Σελς
* Kpov... (Υ)	Senacher	IV	♂	6	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	7	Σελς
* Kpov... (Υ)	Senacher	IV	♂	8	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	9	Σελς
* Kpov... (Υ)	Senacher	IV	♂	10	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	11	Σελς
* Kpov... (Υ)	Senacher	IV	♂	12	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	13	Σελς
* Kpov... (Υ)	Senacher	IV	♂	14	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	15	Σελς
* Kpov... (Υ)	Senacher	IV	♂	16	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	17	Σελς
* Kpov... (Υ)	Senacher	IV	♂	18	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	19	Σελς
* Kpov... (Υ)	Senacher	IV	♂	20	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	21	Σελς
* Kpov... (Υ)	Senacher	IV	♂	22	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	23	Σελς
* Kpov... (Υ)	Senacher	IV	♂	24	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	25	Σελς
* Kpov... (Υ)	Senacher	IV	♂	26	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	27	Σελς
* Kpov... (Υ)	Senacher	IV	♂	28	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	29	Σελς
* Kpov... (Υ)	Senacher	IV	♂	30	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	31	Σελς
* Kpov... (Υ)	Senacher	IV	♂	32	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	33	Σελς
* Kpov... (Υ)	Senacher	IV	♂	34	Κουαφς
* Kpov... (Υ)	Senacher	IV	♂	35	Σελς
* Kpov... (Υ)	Senacher	IV	♂	36	Κουαφς

* Désigne les documents du papyrus LXXV. — * Désigne les documents du papyrus LXXV.

* Nous soulignons, propres à l'époque gréco-romaine (Brugach, p. 184).

† Désigne les docans du papyrus CXX. — * Désigne les écoréons du papyrus XCVIII.

It is here that history ought to intervene. However, it is not possible to introduce a chronology of some sort into this mass of confused and antedated systems, all of them uniformly guaranteed by the ancient Egyptians and Mesopotamians. It is likely that the most summary system, that of the οἶκοι, which take the signs as a whole, is the most ancient. The form called “Babylonian,” which allowed only one domicile for each planet (above, p. ???), is probably especially ancient. It seems that the Babylonian domiciles became the ὑψώματα when the Egyptians redistributed them after their own fashion and doubled the number of domiciles. The classification of ὑψώματα had a greater chance of being chosen, because of its pretensions to greater precision than that of the οἶκοι. It noted the precise degree of the “exaltation.”

However, the system of triplicities, which mixed the two preceding ones with the high considerations called scientific, and was also hard to understand, would have carried away the palm. However, it was contemporary with a system which absorbed it and which had the advantage of being perfectly unintelligible. This was the ὅρια, the terms, an “Egyptian” invention, the success of which was such that – as we have seen – the “Chaldaean” tried their own counterfeit.⁵¹² In the presence of all these masterpieces, the astrologers hesitated to give one pre-eminence, and they never established an orthodox hierarchy. In general, they avoided even posing the question.

Meanwhile, Ptolemy seems to have posed this question about the comparative titles of different planets to be oecodespots or masters of a given birth chart.⁵¹³ He resolved it as best as he could, as a geometer who had perfected the system of the triplicities and who found fault with the ὅρια. In his list, he gave the triplicity the first place and the ὅρια the last.⁵¹⁴ However, he did not say that this list might be a classification, perhaps from a desire not to contradict tradition in an obvious fashion. For, in rectifying the Egyptian ὅρια, he had meant that the masters of the ὑψώματα must go before those of the triplicities. Likewise, he wanted these latter before of the masters of the domiciles.⁵¹⁵ Reason supported the cause. Hephaestion corrected Ptolemy without saying so. He classed the titles of oecodespotia in an order which we may call historic (οἴκου, ὑψώματος, τριγώνου, ὀρίων, φάσεως πρὸς τὸν ἥλιον).⁵¹⁶ Otherwise⁵¹⁷ he lists the titles of the planets to “thrones” in a completely different order (οἴκῳ, ὀρίῳ, τριγώνῳ, ανατολῇ, ὑψώματι). Either he does not have a system, or he changes it depending on the circumstances. Paul of Alexandria does not do more, for he gives two pages of two discordant series of distances (τρίγωνον, οἶκος, ὑψώμα, ὀρια, and ὀρια, ὑψώμα, τρίγωνον, οἶκος).⁵¹⁸ Consulting Firmicus is not the way to escape this embarrassment. Firmicus goes into ecstasies over each association as he comes to them, and he always has the air of placing the one he is speaking of above the preceding ones. In their domiciles, the planets have authority (*imperium*). However, “they rejoice in their exaltations and give signs of the greatest happiness,” and, if a planet finds itself in its ὀρια, it is still “as if in its proper domicile.” On the other hand, a planet in its decan is “as if it were in its own domicile.” Moreover, Firmicus cannot speak against those who “think to find the whole substance of a chart” is in another sort of casual domicile called a “dodecatemorion.”⁵¹⁹ Since there is not a triplicity for this, he feels little enthusiasm, embroiled as he is with geometry. He says nothing bad about it. He passes over the subject in silence. If one wants a hint of a suspicion of a system, his preference would be, first, for the ὑψώμα, next for the ὀρια.⁵²⁰

In the end, there was no fixed hierarchy of planetary fiefs. The astrologers invented them successively in order always to have a large choice of influences on any given point. They did not mean to restrain, by these unwieldy rules, the facilities which they accorded.⁵²¹ Moreover, these rules were not formulated by a congress of astrologers. One may notice, too, that, in juxtaposing the different forms of the planetary domains, they neglected to create separate names for the possessors (δεσποταί – κύριοι). They used the word οἰκοδεσπότης, master of the house, for all of them. It was a word which was open to other interpretations, making it the most banal and least precise term in the astrological vocabulary.⁵²² They have found, on the contrary, many words to express the relationships of position among the planets themselves. They have also found the sentiments, so to speak, which excite these relationships in them, sentiments which include their joy and pride in being proprietors.

Chapter Eight

Relationships from Positions Between the Planets

We will not look any longer at the rights assigned permanently to the planets over the various parts of the zodiac. Instead, we will consider the relationships of relative positions, incidental and transitory, which they create by their own movements. Since each planet has its own speed and its own orbit, these relationships were constantly changing. Moreover, they were so numerous that the astrologers could not avoid the temptation to use them.

In general these relationships assume the planets are genuinely in the indicated positions. An aspect can take the places of the planets. The effects are caused by real emotions and deeds, not just mechanically being in a position. We are dealing with a complete anthropomorphic view of the planets. If we eliminated psychological motives we could eliminate the chapter. At least we can simplify things by leaving out all the extra considerations whose effects are caused by emotions already existing in the positions. We will concentrate on the aspects and the phases. They are basic relationships which enter into all the combinations.

The relationships in which position was only a secondary cause came almost entirely from the theory of the planetary domains.⁵²³ We will keep several examples, those which have found a place in the *Tetrabiblos*. They will form a transition between this chapter and the preceding one. We have thus two categories of positions. There are positions which only coincide with certain points or pre-determined domains, and those which are possible anywhere in the zodiac.

I. Ptolemy only mentions three examples in the first category, and then only very briefly. These are relationships of position which communicate qualities or dignities comparable to honorific titles to the planets. They are defined by bizarre names, such as “proper figures” (ἰδιοπρόσωπα), “bright coaches” (λαμπῆναι) and “thrones” (θρόνοι).

1) One said that a planet was in “proper figure” when it was actually with the Sun or the Moon in the same positional relationship as its proper domicile was with the domiciles of these two luminaries. Venus is an example, when it is in sextile aspect with the luminaries, but is “vesperal” relative to the sun and “matinal” relative to the Moon, and conforming to the original domiciles.⁵²⁴

The oracle of astrology did not always deign to be clear, and the scholiast, under the pretext of making his thought more precise, obscured it. According to Ptolemy, it is necessary and sufficient that Venus be in sextile aspect – separated by an angle of 60° – with the Sun or even the Moon, to be ἰδιοπρόσωπος. However, if it were in aspect with the Sun, it must be to the Sun’s left, as if its domicile, Libra, were in relationship with the domicile of the Sun (Leo). If in aspect with the Moon, it must be placed to the Moon’s right, as if its domicile, Taurus, were in relationship to the domicile of the Moon, Cancer.⁵²⁵ However, the scholiast did not agree. He followed the opinion of the majority (οἱ πολλοί), and they required two more conditions. First that the planet called ἰδιοπρόσωπος must be in its own domicile. Second, that it be in definite aspect as above, not with Sun or Moon, but with both, Sun and Moon.⁵²⁶ Moreover, it must be “vesperal” in relation to the Sun and “matinal” relative to the Moon. Posed in this way, the question does not often lead to a solution for either planet. This sort of combination must be rather rare. In the example given, Venus must be in its domicile, Taurus, while the Sun is in Pisces and the Moon is in its own domicile, Cancer. However it was calculated, the word ἰδιοπρόσωπία (*visio facialis*) remained unexplained. What is it about a planet in this position which makes it a figure, a face, a “true” personage? Would it be proper to squint under a certain angle to look at the two luminaries at once? It was very likely an equivocal desire on Ptolemy’s part, an episode in the war which he waged, silently, against decans and incorporeal divine entities, which had no place in his physics. One concedes readily that a planet would qualify as ἰδιοπρόσωπος when it is in its own decan without any other relationship. Ptolemy, who ignores the partisan bias of the decans, substituted for this condition a simple mixture of geometrical relationships. He knew this would disconcert his “Egyptian” rivals. His followers have perhaps made it even more complicated. This done, he kept, without scruple, the sort of influence proper to the decans for ἰδιοπρόσωποι, action upon the psychic faculties.⁵²⁷ Ptolemy did not find the baroque terms λαμπῆναι and θρόνοι more to his taste.⁵²⁸ Not daring to suppress them, he wanted at least to invent synonyms. They were applied to those planets which had two or more of the motifs in which they gloried. That is, when they found themselves in

domains to which many titles belonged, such as domicile, exaltation, triplicity, ὅρια and other similar investitures, they were called λαμπήναι or θρόνοι. The scholiast ⁵²⁹ takes pains to re-establish the distinction which “the Elder” passed over in silence. He explains to us that the dignity of the “brilliant seat” is higher than that of “throne.” These metaphorical names were affected by the etiquette due to magistrates, and the λαμπήνη is an elevated seat, of silver. The θρόνος is a seat of wood and less high. Porphyry accepted that they were synonyms, and speaks only of the λαμπήναι. He added that the planets so honored have an exceptional power and keep it even in occidental phase or when lost in the rays of the Sun.⁵³⁰

It is likely that these designations come from Petosiris, that is, from an Alexandrian. Perhaps he remembered the “thrones” upon which Plato sat his three Fates and substituted this majestic seat for a boat, the usual vehicle for Egyptian gods and decans.⁵³¹

We now pass on to relationships which are exclusively planetary. They were always measured upon the circle of the zodiac, but without necessary connection to the sign which they occupy. We are entering the race-track of the planets, where the fastest of all, the Moon, is the principle object of attention. There was ample provision of terms for noting the incidents of this silent sport, where Pythagorean music disappears. We need not count on the astrologers to introduce some order into the abundant nomenclature which confronts us. Of all these terms, Ptolemy retained only two – the συναφαί and the ἀπόρροια. Those which he disdained as unsupported by scientific explanation remain in a confused state.⁵³² Lesser astrologers considered isolated cases and did not care about the associations of ideas which connected them. We will begin with the simplest case, the conjunction of two planets.

Συναφή [Κόλλησις] (*contactus* or *conjunctio* – *adplicatio* – *glutinatio* – and ἀπόρροια – *defluxio*). [separation] ⁵³³ There was a “contact” (συναφή) between two planets who found themselves upon the same meridian. The lovers of distinctions reserved the name “collage” or “gluing together” (κόλλησις) for the imminent contact. A separation of 3° between two planets was allowed, the faster being in rear. If the faster planet is the Moon, some astrologers increased the separation to 13°, the distance the Moon traveled in one day.⁵³⁴

The moment of contact or conjunction was followed by the separation (ἀπόρροια), which began just after the astrological contact, 3° to the East.⁵³⁵

Approach or “collage,” conjunction and separation are successive periods in one event of high astrological importance, the meeting of two planets. When one of the two is the Sun, the encounter always leads to a sad crisis for the other planet. It means destruction and rebirth for the Moon, paralysis and “burning” for the other vassals of the Sun.⁵³⁶ Sometimes the crisis extended to the Sun itself. The Moon would pass in front of the Sun and it would fall into a “faint” (ἔκλειψις or eclipse). However, in this celestial marriage, the Moon gained energy. Moreover, in a general way, the planets exchanged their qualities, good or bad, in their encounters. Also, one must take care to note not only the intrinsic effect of such a meeting but its repercussions upon the effects of a following encounter with other planets. The Moon, for example, visited its six colleagues each month. The Moon, when approaching a planet, was not indifferent towards the one it had left. It brought to the new “contact” a certain mood or disposition retained from the preceding separation. Finally, we ought to consider the case where one planet is, at the same time, in direct contact with a second planet and separating from a third.

All this was not complicated enough for the astrologers looking for reasons and especially for excuses. They extended the field of contacts and separations to 30°, the space of a sign. However, they did not require that the planets be in the same sign each time, which would have decreased the number of instances. In this field of 30°, they distinguished between nearer and farther contacts and separations. As a consequence, they distinguished between more or less energetic influences. The greater or lesser amounts of energy indicated a more or less long delay before the prediction came to pass. This last consideration, associated with the theory of the four “ages” of life, made them establish four categories. They were contacts and separations at 3°, 7°, 25° and 30°. This was not enough for them. They replaced the rule of common sense, according to which the meeting of the planets must be real (κατὰ συμπαρουσίαν or σωματικῶς), with another astrological rule. The aspect (σχῆμα) could substitute, or nearly substitute, for the real presence. In consequence, every planet could be replaced by the “rays” which they sent out along the polygonal aspects. This held true in every relationship between the stars, those which we see and those which remain unseen.⁵³⁷ The number of instances was already large, using only real presence. It was multiplied by the number of the aspects, doubled,

when there was room, by the distinction between right and left. Finally, to fill the measure, some astrologers looked at contacts and separations of the Moon with the ὅρια of planets. At the same time, they also recommended one study the aspect of the planet whose domain was occupied by the Moon.⁵³⁸ These are not negligible things. Paul of Alexandria and his scholiast declare that one could predict nothing without looking at the conjunctions and the separations of the Moon. It did not matter whether with horoscopy or whether with καταρχαί (elections), which worked upon the body, the soul, or both.⁵³⁹ This refrain closed every astrological formula.

The saying that all tropes are variants of the metaphor applies as well in astrology. All relationships between the planets derive from conjunction and separation. When there was a conjunction between a planet and several others at the same time, one said that there was a “competition” (ἐπισυναγωγή),⁵⁴⁰ and that the principal planet took the energies of the others for itself. If, a planet being in contact with another, this other being in contact with a third, there was a derivation or a channelization of (μετοχέτευσις) – *translatio virtutis*.⁵⁴¹ The conduit thus formed caused the properties of the preceding planet to pass to the following. When two planets, before, during, or after “approach, by real presence or by aspect,” are in the same segment of the ὅρια, one may say that they have common borders or are in contiguity (ὁμορώσις – *confinium*).⁵⁴²

2) Ἀκτινοβολία (*emissio radiorum*)⁵⁴³ “Shooting out rays” is a completely natural, hardly metaphorical, expression to apply to the stars. The comparison of the ray to an arrow or projectile of some sort is taken for granted. Once this is done, the imagination assumes the action of the ray is mechanical and hostile. The ray could also be assimilated to a look or a glance. This was the idea which prevailed among the Latin-speaking astrologers. The geometric figure which the Greek called σχήματα or σχηματισμοί, Latins called an aspect or *adspectus*. In this case, the action of the glance is not thought of as mechanical, but as a sensible impression. It is agreed, moreover, that, ray or glance, the astral influence does not count unless it follows one of the polygonal aspects. If the astrologers had not refined this, there would be no need for a special paragraph on the ἀκτινοβολία. They remained the unique, universal, and necessary mode of communication among the stars. However, the anthropomorphism which sleeps at the foundation of “mathematics” did not leave the theory at this degree of simplicity. Not only did the astrologers introduce the purely subjective distinction between right and left into the aspects. Wishing to use them to distinguish the effects, they pushed them to an extreme. The two metaphors, originally equivalent and interchangeable, of “ray” and “glance,” became opposites.

Therefore, according to this doctrine, the planets walk to the encounter in the daily direction, that is, from right to left or counterclockwise. They “glance” ahead, over the planets which precede them, and shooting their rays behind, at the following planets. For those who would enter into these infantile comparisons, the glance in front, in the sense of a walk, is a natural thing. The same is not true for the ray shooting to the rear. Were our theorists artists who see, floating behind in the wake, the tails of the planets? Were they strategists who had to speak of the classical Parthian shot?⁵⁴⁴ The glance to the front was enough to explain everything. However, because people wanted an antithesis, the planet had to send a ray to the rear.

Imagination worked to calm these arms bearers. Meticulous souls protested against rough estimates by signs (ζωδιακῶς – *platices*) and would not admit precise shooting or a glance adjusted to the degree (μοιρικῶς). Others thought that shooting of rays to the rear assumed a hostile intention, and that, assuming a trine aspect, it took from that aspect its universally favorable character. In consequence, there could be “actinobolia” only in an unfavorable aspect, such as the square or the diameter. In these conditions, the shooting of a malefic planet was to be feared. In square aspect, Thrasyllus said, it was a killer. For the diameter, there is one difficulty. The planet in diametric opposition with another is neither ahead nor behind it they are face-to-face. Therefore, it neither glances nor shoots, which is an absurdity, in view of the energy of the diametrical aspect. Otherwise, it glances and shoots and the same time, and the effect of the glance tempers that of the ray.⁵⁴⁵ This is why, I suppose, the shot along the square aspect is especially unlucky, more than the diametrical shot. It is probably how the innovators put the classic psychology of the aspects into disarray.⁵⁴⁶

The argumentative had plenty of material for reflection. When a planet turns retrograde, does it walk backwards? Or does it turn around, so that the glance becomes the ray and vice versa? If it goes backwards without turning, is its speed added to that of the ray, which thus becomes even more dangerous, while the planet itself becomes weaker? Does this explain why the planets moving in front

are favorable, their speed sustained by that of their rays. Does it explain why their shots are more sure in station? The theory of actinobolia touches on everything. Nearly everything touches and confuses everything else in astrology, randomly weakening or strengthening earlier dogmas.

But let us return to questions of sentiment, ballistics apart. What reason is there to imagine this offensive shot? Could it be that the planet which shoots the other is jealous of the other's superiority? It is superior, considering that it is the general rule of astrological etiquette that the right is preeminent over the left. The right precedes the left in the sense of the daily rotation of the universe, coming from the Prime Mover. This preeminence (καθυπερτέρησις - *supereminentia* - *elevatio*) was not just words. For the people of the Late Empire, each superior planet extracted a tithe (ἐπιδεκατεύει) from its inferior, since the two are in square, that is, hostile, aspect. Thus a planet in Aries gets a tithe from a planet in Cancer, the planet in Cancer gets a tithe from the planet in Libra and so on around the circle. It was used for predictions about the chances which the astrologers' clients had to enrich themselves.⁵⁴⁷

Achinobolia or offensive radiation, as distinct from favorable or indifferent radiation must have been invented mainly to predict someone's death. This took place when the planets or vital positions were speared by the darts of the "anaeretic" or "sniper" planets. Otherwise, the distinction was not always maintained, neither in practice nor in words. It was too artificial a distinction to stop an ordinary astrologer from saying bluntly that one planet "saw the rays" of another, rather than using very technical language.⁵⁴⁸ There is hardly any question of the arrangements which we have already considered, although founded upon the same ideas of superiority, of attack and defense.

3) Περισχέσις – ἐμπερισχέσις (*detentio* – *obsidio*).⁵⁴⁹ – We now will look at astrological siege warfare. A planet may be blockaded or besieged in two ways

a. By a single planet (περισχέσις), when it throws its rays into neighboring signs, to the left and right. For example, the Moon in Virgo and Mars in Aries. The Moon is blockaded by the rays of Mars which fall into Libra, in diametrical aspect. It is also blockaded by the one which falls in Leo, along the trine aspect.⁵⁵⁰ Thus the Moon is paralyzed, delivered to the influence of Mars. Woe to the new-born children if some beneficent planet in a favorable aspect does not come to their rescue!

b. By two planets (ἐμπερισχέσις) which have a planet besieged between them. Or by planets who shoot out their rays to the left and right of it for a distance of at least 7°. This was the strictest blockade. It could be dangerous or happy, depending on the nature of the two besieging planets and that of the besieged planet. It was nearly always the Moon.

But in every case⁵⁵¹ there is no blockade if a third ray comes between the two besieging rays. This intercession (μεσεμβολήσις – παρεμβολήσις – *interceptio* – *intercalation*)⁵⁵² may still serve to impede communication between two planets placed at a short distance. Here there must be precise measures. For example, let the Moon be at 10° of Leo and Mars at 25° of Leo. If Jupiter is simultaneously at 12° of Aries, the ray which shoots along the trine aspect strikes Leo at 12°. It intercepts momentarily the reciprocal action of the two planets reunited in the same sign. Communication is re-established between the two planets in about two hours, the time which it takes the Moon to reach a point seen by Jupiter.

4) Δορυφορία [doryphoria] (*comitatus*).⁵⁵³ When surrounded by an honorific retinue, the relationship of sentiment is reversed. The besiegers are changed into satellites (δορυφόροι), members of an entourage. However, the etiquette of retinues is more complicated than that of sieges. One feels that the astrologers must have been inspired by Byzantine ceremonial. There are three ways for a planet to become part of a retinue.

a. When two planets are each in their own domiciles or exaltations, the one in which a "center" is found (ἐπικέντρος) and which is in front in the sense of daily motion, has the other as a satellite. Both must be in a definite aspect. For example, by virtue of domicile, the Sun in Leo has Saturn for satellite, if Saturn is in Aquarius, in diametrical aspect. The Sun in Leo has Jupiter for satellite, if Jupiter is in Sagittarius, in trine aspect. Likewise, Jupiter in Cancer has for Mars satellite, by virtue of an exaltation, Mars in Capricorn. This first system appears to be a particular case of καθυπερτέρησις with actinobolia, supercharged with the new conditions about the "centers" and the planetary domains.⁵⁵⁴

b. The second model of *doryphoria* applies only to the two luminaries, the Sun and the Moon, leaders of the two sects, day and night. Suppose the Sun or the Moon is on the Ascendant or the Midheaven (the two "important" centers). Even without being in its own house, all the planets of its own sect (τῆς αἰρέσεως) which see it along a defined aspect are its satellites. There is one difference. The satellites of the Sun glance ahead, that is, in this case, in the sense of the daily motion. Those of

the Moon glance behind, that is, in this case, in the direction of its proper movement, the direction in which they themselves are moving. Thus, the Sun walks behind its satellites, the Moon in front of them.

c. Finally, there is yet a third sort of *doryphoria*, which is an extension of the preceding, with changes to the profit of planets other than the luminaries. Every planet which is at the Ascendant or in culmination has for satellites the planets which precede or follow it most closely. They must be of the same sect as the birth chart. Thus, in the case of a daytime birth chart, it is the diurnal planets which are in the entourage. It is the nocturnal planets in a nocturnal birth chart. The accord is perfect when the planet thus surrounded is of the same sect as its satellites.⁵⁵⁵ In this egalitarian system, the luminaries themselves may descend to the condition of satellites.

As far as I can judge, *doryphoria* began with a group of planets all physically within a short distance of one another, the space of one sign. The satellites followed, in the direction of daily movement, the honored superior (καθυπερτέρησις) planet. Then came the rationalists and the abstractors of the quintessences. Assuming the satellites were like ushers or lictors, they became a reflection of the honor guard which precedes a magistrate. The consular etiquette required that one set of lictors go first and the second bring up the rear.⁵⁵⁶ However, it was impossible to be sure what *ahead* and *behind* meant. There were two movements in opposite directions. *Ahead* could mean in front of the Sun in the direction of its daily motion. Likewise, it could mean in front of the Sun in the direction of its motion through the ecliptic, which was opposite to the first. Of course, the same was true for the Moon. The inevitable substitution of the aspects for real presence brought actinobolia into play, in proper and improper senses of the word. Due to the great distance, across a circle, the distinction between right and left, between ahead and behind, has become problematic.⁵⁵⁷ It produced new confusion which, with the help of the commentators, has made the whole thing into an unintelligible chaos.

We have finally exhausted the list of hostilities and courtesies customary in the sky. The courtesies must go – we have seen – back to disinterested charity⁵⁵⁸ However, the casuistry of the conflicts is much more ample than the code of sympathetic hospitality.

The planets counteract and help one another when the day planets occupy the domiciles or the exaltations of the night planets, and vice versa. They also do so when there is an antagonism of character – and not just of αἵρεσις, sect – between a benefic planet which is lodged in the home of a malefic one, or vice versa. One says then that there is an ἀντίναυσις (*resolutio*) or annulment of prediction. In particular, one calls the state of a beneficent planet tied up or besieged or struck or lodged by a malefic planet “affliction” (κάκωσις).

Astrological pessimism was more demanding than that of the philosophers. It did not even admit that the absence of evil was a good thing, at least for the feminine sex, excellently represented by the Moon. Suppose the Moon was neither in contact, nor in separation, nor in aspect of any sort with any other planet, nor on the point of a short delay (for a space of 30°). The astrologers said that it was “void of course” (κενοδρομία – *per vacuum cursus*). Its action was then indifferent and ineffective according to some, detestable according to others.⁵⁵⁹ One would like to know if the unknown psychologist, the author of this nice invention, dreamed of abandoned coquettes or older girls.

Finally, the astrologers still noted – to annoy, no doubt – the smallest difference of position (παραλλαγή) able to alter the regularity of the aspects. One may cite as an example the position of the Sun at 15° Aries and that of Saturn at 20° Libra. The one had not quite reached the exact point of diametrical opposition, the other had paused at it.⁵⁶⁰ This scruple leads us well beyond early astrology, which relied upon rough estimates. We come to more delicate methods, dreaming rather of those used to calculate the Ascendant.

Chapter Nine

The Zodiac Considered as Circle of Birth

We may study of the fixed properties of the zodiac or the intrinsic qualities of the signs, the moving influences of the planets and their combinations. However, this ought not to make us forget that this great rotating machine, this wheel of Destiny, must be questioned at a certain time. This moment the astrologers sought to make as short as possible. It was in order to make it possible to introduce noticeable differences among the predictions for nearly simultaneous births, such as those of twins. Sometimes they wanted rather large differences for twins. To respond to this famous objection, endlessly repeated by all their adversaries, they compared the celestial sphere to a spinning potter's wheel. One could not touch the same spot twice, no matter how quickly one's finger moved.⁵⁶¹ They wanted to create an image of the heavens at an indivisible moment, what our modern photographers call a "snapshot." This image or chart, limited to the band of the zodiac, is the "theme of geniture" or birth chart (Θέμα or διάθεμα τῆς γενέσεως – *constellatio*), what in modern English is called a "horoscope". [Natal chart]

I The Cycle of the Places or Houses

A. The Centers. [Angles] – The fateful moment which the astrologer sought is represented upon the zodiacal circle by the point which emerges from below the Eastern horizon. It is called, for that reason, the "indicator of the moment" or Ascendant (ῥοσόκπος – *ascendens*). In modern English it is the Ascendant or the Rising Sign.⁵⁶³ From this point, we begin subdividing the circle of geniture.⁵⁶⁴ [dividing the chart]. The circle is the zodiac itself, but split-up into twelve independent compartments superimposed upon the signs. It communicates to each of its compartments (τόποι – *loci*) [houses] specific properties. These may be combined after the fact with those of the neighboring signs,⁵⁶⁵ but were originally independent. The signs have their places, permanently fixed, while the compartments of the circle, beginning with the Ascendant, move with it relative to the signs, for each geniture. On the other hand, while mobile relative to the divisions of the zodiac, the natal chart is fixed relative to the Earth. It is a motionless framework inside which the zodiac and the whole cosmic machine turns.

It is evident that the ancient astrologers, those who had not yet quarreled with the debunkers, sought a star at the horizon, either a fixed star or a planet. It was born, so to speak, at the same time as the infant whose destiny they were trying to predict. The planets were too few to furnish enough Ascendants,⁵⁶⁶ so that it was, above all, from the clock-face of the zodiac that one demanded "the hour" (ῥα)⁵⁶⁷ One was content to note the whole zodiacal sign which rose above the horizon. From this comes phrases like "born under a bad sign."⁵⁶⁸ When this rough estimate was no longer enough, it was necessary to look more closely. One could go to the degree of the circle and even to subdivisions of the degree. The limit to this was not due to necessity but to the imperfect means of observation.⁵⁶⁹ However, the "Ascendant degree" obtained in this way no longer corresponded to any given star or planet. It became an entity in itself, an abstraction which the astrologers were forced to treat as a real star. They repeated constantly that the geometric combinations imagined for the stars applied equally to the pivots or "hinges" called "centers" (κέντρα – γονίαι – *cardines* – *anguli*) [Angles] calculated from this starting point.⁵⁷⁰

The Angles of the birth chart are as follows, in the order of the direction of daily motion. First, the Ascendant or Rising Sign (ῥοσόκπος – ἀνατωλῆ – *ortus* – *pars horoscopi*). Next, the superior culmination or Midheaven (μεσουράνημα – *medium caelum*, abbreviated MC); third, the Descendant (δύσις – δύνων – διάμετρον δυτικόν – *occusus*). Fourth, the inferior culmination or Lower Midheaven (ὑπόγειον – μεσουράνημα ὑπὸ γῆν – ἀντιμεσουράνημα – *imum caelum*, abbreviated IC). They are determined by the intersection of the planes of the zodiac, of the horizon and of the meridian.⁵⁷¹

Before explaining the power of the angles and the specific qualities of the twelve compartments or "places" (τόποι – *loci* [houses]), it is necessary to make an excursion into the domain of geometry, a domain common to astronomers and astrologers. We do so in order to pose the problem which tormented those astrologers able to understand it. It served, more than anything else, to discredit the

street-corner practitioners to the profit of the true mathematicians. This was the problem of the ascensions (ἀναφοραὶ) of the signs of the zodiac, the solution of which determined the positions of the angles and of the places relative to the signs of the zodiac.

The first astrologers (and those later ones who remained at the same level of instruction) thought the zodiac was like a circle. It could be divided into four equal quadrants from the positions of the Ascendant and the Occident (or their points of intersection with the horizon), and the positions of the superior and inferior culminations (or their points of intersection of the meridian).⁵⁷² At the same time, they perceived – and this is where they needed to begin – that certain signs of the zodiac rise much more quickly above the horizon than others do, and descend, on the other hand, more slowly than the other side. This was an important phenomenon. The length of life (a grave subject, if you will) was based upon the size of the arcs of the zodiacal circle expressed in time. In other words, it depended upon the angular speed with which the different parts of the zodiac turn via the effect of the daily motion. The positions of the angles were calculated falsely, and with them the distribution of the places, if one persisted in believing that the horizon and the meridian always divided the zodiac into four equal parts.

We can say nothing about the ancient Mesopotamians, not even whether they may have learned geometry from the Greeks.⁵⁷³ However, it is certain that the Egyptians, after, as well as before, their contact with the Hellenes, absolutely refused to accept the ἀναφοραὶ. We have seen above (p. ??) how some assumed that they had divided the zodiac into equal arcs of 30°. The writers we are studying did not dream of protesting this. Long after Euclid considered the question, the Greek Egyptian author of *The Art of Eudoxus* or *The Didascalia of Leptinus*.⁵⁷⁴ gave the formula, which he believed infallible. “At the setting of the Sun, allow the water of a clepsydra to fall into a vase, just as the stars rise.” According to our author, this is roughly one of our twentieth century hours, or the rising of half a sign. “Immediately after the stars have risen, allow all the clepsydra water to flow. In the same fashion, the water will finish the entire sign.”⁵⁷⁵ It is not even certain that the famous Petosiris took the ἀναφοραὶ into account.⁵⁷⁶ In any case, it was one of the most obscure teachings, and with good reason. Firmicus, who cites Nechepso so often, never brings the subject up. Speaking of the placement of the compartments of the birth chart, he took pains to note that the angles are 90° from one another. The first house extended from the first to the thirtieth degree and the second, from 30° to 60°. The third reached to the inferior culmination at 90°, and so on. That was meant to “clear-up obscurity” and prevent all confusion.⁵⁷⁷ He has, of course, spoken of the ἀναφοραὶ and of their variation according to the climes. However, our Boeotian imagined that they marked “in which years each sign rises in the charts.” If we must look for sense in this nonsense, here it is. Each individual is born in one of the seven climes. Each year in his life would feel the special influence of a certain sign of the zodiac. Which clime he was born in would determine which sign would influence which year. It is to “clarify” once more this obscure nook that he set up another list of ἀναφοραὶ.⁵⁷⁸ Firmicus makes much of the famous “*thema mundi*” or birth chart of the universe, ordained by the “Egyptians.” It proves decisively the ignorance of these legislators of astrology. In placing the Ascendant in the middle of Cancer, they have not failed to place the upper culmination in Aries.⁵⁷⁹ Finally, Firmicus protests in his fashion (without knowing it, probably) against the people who deranged, at every turn, the position of the centers. They reveal a secret which Petosiris himself kept, according to Firmicus. This secret consists simply of placing the inferior conjunction 90° from the Ascendant. There it piles up “the whole secret of life.”⁵⁸⁰

That is evidence enough to show that the “Egyptians” did not know the obliquity of the zodiac. They were used to putting their own zodiac, the circle of the decans, around the equator. They did not discover for themselves, nor accept from the Greeks, with all its consequences, the obliquity of the ecliptic.

The difficulty of the problem of the ἀναφοραὶ is this. The signs of the zodiac rise above the horizon and descend below it more or less obliquely, at an angle. Their angular momentum is measured along a limb of the great cosmic wheel, the equator, the plane of which is perpendicular to the axis of rotation. It is necessary to convert the degrees of oblique ascension (along the zodiac) to degrees of right ascension (along the equator). The obliquity of the zodiac relative to the equator is a fixed element of the problem. However, there is another variable element, the latitude of the place of observation. This is the angle between the plane of the place of observation, the plane of the equator, and the plane of the zodiac. This last variable element is the reason why, once all the calculations

have been made for one “clime” (zone of latitude), it is necessary to start over again for another clime.

The question, of capital importance to the astrologers, also interested the astronomers. They also marked the degrees of longitude along the ecliptic.⁵⁸¹ They were obliged by this to establish the correspondence between the degrees of longitude and the degrees of right ascension marked along the equator, the face of the cosmic clock. The most learned geometers in Greece sought better methods of calculation. We still possess, from the mathematician Hypsicles,⁵⁸² who lived about fifty years before Hipparchus, a small work on the subject. Hipparchus reprised the subject in a work, equally technical, which Pappus cited.⁵⁸³ Ptolemy rectified the proposed solutions by using methods which lead to trigonometry, the only way to furnish formulas that were at once exact and convenient. The divergences which the scholiasts record between the tables drawn up by the older and the newer astrologers, Apollinarus, Thrasyllus, Petosiris, Ptolemy,⁵⁸⁴ show well that the accord could not be made. The “Egyptians,” who began by ignoring the ἀναφοραί, did not want to abandon the tables of Hypsicles. They ended up circulating under the name of Petosiris, at least for the clime of Alexandria. Even the authority of Ptolemy was not able to reason with their stubbornness. Two centuries after Ptolemy, Paul of Alexandria drew up yet another manual of astrology for his son, Kronammon. He had the goal of countering the traditional errors and to promote, among other corrections, “the ἀναφοραί according to Ptolemy.”⁵⁸⁵

Fig 30 Rising and setting of Aries

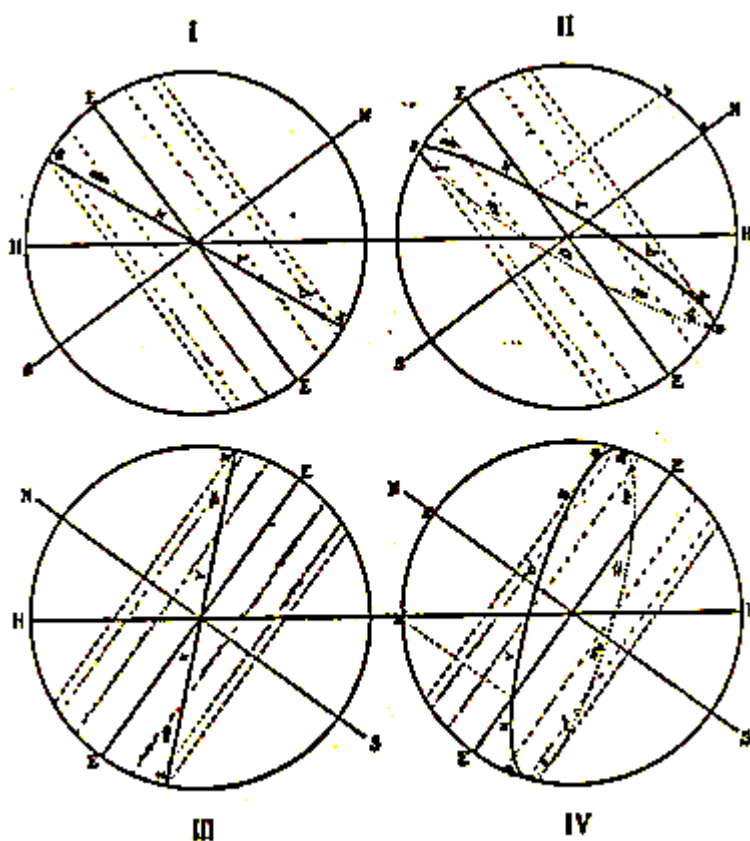


Fig. 29. Le lever (I-II) et le coucher (III-IV) du Bélier.

The observation had been made rather earlier that the most oblique parts of the zodiac are also those which rise the most quickly above the plane of the horizon. At setting, the position is reversed, those which rose most quickly are the ones which set most slowly.⁵⁸⁶ Thus one says that “Aries is the quickest of the signs.”⁵⁸⁷ Consider, to fix ideas upon this point, the following figures [Fig. 30] representing, in four steps, the rising and setting of Aries.⁵⁸⁸ from Aries to Virgo, and the time of descent decreased from Libra to Pisces. They ended by creating, by various empirical methods,⁵⁸⁹ tables calculated for seven “climes” or latitudes. The drawback is that these climes were aligned subjectively. Moreover, in wishing to make them equidistant, one did not know what measure to adopt. Rather, one assumed that they had equal arcs of the meridian.⁵⁹⁰

Let us return to our astrologers, recalcitrant students of the geometers. Manilius does not seem to have sensed the importance of the given variable (hour or latitude) in the calculation. He seems to consider the numbers which he succeeded in versifying, and which he borrowed from an anaphoric table for the clime of Rhodes, to be useable everywhere. This page of mathematics was a veritable grimoire put into hexameters. The proof that it was not very clear to him, is that, after this particular example, he brings in two reprises of the general discussion of the problem, once with the units of time (hours), a second time with the units of arc (stades). However, he did not notice that these two are the

same thing.⁵⁹¹ Finally, after having repeated over all the tones that, without the calculations of the ascensions, “the foundations of the art crumble,” Manilius returned to instinct. He repeated his lesson once more, in the usual way the ignorant signal their stupidity. He tranquilly taught this enormity “in one hour, it does not matter which, the signs rise thrice five degrees.”⁵⁹² Manilius, a mediocre student of Urania, could not traverse mathematics upon the back of Pegasus.

Let us leave the poetic paraphrases which have exercised the learning of the commentators. The system explained by Manilius consisted of instituting an arithmetic progression. Its ratio, furnished by an empirical method, depends on latitude. The latitude is represented by the length of the day on the summer solstice, or by an arc of the equivalent circle. The minimum duration or anaphoric arc was fixed in Aries and the maximum, in Virgo. This meant that one obtained the progression (παραύησις), whether by addition of the ratio (αύξομείωσις), sign to sign, from minimum to maximum, whether by subtraction, from maximum to minimum. Once this series of six signs has settled, it is enough to double an equal series and invert it for the isanaphoric signs to complete the table.⁵⁹³

It is useless to criticize or to revise the different solutions produced by astrologers who are more competent than Manilius, but less interesting to follow. One will find those of Ptolemy in his *Almagest*. There is an abundance of rectified tables following the ancients and the modern in the large books of Junctinus and Petau. It is enough, to give an idea of the real tool kit of the astrologers, to insert here a table of the ἀναφοραί. It is supposedly from Petosiris, calculated for the first and second climes (Alexandria and Rhodes)⁵⁹⁴

Table of Ascents and Descents

ASCENSIONS (ἀναφοραί).					DESCENTES (καταφοραί).				
		1 ^{er} cl.	2 ^e cl.				1 ^{er} cl.	2 ^e cl.	
Ζώδια ὀλιγοανήφορα	Υ	21° 40'	20°	)(	Υ	38° 20'	40°	)(	Ζώδια βραδυκατάφορα
	Ϻ	25°	24°	≡	Ϻ	35°	36°	≡	
	Π	28° 20'	28°	χ	Π	31° 40'	32°	χ	
Ζώδια βραδυανήφορα	Ϟ	31° 40'	32°	↔	Ϟ	28° 20'	28°	↔	Ζώδια ὀλιγοκατάφορα
	Ϡ	35°	36°	π	Ϡ	25°	24°	π	
	πρ	38° 20'	40°	⋈	πρ	21° 40'	20°	⋈	
TOTAL.....		180°	180°			180°	180°		

After all these laborious measurements,⁵⁹⁵ one consequence is that the twelfths of the circle of geniture, or “places” (τόποι) (which we deal with presently) are not equal from one quadrant to another. This is because they are equal fractions of unequal quadrants.⁵⁹⁶ If the astrologers persisted in dividing them into 30°, then these degrees must be unequal from one quadrant to another.

As if there were not enough distinctions and tergiversations, the astrologers did not agree on the fashion of placing the “houses” relative to the angles which they frame. The “Egyptians” did with the places what they did with the signs. They left each center in the middle of the house from which it was derived. The astrologers trained by the astronomers placed the angles in the same way as the solstices and equinoxes, at the beginning of the compartment. However, the beginning of the first degree is in reality a zero, and the partisans of this system had the superstition of the μεσεμβόλημα against them. Ptolemy thought it good to compromise. He placed the center after the fifth degree of the related house, for reasons that commentators admired very much but could not explain.⁵⁹⁷

The angles themselves have a specific energy which they pass on to the signs and the planets⁵⁹⁸ when they find themselves coinciding. In all cases where it is a question of comparing the intensity of a planet's actions, one hears repeated constantly that it is necessary to give a very high

standing to a planet which is upon a center (ἐπίκεντρος) or which is near to one. One got different predictions, of course, depending on whether the planet was to the right or left. The question of hierarchy among the angles was not so easy to resolve. It was a matter of evaluation, variable depending on the particular case or the type of prediction. It even varied according to the idea of which would make a better sovereign, of which gave value to existence. Thus it happened that philosophical considerations penetrated where one expects to find only geometry. To tell the truth, the competition was between the Ascendant and the Midheaven, the other angles being only their partners.⁵⁹⁹ The Ascendant without doubt kept the first place. It was first from the geometric point of view, as serving to determine the others. It was first from the strictly astrological point of view, as giving life, physical life (ζωή) without which there would be nothing to make predictions about. The Midheaven, however, could serve to determine the Ascendant as easily as vice versa. It also had prerogatives which were at least comparable. It represented not mere physical life and childhood. It stood for the joys and ambitions of maturity, fortune, honors, glory, all those things without which life would be no more than the troubles of a living being. The physicists – and we know that Ptolemy thought he was one – found yet other reasons. The ray which the Ascendant threw to earth was oblique and was diluted by the moist fogs at the horizon. The star culminating at the meridian is at its most energetic and can shoot its fiery rays straight down on human heads. To this argument, irrefutable by physics, the partisans of the Ascendant's supremacy opposed an argument valid in physiology and metaphysics. It was that the Ascendant gave the signal for increase, for a rise in life, while the decline began with the culmination. The question remained undecided, Ptolemy holding for the Midheaven and Dorotheus of Sidon maintaining the prerogative of the Ascendant.⁶⁰⁰

The Descendant had a symbolic value which made it the antithesis of the Ascendant, the personification of decline and of death. As for the Lower Midheaven, Ptolemy wanted to eliminate it from all horoscopes and even from all calculations.⁶⁰¹ The “Egyptian” tradition, however, was older than his revisions and superior in authority. It kept a place and a specific role in the birth chart for the Lower Midheaven. The theory of houses, as we will see further on, embraced the entire circle. If the circle had not served as the seat of predictions about individual destinies (in horoscopy), the astrologers would still have felt the need to determine the orientation of the two angles situated upon the meridian. However, they were also used in meteorological and “catholic” predictions. Therefore, since each was connected with different earthly regions, it was necessary to calculate their positions precisely. They decided that the Midheaven corresponded to the South and consequently, the Lower Midheaven corresponded to the North.⁶⁰² There was no lack of reasons. They needed only to invoke geometry. They said that, looking at the inclination of the sphere, the Midheaven is obviously to the South, relative to the vertical. Besides this reason, sufficient in itself, doubtless, there was also a vulgar idea drawn from common sense. The stars, once they have set in the West, returned to the East via the North. “To the North” and “beneath the Earth” were, for the course of the planets, identical steps. The scholiast to Ptolemy would have done well to have contented himself with admiring “the very elegant and useful harmony” which united the cardinal points of the zodiac to those of the horizon in this way. He should not have made Ptolemy say that the northern winds (according to the theory mentioned above) blew beneath the earth (ἀπὸ τοῦ ὑπογείου).

The Centres (or cardines) [Cardinal signs] give energy and speed to the stars which they point out. After the Cardinals, come the four compartments called ἐπαναφοραί or Succedent. In reality and on charts, they are next in power, in the order of their movement, and in dignity. They “rise afterward.” They walk towards the future. Their action, energetic enough, is rather favorable, with exceptions (necessary and common in astrology). There remain the four compartments, called cadent by modern astrologers, which “decline” (ἀποκλίματα – ἐπικαταφοραί) relative to the centers. Obviously they are weaker. The logicians were tempted to refuse them any energy at all. Alternatively, thinking that evil is the negation of good, others attributed to them an evil energy.⁶⁰³ However, there are surprises for us in all the astrological classifications, divided as they are according to various conflicting principles. This is certainly true of the houses, which we will, finally, explain.

The system of the houses (τόποι – loci) was created doubtless by astrologers⁶⁰⁴ who wished to break, so to speak, with the tiresome exegesis of the zodiac. They wanted to rid themselves of all the paraphernalia of domiciles, exaltations, terms, decans and other fiefs marked off by fixed points on the zodiac like the zodiacal menagerie itself. They wanted to base their predictions exclusively upon the influence of the planets considered in three angular positions (κέντρα – ἐπαναφοραί –

ἀποκλίματα) relative to the horizon. Perhaps they counted on using the zodiac to interpret the forces which acted upon the body. Perhaps they hoped to use their method for calculating moral aptitudes, the vicissitudes of conscious life, the succession of acts in the different stages of life. In any case, their system, conceived as independent of the zodiac, was only superimposed upon it. The logic of the astrologers accepted everything and never had too much to add to the mixture.

The logic of common usage was less complacent. It found difficulties that, very likely, the “Egyptians” had never imagined. Some were in principle, others were in the details of the theory of the houses. The special power attributed to the “centers” [angles] were more or less well explained by so-called “natural” forces. Their example authorized thought that the other angular positions might also have specific modes of action. Some modes existed by themselves. Some were in collaboration with the angles and depended on connections by definite aspect to this or that one. We will see that, in effect, the efficacy of the places is explained by their angular relationships with the Ascendant, or, at need, with another angle. The explanations were after the fact, at the very least. However, in the end the birth chart – as we have already said – was like a sphere outside the universe. With its compartments fixed relative to a supposedly unmoving earth, it was an immobile envelope within which all the other spheres turn, even the sphere of the fixed stars. Imagination, in spite of visible realities, sowed occult immaterial influences upon this ideal envelope. Strange etiquettes representing good luck and bad luck in an abstract state were placed upon it. They were distributed among the various acts or phases of existence for reasons and according to rules which are a perpetual defiance to good sense. Trying to render these rules intelligible, the astrologers sank to a degree more than absurd. In seven of these twelve compartments they placed patronages, tutelages or domiciles of the planets, whose known temperaments became the reason for the influences thus localized. In this they merely imitated the distribution of the planetary domiciles (οἶκοι) in the signs of the zodiac. However, the counterfeit was even less comprehensible than the model, which was not much to start with. A neophyte of good will might admit that certain signs especially pleased certain planets according to reciprocal affinities. He would be singularly blind to accept these sorts of spirits or souls of the planets. They were arranged like the hours on the face of a clock. They eternally threw their invariable emanations, which one could also conceive as material effluvia, from the same points.⁶⁰⁵ But faith in “centuries of experience” soon masked the incoherence and caprice in the reasoning. Once these postulates are admitted, one was in possession of a handy tool. Its resources were increased, too, by the combination of fixed influences and the actions of the stars which passed through these compartments, planets and signs. Their actions were specific to a locale, and reciprocal, depending on distance. Moreover, these combinations were themselves modified and complicated by the ballistics of the *aspects* and the *antiscia*. (There is hardly any need to announce it)⁶⁰⁶

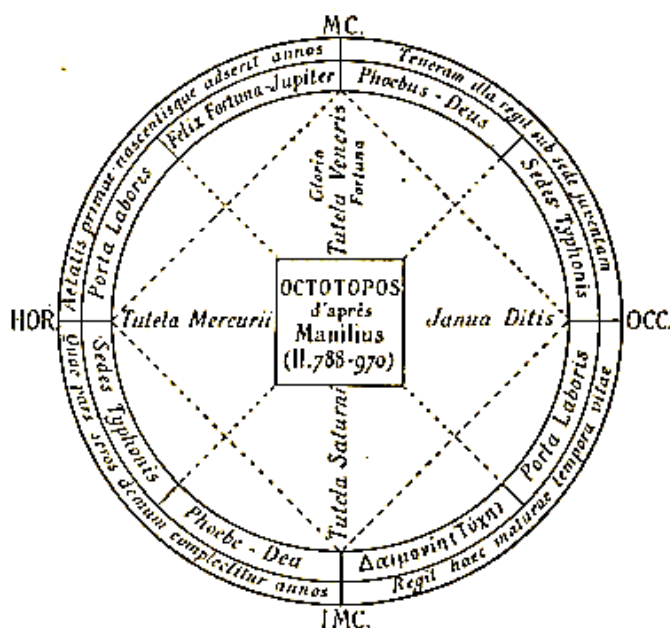


Fig. 30. Système des huit lieux.

Fig 31 The Eight Houses in Manilius

B. The System of Eight Places (ὀκτώτοπος.)

If one takes the three categories of places mentioned above (κέντρα – ἐπαναφοραί – ἀποκλίματα) while thinking of the angles as “points,” as their etymology implies, one obtains the system of eight places added to the four centers. This is how Manilius understood it.

The work of this beginner, it is good to repeat, is precious to those who wish to understand the associations of ideas behind the system. They were later effaced or travestied by astrologers with scientific pretensions. Manilius began by defining the centers. He gives us at once the secret of the hegemony which he attributes to the superior culmination it symbolizes success and is the abode of Glory.⁶⁰⁷ However, wealth is also power and it is even

identified with the foundation of all things.⁶⁰⁸ As a foundation, and also because it is in the bowels of the earth, inherited wealth (and not earned wealth) sits at the lowest center. The Ascendant balances the influence of the underground center⁶⁰⁹ and decides the course of life, including habits, tastes and aptitudes. Finally, the consolations of middle and old age (banquets, conversations, leisure time, even becoming a god) were associated with the point where the zodiac sets, called *Janua Ditis*, gate of Pluto.⁶¹⁰ Although a little disconcerted by this mutual exchange, the reader may divine that the cycle represents human life. The four quadrants are the four ages, a comparison so natural that it became banal.⁶¹¹ This is what Manilius means. However, he seems not to have noticed that, provisionally, he had put the whole of life into the semi-circle above the horizon. The semi-circle below the horizon is placed in the sub-basement, the “foundation,” as he would say, of a machine supposedly immobile. It was a conception which Ptolemy judged, with good reason, incompatible with the system of the places embracing the whole sphere and supposedly in motion.

Manilius did not look at this conception closely, and he must have begun to distribute the planets between the centers. They also have their domains in this counterfeit zodiac.⁶¹² Mercury was assigned to the Ascendant, because it presides over elementary education. Venus had the Midheaven, because it began the age of love and marriage.⁶¹³ To the Descendant, Manilius, not finding a planet to represent death, assigned the god Pluto. Finally, in the lower regions where inherited wealth lies, he installed Saturn who, in astrology, played the roles of father and of elderly miser. This did not keep him from mixing in elements from a completely different system. He says with the tone of an oracle that the four quadrants represent the four ages of life. Childhood ran from the Ascendant to the Midheaven, youth, from Midheaven to the Descendant, where maturity began. Maturity ended at the base of the staircase and then allowed old age to climb, painfully, the incline which rejoined the Ascendant.⁶¹⁴ Also, Manilius has placed marriage ahead of the Descendant, in the middle of life, rather than at the end.⁶¹⁵ He doubtless judged the Descendant compatible with Pluto abducting Proserpine. It is pointless to oppose such hardened logicians they have lost the taste for discussion.

So Mercury, Venus, Pluto and Saturn live as they like, cramped no doubt, in the angles which are points. Between these points, eight places extend, two per quadrant. Thanks to a rule which is merely a deviation from the theory of aspects, there are only four sorts of influences for the eight places. The opposite sectors have similar temperaments. Manilius makes laudable efforts to make them intelligible. The first place in front of the Ascendant is the “Gate of Work,” a sad place, discouraged by the beginning of the ascent. The opposite place, about to plunge into the night, is also sad and with more reason. It is a second “Gate of Work.” Why is the place rising behind the Ascendant (ἐπαναφορά) “with good reason the abode of Typhon,” and likewise the opposite place? It is because, since Typhon is stunned and buried beneath Mount Etna, these places are sad and unhappy. The one suspended above the setting place has a fear of falling into nothingness, the other which rises behind the Ascendant feared slipping upon the incline!⁶¹⁶ One might hope that daily habit would teach reasonable beings better. One would not have believed them so unreasonable. In compensation, the place which approaches the superior culmination is full of hope and in consequence, pure joy. It was the home of Jupiter and also of Fortune.⁶¹⁷ The opposite sector represents finished work, approaching the wealth which is its reward. This one is the home of Δαίμονι, for which Manilius could not find an equivalent name in Latin.⁶¹⁸ The remaining two ἐπικαταφοράι, places were occupied, one by the Sun, called Θεός (*Deus*), god, by the Greeks, the other by the Moon or “goddess” (Θεά – *Dea*). The reason is that the place occupied by the “god” corresponds to the age where youthful passion gives place to ambition, and that the Moon faces its brother.

Such is the bizarre sketch of the astrological “temple” of eight places, traced in lines so confused that one cannot understand how to draw its plan with straight-edge and compass. Scaliger pretended to attribute an arc equal to those of the “eight places” to each center. That is, he corrects the construction which Manilius himself calls ὀκτώτοπος⁶¹⁹ into the usual system of twelve places, more or less distorted. The testimony of Firmicus,⁶²⁰ the only astrologer other than Manilius who speaks of “eight places,” does not serve to end the question. He considered these eight places as a rough (*platic*) extract of the system of twelve places, an extract meant for beginners. His eight places are neither qualified as are those of Manilius, nor a series of the same sort, nor situated in the same way. The centers, exclusive of the eight places, figure to the number of three in the system of Firmicus. The presumption which comes from this comparison is that there must have been a forgotten tradition which divided the archetypal chart into eight compartments. Alternatively, it divided the chart into

twelve compartments of which only eight were considered active.⁶²¹ This system was understood neither by Manilius nor by Firmicus, each of them capable of disfiguring, neither able to invent.

C. The System of Twelve Houses. The system of the *octotopos* as thus taught was incompatible with the theory of the aspects. At the very least, it was compatible only with extreme pessimism, for it only admitted the diameter and the square, excluding the two favorable aspects, the triangle and the hexagon. [Fig. 32, the twelve houses of the archetypal chart and Fig. 33, the system of the twelve houses (square diagram)]⁶²²

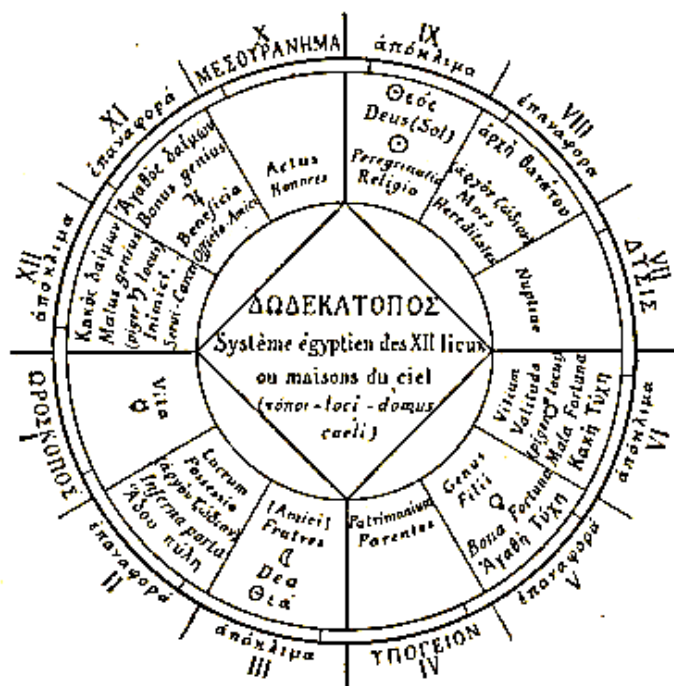


Fig. 31. Les douze lieux du cercle de la géniture.

by the circle unrolls in an order opposite from the one that the contemplatives were accustomed to attribute to the four ages.⁶²³ Those astrologers who loved arguing or were slaves of earlier traditions have preserved the older scheme, nonetheless, to mix at need with the other.⁶²⁴

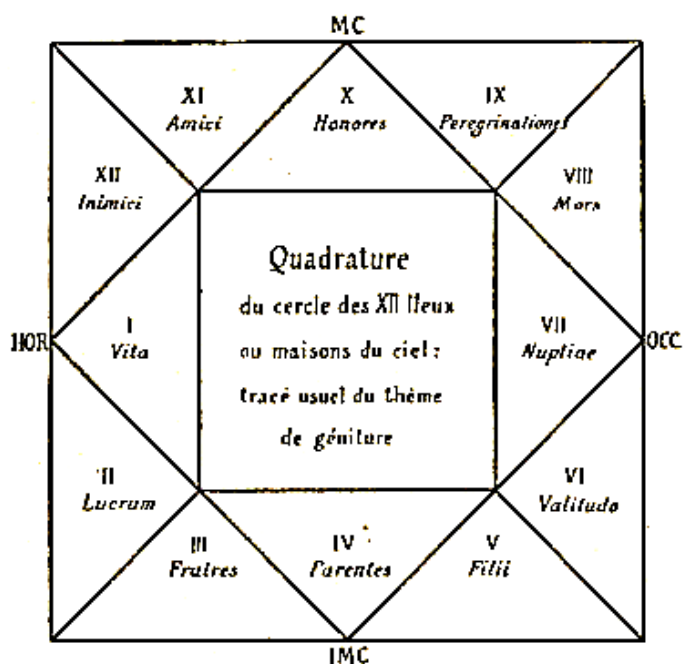


Fig. 32. Le système des XII lieux (tracé rectangulaire).

Fig 32 The twelve houses or places of the [archetypal] birth chart

We will put it aside to occupy ourselves with the system which was truly astrological and widely used, that of the *δωδεκάτοπος*. We are in the presence of a dogma universally accepted, save perhaps by Ptolemy. It was a dogma which was maintained without change from the time of Sextus Empiricus down to the Middle Ages and later.

We must say first (it is worth the trouble) that we will no longer deal with poetic or popular symbolism. We will not contemplate the sky without taking into account its movement or caring about the part hidden below the horizon. Our astrologer-astronomers arranged the houses like the signs of the zodiac, in the order in which they emerge and set. In consequence, the stages in life symbolized

Fig 33 The system of 12 houses (square chart)

The houses on the angles are the most important and have nearly the same attributes as in the *octotopos*. The Ascendant (first place) represents "life, the foundation of the entire geniture." The Lower Midheaven (fourth place) stands for "parents, inheritance, goods." The Descendant (seventh place) represents weddings, without argument this time it is the *γαμήλιος τόπος*. The Midheaven (tenth place) stands for "life and breath, acts, homeland, arts and honors", in short, the preoccupations of middle age and the ambitions of the citizen. Next we go to the four places called "seconds" or favorable. They are in trine aspect with the Ascendant (houses five and nine) or in sextile aspect

(houses three and eleven). Finally, there are the unfavorable or ineffective houses (houses two, six, eight, and twelve). They are “sluggish and dejected” (ἀργὸν ζώδιον – ἄβλεπτον – *pigrum* – *dejectum*), because they are not in any positional relationship with the Ascendant, or, in other words, are “inconjunct” with it.

Fig 34 and 34b More square chart types

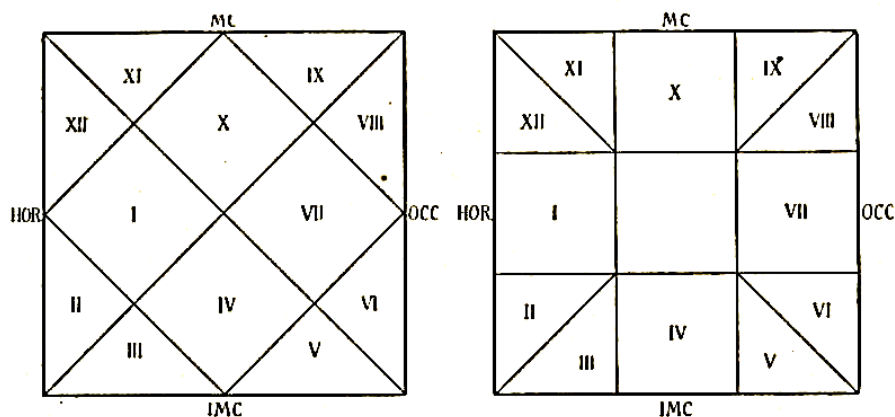


Fig. 33 et 33 bis. Tracés de quadratures.

The planets – under assumed names – were distributed among the twelve places according to two sorts of considerations. They are easy to guess when one knows the models imitated by the creators of the system, that is, the distribution of the planetary domiciles. One wished to follow, in the sense indicated, the ascending order of the planets and, at the same time, to place the beneficent planets in the

favorable places, with an exception made for the centers, which were strong enough by themselves and did not need the planets. The agreement of the natural order of the planets with the affinities indicated by the geometry of the aspects served as evidence for the marvelous harmony of the universe. It consecrated as never before this masterpiece of the art of interpreting Nature. However, the inventors got this agreement by re-arranging the usual order of the planets slightly. Likewise, they did not follow the natural stages of life too closely and they down-played the principles which attributed favorable actions to the ἐπαναφοραί, unfavorable ones to the ἀποκλίματα. This allowed many exceptions, in effect removing the rules.

Fig 35 A circular chart

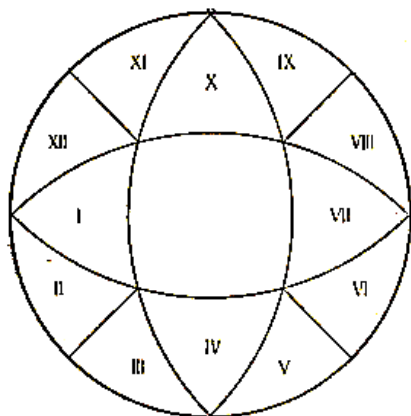


Fig. 35. Tracé circulaire.

The second house – which follows the Ascendant ἐπαναφορα and, as a neighbor, is not in aspect with it. It keeps its name of “Gate of the Underworld” (Αἰδου πύλη). However, our astrologers have corrected the natural “laziness” of the house, from their own good will, by placing “hope” there and “increasing possessions, money.”⁶²⁵ They dreamed, no doubt, of a child entering into his second twelfth year of life. So, they called from geometry to geometry, remarking that, if this house has no aspect with the Ascendant, it is in trine with the Midheaven.⁶²⁶ This is the same house, no doubt, where, if they had had free hands, they would have placed Mercury, for whom they could find no more satisfying employment.

At the third house, favorable because ἀπόκλιμα, “brothers and friends” figure. One places here the grand voyager, the Moon, under the name of “goddess,” opening the series of the planets.⁶²⁷

In the Lower Midheaven, or the fourth house, we still find, as we have said, “parents,” “inheritance,” etc., but no longer the “father.” Saturn has been dislodged by the tyranny of the planetary order and slandered to justify this expulsion. We find him again in the form of the “evil spirit” in the last compartment. It ought to have been, following the order of the planets, the place of Mercury, but Mercury represents education, or, in gaining wealth, earned money and not inheritance. He was left to one side, because, in spite of geometry, he could not find refuge at the Ascendant where he had been placed by Manilius.⁶²⁸

The fifth house is the compartment of “children,” put next to that of parents. As Venus is the goddess of reproduction, one should not be surprised to find her disguised as “Good Fortune” and one regrets the passing of the time when it was good fortune to have many children.⁶²⁹

Mars could not be far from Venus the attraction is one which does violence to the planetary series. The Sun is in the compartment opposite the Moon. The sixth house is “lazy” and unfavorable by position, and is thus the hostelry of Mars. Under the pseudonym of “Bad Luck,” it was the receptacle of sickness and infirmities.

At the Descendant or the seventh house, the central stage of existence, we know that one meets “weddings.” It is not necessary to ask why weddings come after children. Weddings are there because, in the tour of existence, the Descendant represents the middle of the career.

Once the diameter is passed the construction obeys, by increase, the laws of symmetry. Briefly, after the eighth house, a “lazy” house, situated face to face with another “lazy” house,⁶³⁰ we find ourselves in the presence of Death.⁶³¹ He could not wait for a similar stage and replaced, to no advantage, the Typhon of the *octotopos*. The system begins to seem a little incoherent. The astrologers weakened their principles by admitting that this place could presage the summit of happiness, of riches, and of glory. Only under certain conditions, however, complicated somewhat by other conditions.⁶³²

At the ninth house, the “god” par excellence,⁶³³ the Sun, presides over “sects, religions and travel.” It is precisely here, face to face with the “goddess,” that Manilius placed his Phoebus. This is the “god” of whom the students of Seneca the Rhetor also spoke.⁶³⁴ Why unite such unrelated ideas as religion and travel? I personally explain this by saying that there was very likely an association of ideas due to the exceptional vogue for solar cults, that is, foreign or “peregrine” religions under the Empire. This “god” is perhaps Mithras, the eastern god, rather than the Sun, who shone for the whole world.

At the superior culmination or tenth house, we find “life and breath, actions, homeland, home, the arts and honors.” It was the compartment of “action” *par excellence*.

Jupiter did not make such a grand figure at the eleventh house, where, under the name of “Good Spirit (Ἀγαθὸς δαίμων)”⁶³⁵ he forms a pendant to Venus, “Good Fortune.” His proverbial bounty is indefinite and without specific object. He is a friend who renders “services” and gives “benefits.”

Finally, at the twelfth house” Saturn groups many disagreeable things around himself. They under the name “evil spirit” (Κακὸς δαίμων), were placed face to face with “bad luck. They include nuisances caused by enemies, slaves, and also by the infirmities and chronic illnesses connected with the idea of old age. Old age is inseparable from the person of the “aged” Saturn. [Figs. 34, 34b, 35]

We give here a sort of parenthesis to present to the reader with the diagrams upon which the astrologers have usually written the facts of the charts (figs. 33, 34, 34b, and 35). These square charts (which I call “squaring the circle”) are only rough equivalents imagined by people not used to the compass or deprived of one.⁶³⁶ Perhaps they did not mind that these bizarre figures could not be understood by ordinary people.

One understands, when one has gone through the cycle where logic is so often in distress, why Ptolemy does not want to take it into account.⁶³⁷ It represented a conflict and a rickety accommodation between two and even three different conceptions. The first unrolled the symbolic thread of life between the Ascendant and the Descendant and assimilated human life to its models, the stars brightening in the East and dimming in the West. The second without changing the interpretation of life, prolonged it into the four quadrants and assigned the last one to old age. Finally, there was a third conception, more mathematical, which considered the order – opposite from the preceding – in which the twelfths of the circle were helped by the daily motion to rise above the horizon. It was the first idea which put Death at the setting place, or just above it (ἀρχὴ θανάτου).⁶³⁸ It was the second conception which put weddings at the setting place, Saturn, inheritance and treasures, at the Lower Midheaven, and Typhon or Death just below the Ascendant, to close the cycle. The third conception would have simply inverted the product of the second. However, an eclecticism with multiple pretensions made a system prevail which will be explained. Over all, it is the most incoherent of all.

I said above that this system was definitive. This is not to say that no one tried to revise it or even to replace it with another. It is easy to see, when consulting the descriptions of Paul of Alexandria and of Vettius Valens, that the incoherence was increased by the return of traditions eliminated earlier.

Thus, old age and even death settle at the Lower Midheaven, where the aged Saturn also lodged. It was pall-mall with the swamps which the naive imagination otherwise thought occupied this cesspool of the universe. A pessimist slipped women and slaves in with “Bad Luck.” Infirm old age and death were newly attracted to the Descendant by a natural symbolism, and also “long voyages.” Perhaps it was placed there by a Greek who remembered the Phoenicians and dreamed of the Atlantic.⁶³⁹ The superior culmination, which had long been the seat of Venus and the heats of the flesh, picked up “weddings with male offspring.” Other correctors, preferring the septenary division of Hippocrates to the twelve steps, re-cut the circle. Some declared five places (third, sixth, eighth, ninth, twelfth) inactive (ἀρχημάπιστα), three of which were unfavorable in the usual system.⁶⁴⁰

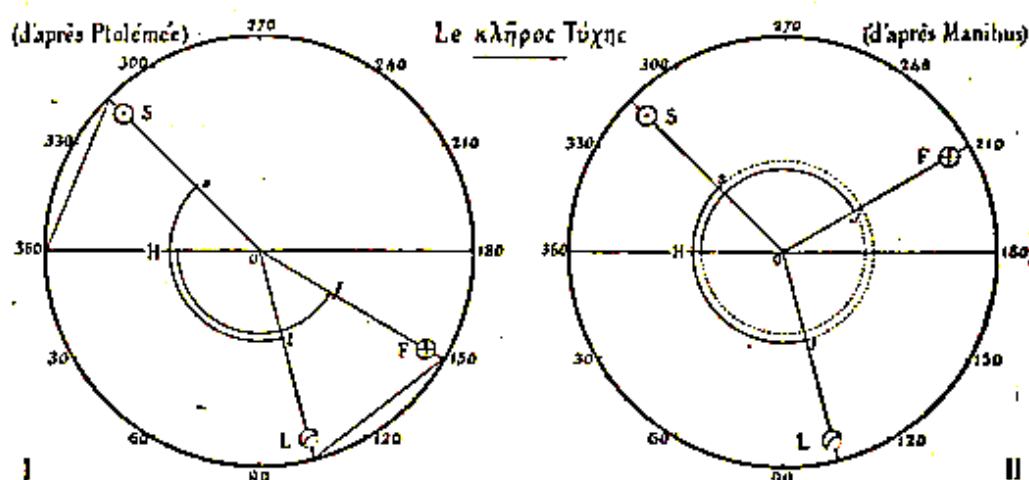
Finally, we encounter a tentative original system, substituting a more complete construction for the usual system. It extended the life cycle from before birth to after death.⁶⁴¹ Our philosopher – it was a philosopher, no doubt – had found a way to be yet more extravagant than his predecessors. Its life cycle turned in two opposite directions, at the same time. The four major stages of life – birth, maturity, old age, death – went from left to right, clockwise, like the daily motion. Maturity was at the top of the sphere, death at the bottom. However, each center formed the middle of a group of three places which were counted in the chronological order of their rising. The ἀπόκλιμα was at the head, the center next, the ἐπαναφορά at the tail. In this way, the groups are arranged from left to right, and the individuals within each group from right to left. The cycle begins with the place which precedes (ἀπόκλιμα) the Ascendant. This represents the problems of pregnancy and childbirth. The Ascendant stands for birth and the first stage of life. Infancy ends with the following place. One then passes on to the second group, at the height of which the “middle of the middle” culminates. It was flanked to the right by the beginning, to the left by the end, of middle age. The Descendant represents the “end time,” which begins to its right and ends to its left. The lower culmination symbolizes death, having on one side “the time before death,” on the other, “the time after death.” What is the time after death? The scholiast did not think it was the reputation left behind by the dead. He does not ask if the system came from Pythagorean fabric, with the time after death presaging a reincarnation which began the cycle once more.

II. Other Cycles The System of Lots

The circle of the “houses,” marked out beginning with the Ascendant, is not the only one which was superimposed upon the Zodiac. The imagination of the astrologers is inexhaustible, and those who frequent them must be armed with patience. Look now at the circle of “labors” (ἄθλα) or of the “lots” (sortes). We will begin with the “Lot of Fortune” (κλήρος Τύχης)⁶⁴² a sort of “lunar Ascendant” derived from the other, zodiacal, Ascendant.⁶⁴³ The Moon, as the god Sin, was the chief agent in Mesopotamian astrology, and the Greeks kept a prominent role for him, inferior only to that of the Sun. Those theoreticians who were affected by philosophy taught that, if solar influence prevailed in psychic life, the Moon ruled over physical life. On the other hand, one knows how many people were conquered, due to the decline of the civic religion, by faith in the omnipotence of Fortune.⁶⁴⁴ This vague entity was easily decomposed into “fortunes” or particular chances. She was adapted to the measure of all beings, collective or individually, existing in the sublunary world and thought of as “playthings of Fortune.” Each individual thus had his or her own Fortune, and a place of honor would be reserved in the chart for this female Spirit. We have, in effect, met it twice before, under the names of “Good” and “Bad Fortune” associated with Venus and Mars.⁶⁴⁵ Its sex, its protean nature, and even its caprices approach that of the Moon. This is the source of the idea of joining the one with the second acolyte and leaving the other to the Sun. To the psychic and physical aptitudes derived from the influence of the “luminaries,” Fortune added all those which came from outside, all those which are “acquired” (Τύχη κτητική – ὀξιωματική).⁶⁴⁶ One seeks it at a position on the circle which depends on the positions of the Sun, the Moon and the Ascendant.

Once again we ask Manilius for the oldest teachings, for we are neophytes upon the subject.

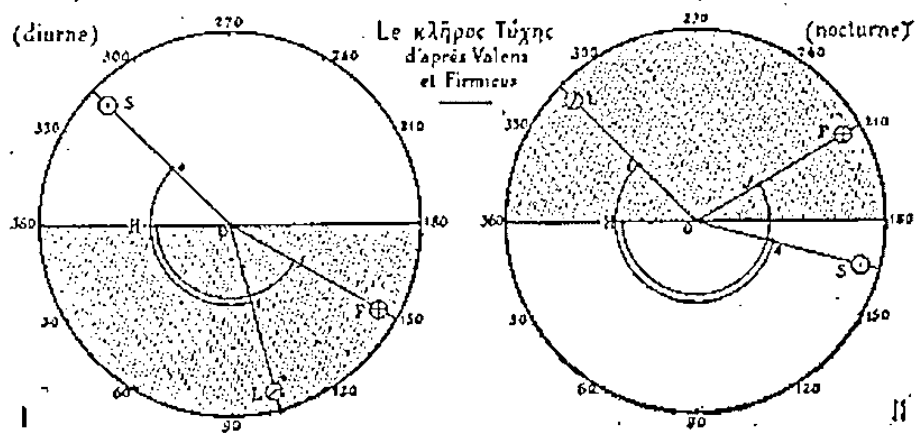
Fig 36 The lot of fortune according to Manilius and Ptolemy ⁶⁴⁷



Manilius repeated once more, with his usual emphasis, that all was complex among these astral combinations and from this complexity came a variety of destinies. Then Manilius taught how to find the Lot of Fortune, the point of departure for dividing the circle into twelve ἄθλα or lots ⁶⁴⁸ First, we must distinguish between a daytime chart and a nighttime chart. For a daytime chart, one took the distance from the Sun to the Moon, going in the order of the signs (from right to left or counter-clockwise). Then one transferred the length of this arc to the right side of the Ascendant. At the end of the arc is the Lot of Fortune. If the geniture is nocturnal, one does the opposite. One measured, not the distance from the Sun to the Moon, but the complementary distance, from the Moon to the Sun, going counter-clockwise. Then one transferred the arc, not to the right side but to the left side, of the Ascendant.⁶⁴⁹ Firmicus gave exactly the same procedure, whether he had taken it from Manilius or from Nechepso and Petosiris. It was, in effect, to these imitators that the scholiast on Ptolemy attributed this method. However, there was one difference, that he understood the procedure in a reverse sense. That is, that he moved or “deducted” the distance from the Sun to the Moon to the left of the Ascendant for daytime charts, the distance from the Moon to the Sun to the right of the Ascendant for the nighttime. However, he made the appropriate observation, and very justly, that this double operation reaches the same result.⁶⁵⁰ In effect, transferring one of the two distances to one side of the Ascendant, or, on the other side, the complimentary distance, was to make the same calculation by two different methods. One had the same position for the Lot of Fortune in both daytime and nighttime charts. What neither the good Manilius, nor the thoughtless Firmicus were able to perceive was not in doubt. For others, whose intelligence was less impenetrable to mathematics, the question was this. Did the grand initiators, Nechepso and Petosiris, really believe they were obtaining two different results from these two different procedures? Alternatively had it had pleased them, for some mysterious reason, to teach their adepts two different ways of reaching the same goal? According to Valens, the “king” Nechepso had, in his thirteenth book, explained one of these two procedures, and indicated the other summarily in saying “do the opposite.” [Fig. 37. The Lot of Fortune according to Valens and Firmicus] This was an enigma.⁶⁵¹ Did Nechepso mean to say that it was necessary to take the complementary distance? Or that one ought to deduce the complementary distance in the opposite sense? From the doubt, Valens made a new system of his own. He always moved the distances to the left of the Ascendant, which gave him different positions for ⁶⁵² the Lot of Fortune for day and night charts. However, when it is a question of a nocturnal chart, and the Moon, like the Sun, is below the horizon, he returns to the calculation used for the diurnal chart. That is, he, moves the distance from the Sun to the Moon. Except for this refinement, the system of Valens is found again in Firmicus. He takes it in both hands and remarks that it is a “summary method,” and although he could make it more precise, it was no more important than any other.⁶⁵⁴ Some people, notably the “divine Abraham,” remarked that one might use these different ways of transferring the distances to enrich the astrological tool-kit. If the Lot of Fortune were a “place of the Moon,” as one might say, it was equally a “place of the Sun,” connected to the Ascendant by a mathematical relationship.⁶⁵⁵ Since that time, it was completely simple – natural, even, for an astrologer – to

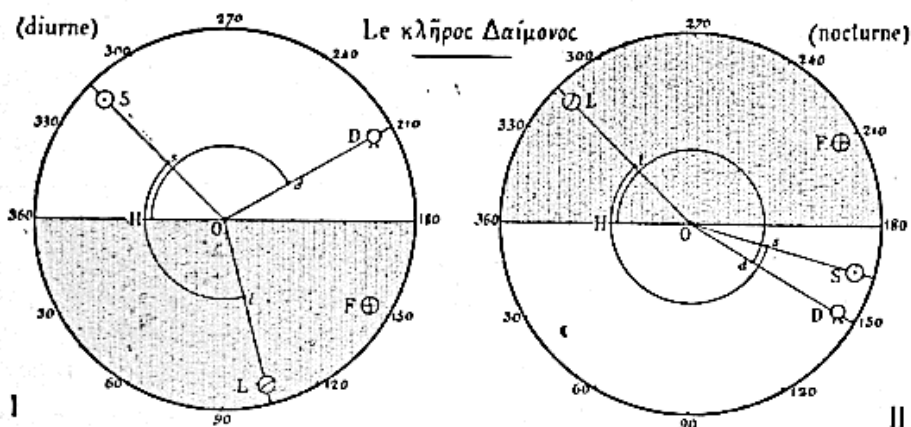
determine these two points by inverting the same formula. One began to transfer the distances to the left of the Ascendant (κατὰ τὰ ἐπόμενα) in order to fix the Lot of Fortune. In the same way, one obtained the “place of the Sun” by transferring the same distances to the right (κατὰ τὰ ἡγούμενα). This place received, as an astrological name, the title of place or Lot of “Spirit” (Δαίμων – *Daemon*). It is a homonym without the epithet of the “Good Spirit”⁶⁵⁶ which was incorporated in the eleventh compartment among the fixed places. Each a system-maker imposed his taste upon the vocabulary, without caring about possible confusion.

Fig 37 The Lot of Fortune according to Valens and Firmicus



It is no longer necessary to ask of Firmicus how one determined, either the house or Lot of Fortune or the Lot or house of Spirit. This advocate was misled in mathematics and distracted by his own foolishness. He made so many detours that it is impossible to follow an idea in his book and to understand what he had read.⁶⁵⁷ Let us take the arithmetic of Paul of Alexandria. If one marks the κληρος Τύχης at the end of the distances transferred to the left of the Ascendant, one finds the κληρος Δαίμονος at the end of the same distances transferred to the right,⁶⁵⁸ and vice versa. If the distances stay the same, the diurnal Spirit occupies the nocturnal place of Fortune, a solidarity admirable and proper enough to rejoice the mystics.⁶⁵⁹

Fig 38 The Lot of Fortune according to Paul of Alexandria



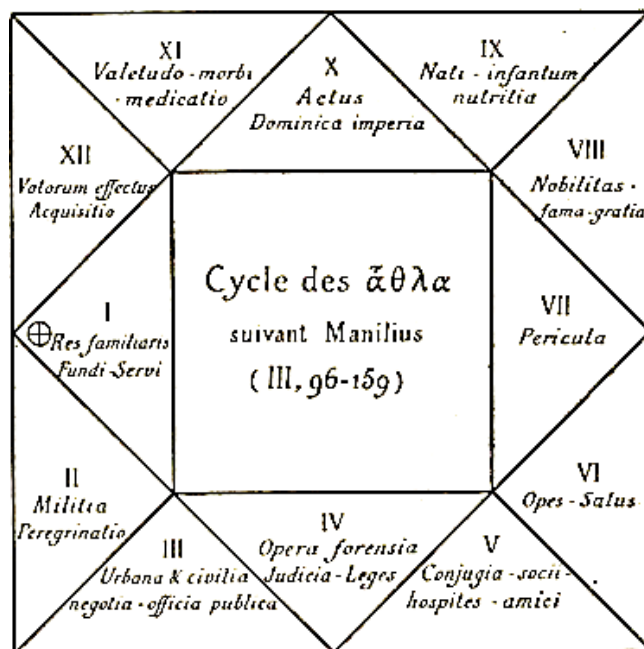
We will see shortly how the same method was used to fix a “place” or “lot” for each of the planets, rigged out equally in mystical names. For the moment, we will look at the “Lot of Fortune” and at Manilius, by-passing Ptolemy. Ptolemy had visible disgust for all these arithmetic speculations, dreamed up without a shadow of “natural” reason. He kept only the Lot of Fortune, the same for

daytime and nighttime charts, as Nechepso and Petosiris had wanted. He disdained teaching the ignorant that his unique procedure is the exact equivalent of the two petosiriatic procedures which had tortured so many brains. He transferred the distance from the Sun to the Moon to the left of the Ascendant in every case. In this way he obtained a point which he consented to call, in deference to common usage, the Lot of Fortune. In reality, it is a sort of “Ascendant of the Moon.”⁶⁶⁰ This point had value in his eyes, because it gave him a “natural” reason for existing. The “lunar Ascendant” was placed in relationship to the Moon in the same angular position and on the same side as the proper Ascendant in relationship to the Sun.⁶⁶¹ This mathematical relationship was enough to calm Ptolemy's scruples. We will not go on to ask how it could be that any angle could establish so notable a relationship between the Ascendant and the Sun, the lunar Ascendant and the Moon. After all, he had taught that only the angles catalogued under the name of aspects had any virtue. Ptolemy would have responded, doubtless, that the angle itself was not important. Rather the similarity between the two angles was. The Sun and the Moon are in the same positional relationships, each with one of the fateful points.

Our diagrams (figs. 36-38) clarify both the text of Ptolemy and the petosiriatic “enigma.” They also clarify the equivocations, rectifications and contradictions of the astrologers' poor exegeses, where some could not tell right from left or discuss whether the inversion was partial or total.

However one calculated it, the Lot of Fortune was very important in a horoscope. As Firmicus said, it decided not only fortune that is, wealth and success in general – as Ptolemy himself admitted. It also decided conjugal affections as well as the “*patria*” or social condition.⁶⁶² In practice, it decided everything. This was how Manilius understood it. [Fig. 39, the Lots of Manilius] He drew up, without telling us how he learned these secrets, a circle of twelve compartments which approximated a complete cycle of life, with the Lot of Fortune playing the role of the Ascendant. In short, it was an imitation of the circle of houses, which was itself an imitation of the zodiac.

Fig 39 The Lots or Athla of Manilius



Twelve lots, listed in the order of the signs, are:

- I Fortune, in the usual sense of the word, that is possessions;
- II Travel and Military affairs;
- III Civic affairs;
- IV Legal matters;
- V Marriage and other friendly associations
- VI Earned wealth;
- VII Perils;
- VIII Generosity, Reputation;
- IX Education of children;
- X Action, authority, the duties of the master of a household
- XI Health and illnesses;
- XII Accomplishment or failure of desires (*qui continet omnes votorum effectus*).⁶⁶³

The copy resembled the model on many points. Marriage occurs in the same numerical order (fifth lot) as children in the system of the twelve houses. Perils were in the place housing Pluto, that is, death, in the system of the *octotopos*. One rediscovers in the eighth lot the “noblesse” or generosity which Firmicus introduced to the eighth place (above, p. ???-?). The education of children (ninth lot) was a good fit with religion. Finally, the tenth lot kept the dominating character of the tenth house.⁶⁶⁴ It is pointless to study the parallels more closely, for the system of the ἄθλα or *sortes* remains the exclusive property of Manilius.⁶⁶⁵

Whether Manilius understood his teachers well or poorly, this is not how the “Egyptian”

astrologers meant to manage the κλῆροι. There is still one more method, perhaps two, to examine. At this point, there ought to be one of those enthusiastic exhortations to encourage the reader, of which our poet had the secret. We cannot promise he who has a taste for clear ideas more than deceptions.

The system of κλῆροι, “lots” or “sorts,” is a collection of which the Lot of Fortune is only one piece. Given the position of a planet, whether considered alone or in relation to another, one uses it as a die which one throws upon a circle and which then rolls to another place. The gods play hide and seek with mortals and it is the height of the art to extract their secret from them. For the inventors of this “lottery” the visible positions of the planets are not the ones where they genuinely exert their power. One must hunt them, and one must expect in advance that the tricks of the trade are very complicated. There are two procedures, between which the astrologers themselves perhaps did not see the connection,⁶⁶⁶ but whose affinity is revealed by comparison. One connects a planet, considered in isolation, with its “dodecatemoron.” Another measured the distance between the planet mentioned above and a place designated not by its position but by its temperament, to find an effective place. So let us gird up our loins and enter resolutely into these arcana, issuing from feverish and distracted⁶⁶⁷ minds.

The planetary “dodecatemoria” with which he is here dealing have nothing in common with the ones (δωδεκατημόριον δωδεκατημορίου) with which we dealt above (p. ???-?). The earlier ones were divisions of the signs into twelfths. Only the name is the same. The system was already known to Manilius,⁶⁶⁸ who tired himself out versifying the explanation. Far from falling into disuse after Ptolemy, it became a general method. (He had refused to stop it.) One used it to move, not only the planets, but also the “centers” and the κλῆροι themselves. As it was absurd in itself, its partisans put it above all the others and raised their voices in declaring it indispensable. “Some,” Firmicus says, “think they are able to find from it the whole substance of a chart and that all which hides the decree of destiny may be revealed by the dodecatemoria.” Moreover, Firmicus did not fail, after listing the “decrees” of a planet or the Lot of Fortune, to add “further, search for a dodecatemoron.”⁶⁶⁹ To calculate the dodecatemoron of a point on the circle, whether a center or the home of a planet, take the point's position in degrees. Multiply it by twelve, then taking the product, go that number of degrees from the original point. Go in the direction of the signs, at the rate of 30° per sign.

To make this definition clear, our authors are prodigal with examples. Firmicus says,

*“Let the Sun be in Aries 5°, 5'. Twelve times 5° is 60°, and twelve times 5' is 60' (1°). Thus the total is 61°. Give 30° to Aries, which we say is East of the Sun, and 30° to Taurus. The dodecatemoron is in the first degree of Gemini.”*⁶⁷⁰

Paul of Alexandria used a similar calculation. He showed that, if Mercury is at the eleventh degree of Aries, its dodecatemoron would fall at the twenty-third degree of Leo. However, Paul of Alexandria is no stranger to simpler notions of arithmetic than Firmicus'. Suppose, rather than leaving from the initial point, one goes back to the beginning of the initial sign. It is then necessary to add the quantity itself to the product of the quantity times twelve. One obtains this at one blow by adding ‘one’ to the multiplier. Paul of Alexandria thus used thirteen as multiplier, rather than twelve. The manuscript includes a scholiast who did not understand Paul's procedure. He believed that the multiplier thirteen was chosen so that – in certain cases at least – the dodecatemoron comes back to the same sign which served as the point of departure. One thus obtains, it seems, “a more evident dodecatemoron,” no doubt because if the quantity is 30°, the dodecatemoron returns to exactly the same point and finds itself, in effect, suppressed.⁶⁷¹

One may arrive at the same result by an inverse method.⁶⁷² Rather than multiplying the quantity by twelve and distributing the degrees at the rate of 30° per sign, one takes what one has, divides it into twelfths (2°, 30', rather than 30°) and distributes it among the following signs. This method was even more “dodecatemoric” than the other. Each sign received a δωδεκατημόριον δωδεκατημορίου (a twelfth of a twelfth of the zodiac). It was an excellent way of mixing, inextricably, the system of the variable dodecatemoria and the system, completely different, of the fixed dodecatemoria of the zodiac. The water is never troubled enough in the eyes of the astrologers. Furthermore, this method did not let one see the points of departure and arrival as well as the other one. One begins the distribution of the “twelfths” from an initial sign without caring about the cranky mathematicians. They would have

reduced the portion of the sign to the quantity complementary to the date, that is, as much the smaller as the other would be larger.⁶⁷³

We may now return to Manilius, the most ancient authority on these “Babylonian” fantasies and the artless man of whom we may ask their reason for being. Manilius thought that, since the round machine of the zodiac moved by duodecimal divisions, it was perfectly logical to subdivide the signs by twelve. See how he justifies cutting the zodiacal dodecatemoria into divisions of 2°, 30'. They operated a marvelous mixture in the signs. He passes once more from the fixed dodecatemoria to the mobile ones. “Nature,” he says, “has placed and traced its roads in several ways and she wishes that one search them in all ways.” “Nature” endorses everything that pleases the astrologers' imagination. So, first, find the Moon at the moment of a birth. Next, it is necessary to multiply the ordinal number of that degree of the sign by twelve (*Sublimi totidem quia fulgent sidera mundo*). Then distribute the product beginning with the first degree of the sign. This is the same as the vulgar method explained above, with the error which sullied it. However, Manilius has kept some surprises for us. Suppose each sign has received its complete portion of 30° (τριακοντάς).⁶⁷⁴ If, at the end of the distribution, there remains a fraction of a portion, it is necessary to transform it into dodecatemoria of a sign. That is, one must change it into portions of 2°, 30', and then distribute these portions, in the guise of triacontads, i.e., 30° portions, to the following signs. At the place the distribution ended, the “dodecatemorion of the sign” devolved upon the Moon. It is a combination of the two methods of calculation explained above. The combination led to different results and ended by determining, not the degree, but the “dodecatemorion” properly so-called, a “twelfth of a sign” to which the planet is transported.⁶⁷⁵

Did Manilius combine the two method accidentally, that is, by confusion? Or did he choose, from all the others, one particular proceeding, only to abandon it later? For one who is familiar with Manilius, the first is much the most likely.

However one obtained it, the δωδεκαμήριον had the effect, not only of displaying the influence of the planet, but also of altering it notably. The planet that was the object of calculation combined its influence with that of the planet which already held title to the place where the new venue is transported. What title did not much matter. It was a question for debate among the partisans of domiciles, exaltations, triplicities and terms with value of the “houses” (τόποι) equal to or even higher than that the zodiacal signs. The exaltation was hardly usable because it occupied only one degree per sign,⁶⁷⁶ and did not exist in all the signs. The triplicities had the indecisive allure of a menage à trois and the decans were no more than a third of a sign. Preference hesitated between the οἶκος and the ὅριον. Demophilus held for the domiciles⁶⁷⁷ and Firmicus preferred the ὅριον.⁶⁷⁸ Manilius also thought that the virtue of the dodecatemoria came from the ὅριον. It was necessary to look very closely there, seeing that “the smallest part is the largest in effectiveness.” However, the unfortunate poet, lost in a series of “twelfths,” imagined that the ὅριον are fifths of a dodecatemorion, which is itself a twelfth of a twelfth of the zodiac. Next, according to him, the δωδεκαμήριον or twelfth of a sign is divided equally between the five planets, 1/2° per planet. It is the planetary proprietor of the half-degree where the distribution ends which decides the virtue of the dodecatemorion.⁶⁷⁹ It was one more of those combinations for which the ignorance of Manilius is solely responsible. It was all the less acceptable because he was too embarrassed to say that his twelfths of twelfths were the same as the degrees of the signs. His fifths of twelfths of twelfths were even less acceptable.

That is enough – for the moment at least – on the mobile dodecatemoria. Like the geometric aspects, they were a sort of ballistics, cannon balls plunging along many different trajectories. They were not subject to a fixed trajectory and shot straight along polygonal aspects. The system was well-judged by the commentator upon Ptolemy, who did not accept it. “Let us suppose,” he said,

*“that we find the dodecatemorion of Aries falling in Virgo. One may make either of two choices use it or not use it. If one does not use it, it is pointless to calculate it. If one uses it, then it is no longer the influence of Aries with which one is working, even though Aries is the point of departure”*⁶⁸⁰

This is said very strongly, but the honest scholiast did not perceive that one could say as much of all the planetary domains, fixed or not, which he thought valuable. The satisfied pickpocket always marvels at the contents of the front pocket.

Now let us look at the κλήροι, which produced no less confusion, no less trouble for Ptolemy

and his disciples. Moreover, they came from the “Egyptian” tradition, revered early and late in spite of Ptolemy.

We have already discussed, dealing with the κληρος Τύχης or κληρος of the Moon, what was meant by the word. It is, like the δωδεκατημόριον, a point on the circle. One transferred there, by the calculation, the influence and the office proper to a planet. One took, for first element of the calculation, the distance between the point really occupied by this star and the point occupied by another body. It might be another planet or another κληρος determined later,⁶⁸¹ or, at need, a center.

The system, incompatible with that of the fixed “houses,” is meant to replace them with more subtle calculations. Firmicus had passed much time detailing the properties of the houses in the second book of his manual. Now, after the manner of beginners, he unveiled the deepest foundations of the truth to his dear friend Mavortius. He said

“In effect, it is not exactly true that the parents or the life of the parents is in the place which is in square aspect with the Ascendant, or that the seventh place reveals the spouse; or the fifth, the children; the eleventh, friends, and the sixth, health”⁶⁸²

What ought to be done? Leave here the twelve places arranged in the order we know and calculated separately. We no longer care about the regular divisions, the place where it is necessary to put each of the rubrics piled up in the traditional places. These new places – that is what Firmicus called them, for want of an equivalent as handy for κληρος – are the κληροι. Does one want to find the “place of the father”? One must address the symbol of paternity, Saturn, measuring the distance from the Sun to Saturn, for a diurnal geniture, from Saturn to the Sun, for a nocturnal one. Transport this distance to the left side of the Ascendant and mark the point for the place of paternity at the spot where the arc thus added ends.⁶⁸³ To work with the place of the mother, one counts the distance from Venus to the Moon for a diurnal chart, from the Moon to Venus for a nocturnal one, and then work in the same way. For the “brothers,” work with the distance from Saturn to Jupiter or from Jupiter to Saturn.⁶⁸⁴ For the place of the wife, count from Saturn to Venus or from Venus to Saturn.⁶⁸⁵ Some substituted the Sun for Saturn and always took the distance from the Sun to Venus, whether the chart was diurnal or nocturnal. Firmicus rather disapproved of this procedure. If one seeks the place of the husband, count from Mars to Venus, or from Venus to Mars.⁶⁸⁶ The problem of children is more complicated because of the hybrid character of Mercury. Depending on his position, he is either male or female, diurnal or nocturnal. Also Venus and Mercury meet so often on the same longitude. Whether the chart be a day or a night one, one takes as the point of departure for the measuring arc whichever of the two planets is “the first,” i.e., precedes the other in the sense of the proper movement of the planets.⁶⁸⁷ If the two planets are in perfect conjunction (*in iisdem minutis*), then one must replace Venus with Jupiter, which is similar in temperament. Then measure the distance from Jupiter to Mercury for daytime genitures, from Mercury to Jupiter for night-time ones. The place of health and infirmities was deduced from the distance between Saturn and Mars, the two malefic planets, or between Mars and Saturn. Firmicus did not stop at the number twelve for the κληροι. He crowds together, pall-mall, quantities of diverse rubrics. He uses the distances between the planets, between planets and centers, from the Lot of Fortune, from that of the Spirit, and even the distances between these two κληροι.⁶⁸⁸ It is a series which could be prolonged beyond the limits of human patience.⁶⁸⁹ In this controversy (a swamp without borders) the Hermeticists, who awarded themselves the monopoly on ancient Egyptian wisdom, created seven “universal” κληροι, one per planet. We have already met five of them and only the coincidences of lacunae have kept us from the other two. Here are the whole seven, which are listed by Hermes Trismegistus in his book of “Complete Virtue” (Πανάρετος).⁶⁹⁰

Saturn becomes Nemesis (Νέμεσις)⁶⁹¹

Mars becomes Audacity (Τόλμα)

Venus becomes Love (Έρως)

The Moon becomes Fortune (Τύχη)

Jupiter becomes Victory (Νίκη)⁶⁹²

Sun becomes Spirit (Δαίμων)

Mercury becomes Necessity (Ανάγκη)⁶⁹³

We have nothing to add to what has been said about the κληροι corresponding to the two luminaries, Τύχη and Δαίμων. Paul of Alexandria taught us how to find the others, in the hermetic

manner, which was not at all law for the independent astrologers. For the κλῆρος Ἑρωτος, one transfers, to the Ascendant, the distance between the κλῆρος Δαίμονος and Venus, direct (for day time charts) or reversed (for night time charts). For the κλῆρος Ἀνάγκης, one transfers the distance from Mercury to the κλῆρος Τύχης to the Ascendant for a day time chart, and the opposite for a night time chart. For the κλῆρος Νέμεσεως, one uses the distance from Saturn to the κλῆρος Τύχης and vice versa. Thus these mathematical entities engendered themselves, one and all, by a series of calculation all based upon the positions of the Sun and the Moon.

It is, I believe, useless to philosophize on the points of departure for these directions. There is little doubt that these astrologers did not rely much on the subtle intentions which they had postulated. It is no more necessary to anticipate apotelesmatica*** in listing, according to Paul of Alexandria, the predictions fixed under this rather transparent etiquette⁶⁹⁴ Perhaps it would be appropriate, before going further, to stop and review the results so far. We have seen that the zodiac itself, taken as a collection of signs, was of only secondary importance in mature astrology. It served, above all, as a yardstick for the positions of the planets and the directions of their aspects. Even so, however, it was often replaced by the circle of geniture. Nevertheless, the planetary domains encrusted upon it offered great variety. It was never rivaled by the summary localizations of the planets – masked by theological names – in the circle of geniture. Nor was it rivaled by the associated signs with all the influences emanated by the planets.

The planets are the true Fates of astrology, the daughters of Destiny. It is the list of their modes of action which the astrologers must always keep in mind. Ptolemy drew it up for his disciples. They went on to re-cast and expand it after him, without exhausting the subject.⁶⁹⁵ Demophilus counts and puts into order eleven modes of planetary action. Each planet had more benefic energy the more such conditions it meets and therefore “rejoices” longer.⁶⁹⁶

To be in good form, a planet must be in one or more of the following conditions (reclassified in logical order).

I. Relative to the birth chart. – a. it must be in a position favorable with relation to the Ascendant, that is, at a propitious center (especially the Midheaven) or aspect (trine – sextile). – b. It must not be found in a “lazy” place, i.e., without aspect to the Ascendant, a rule implied by the preceding one.

II. Relative to the zodiac – a. it must be in a “solid” sign (στερεός), symbolic of stability and calm.⁶⁹⁷ b. it must be in a sign and a quadrant of the same sex. – c. it must be in one of its domains, domicile, triplicity, exaltation, terms, decans (πρόσωπα). – d. it must not be in debility. (ταπείνωμα)

III. Relative to the other planets. – a. If not in its own domain, it must be in the domain of a sympathetic planet which is

1) sympathetic by αἵρεσις (diurnal-nocturnal);

2) sympathetic due to sex;

3) absolutely sympathetic because benefic.⁶⁹⁸ b- it must be neither in conjunction nor in opposition nor in square aspect with a malefic planet, especially not with a malefic planet of the opposite αἵρεσις.⁶⁹⁹

IV. Relative to its own proper movement and to the Sun (phases). – a. it must be in forward movement (ὀρθοποῶν), not retrograde. – b. it must be in Oriental phase, if dealing with a masculine planet, in Occidental phase for a feminine planet.⁷⁰⁰ – c. it must be with its luminary, – in other words, be in its αἵρεσις – the masculine planets being above the horizon in the daytime, and the others, at night. – d. it must not be in or near the Sun's rays (as far as 15°), or “in the heart of the Sun, the exact same degree.”⁷⁰¹

After having explained these rules, the same compiler – or some glossator – brings some of them together into a table of the four “joys” (χαράι) or “favorable witnesses” of the planets. The first joy is to have the planets in their assigned houses in the circle of geniture. The second is to have them in their domiciles in the zodiac. The third and the fourth have to do with “phase” and sex. It is an essay at classification like the others. It confirms one more time – and that is all that I want to emphasize – the superiority of the “houses” to the signs. Mesopotamian or Greek symbolism was defeated by the more complex symbolism of the “Egyptians.”

*** *Apotelesmatica* is an archaic term, which refers to casting astrological charts. B-L has chosen to use “universal apotelesmatica” to denote a variety of charts with different functions from the better known birth or natal chart. See Ch 11. Given the interests expected of our readers it seemed more appropriate to retain the word *apotelesmatica* than substitute phrases for it. KM

Chapter Ten

Earthly properties and patronages of the stars.

We have learned to know the forces which move the world. We have learned the places where they are attached to the sky, that is, in the positions of the planets and the signs. However, there has been hardly any discussion until now, of the Earth save as the seat of the observer and the center of his measurements. Those relationships were perpetually varying and determined by calculation in each case. Astrology also assumed other, unchanging, relationships. These added their specific actions to the passing influences, increasing or hindering them. In a word, the zodiac had been garnished throughout with permanent domains. The terrestrial world also had been divided into domains which are devolved upon the planets, upon the signs, or both of them at the same time. This division may deal with surfaces or terrestrial regions. It may also concern categories of things or animated beings. Finally, we are taught that a human being is a microcosm, a miniature universe. The division of the earth was repeated within the human being. Astral influences were divided among all its bodily organs and mental faculties.

This logical proceeding is, in short, so natural (in spite of the bizarre results to which it led) that one could not say when or why it became part of the system. The astrologers took it to extremes but did not invent it. Without doubt, a map of the earth cut-up into sidereal fiefdoms, such as we will meet further on, had pretensions to be a work of learning. But more primitive minds could arrive at a similar conception, without so much mathematics. What were the ancient cities, if not the property of their civic gods? It was enough to replace the traditional gods with the stars, gods as well, to sketch out the system which was taken over by the astrologers. Plato did not dream of their doctrine when he made Critias say "Originally, the gods divided the entire earth among themselves, country by country. Once established, they took care, as shepherds do, to nourish and shape humans, who were at the same time their students and their property"⁷⁰² If the astrologers had not invented the practice of dividing up of the earth's surface or populations,⁷⁰³ there were plenty of precursors who had imagined dividing and distributing categories taken from all the kingdoms of Nature. Mythology spread its gods throughout the air, water, earth before astrologers began to write about the affinities of the celestial bodies with heat, cold, dryness, moisture. The poets sang of the golden Sun or the silvery Moon or spoke of Mars' iron before astrological chemistry assigned each metal to a specific planet. Everyone knew that plants and animals preferred certain gods. The dog and eagle belonged to Zeus, the laurel and dolphin, to Apollo, the myrtle and dove, to Aphrodite.⁷⁰⁴ Astrological medicine (ιατρομαθηματική) was preceded by popular superstitions. It was completely based upon the affinity of the organs, on one hand, and of the medications, on the other, with the stars.⁷⁰⁵ Demonology, which attributed illnesses to possession of the body by occult powers, is the earliest form of religion. Religion was never completely disengaged from it and returned to it in its decrepitude. The astrologers did not mark down and sell off the collection of amulets, phylacteries, magical spells, which they had inherited. Nor was it they who first had the idea of making the viscera into divine properties. From time immemorial, the diviners considered the liver to be the seat of revelation. It was the mirror upon which the gods projected the revelatory images, according to Plato. It was in order not to be out of step with their predecessors that the astrologers lodged Mercury there.

From all these earlier traditions and reveries, the astrologers drew a series of associated ideas which invaded all the natural sciences. It produced an astrological or alchemical botany, zoology, physiology, medicine, and pharmacopeia. The physiology of the human microcosm was, in turn, an abridged version, of the whole of astrology. If facial features and the shape of the body were due to astral influences, one could deduce the one from the other. The method was reversible. Astrology thus laid hands on an entire science, physiognomy. It traced all portraiture.⁷⁰⁶ One may abridge even more. The palm readers localized the marks of celestial influences in the hand, which became a birth chart traced by Nature itself. The planets had their own domains there.⁷⁰⁷ The direction of the lines indicated their relationships and reciprocal aspects, and the length or depth of the lines, their degree of energy.

One hardly knows where to begin this enormous excavation. One must understand, not just list. That is, one must grasp the associations of ideas which attach the individual attributions to general principles. Only then will one be able to extract from this mass of extravagance the small amount of

logic which it contains.

Let us go on to root the distribution of minerals, metals, and precious stones in an understandable principle. Here one is guided by the metaphors which assimilated the Sun to gold, the Moon to silver. The distribution of the metals was made principally upon color, compared to those of the planets. The associations of the colors with the planets definitely goes back to the ancient Mesopotamians. The seven stages of the observatories of Borsippa and Nineveh were painted with the planet's colors and even the seven enclosures of Ecbatana.⁷⁰⁸ We have seen that Saturn was supposedly black. Jupiter was clear red. Mars was purple. The Sun was clear gold. Venus was white and Mercury, blue. Plato described the orbs or celestial spheres in the tenth book of his *Republic* and took pains to note their colors, which varied from white to yellow and red. Ptolemy used the planetary colors for predictions based upon the colored rays which project from the chromosphere of the Sun during eclipses.⁷⁰⁹ He attributed a livid gray to Saturn, white to Jupiter, yellow to Venus (Aphrodite the blond), variable colors to Mercury, always changing and never definite. Their scholiasts compiled at random and hardly agree with each other beyond the fiery red of Mars and the gold color of the Sun.⁷¹⁰

Those who imagine that the astrologers would be content with observing the real colors of the planets are short of the mark. The nuances would not have been trenchant enough and the secret harmonies would not have been visible. Proclus has a beautiful saying that there is no black in a burning body (ἐν ἐμπυρίοις).⁷¹¹ It is necessary for Saturn to be black, Valens says, because he is Time (Κρόνος = Χρόνος) and time obscures all things. Saturn remains Φαίνων, nevertheless, because Time brings all things into the Light (πάντα τῷ πάντα τῷ χρόνῳ φανερὰ γίνονται). Why is Jupiter brilliant (λαμπρός)? Because he presides over glory and honors. Venus has a mottled color, because of the mobility and diversity of the passions which it engenders. Mercury is yellow, the color of gall, because it presides over the liver. The Moon is the color of air, that is, bluish like the atmosphere which it agitates, and which is changeable like it is. Moreover, it is regrettable, our logician adds melancholically, that the colors black and red, "a spot of which is enough to discolor the clear colors," belong to the malefic planets.⁷¹² Another rationalist, astrologer or no, concludes nevertheless that the Sun is black because it darkens the skin and because its symbol, the bull Mnevis, was very black!⁷¹³

Finally, it was not "nature" which furnished the colors attributed to the signs of the zodiac and to those geometric entities which one called "places." Nature did not distribute the basic qualities of cold, hot, dry, and wet, among the zodiacal triplicities.⁷¹⁴

What with the colors and other considerations, it was not hard to find the mark of the planets upon the metals which their action engendered in the bosom of the earth.⁷¹⁵ Since gold was attributed to the Sun, and silver to the Moon, Jupiter could take the yellowish amber, and Saturn, lead, livid like its face.⁷¹⁶ Warlike and bloodthirsty, Mars had a right to iron, covered with rust or blood, red in either case. Venus, goddess of Cyprus, took for herself the metal of Cyprus, "copper." If it were not the color of the planet, it called to mind the rosy cheeks of the goddess. A seventh metal, tin, was adjudged the metal of Mercury, without any obvious relationship and for want of a better choice. However, when "quicksilver" was discovered, this miraculous metal, mobile and protean, partly liquid, partly solid, was assigned rightfully to Mercury. Tin replaced amber as the property of Jupiter. Amber was suppressed in honor of the number seven and scratched from the list of simple bodies.⁷¹⁷

Precious stones were the preferred material for phylacteries and receptacles for an infinite number of occult properties.⁷¹⁸ Color was one motif for classification, but not the only one. The "Egyptian" astrologers reached into a great mass of Egyptian superstitions. They found there stones attributed to each day of the month and to the chiefs of the decades or the decans. There were distributions among the planets.⁷¹⁹ However, the preferred mode was distribution among the decans. They took the roles of both the planets and the signs of the zodiac.⁷²⁰ The astrologers used every imaginable sort of relationship. They included domiciles, chorographic protectorates (below, Chapter 11), chance similarities in names, etc., not to mention pure fantasy. Those who loved enigmas had a free hand here.⁷²¹ When they were done, one could start a new struggle over botany and zoology.

The distribution of the plants⁷²² was made in the same unsystematic way. The astrologers used general appearance, the color of the flowers, a whole crowd of magical or medicinal properties. One recognized them from the popular names of the plants or puns made upon these names. One plant which was called the "buckle" (πλοκαμῖς) or the "dove plant" (περιστερῶν) was assigned to Venus. The "wand of Hermes" (Ἡρμοῦ ῥάβδος) went to Mercury as absolutely as the sunflower is assigned to the Sun today. It was no doubt a play upon words (ἄρην and Ἄρης) which attributed the arnoglosse

to Mars, at least as much as the “lamb's tongue” made one think of Aries, domicile of Mars. In general, sharp, stinging, plants were the domain of Mars. The sweet-smelling plants were “aphrodisiac,” and the sweet fruits went to Venus. The always slightly offensive energy of Saturn revealed itself in the flavor of the onion, of garlic, of mustard, and of pepper.

The chapter on zoology is less well-furnished.⁷²³ The habit of attributing animals to the gods as servants and special messengers was universal. The Biblical and apocalyptic Jahveh Himself is surrounded by them, as are our evangelists and some well-known saints. Dragons, serpents, scorpions, vipers, foxes, cats, and mice, nocturnal birds⁷²⁴ and other furtive sorts of animals belonged to Saturn. Why were the hare and the ass put into the same group? Concerning the hare, I have nothing to say, save that its ears were a worthy pendant to those of the ass. As for the ass, I suspect that it was led here by a play on words worthy of joining the Stoic and Neoplatonic etymologies. “Ovoç, ass, donkey, is contained in Κρόνοç.”⁷²⁵ It is not surprising to see the ferocious and meat-eating animals in the lot of Mars, livened-up by the monkey and the hog. For other animals, one can hardly see any general principle. An exception may be that domestic animals are the lot of Mercury, the usual pedagogue of astrology.

However, the gods concentrated their attention, and the stars, their energies, upon Humanity, the microcosm. The distribution of the celestial influences among the parts of human body, the astrological “melothesia,” could not help being a masterpiece. Since the whole world was at work here, it was even a collection of masterpieces. It was one of those creations, which, complex in origin, became even more so upon reflection. It was necessary to consider the various members and the internal organs as parts of the body, with equal claims. Among the constituent elements were the bones, the blood and humors, the breath, the vital warmth, corresponding to the four cosmic elements. It was even better to institute a hierarchy embracing the body and soul, the vegetive, sensitive, and intellectual souls. There were plenty of astrologers to pose these sorts of questions, and to resolve them differently.

Once again, we find a concurrence between zodiacal and planetary astrology.

The zodiac, considered as a measure and a prototype of the human body, had the double advantage over the planets of being fixed, while the number of planets was debatable. The zodiac also offered a greater number of divisions, especially if one used the decans.⁷²⁶ Manilius did not know or did not explain the zodiacal melothesia. Usually, one has a chance of finding naive reasons in his work, which others hide. Here, we are deceived. Unusually, he is very brief and gives no reasoning. He does not even take the time to formulate the very simple rule which he applies. It consists of stretching out, so to speak, the human body upon the unrolled circle of the zodiac. He placed the head upon Aries (the Ram, “head of the universe”) and the feet upon Pisces, the Fish. They had no feet, but made up for this deplorable lack by the fact that there are two of them. The head devolving upon Aries, the throat corresponded to Taurus, an animal with a thick neckline. The shoulders and arms, twin members, belonged to the Gemini. The chest went with the carapace of Cancer. The flanks corresponded to Leo, the lower belly or bladder, to Libra. The pubis went to Scorpio, the thighs, to Sagittarius. The knees corresponded to the kneeling Capricorn, the lower legs, to Aquarius and the feet, to Pisces.⁷²⁷

The associations of ideas are not exactly the bright side of this mechanical procedure, and one can understand why Manilius did not linger in evaluating them.⁷²⁸ Sextus Empiricus knew and reproduced the preceding list, adding an indication of his own. He said that the presence of a malefic planet in one of the signs of the moment of birth led to the mutilation of the corresponding member. The same list is encountered elsewhere, with tentative rearrangements, but protected against deformations in the system itself, which left hardly any room for imagination.⁷²⁹ The melothesia by decans (similar with the signs divided into thirds) was probably made fashionable by the famous “Nechepso.” It was known to Celsus, who attributed it to the Egyptians. “Among them,” he said,

*“thirty-six spirits or gods of the air – one could count several times more – have divided the human body into thirty-six parts. Each of them was designated to watch over one of these parts. They knew the names of these gods in the language of the country”*⁷³⁰

It was to the planetary melothesia which the innovators turned when inconvenienced by the

rigid geometry of the zodiac. With it they had a “natural” series, no doubt,⁷³¹ but one more complacent, with more understandable elective affinities. They could even get rid of, if they liked, the order according to distances and hold to the elective affinities. However, the height of the art was to combine the two sorts of relationships. Ptolemy either did not try or did not succeed.⁷³² He does not try to do more with melothesia, nor does he pass the subject by. He follows (perhaps willy-nilly) a system invented by some fantasists, pulled out of thin air. He did so with regret no doubt and for want of anything better. He only mentions it briefly. He does not add any of the classification principles which we might suggest (and which are half suggested by the scholiast). Saturn has the right ear (the other being reserved for Mars)⁷³³ the bladder, the spleen, the phlegm, the bones, that is, all that is humid or hard, with a mixture of cold. Jupiter governs the sense of touch, the lungs, the arteries and the sperm. That is, he rules all which is temperate and especially “pneumatic,” being the windy planet par excellence.⁷³⁴ Mars has the left ear, as collaborator with Saturn in evil deeds. Likewise, in its own right Mars rules the kidneys, the veins and the testicles, sources of heat and passion. The Sun, as eye of the universe, has for its own the eyes, the brain, the heart, the nerves. In a general way, the Sun rules the right side, corresponding to the hemisphere of the diurnal “domiciles.” It rules the “hegemonic” organs.⁷³⁵ Venus had the sense of smell, perfumes being the stimulus of love. It also rules the liver, seat of prophetic enthusiasm, to which women were particularly receptive, and the flesh, which became beauty. Mercury had empire over reason and over the tongue, as the god of knowledge and of eloquence. As a planet with a rapid motion, it ruled bile by affinity, and “the seat,” without doubt by Hegelian logic, by virtue of the identity of the contraries.⁷³⁶ Finally, the Moon ruled over the left side of the body as the Sun does over the right. It had the sense of taste – the one sense which remained to be distributed – the swallowing of liquids, the stomach, the belly and the womb.⁷³⁷ This attempt did not discourage others. Demophilus took up and perfected the system. He mixed in all sorts of psychic influences and dangerous reasonings.⁷³⁸ He left all the phlegmatic and cold humors to Saturn and removed the rest. At least there was no more question of the spleen, assigned to the Moon, nor of the ears, left and right. Hearing went with the tongue, to Mercury. The subtle distinction applied earlier to the ears was applied to the eyes now, too. There was a sub-distinction of which the author, perhaps, was proud. The Sun ruled the right eye in men and the left eye in women. Look who recalls all things to their true places.⁷³⁹ The liver fell to Jupiter, with the stomach and the nerves. Mars took the hot things, everything which boiled and fermented in the organism, the blood, the kidneys, the reservoirs of semen. If it left only bile to Venus, it was doubtless not to be neighborly with Jupiter. The improvements ended by leading to a reversal.

It was the amateur astrologers, Gnostics or Pythagoreans, who had the greatest success in combining the order of the planets with their physiological and psychological affinities. They were more free with regard to the traditions. See, in this genre, a small masterpiece, transmitted by the author of the *Hermippus*.⁷⁴⁰

Saturn, as planet, was enthroned in the highest part of the sky. As a god, he was prudent, wise, cold in body and in soul. He corresponded to the brain. Even his specific attribute, paternity, could be used. It was a general belief in antiquity that semen came from the brain by way of the spinal column.⁷⁴¹ Jupiter had the thorax, the seat of the “sensitive” soul. The exception was the heart, which, as caloric foyer of the body, is the seat of the Sun. Mars, a choleric god, rioted bile (χολός). Venus ruled the vast domain of physical appetites. It included the belly, the kidneys, the genitalia, the thighs and the lower legs.⁷⁴² Mercury represented divine intelligence, source of all knowledge. It was lodged in the liver, where the signs of revelations were written. Finally, to the Moon, low, cold, bloodless, remained the extremities of the lower members.

However, he spoiled the system somewhat. He introduced considerations based upon divergent opinions and the obligatory baggage of hot, cold, moist, dry. In this way, he created difficulties which he excused with bad reasons. He could not see that the Sun is with the heart by affinity and not because of its central position. Nor could he see that the Moon is with the feet because of its low position, and not because of the “cold” of the extremities.⁷⁴³

The abstract terms which appear here and there and the jargon of our contemporary charlatans are imprinted with the speculations of Platonists, Pythagoreans and others upon the macrocosm and microcosm. They are troubled images and confused harmonies which the commentators upon the *Timaeus* dispersed in floods. They include the division into thirds, sevenths, twelfths, of the sensible, spiritual and intelligible worlds. They also include the appetites of the body and the faculties of the

soul. Finally, they include everything that the imagination in quest of harmonies used to satisfy its desires and to accommodate to its tastes. Some found seven interior numbers and seven exterior organs in the body.⁷⁴⁴ Those even more expert in anatomy counted twenty-eight parts in the interior, corresponding to the four groups of seven divisions in the Moon's course.⁷⁴⁵ The pythagorizing musicians not satisfied with the seven-fold division arrived at the octave by adding the sphere of the fixed stars to the seven planetary orbs. Those who wished one more place, to lodge the nine Muses, added, again, the Earth, the support of the whole lyre.⁷⁴⁶ Ptolemy abstained or did not take the time to adapt these harmonic speculations to astrology. Exceptions were for the chords and angles of "aspects." Others did take the trouble, however. Proclus,⁷⁴⁷ to speak of the one most convinced of all, taught that the sphere of the fixed stars corresponded to the intellectual sense (τὸ νοερόν). The orb of Saturn corresponded to the contemplative sense (τὸ θεωρητικόν) and Jupiter, to the political or social sense (τὸ πολιτικόν). Mars corresponded to the passions (τὸ θυμοειδές) and the Sun, to the sensible faculty (τὸ αἰσθητικόν). Venus corresponded to desire (τὸ ἐπιθυμητικόν) and Mercury, to the vocal faculty (τὸ φωνητικόν). The Moon corresponded to the vegetative force (τὸ φυσικόν). The soul, in descending from the sky, seized upon all these faculties and returned them when ascending back into the sky.⁷⁴⁸ One may laugh at these crazy notions. One may at least envy when one realizes that the state of mind which produced them tends to return. One may also smile that the idea of the microcosm slipped, in various disguises, with its aprioristic proceedings, into what is called sociology. The mania for comparisons, in the service of a relic of mysticism,⁷⁴⁹ is found in our modern sociologists. Belated disciples of Plato, they find all the organs of the human body in society, under the pretext that the whole must resemble the part. We see them creating a social histology, which finds the heart in the capitals. The arteries and veins are the commercial ways. The nervous system is the telegraph. The head is the ruling classes. The muscle is labor. The fat is the rich or the clergy, and the skin, cover and defense of the whole group, is the army. They have discovered that societies not only grow larger, by extending their territories, but they also grow taller, when their buildings are taller. They also think that society as a whole has gender, rather like astrologers who thought the planets and signs of the zodiac had gender. Conquest is often, in their eyes, a fertilizing rape, a ruse of Nature. If they are short of ideas, they might study our following chapter with profit. It will treat the celestial protectorates over various peoples. For they have only part of the road. The way of the Platonists and the astrologers leads higher. After having discovered so many harmonies between humanity and human groups, it would no doubt please them more to find harmonies between them and the extent of the entire Earth. One could reproach them for not being conscious of the unity of the laws of Nature which had kept them from going farther.

However, let us leave the modern mystics. Let us reclaim their ancestors and go on to see how they have extended and distributed the sidereal influences to the inhabited earth, under the form of celestial patronages. We enter a little early into applied astrology or *apotelesmatica*, in order not to force our company on Ptolemy.

Chapter Eleven

Universal Apotelesmatica

Ptolemy arranged a most opportune transition for us. He made the conditions for entry into his universal apotelesmatica the same as those upon which he based his predictions. The first part of this chapter belongs in reality to the preceding one and continues it. He worked to distribute the sidereal influences not so much over the Earth, considered in its physical structure. He did it for the “inhabited earth” (οἰκουμένη), that is, to human groups called cities or states, peoples, nations, races. It is still humanity which is viewed over-all, not to say uniquely, in the divisions and subdivisions which I will call “astrological chorography.”⁷⁵⁰

Ptolemy tells us, in approaching apotelesmatica (putting the astrological tool kit to work) that this branch of the art has two very distinct tasks. It may predict events interesting to collective beings, or incidents and potentials in individual life. When the task is different, the method is different. Communities are not born at a given moment and it is by metaphor that one speaks of the stages of their existence, of their growth and death. One does not, then, observe their Ascendants or draw up birth charts for them. He admits this might be possible, approximately and in certain cases, such as the foundation of a city at a known date. Apotelesmatica, however, is more concerned with phenomena such as earthquakes, famines, plaques or wars, which interest more than one city at the same time. Predictions about them must be sought ahead of time with methods serving to establish their particular destinies.

Applied astrology or “apotelesmatica”⁷⁵¹ is divided into “universal” (καθολική – καθ’ ὅλον) and “special” (γενικόν) or “horoscopy.”

The principle method used by “catholic” astrology is the interpretation of eclipses of the two luminaries. They indicate the nature, the genre, the place and finally the intensity and length of the event from the phenomenon observed. The most important question of all in the opinion of the consultants was to resolve the question of the place where the prediction would come to be. To do so, it is necessary that a correspondence be established ahead of time between the terrestrial regions and the parts of the zodiac where the eclipses took place.

This is how terrestrial maps divided into astrological fiefs were used. The maps were drawn up first by practitioners who inserted what was indispensable, that is, the zodiacal domains. They were followed by savants who, in introducing the planets, had pretensions to converting astrological chorography into a comparative ethnography.

Astrological Chorography and Ethnography.

The system of Ptolemy, the most complicated of all, was preceded by simpler systems, which were not all abandoned. Let us begin with those who used the signs of the zodiac only as figures and not (ostensibly at least) as planetary domains. The first in date is for us that of Manilius, the very precious neophyte, who found naive, impulsive, reasons to explain its distribution.⁷⁵²

Aries, let us not forget, is the ram which furnished the Golden Fleece. The Propontis, which it swam across, belonged to it by right. Add the Hellespont and Colchis, which found no place in the verse of the poet. Egypt belonged to Aries, too. Manilius, haunted by his image of a swimming ram, believed that this was because Aries caused the Nile flood. He forgot Amon, the ram-headed god.

Dependent upon *Taurus* were “the mountains of Scythia, powerful Asia and the effeminate Arabs, a country enriched by its trees.” The “mountains of Scythia” designated Scythia or the Tauric Chersonese [the Crimea], whichever name is spoken. Asia is dominated by the Taurus mountains. The Arabs, enriched by the commerce in sweet-smelling resins, deserved to have as patron the chief of the feminine signs (domicile of Venus, exaltation of the Moon).

The banks of the Pontus-Euxinus [the Black Sea], which curves in the shape of an bow, are under the tutelage of the first of the *Twins*, the archer Apollo. The other Twin rules over the mouths of the Indus and the Ganges. This must be Bacchus, conqueror of the Far East, at least if it is not Hercules, brought here by one of the many variants of the legend of the Argonauts.

To *Cancer* belongs Ethiopia, the land of the black people, which “make a spot upon the globe.”⁷⁵³

Leo possessed Phrygia, where his disciples draw the chariot of Cybele, plus Cappadocia, Armenia and Bithynia. They were all countries inhabited by wild animals and people who resemble them. Leo, finally, also owned Macedonia, home of those human lions who, led by Alexander, have “conquered the universe.”⁷⁵⁴

Various systems of astrological geography

Virgo, who is justice, knowledge and peace, extended her patronage over Rhodes, the land of learned astronomers. It had been inhabited for a time by a new Helios, Tiberias, the true Sun of the world.⁷⁵⁵ She also ruled over the coast of Asia Minor (Caria – Doris – Ionia) and the old Arcadia. The Athenians, who already had their Παρθένος and who could claim Virgo – Erigone, are forgotten or drowned in the Ionian group.

Libra protects the country – and especially the city – which held the balance between peoples dominated by the royal-people and which raises or abases them at will, Italy and Rome.⁷⁵⁶

Scorpio was patron of unpleasant peoples. It held Carthage, the coasts of Libya and Cyrenaïca,⁷⁵⁷ Sardinia too and, in general, to “lands fertilized by the liquid plains.” They were all the places already visited and colonized by the Phoenicians. Manilius, an anti-Semite in his way, here interprets the old grudges of the Greeks and Romans.

Where would *Sagittarius* be happy if not Crete, the classical fatherland of archers? With the Cretan legends of Minos and Daedalus, and of Daedalus chased to Trinakia, one reaches Sicily (which also obeys *Sagittarius*) and its neighbor, Magna Graecia.

Capricorn, an amphibian composite, dominates all the coasts alternately bathed and abandoned by waves of the ocean,⁷⁵⁸ Spain, Gaul, Germany.

Aquarius reigned over aquatic or maritime countries, Phoenicia, Cilicia, lower Egypt.⁷⁵⁹

Finally, *Pisces*, born in the Euphrates, governs all its neighbors, Babylon, Susa, Bactria, the banks of the Tigris and of the Indian Ocean, called the Red Sea.

We do not know to what extent Manilius is responsible for the arrangement which he explains or the reasons which motivate it. What is certain is that he believed in applying the rules of a healthy logic to dividing the cause from the effect. He sought resemblances between protégés and patrons. Others, using the same logic, arrived at very different results. Dorotheus of Sidon was a teacher whose authority balanced that of Ptolemy. He had his reasons, which we will try to divine, for distributing the terrestrial domains of the signs completely differently. Dorotheus seems to have wanted to combine affinities by temperament with the positions of countries upon a map. That is, he wanted to unroll the zodiac upon the surface of the Earth, East to West. He used temperament to explain exceptions to the rule of position.⁷⁶⁰

Dorotheus took the cradle of astrology as his point of departure. Its primacy was affirmed by that of Aries, the opening sign of the Mesopotamian year. To Babylonia was added Arabia, by virtue of longitude, no doubt. A part of Arabia belonged to Taurus. It also possessed Media and Egypt, the latter because of the sacred bulls Mnevis and Apis. The former belonged to Taurus, perhaps because of the bull-headed capitols of Medo-Persian architecture. The rule of position brought us next to Cappadocia, Parrhebia (?), Phoenicia, which went to Gemini. Phoenicia belonged especially with Hercules-Melkart. Homeric Parrhebia with Dodona went to Apollo, the unique prophet of Zeus.

Cancer reigned over Thrace as a northern sign and over Ethiopia as a burning sign, both countries supposedly having the same longitude. To Leo belonged Phrygia with its lions of Cybele, as well as, no doubt as a war-like country, Northern Greece (Hellade) and Pontus, the homeland of Mithradates. Rhodes, the Cyclades and the Peloponnesus formed a collection of civilized, pacified, countries governed by Virgo. Italy belonged, as before, to Libra, along with, by an assimilation flattering to Cyrene, Cyrenaïca. Carthage, Libya, Sicily were assigned in general to the venomous Scorpio. We here finish with the West. Alongside, one encountered, for the lot of *Sagittarius*, slingers and archers [the Balearic Islands],⁷⁶¹ Crete by affinity and, under the name of Gaul, the vast habitat of the celto-germanic population. Finally, the fogs of Cimmeria must go, with Capricorn, to the Far East. Dorotheus must have begun his distribution at the Far East with Aquarius, which was placed at the beginning of the terrestrial band, exactly as the month of January began the Roman year and ended at the

Euphrates with Pisces ⁷⁶² The names of the authors have been effaced here in our text, but that is no great loss.

Upon these elucubrations, already disquieting, the “ancient Egyptians,” the terror of any who seek intelligible rules in astrology, the Egyptians, I say, with Odaspes, Valens, “and others” as imitators, increased the obscurities with both hands. They dissected the signs into minuscule fractions (κατὰ μέρος – μερικῶς) and took a malicious pleasure in making neighboring segments correspond with the most distant parts of the earth. These new demiurges were hindered by neither their clients' credulity nor by their own stupidity. They brewed, with delight, occult effluvia emanating from the head, the belly, the right arm, the left arm, the front part of the feet, the back part of the feet, the quiver, the urn, etc., of this or that sign. Then they sowed them in the air over the world, without knowing where these sparks of artificial fire might fall.⁷⁶³ Those least maddened with mysteries were content to substitute division by decans for division by signs.⁷⁶⁴ They might even arrive at the number of forty-eight different addresses for the eclipses by a means completely ingenious. They grouped the twelve hours of the day in four “trihoria” (τρίωρος [ῥα]) and assumed that each sign corresponds, during each trihoria, to a different country. It is a combination of a division of time with a division of space.⁷⁶⁵

All this smells of Egypt, cradle par excellence of the systems of “chronocratoria.” [Time Lords] These were regencies over fractions of time (years, months, days, hours) by different gods and spirits, carefully cataloged. These “ancient Egyptians,” who were Hellenes or Hellenized, drew upon the old native traditions to enrich astrology and to surpass their rivals, the “Chaldaean” [Mesopotamians]. Even the basic idea of astrological chorography may have come from an older Egypt, for the Egyptian sky was a copy of the earth. One distinguished an eastern sea, a northern, a western, provinces or nomes distributed among the thirty-six decans. They were surrounded by rivers and canals, covered with towns (*deman*) where the decans lived.⁷⁶⁶ It was enough to bring the sky down to earth again and enlarge it to fit new geographical knowledge.

One also meets, in a concurrent vein of tradition, a planetary chorography, which was more “Chaldaean.” In any case, it was combined by the Greeks with their geodesic division of the earth into “climes.”

Those ancient geographers and astronomers who were not primarily astrologers, such as Eudoxus, Eratosthenes and Hipparchus, estimated the latitudes. They approximately spaced them according to the length of the day of the summer solstice, adding one half hour to each parallel. They counted, for the “inhabited earth,” seven zones or more, depending on where they placed the limits in the North and the South. Eratosthenes established eleven, from the land of the cinnamon sellers [the coast of East Africa, modern Kenya and Tanzania] to the mouth of the river Don. They started with another system, which treated the whole earth as a sphere. On it one found reproduced the framework of the celestial zones, the two tropic circles, the two polar circles, perhaps the equator. Eratosthenes added five or six zones, depending on whether the older scholars had used the equator as a line of demarcation.⁷⁶⁷ However, these zones are no longer the “climes.”

The astrologers used these large estimates. They used the climes to estimate the, *anaphorai* ἀναφοραί since they looked ignorant if they could not do the latter. But they wanted seven, no more, no less, for the whole of the inhabited earth, so that they could assign a clime to each of the planets.⁷⁶⁸ They found their seven climes and one could trust them to find reasons for distributing them. Nevertheless, they endured nearly insurmountable difficulties. They wished to keep the order of the planets and, at the same time, not to leave their *oikouμένη*, which was north of the equator. Putting the cold Saturn in the North obliged them to put the no less cold Moon in the South, over the torrid zone. Correspondence was best established by placing the Sun in the torrid zone, Saturn and the Moon near the poles. Then, however, they left the inhabited earth and dropped into the system of five zones, useless to them⁷⁶⁹ The five zone system was useless, although not because of the number five. There were five “planets” proper, if one leaves out the two luminaries. It was useless because it seemed absurd to extend the action of the planets to the polar regions. They circulated everything between the tropics and were thought to throw their effluvia a little more nearly perpendicular into the zones which they protected.⁷⁷⁰ Briefly, we know that there were systems of planetary chorography with seven zones or climes.⁷⁷¹ However, doubtless poorly balanced, they were abandoned, whether for the zodiacal distributions or for the masterpiece of Ptolemy.

Finally, we approach the masterpiece,⁷⁷² where all the ingredients of a science adulterated by astrology enter.

One may ask how much of the originality in this ethnographic system which we will analyze goes back to the astronomer and geographer who was Claudius Ptolemy. It is certain that he had not invented the system or the procedure himself. Manilius already knew the regime of astral suzerainties distributed over the surface of the earth. Nor did he invent the idea of applying the agglomeration of individual destinies drawn from eclipses. They were the very foundation of Mesopotamian astrology, born to serve and advise kings. Eastern astrology was occupied with peoples before it was concerned with individuals. Greek astrology was born from the Eastern variety, but in a time and among a people where intellectual culture had exalted the sense of individuality. It must have returned on the same road in an opposite sense, after basing its vogue on the egotistical curiosity of individuals about the destiny of human societies. This is not to say that the Mesopotamian astrologers, who did not travel much, had not already drawn up maps for astrological use. One must leave to one side the theory, recently proposed, which attributes the distribution of astral influences over the extent of the inhabited earth to the philosopher, historian, geographer and astrologer, Posidonius.⁷⁷³ Since the ideas did not immediately engender all their consequences, we need no longer say that Posidonius had intended his map for the use to which Ptolemy later put it. It may have been proposed, as Fr. Böll thinks, to respond to an awkward objection from Carneades. He had declared the fact that groups of human beings had the same temperament, the same habits, the same laws and, in consequence, taken over-all, the same destiny, to be incompatible with the theory of individual horoscopic charts.⁷⁷⁴ Posidonius treated each ethnic group or political nation as if it were a sort of individual. All the different influences upon that group, including astrological influences, gave it its own horoscope, its own destiny. The charts and destinies of all individuals within that group were built upon that foundation.⁷⁷⁵ One of those influences on the group was heredity, i.e., the past influences of the stars and their cumulative effects. The other influences were due to the stars at work in the present. This action, past or present, always identical to itself, is that of the sign or signs, the planet or planets which dominate each country. All things considered, I willingly leave to Posidonius the general idea that natural laws determined the characters of peoples. I leave to Ptolemy the dubious merit of having complicated a probably simpler system by introducing the planetary triplicities.

Ptolemy began by dividing the οἰκουμένη into four regions or quadrants (τετρατημόρια). They were separated, in longitude, by the meridian of the Arabian [Persian] Gulf and of the Palus-Maeotidis, the Sea of Azov, in latitude, by the parallel which ran from the Pillars of Hercules [Gibraltar] to the Gulf of Issus. Each of these quadrants is dominated (οικοδεσποτεῖται) by one of the zodiacal triplicities. As we saw further back, (pp. 199-206) they have their own orientations, based upon the temperament of the planets they domiciled. If one makes the celestial and terrestrial orientations correspond,⁷⁷⁶ one finds that the northwest triplicity (♈ - ♉ - ♊) dominated Celtogalatia or Europe. The southeast triplicity (♌ - ♍ - ♎) dominated Ethiopia and Upper Asia. The northeast triplicity (♏ - ♐ - ♑) dominated Libya. Now, one must distribute the combined influences of the signs of the zodiac and the planets within the interior of the quadrants.⁷⁷⁷ From a geographer who inherited the scholarship of Posidonius and who was able to invoke, in turn, the physiology and the psychology, of the various peoples, one expects tours de force. The fact is, even if one does not always see the reasons which determined the detailed attributions, one notices very well the precautions which the astrologer took to preserve his freedom and avoid objections. The combination of planetary influences and zodiacal influences already augmented considerably the number of nuances applicable to the depiction of ethnic traits. Sympathy between the signs associated in trine offered a crowd of supplementary resources. Finally, the peoples who inhabit the central regions are of the most mixed stock and must have, in a very advanced civilization, a very great variety of aptitudes. The prudent doctor proposed a rule that the parts of the quadrants turning around the center of the figure “assume by increase” (προσλαμβάνουσι) the traits of the opposite quadrants. He did not count the influence of the planets, which, representing intellectual culture, is common to all of them.

Ptolemy disguised the path which he followed to the best of his ability. He did not admit that the affinities which he established served as the point of departure for his inductions. He presumed that the causes came directly from physics and astral geometry on the one hand, from geodesy and meteorology on the other. He only invoked ethnic traits as evidence. He protects himself from agreeing that the causes were invented to explain the effects. The causes perfectly unknown in themselves, but the heat of the Sun played a part. This is not to incriminate his good faith. Dogmas are always collective

works. Those who finish them or modify them follow an impulse which they did not begin. It is not necessary to believe that the astrological map of Ptolemy had no mysteries for its author.⁷⁷⁸ It rested upon a quantity of pretended observations and of associations of ideas. They came, on the one hand, from the offices of the astrologers. On the other, they came from common opinion, anonymous judgements about peoples and races by the inhabitants of the Greco-Roman world. It is precisely these judgments which are the most interesting for our analysis. If astrology is a chimera for us, it was a reality to them.

Ptolemy needed, first of all, to limit and make precise the value of the influences exercised upon the terrestrial regions by the stars of the zodiac. These influences augmented those of climate, of altitude, of the nature of the soil, rather than substituting for them. The latter influences were more intermediate and more energetic. It is clear that seacoasts encouraged navigation and that horsemen are met where the pasture is good for raising horses. Too, the influences were general, not specific. They did not affect the individual save as part of a group.

Taken as a whole, the peoples of Europe, under the influence of Jupiter and of Mars in occidental phase (ἑσπέριοι),⁷⁷⁹ were bellicose, enemies of all servitude. They were more sensitive to friendship than to love and very prone to converting friendship into physical love. The absence of Venus was felt, from this point of view, in the outer part of the quadrant. The influence of the opposite quadrant or triplicity was not felt, that is, among the Britons, Gauls and Germans.⁷⁸⁰ These barbarians are exclusively under the influences of Aries and Mars.⁷⁸¹ Leo and the Sun gave a majestic benevolence to Italy, to (Cisalpine) Gaul, Apulia and Sicily. Sagittarius and Jupiter gave the taste for cleanliness to Tyrrhenia (Etruria), Celtica or central Gaul and Spain. The interior part of the European quadrant, which accepted influence from the Asiatic quadrant, included the basin of the Aegean Sea. There, the effluvia of Saturn, of Mercury and of Venus, associated with those of Jupiter. The result produced natures balanced in body and souls, friends of ordered liberty, scholars, artists. In a place dominated by Venus, they put art at the service of elegance and pleasure.

The southeast quadrant or southern Asia, placed under the influence of Saturn and of Venus in oriental phase (ἑωτοί), enclosed peoples who are grave, solemn and voluptuous. Those who experienced the double action of Venus and Taurus (Parthia - Media - Persia) outraged nature with incest.⁷⁸² In revenge, the combined action of Virgo and of Mercury gave to Babylonia - Mesopotamia - Assyria its superiority in the science of astrology. The mixed part of the Asiatic quadrant submitted to reciprocal influences from the European quadrant, since the people there were more restless, more hardy and more deceitful, too. The solar cults there were sustained by the patronage of the Sun.⁷⁸³ Jupiter caused Happy Arabia to be ruled by the proverbial happiness which gave the country its name.

The Northeast quadrant or northern Asia was dominated by Saturn and by Jupiter in oriental phase as well as by Mercury. It enclosed peoples who were extremely rich, wise and chaste in its outer portions. It had the influence of the "human triplicity," of Gemini, of Aquarius and especially of Libra, which was in perfect accord with that of the planetary rulers. It is necessary to say, however, that Aquarius and Saturn engender the ferocious peoples of Sarmatia, Oxiana and Sogdiana. Asia Minor, the central part of the quadrant, submits to influence from the African quadrant. In Asia Minor, one honors Venus under the name of the Great Mother and Mars under the name of Adonis. Women there have virtues which the men lack. Colchis especially owes its virile Amazons to the action of the Moon in oriental phase, masculinized by position. Scorpio and Mars are responsible for the spiteful deceitfulness of the Cappadocians and the Syrians of Commagene.

The Southwest or African quadrant lived under the influence of the animal triplicity par excellence (♉ - ♊ - ♋). It was dominated by Mars and Venus in vespereal phase as well as by the Moon, planets to which Jupiter adds itself, as indicated by the cult of Jupiter Ammon.⁷⁸⁴ Venus and the signs of a completely feminine triplicity produced races ardent in love and prolific. Also the kings shared their thrones with their spouses, who were their sisters.⁷⁸⁵

Astrological Geography of Ptolemy

I Northeast Triangle (☿ ♈ ♀) ☉ ruler in the daytime, ♃ at night; + ♂

☿ and ♂ – *Brittania, Gallia, Germania, Bastarnia*
♈ and ☉ – *Italia, Gallia (Cisalpina?), Apulia, Sicilia*
♀ and ♃ – *Tyrrhenia, Celtica, Hispanica*

Central region, influenced by the Southeast Triangle and ♄
♄ and ♅ – *Thracia, Macedonia, Illyria*
♊ and ♄ – *Hellas, Achaia, Creta*
♋ and ♀ – *Cyclades, Coast of Asia Minor, Cyprus*

II Southeast Triangle (♋ ♊ ♀) ♀ rules the daytime, ☾ at night; + ♅ (and ♄)

♄ and ♅ – *India, Ariana, Gedrosia*
♋ and ♀ – *Parthia, Media, Persia*
♊ and ♄ – *Babylonia, Mesopotamia, Assyria*

Central region, influenced by the Northeast Triangle and ♄

☿ and ♂ – *Idumaea, Coele-Syria, Judaea*
♈ and ☉ – *Phoenicia, Chaldaea, Orchinia*
♀ and ♃ – *Arabia Felix*

III Northeast Triangle (♈ ♎ ♀) ♅ rules the daytime, the night, ♄; + ♃

♈ and ♄ – *Armenia, Hyrcania, Matiana*
♎ and ♀ – *Bactriana, Caspia, Serica*
♋ and ♅ – *Sarmatia, Oxiana, Sogdiana*

Central region, influenced by the Southeast Triangle

♌ and ☾ – *Bithynia, Phrygia, Colchis*
♍ and ♂ – *Syria, Commagene, Cappadocia*
♋ and ♃ – *Lydia, Cilicia, Pamphylia*

IV Southeast Triangle (♌ ♍ ♀) ♂ and ♀ rule the daytime, ♂ and ☾, the night

♌ and ☾ – *Numidia, Carthage, Africa*
♋ and ♃ – *Phazania, Nasamonitis, Garamantice*
♍ and ♂ – *Mauretania, Gaetulia, Metagonitis*

Central region, influenced by the Northeast Triangle

♈ and ♄ – *Cyrenaica, Egypt, Marmarica*
♎ and ♀ – *Thebais, Oasis, Troglodytica*
♋ and ♅ – *Arabia, Azania, Aethiopia media*

A selection made in the preceding table allows us to group with each sign the countries which it protected, either directly or by communication between two triplicities. This “simple explanation” (ψιλή ἔκθεσις) was destined to serve as a guide to practitioners who were content to look into the Zodiac for the addresses of the presages. They did not care about the fine points of ethnographic psychology. The scholiast attributes it to Ptolemy as well.

Correspondences between the signs and various terrestrial regions

♈ – *Britannia, Gallia, Germania, Bastarnia, Coele-Syria, Palaestina, Idumaea, Judaea*

♉ – *Parthia, Media, Persia, Cyclades, Cyprus, Coast of Asia Minor*

♊ – *Hyrkania, Armenia, Matiana, Cyrenaica, Marmarica, Lower Egypt*

♋ – *Numidia, Carthage, Africa, Bithynia, Phrygia, Colchis*

♌ – *Italia, Gallia (Cisalpinga?), Sicilia, Apulia, Phoenicia, Chaldaea, Orchinia*

♍ – *Mesopotamia, Babylonia, Assyria, Hellas, Achaia, Creta*

♎ – *Bactriana, Casperia, Serica, Thebais, Oasis, Troglodytica*

♏ – *Metagonitis, Mauritania, Gaetulia, Syria, Commagene, Cappadocia*

♐ – *Tyrrhenia, Celtica, Hispania, Arabia Felix*

♑ – *India, Ariana, Gedrosia, Thracia, Macedonia, Illyria*

♒ – *Sarmatia, Oxiana, Sogdiana, Arabia, Azania, Aethiopia media*

♓ – *Phazania, Nasamonitis, Garamantice, Lydia, Cilicia, Pamphylia*

Equal amounts of geometry, geography, history and mythology went into this learned construction. It is information, still interesting to us, of civilization during the epoch between Posidonius to Ptolemy. However, it was too complicated for the average astrologer. They did not find value in such high speculations and, in general, they did not like their colleagues who were stuffed with philosophy. Thus one sees that the successors of Ptolemy pruned his triplicities and his “trigonocrator” planets, keeping no more than the distribution of the signs of the zodiac.⁷⁸⁶ They did not even believe one should not start this distribution all over again, in another fashion, simple or complicated, with fewer pretensions to science and more to mystery. This is what the “Ancient Egyptians” mentioned above did. Paul of Alexandria was esteemed equally with Ptolemy, Dorotheus and the Egyptians. He tried a distribution of the signs which permitted him to establish a continuous series upon the earth. He followed the order of the signs of the zodiac, as Manilius and Dorotheus did.⁷⁸⁷ At the same time, his system allowed him to keep for the signs the orientation which came to them from the system of triplicities. The series of signs thus was arranged into three groups. Each one a complete circuit in four steps. All were in correspondence with supposedly neighboring countries, which unrolled in order from East to West. This is just as marvelous and as unintelligible as anyone could want. In beginning with Aries and Persia in the East, our astrologer-geographer arrived at Pisces, that is, in the North. Only the Red Sea and India left over. He places them without hesitation in the North, part of a group in which Syria occupies the South!⁷⁸⁸ This scandalized those adepts who kept a shadow of common sense. The author of the *Hermippus* rose up against the assumptions which placed Armenia and Africa under Cancer, Syria and India and Thrace under Capricorn.⁷⁸⁹ It was established that the northernmost point of the ecliptic reaches its zenith at Syene. Thus it was absurd to place regions farther north under any point of the zodiac. He seems to reject absolutely all astrological chorography, zodiacal or planetary. However, his logic went no further and the monomania was fixed at once. His theory of perpendicular influence would have meant that astrology worked only in the tropical zone. Now, what he actually researched was the address of eclipses, whose effects extended over the entire inhabited earth. For this he found or imagined a system which he judged excellent. The earth shrinks, he said, from the equator to the poles. It was therefore necessary to divide the inhabited earth, between the terrestrial “Paradise” and the mouth of the Don, into seven climes or zones. Their breadth diminished in proportion to its length. This platonizing Christian knew that, in the central zone extending 13° along each side of the equator and supposedly torrid, one found many fabled places. They included the Paradise, the Elysian Fields (τὸ Ἠλύσιον πῆδιον) of mythology, home of the Golden Age, cradle of the human race and the abode of the happy souls, the place where their glance could embrace the entire world and contemplate beauty. The first clime of the world of the living began, then, at the thirteenth

degree of latitude and was 8° in breadth. The others climes were in stages above and their breadth decreased, until the forty-eighth degree, inclusively. This was the limit of the habitable or inhabited earth. The sequence followed the arithmetical regression 8, 7, 6, 5, 4, 3, 2. These seven climes correspond to seven slices cut out of the zodiac, from equinox to tropic. Each included 13°. From this point, it was enough to observe in which degree of which of these zodiacal slices an eclipse took place, in order to know in which part of a given clime it had an effect. Thus the indispensable chorography was repaired. It was not planetary, in spite of its seven (or even eight) climes. The graduation was supposedly ruled uniquely by the solar stages. Nor was it zodiacal, since the climes are independent of the signs.⁷⁹⁰

II

Rules of Universal Apotelesmatica

We have finally ended the description of the tool kit used to localize the “universal” predictions. Let us now look at management. We rejoin here the most authentic Mesopotamian foundation. It had invented, if not the method itself, at least the sorts of phenomena which furnished the facts for calculation.⁷⁹¹ These facts demanded that one make observations of the eclipses of the Sun and of the Moon as well as of accidental “meteors,” haloes, bolides, comets, thunderclaps and even earthquakes.

The importance of eclipses does not need to be demonstrated. Since the luminaries, as Ptolemy said,⁷⁹² provided the power for everything else, their conjunctions in solar eclipses, their oppositions in the lunar ones, are moments of capital importance. People did not have to know the reasoning of the phycists to be afraid. They would have been freed of their fear by other lines of reasoning, showing them that the eclipses arrived at fixed dates and had no relationship at all with their affairs. However, this line of reasoning, which would have destroyed astrology completely, was quite difficult to understand. People did not give up their concern with the celestial powers. Ptolemy knew how to calculate eclipses. He nevertheless believed in astrology and did not breathe a word of objection. The author of the *Hermippus*,⁷⁹³ who posed the question, responded that the periods of the eclipses are fixed, but irregularly distributed within these periods. God, who foresaw everything, made this irregularity correspond with the irregularity of the events, of which they were not the causes, but the signs.⁷⁹⁴ Moreover, these signs were not necessarily followed by bad omens. If the frightened people became wise, the divine announcement might remain a simple warning. The pious author thought also that God made the nodes of the ecliptic move. The result was that these announcements were not always addressed to the same countries. Each would have its share. Mixed with a little science, this gibberish appeared completely serious and distracted attention from the fundamental objections, which, at bottom, remained intact.

Let us not discuss established dogmas, however. Instead, let us look at Ptolemy's work.⁷⁹⁵ He proposed to give responses to the four following questions:

- 1) To what country is the prediction (including eclipses) related? This is the question of place (τοπικόν);
- 2) When will the announced event take place? How long will it last? This is the question of time (χρονικόν);
- 3) What sort of beings does it concern? (γενικόν);
- 4) What will its quality be? In other words, what form does it assume? (ειδικόν – ποιότης)

I. The Question of Place.⁷⁹⁶ As a general rule, Ptolemy warns that an eclipse is effective only when takes place above the horizon. It must be seen in the place which it concerns.⁷⁹⁷ He does not take invisible eclipses into account. To know the address of the prediction, it is necessary to note the sign of the zodiac where the eclipse takes place. Then one must search the charts or tables listed above for the country which corresponds to this sign.⁷⁹⁸ To be more precise, it is necessary to see if the ecliptic point has some relationship, perhaps with the Ascendants of the cities of the region. Perhaps it has a relationship with the positions of the two luminaries at the time of the foundations of these cities, perhaps with the Midheaven of the birth chart of their actual rulers.⁷⁹⁹

II. The Question of Time.⁸⁰⁰ Because of differences in longitude, the same eclipse is seen everywhere at the same local hour and for the same length of time. After determining the region affected, it is necessary to note the latitude and longitude. This lets one establish the positions of the four local “centers” of the zodiacal circles, much as for a birth chart. Next, one must judge the length of the eclipse in equinoctial hours. The length of the eclipse foretold the length of the event, at the rate of one year for each hour of a solar eclipse and one month for each hour of a lunar eclipse.⁸⁰¹ The date of the event was furnished by the position of the ecliptic point relative to the centers. This relationship permitted, moreover, previewing the intensity of the phases, exacerbations (ἐπιτάσεις) and remissions (ἀνέσεις), of the predicted phenomenon. Thus, the ecliptic point at the Ascendant presaged a delay of four months (a third of a year) before the event and a maximum intensity in the first third of the eclipse. The ecliptic point at the Midheaven meant a double delay and maximum intensity in the middle third of the period. The ecliptic point at the Descendant meant a triple delay and the maximum intensity in the last third.⁸⁰² The Lower Midheaven, as has been already said, remained unused. One sees that the delay embraces the whole of the year, without trespassing upon the following one. The length of the effect may then go beyond one year, but the event itself necessarily arrives in that year.

If one wanted to push the diagnosis of variations in intensity further, it was then necessary to take into account the “syzygies” which were produced at the same ecliptic point, or at a point associated with it by aspect, during the whole duration of the predicted effect.⁸⁰³ Also one had to consider the positions of the planets at the moment of an eclipse. At their rising or when they stand still (στηριγμός), these planets increase the effect and they diminish it when they are setting.

The system of these calculations is ingenious, but its complexity does not approach that with which we must resolve the third problem.

III. The Question of Variety (of the Subject in View).⁸⁰⁴ To know what sorts of beings, what kingdom of nature, will be attacked by the action announced in the stars, it is necessary to take the zodiac and the planets into account and the extra-zodiacal stars as well. All are combined and accommodated in a manner which we will see. In fact, it is upon the form and the attributes of the signs that the prognosis is built. It is to multiply the facts that the learned astrologers brought in the other stars and planets.

Then, given the ecliptic sign, it is necessary to discover the “lord of the eclipse (κύριος τῆς ἐκλείψεως).” It is the planet which has the greatest number of associations firstly with the sign of the eclipse, whether it is through visible application or separation (συναφή – ἀπόρροια) to this sign by one of the regular “aspects” or by some dignity in the sign through domicile, triplicity, term, etc.⁸⁰⁵ Almost as important is its association with the “center” or cardinal point which precedes the eclipse and which the daily movement causes to pass by the place of the eclipse.⁸⁰⁶ The master planet would then be the one with the most relationships with these two “master places” (κύριοι τόποι) at the same time. When several planets have equal rights, arbitration becomes a delicate operation. It is guided by rules,⁸⁰⁷ which it is at least appropriate to insist that we will meet again. Among the extra-zodiacal stars, the one which is the most qualified to collaborate is the one which is found on the “center” closest to the eclipse, but on the West side. That is, the star which has most recently passed the angular position of the eclipse. If it is missing, take the one which will be rising or culminating at the moment of the eclipse.

The astrologer now must analyze, first the ecliptic sign itself. Then he looks at the signs holding the planets and stars (or corresponding signs) that are introduced into the data from the preliminary calculations.

He considers, in the first place, their forms. If they are anthropomorphic signs, the presage concerns the human race. If they are terrestrial (χερσαῖα), the prediction is addressed to four-footed animals, wild or domestic. Winged signs mean birds and aquatic signs mean fish, saltwater fish if the sign is maritime, freshwater fish if the sign is fluvial. The constellation of Argo, the ship which crosses the seas and mounts the rivers, is both at the same time.

In the second place, the astrologer put forward those influences which the signs derived from their fixed position in the zodiac, whether tropical or equinoctial, solid or bicorporal. This led to predictions about weather, applicable to seasons and the fruits of the earth. It also led to moral pressures of a similar nature. Predictions were about religion and to priests, if it worked with the equinoctial signs,⁸⁰⁸ political changes and revolutions, if it worked with tropical signs. The solid signs dealt with monuments and edifices, the bicorporal signs, “peoples and kings.”⁸⁰⁹ In the third place, the

astrologer judged, in the signs, the influence which came to them from their angular position relative to the horizon. The sign which was found at the Ascendant or in the eastern quadrant at the moment of the eclipse dealt with youth and the future. At the meridian it concerned businessmen, kings and priests and at the setting, old people, the dead and reformers of old laws.

Finally, one prejudices the absolute intensity of the attendant effects from the magnitude of the eclipse and also from the positions of the concerned planets, not just, as earlier, the phases of intensity. In effect, the evening planets diminished the effect of solar eclipses, the morning planets, the effects of lunar eclipses.⁸¹⁰ Those which are in diametric opposition with the eclipsed star diminish the energy of the presage by half.

IV. The Question of Quality or Form. There remains a question which is composed of two others, often satisfied by the same response. Is the presaged event good or bad? At what point good or bad? Secondly, what particular variety is it? This chapter is one of the hastiest and most confused in *Tetrabiblos*. Carried away by his taste for classifications, Ptolemy had not reflected enough. He would have liked to avoid answering the first question. In this he was remiss according to popular opinion, which could not admit that an eclipse could prefigure anything but misfortune.⁸¹¹ From the religious point of view, which was not in doubt, the eclipsed god was covering his face in horror at the sad crisis. Likewise, from the point of view of physics, the deprivation of heat and light at an abnormal time could not be good for the earth. Ptolemy here invoked only the “natural temperament” of the stars. However, physics was also against him. He then judged the prediction to be good or bad depending on the temperament (natural or acquired) of the “master” planet of the eclipse. This planet was enough by itself.⁸¹² Beyond this, he enumerates, planet by planet by “sole oecodespot” planet. The predictions spilled over onto people, the atmosphere, animals and plants and so on, without anything but the usual banalities. Saturn and Mars were malefic as usual, while Jupiter and Venus were benefic. Mercury could be either, depending on the planet with which it is in aspect. He lost sight of the eclipse and even the universal character of the prediction. It was hard to persuade a sensible man that cold humors or happy marriages come into being at a moment given by chance to everyone throughout a country.

In reality, Ptolemy, pressed for time or impatient, takes the whole thing and somehow fits in a load of predictions appropriate to individual genitures. He betrays his fatigue in saying that, in view of the number of possible combinations from aspects, signs and phases, he will leave investigation into details to “the initiative and the discernment of the mathematician.” It is a point nevertheless to which he recommends attention. The prediction could be very different if the master planets of the eclipse did not have the affected regions under their patronage. Even the malefic planets treated their protégés with a certain benevolence. However, they were permitted everything with regard to those lands, peoples and things with whom they had no pre-existing attachments. Ptolemy did not hesitate to say that he did this with natural affinities. He did not want anyone to see that his rule came, in a straight line, from the faith which attributed human sentiments, sympathies and antipathies to the star-gods.

All these calculations did not exhaust the deductions to be drawn from eclipses. One found supplementary information in the epiphenomena. For example one interpreted the color of the eclipsed star and of the concomitant phenomena, luminous branches (ῥάβδοι), haloes and other particularities.⁸¹³

The colors have the same influences as planets of that color and, depending on whether the color is general or limited to a few points, the effect would be general or limited to a few places. The latter are indicated by the points in question upon the disk of the eclipsed star.⁸¹⁴

The indefatigable “Egyptians” pushed speculations about the colors of the Sun and the Moon even further, not only during eclipses⁸¹⁵ but at the setting of the luminaries or even “throughout the whole day.” The Sun, without being eclipsed, could be “tarnished” (ἀμαυροθεῖς) to the point of resembling a mirror or the Moon, allowing the stars to be seen in broad daylight. It might be ocher or red to the point that “the soil appears blood red”; all this, depending on the sign in which it was found.⁸¹⁶ The astrologers reversed everything they had found in the observations in the traditions of Mesopotamia and Egypt and in comparisons between them. It was they, more learned than Ptolemy, who found a use for eclipses taking place “beneath the earth,” that is, beneath the horizon.⁸¹⁷ They had recourse this time to signs grouped into triplicities. Doubtless the goal was to astound the naive with the multiplicity of their methods. They also distinguished, as usual, between eclipses of the Sun (which worked in the East) and lunar eclipses (which had their effect in the West). Underground eclipses generally caused earthquakes.⁸¹⁸ When they occurred in the “royal triplicity,” they caused the

deaths of kings in Asia and Europe. One distinguished also, depending on the quality and the position of the signs, between North and South. For example, an eclipse of the Sun in Aquarius dried up northern rivers. In Leo, it lowered the floods of Egypt and agitated the Indian and the Atlantic Oceans.⁸¹⁹ The most incoherent associations of ideas swirled and collided in the minds of the astrologers. Doubtless they did not escape obvious folly save by making a choice between systems and only absorbing those silly things which they were able to digest.

Comets,⁸²⁰ appearing during eclipses or as independent phenomena, form an important chapter of universal astrology. Ptolemy gave them a few lines. Others, however, studied the various sorts of comets before them closely, for example, whether as meteorologists or astrologers or haruspices. This was a vague domain which was disputed by the Etruscans and the astrologers and in which the Etruscans may have preceded their rival. They did so, not so much from the point of view of observation, as from the viewpoint of interpretation. We do find mention of a “star having a nucleus in front and a tail behind in the Mesopotamian documents.”⁸²¹ The haruspices, whose fulgural art was a famous specialty, had the advantage of attaching a complete theory to the appearance of comets. Comets were, for them, special thunderbolts, flaming torches thrown by the thundering gods. As their explanation ended up by prevailing among the Mesopotamians themselves, it is to be assumed that the astrologers had not succeeded in finding a more satisfying one.

Neither astrologers nor meteorologists, Anaxagoras and Democritus had thought that comets were born from the encounter of two planets.⁸²² The “Chaldaeans” – without guarantee of antiquity – had found, by intuition, the explanation adopted by modern science. For them, comets were stars which came from the depths of space and there returned, bodies which “plunged into the immensity of the ether as fish do into the depths of the sea.”⁸²³ However, those who believed in Aristotle’s crystal spheres could not send their comets very far, for they would break the spheres as they crossed them.⁸²⁴ This scruple brought back into favor the old theories which made the stars into fires emanated by the earth.⁸²⁵ Abandoned for the permanent stars with regular movements, the explanation was still good enough for comets and completely appropriate for meteorites. They were so many rockets shot at the Earth which caught fire in the upper regions of the sublunary world and burned up as they fell. The Egyptian Trismegistus had an eclectic opinion. From the point of view of divination, there was no use for the meteorites, these “decaying stars,” useless, inconvenient, sparklers exhaled by the Earth. However, he kept the comets, “messengers and heralds” of universal predictions, sent expressly from the upper spheres, probably by the decans, to the sub-lunar region.⁸²⁶ In this way, he returned to the explanation which was the most intelligible to faith, without being unacceptable to the physicists not vassals to Aristotle, that of the Etruscans.

Comets were, for the classical astrologers, torches thrown by the planets and shared their natures. It was enough to know whence they emanated to assess the prediction. Ptolemy, always prudent, did not say that they came from the planets, but only that they had the same nature. Moreover, since he knew that the predictions were for disasters, he retained only the comets which were of the same substance as Mars and his always compliant acolyte, Mercury (Ἀρείκα and Ἡρμικά).⁸²⁷ He eliminated Saturn as “cold”⁸²⁸ He abstained, too, from looking too closely at distinctions. He cites in passing the comets called beams, trumpets, barrels, “and other similar names.” Those who did not blush at using them were less discreet. They described, classified, re-classified, the comets according to their shape, their color, and their presumed origin. Campestris, part haruspex, part astrologer, seems to have been a specialist in the matter. He knew the effects of the comet called “horseman” (ἵππεύς) because of the mane flowing behind, which proceeds from Venus. He also knew of the comet called the “sword” (ξίφιδας), which came from Mercury or from Mars. Likewise, he knew about the comet properly called “hairy” (κωμήτης), which proceeds from Jupiter. He knew of the “disk” or tambourine (δισκεύς), which is an effluvium of the Sun, and of the Typhon or hurricane (Τυφών comet, created by an eddy in the atmosphere.⁸²⁹

These last two varieties, being in circular shape, menaced the whole earth.⁸³⁰ The other comets indicated the address of the prediction (τοπικόν) by the part of the sky – East or West – where they are seen to appear and by the direction of their tails. One may divine the place to which the prediction applies from the chorographic relationship of the part of the zodiac where they appear, or even the sign of the zodiac in which the planets which throw them are found.⁸³¹ The beings addressed by the prediction (γενικόν) are designated by the shape of the comet. It was a rule, originally, that comets did not concern unimportant people. They addressed kings and kingdoms. This is what Nero’s astrologer,

Balbillus, said to him.⁸³² With the progress of democratic ideas and especially of melothesia, the predictions were thought to apply not only to people in general but to animals and plants. The comets in animal form (θεριόμορφα) predicted for animals. The δοκίδες in their quality of “beams, predicted for” the plants.⁸³³ Likewise, the “flutes” were not reassuring to musicians.⁸³⁴ It is not hard to find associations of ideas just as striking for the nature or shape of the attendant misfortunes. One might guess, for example, that the “swords” and “trumpets” announced wars and massacres. However, it is necessary to know the finer points of the art to suspect that the famous “beams” announced shipwrecks, and especially naval battles, among other disasters involving wood.⁸³⁵ Some also thought of applying the geometry of aspects to comets. They wanted to interpret their correspondence with this sign or part of sign or with a prominent constellation.⁸³⁶ The best way was to look at correspondences with the planets which they had met and hidden in passing. This last system is more ingenious than the other, given that it was a question of fast moving stars. A comet occulting Saturn – god of grain – announces a crop-failure. If it passed in front of Jupiter, the Great King of Olympus, there would be “troubles for royal houses.” The accolade given to Mars predicted wars and epidemics. A comet connected to Venus foretold rapes, deaths of queens and civil discords. One passing in front of Mercury, diplomat and celestial messenger, predicted the rupture of conventions and “annoying noises.”⁸³⁷ The question of the moment and the duration did not remain without response. One applied the rules formulated above for the eclipses. A “dawn” (ἑωχ) comet, rising before the Sun, hurried the moment. A “dusk” (ἑσπέριος) comet slowed it. The duration of the effect was measured by the visibility of the comet. A wise disciple of Ptolemy found a way, “completely admirable,” of fixing, with mathematical precision, the cessation of a comet's effect. First, he assumed that they all came from Mars and from Mercury, and no doubt always from these planets in “additive” motion (προσθῆται). He then taught that the forecast effect ceased when the mother planet went into “subtractive” or retrograde motion.⁸³⁸

The meteorites or “shooting stars” (διόπτροντες) were interpreted in the same fashion as the comets. Indeed, some people confused them. There is no time to consider them separately. It must be enough for us to admire in passing the use which the Platonists found for them. They are models for human souls or the souls themselves, which “shot” from on high into the human body.⁸³⁹ The aurora borealis (χάσμα ἐν τῷ οὐρανῳ) was also one of those phenomena which, as with comets and meteorites, confused the Greek astrologers. They were accustomed to relating everything to the zodiac and the planets. It was a sort of “Typhon,” and others, no doubt, had said before them that this celestial “hiatus” predicted earthquakes and crevasses in the soil.⁸⁴⁰ The same was even more true for lightning, which other diviners, not to mention the scientists, studied at the same time as them and, one may say, better than them. However, the astrologers, to whom nothing human was foreign, were not free to decline the rivalry. After all, the ancient Babylonians had been concerned with these questions.⁸⁴¹ The Babylonians distinguished, it seems, all sorts of lightning flashes, including atmospheric lightning thrown by the god Bin, and planetary lightning coming from Nergal (Mars). The first influenced harvests, the others produced earthquakes. The haruspices divided lightning flashes among a certain number – always increasing – of thunder gods and, like the astrologers, judged the origin of the lightning flashes from their color.⁸⁴² On the other hand, the Stoics, devotees of classical mythology and pontiffs of the triangle, reduced everything to their ternary divisions. They claimed for Jupiter alone the privilege of throwing bolts of lightning, to the number of three (*tres manubiae*). The adapters who mixed haruspicy and astrology made everything into complete chaos. Examples include Campestris, disciple of Petosiris and the “Roman” Vicellius, working upon the books of Tages. The astrologers, led by so many collaborators, did not know which theory to adopt and which practice to follow. The “princes of the doctrine” taught that there were three types of lightning. They came from the three upper planets, but principally from Jupiter. Affected by the humidity which fell from Mars, Jupiter projected these lightning bolts, all charged with predictions, especially when the atmosphere is agitated.⁸⁴³

Lightning, a projectile which shocks, breaks and burns, was not thunder. One may hear thunder without seeing a flash of lightning, which is, depending on the case, a prodigy or a phenomenon more benign. John Lydus extracted from the books of Nigidius Figulus, of Fonteius, of Labeo, themselves interpreters of the “books of Tages.”⁸⁴⁴ He also used some “brontosopic” calendars, much appreciated by the Byzantines. In them, the greatly varying meanings of “the thunders” (βρονταί) or of the lightning (κεραυνοί) depend, day by day, on the age of the Moon.⁸⁴⁵ Alternatively, they depend,

month by month, on the position of the Sun or the Moon in the zodiac. Sometimes the meaning even depends upon the nature of the object struck by lightning (a genuinely Etruscan doctrine).⁸⁴⁶ The monthly predictions are addressed to various regions by means of chorography.

The transition from thunder and lightning to earthquakes was easy enough. They were all related to the same cause, the agitation of the air, above and below the earth.⁸⁴⁷ There came a time, in the second century of our era, when the repeated earthquakes which destroyed flourishing cities attracted attention to these redoubtable crises. The astrologers were caught short. Their usual source of ideas, the Stoics, dared do no more than mention the trident of Poseidon Ἐννοσιγῆος. It was a puny instrument for such works and, in addition, not very astrological. For others, the anger of the gods was a good, simple, explanation. The theologians of all times used it readily and, while unkind to the victims, it was good enough for everyone else. The ordinary diviners, especially the haruspices, had here an occasion to put their talents to good use. They could research the sins which had excited the anger of the gods.⁸⁴⁸ Some used books which blamed them on the impiety of the Christians. The Christians, in turn, took pains to reveal the enormous vices of the pagans. The astrologers could only say, in principle, that earthquakes had the action of the stars for a cause. It was a violent action, due to some accidental conjunction. It was like the one which, according to the disciples of the Stoics, produced the periodic renovation of the world by flood or fire. They especially suspected the upper planets, in conjunction with the Sun at one of the cardinal points of the universe, of being the causes of the phenomenon.⁸⁴⁹ Little by little, the astrologers shed the duty they had assumed quite willingly, that of predicting earthquakes. They substituted for it another practice, infinitely more facile and less exposed to contradictions. They considered phenomena of this sort as presages of a "universal" nature and distributed the predictions over the surface of the earth, by means of their chorographic tables.⁸⁵⁰

But we are getting farther and farther from classical astrology. Ptolemy consecrated the last part of his universal apotelesmatica to teaching how to draw up an almanac.⁸⁵¹ He distributed the meteorological predictions (heat, cold, rains and winds, storm, droughts) with their natural consequences (famines, epidemics, etc.) among the seasons and the months according to the syzygies, the appearances of the stars, etc. He especially used the properties of the signs of the zodiac occupied by the Sun and the Moon. In no other place is he more prodigal with so-called scientific reasons. He broke each sign into three parts (leading – middle – following) in the sense of longitude⁸⁵² and into two bands (northern and southern) in the sense of latitude. He housed there, to his taste, the elementary forces which he loved and to which he appealed, cold, hot, moist, dry. He threw it together quickly and did not admit what he had salvaged from the theories of others about lightning bolts and earthquakes. A given sign or third of a sign is rainy or windy or thundering or seismic. The winds, lightning bolts and quakes were most often in the northern band.⁸⁵³ It is pointless for us to spend much time on these undigested elucubrations, which did not interest even the makers of almanacs.

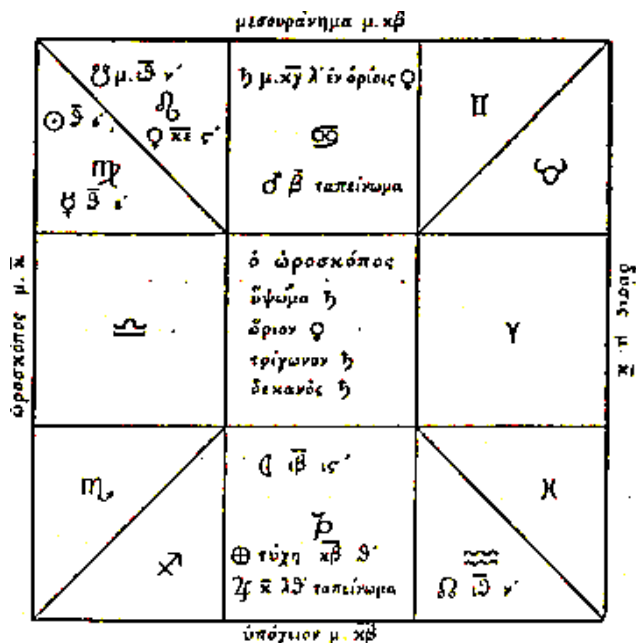
It is enough, too, to indicate a chapter added to this section of Ptolemy by those who held to the Egyptian tradition, for whom the rising of Sothis (Sirius) was the regulator of the calendar. Hephaestion of Thebes give the address and the meaning of prognostics of every sort. Meteorological, nosological, political, prediction, all resulted from the positions of the planets at the rising of Sirius "during the twenty-five days of the month of Epiphi."⁸⁵⁴ The "Egyptians sages of former times" opened a new quarry where the imagination might run as it pleased. They combined the positions and aspects of the planets, the influences of their colors, the apogees and the perigees of their orbits and their reciprocal reactions. They added the brightness and color of the star itself at need, with the winds which blow or the thunders which growl at the moment of its rising.⁸⁵⁵ Sirius is an intruder into Greek astrology and prudence counsels us not to follow this fork in the trail.

The moment has come to consider the subdivision of apotelesmatica which makes a frontal attack on the problem of human destiny, the field of battle for its defenders and its adversaries, horoscopy. However, horoscopic science, which studies conditions at birth, overwhelmed universal apotelesmatica. It is necessary here to anticipate the following chapter, for good or ill, by right of obligatory transition. The juncture between the two connected subjects is the birth of kings, whose destinies were virtually those of their peoples. We have seen that Ptolemy himself recommended that one consult the birth charts of the cities or their governors when one wants to give more precision to universal prognoses. He could only approve a practice known from the most ancient witnesses. The foundation of a city was comparable to a human birth.⁸⁵⁶ On the other hand, since eclipses were the special instruments of universal apotelesmatica,⁸⁵⁷ it was appropriate to have them intervene in such

a memorable event. Ennius was in the true astrological tradition when he assured his audience that the foundation of Rome coincided with an eclipse of the Sun.⁸⁵⁸ One can never know to what extent astrology collaborated in the creation of the era *Urbis conditae*. It is certain in any case that it made up for a lack of historical fact. Varro and his friend Tarutius seem to have made free with the coincident eclipse and to have treated the chart of the foundation as if it were one for an ordinary birth. Tarutius, “an expert like no other in Chaldaean calculations,” had found that Rome was founded when the Moon was in Libra.⁸⁵⁹ Other astrologers may well have made similar speculations. According to the version which finally prevailed, the Sun was in Leo, the Moon was in Libra (at least it was not in Virgo) Saturn was in Libra, its exaltation and Jupiter was in Leo, the hospitable domicile of the Sun. Mars was in Libra, the sign protecting Rome and Italy. Venus was in Taurus, its own domicile and Mercury, symbol of intelligence, was in Aries, head of the universe. The Romans must have been reassured about their destiny! Tarutius also calculated the chart of Romulus, which was another way of looking at the destiny of Rome. Under this pretext, he addressed the most novel and exquisite flatteries to Augustus. Just as one knows, from the chart, the stages of future existence, one may also, from previous stages, restore the original chart. Tarutius, closely studying the biography of Romulus, thus found that he must have been conceived at the moment of a solar eclipse, 23 Choiak (December, 772 BCE), in the third hour and was born on 21 Thoth (September 771 BCE). That is, wonder of wonders! he had the same birth chart as Augustus, the new Romulus, conceived under Capricorn and born under Libra.⁸⁶⁰

This sort of curiosity proved to be not offensive. Enthusiasts went back to ruined cities, epic and mythological heroes or the *thema mundi*. One could control and re-make history by reconstructing the birth charts of Minos, of Oedipus, of Paris, of Aeneas, even of Thersites. The astrologers offered to settle that much discussed question, the birthplace of Homer. It was a social game, delightfully easy for learned women. Also it was a means of reassessing, for the greater glory of astrological dogma, facts and experiences which had not been noticed in earlier times.⁸⁶¹

Fig 40 The chart of the Arab Empire



We still possess a curious extract in this mixed vein, which made astrology contribute to the restoration of events of general interest or to foreseeing future history. It is an astrological consultation on the destiny of the Arab empire [Fig. 40]. It is a Byzantine work of the late period and pretends to be by Stephen of Byzantium. By an unbelievable mistake, it does not speculate upon the birth chart of Muhammad or the date of his Hijra. Rather, it looks at the chart of the heavens at the moment when the astrologer is informed by a traveler of what has happened in Arabia. Our astrologer's chain of reasoning, who claims to follow the methods of Ptolemy, is interesting to follow. It contains everything he knows. It has aspects, positions of the centers, and planetary domains. It has “houses” on the circle, terrestrial chorography, aphetic places, anaeretic places and all the attractions, which he inserts in order to fix the order and length of the Caliphs' reigns. In the sky, he finds the reason the

Muslims are war-like and pleasure-loving. The stars tell why they forbid wine and pork, practice circumcision and polygamy. The planets say to which countries their conquests extend and where, in time and space, their conquests will end. These tools of Saturn and of Venus – Saturn culminates in the ὄρια of Venus – will eventually be defeated and driven out by the Roman emperor. It will be when Saturn has returned twelve times to its point of departure, that is, its period being ternary, after 360 years. In making the cycle, this impudent prophet could not have chosen a better model than the circle with its 360°⁸⁶²

Greeks and Arabs each took seriously what was convenient to them in this prophecy, in the long run.⁸⁶³ They did the same, without any doubt, for individual charts and clients open to horoscopy.

Chapter Twelve

Universal Apotelesmatica or Horoscopy

We enter, finally, into the true temple of astrology. It is the oracle where the believers, burning with the desire to know their own destinies or those of people connected with them, came to seek a remedy for the torment of ignorance. They risked exchanging it for another torment that of knowledge without hope.

The task of astrology here is more delicate, the methods more complicated and the results more uncertain than with the material of "universal" predictions. For the former, one was content with a certain degree of approximation. The only phenomena analyzed were used to make a prediction. Usually, too, it was not a phenomenon which took place at one moment. Rather, it evolved, so to speak, under the eye of the observer. For an individual's prediction, on the other hand, one is obliged to create the whole future from the initial point. One deals with the instant when life begins and when individuality separates itself from the causes which engender it. Otherwise, the individual remains, like a passive molecule, integral with the groups of which it is a part. In horoscopy, there were no longer any particular, autonomous, destinies. There were only fractions roughly similar to common destinies, like morsels cut from the same material. The fundamental, specific, dogma of horoscopy was the idea that the life of the individual is determined completely by the action of the stars at the precise moment when existence began. The life of the individual is determined completely, in quality and in quantity, in its successive modes and in its length at this moment. The planets' influences were instantaneously concentrated upon the living being at the moment marked by the Ascendant. This is what distinguished it from the concurrent system of the *elections*.

I. The Fateful Moment, Conception or Birth

However, the Greek astrologers, probably the authors of this dogma, collided with a difficulty, they struggled either to resolve or to avoid it. Common opinion made life begin at birth. But this common sense fact became, very quickly, the target of objections. Birth was not the beginning of life, the logicians said. Life began at conception and it was the fertilized egg which held all the possibilities which were deployed in the course of existence. This was where one must bring the instantaneous hammer blow of destiny, not to the passage from life within to conscious life. The philosophers must have used this reasoning against the first astrologers. Vitruvius seems to think a certain Achinapolis, who had accepted the theory and had modified his methods in consequence, was an immediate disciple of Berossus.⁸⁶⁴

We know, in any case, that calculating the chart of conception seems to have been done largely for royalty. It would have been the high point of the art. Perhaps it was done for the conception of the king of Commagene, Antiochus I Epiphanes, more probably for the Emperor Augustus⁸⁶⁵ One can easily divine what a practical, insurmountable, difficulty was caused by this theory imposed by the logicians. In practice, one cannot know the moment of conception save from the moment of birth. Yet to go from the one to the other, it is necessary to pretend to know, exactly, the length of intrauterine life. This period was extremely variable in the eyes of the astrologers. However, astrological researchers did not dare to contest the theoretical precedence of the chart of conception. Some practitioners who pretended to succeed in drawing up a chart before birth. They found an advantage in knowing, not only everything which could be revealed in a nativity, but also whether or not the fetus would be carried to term, whether it would be viable or deformed. These are all questions which would be of interest only if the response came before the event.⁸⁶⁶ One might research the elements of the problem in the horoscopes of the parents, where the destiny of infants was automatically included. Theoretically, it could work, but hazardous all in all, and impossible in practice. There was another way, which demanded less virtuosity direct information. Some astrologers state that many women can tell the moment of conception from spasms of the uterus. They invoked the witness of a certain Cleopatra.⁸⁶⁷ For more certainty, they counseled their clients to adopt the system of the "ancient

Egyptians,” which preselected the day and hour for works of the flesh. They verified if impregnation had occurred from the next menstrual period.⁸⁶⁸ To this, one may object that conception does not take place immediately after sexual intercourse, and that the invisible work was finished at an unknowable date.⁸⁶⁹

Ptolemy was somewhat embarrassed. He thought conception to be the “natural” beginning of life. He knew that physical life itself did not begin without an infusion of a soul, from the entelechy or the prime mover postulated by the doctrine of Aristotle. The Platonists were even more insistent. For them, conception is the moment when the pre-existent soul was joined to the body which it had chosen. Ptolemy resolved to use only the nativity, the horoscope of birth, because it was impossible to get the necessary evidence for conception. He sought to prove that this active or “dynamic” beginning of life, even though later and subordinate to the other, had a superior energy. This energy was exercised not just upon a seed but upon a complete human being and was added to the action already exercised in the same sense upon an embryo. Ptolemy here sneaks in an enormous postulate, with a confidence that dispenses with demonstration. He assumes that conception and birth were phenomena connected by a common cause. They were therefore necessarily produced in the same circumstances, that is, under astral influences, which, if not completely identical, were similar and had the same effect.⁸⁷⁰

This postulate was necessary to make practice fit theory, but it engendered singular consequences which made astrology a medical and legal doctrine. The analogy postulated between the chart of conception and the chart of the birth could only be produced by “aspects,” by substituting one aspect for another (συσχηματισμοί). Likewise, the astrologers taught that an infant could only be born when the state of the sky was similar to the state which had presided earlier over the infant's conception. They looked for more or less similar aspects. Since the geometry of the aspects represented the stages of the duration, this dogma obliged the astrologers to fix the length of gestation. This interested doctors and lawyers very much. Astrology, which touched all things, entered into the life of an always active question. It is a pleasure to look at the efforts which the “Chaldaeans” made to satisfy universal curiosity upon this point.

Their own principles cramped them more. When one must speculate on tiny differences to explain the enormous differences between the destinies of twins, it takes a certain impudence to maintain that analogy was enough to connect two states of the sky, seven, eight, nine or months apart. The astrologers were engaged, nevertheless, in a desperate struggle against their own logic. To simplify the problem, they looked only at the two “luminaries,” the Sun and the Moon or even at just one. It might be impossible to bring the Sun back to the same place, or the Moon back to the same relationship with the Sun. In that case they looked to see if the position could be replaced by another symmetrical or concordant position to be in accord with what they wanted to demonstrate.

Let us look at the simplest system, based exclusively upon the Sun. Censorinus explained it according “the method of the Chaldaeans,”⁸⁷¹ after having reviewed the various opinions of the philosophers and physicians. The Chaldaeans began by justifying simplifying the problem. They said that, if we depend upon the stars, at the moment when the person is conceived, the

“Sun necessarily found itself in a sign and in a part of this sign. It is this which is properly called the place of conception⁸⁷² There were thirty of these parts in each sign and 360 of them in the whole zodiac. The Greeks call them moerae, no doubt because the divinities of destiny were called moerae, and because these parts are our destinies to us.⁸⁷³ Then when the Sun passed into the following sign, it appears under an ineffective aspect or even unseen in any of this place of conception. Most astrologers assure us that the neighboring signs are not seen in any other way. When the Sun is in the third sign that is, separated by an intermediary sign, then one says that it begins to see the place whence it has left, but with a very oblique ray, without force. It is the aspect called κατὰ ἑξάγωνον, [hexagonal aspect] because it subtended the sixth part of the circle ... an aspect which some do not take into account at all, because it seems to them to contribute very little to the maturity of the fetus. But when it enters the fourth sign, with two signs between, the Sun sees κατὰ τετράγωνον, [square aspect] because the line which its look follows cuts one quarter of the circumference. When it is in the fifth

sign, with three signs between, it sees κατὰ τρίγωνον, [trine aspect] for that gaze measures one third part of the zodiac. These two aspects, the square and the triangle, are the most effective, and aid very much in the development of the fetus. The view from the sixth place has no action, for its alignment does not form the side of any polygon. But at the seventh sign, which is in opposition, the aspect is very full and very strong, and makes some infants to be born, to mature, early. One might call them "septimesters," because they were born in the seventh month. If the womb is not able to make its fruit mature in that time, it does not come to term in the eighth month (for the eighth sign is as ineffective as the sixth), but in the ninth month or the tenth. In effect, at the ninth sign, the Sun again looks at the place of conception κατὰ τρίγωνον,⁸⁷⁴ and at the tenth, κατὰ τετράγωνον; aspects which, as was said above, are extremely effective. As for the eleventh, one should not expect it to produce births, because the ray from now on languidly sends its weak light κατὰ ἑξάγωνον. The same is even more true of the twelfth sign, where the aspect is nearly nothing. Thus, according to this calculation, the ἑπτάμηνοι [seventh month fetuses] are born κατὰ διαμετρον; the ἑννεάμηνοι (ninth month fetuses), κατὰ τρίγωνον, and the δεκάμηνοι (tenth month fetuses), κατὰ τετράγωνον."

Let us see how the debates were settled at one blow, in the name of a theory which seemed to illuminate the confused chaos of the empirical traditions.⁸⁷⁵ It coordinated the traditions and gave satisfaction to everyone, save to those who held out for the possibility of birth in the eighth and eleventh months. It flattered the mania of those who liked seven-fold periods, without contradicting, thanks to an ingenious explanation of late infants, those who placed normal birth in the ninth month.⁸⁷⁶

Censorinus, however, was not a professional, and he gives us only a fragment of a complete theory. It could be attributed to a disciple of Nechepso and Petosiris or to a Zoroaster just as authentic,⁸⁷⁷ that is, worked out from time to time by the rival schools, the Egyptians and the Mesopotamians. It is necessary not to forget that physical life comes especially from the Moon. It would be a notorious heresy to exclude from the debate the star which rules and suspends menstruation. The Moon was the luminary whose position it was most necessary to determine at the moment of conception. Since the action of the Moon depended closely on its phases, that is, on the relationship with the Sun, the astrologer must also know the position of the Sun in order to know the phases.

At the time of birth, The Sun must be in a definite aspect with the place which it occupied ἐν σπορᾷ. The square aspect is the most common. For the Moon, the rule of Petosiris held that the Ascendant of the conception will itself be found in the place occupied by the Moon at birth. Vice versa, the Ascendant sign of the birth is the one in which one finds the Moon at conception.⁸⁷⁸ Sometimes it is found in the sign diametrically opposite. The astrologers flattered themselves that they could arrive at an exact date. The solar aspect gave the length of gestation and the position of the Moon indicated the number of months from the moment of conception.⁸⁷⁹ However, it was necessary to opt for one of the possible aspects, and the choice was not left to a delicate being. To make the rules flexible and award themselves the battle-field, the astrologers drew up tables where the length of intrauterine life was estimated according to three classes, long, medium, and short (ἀποκύησις, μέγιστη, μέση, ἐλάχιστη). The difference between the longest class and the shortest was thirty days. For example, for the δεκάμηναῖοι (10 month fetuses), the maximum class was 288 1/3 days, the medium class, 273 1/3 days, and the minimum class, 258 1/3 days. For the ἑπτάμηναῖοι (seven month fetuses), the class was from 206 1/3 days to 176 1/3 days.⁸⁸⁰ With these numbers or others like them, converted into months of different lengths, one had a chance of satisfying the partisans of all the systems. One might use calendar months of thirty days, lunar months of twenty-nine and one half (the synodic revolution) or of twenty-eight days (the anomalistic, tropical and draconitic revolutions).⁸⁸¹ With a month of twenty-eight days, one could appeal to a past month, which, to others, was the current month. For example, one could say that a baby born at 288 days was born after ten months, rather than say that it was born during the tenth month.⁸⁸² In the chapter on the καταρχαί, the *elections*, we will see everything that concerns the presumed influences of the planets, their phases, stations, and retrogradations, upon the stages of intrauterine life. It was a labyrinth in which horoscopy did not want to enter. It knew only

instantaneous events, birth and conception. Knowing the date of one of them, it sought, to determine the date of the other. One could only look for methods of calculating the ordinary problem, researching the chart of conception.

One may be excused for not detailing these methods. They are matters for the mathematicians. The details would risk overloading, uselessly, our subject whose principles we indicate in passing. It is always a question of determining the position of the Moon, given the lunar phase, and related to the position of the Sun, which is itself indicated by the chosen aspect. Look at the calculation proposed by Antiochus of Athens,⁸⁸³

“Consider in what day of the Moon the subject is born. Add 180 to this number and subtract the whole from the month of the birth at the rate of twenty-nine days (per month). Arriving at a day when the number runs out, see where the Moon then is. The sign where it is found is the one in which the Moon was lodged at the moment of conception”.

Hephaestion found the method inexact and proposed another.

*“Let there be, for example, an individual born in the year 97 of the reign of Diocletian, the thirtieth day of the month Athyr, at the sixth hour in the third clime. At this hour we find the Sun near the fourth degree of Sagittarius, the Moon at 0°.47' Taurus, and the Ascendant at 25° Aquarius. As the Moon is found in the signs following the Ascendant, it is necessary to count from the Ascendant to the degree occupied by the Moon. We find 65°.47' between them. Converted into days according to the daily motion of the Moon, at the rate of 13° per day, results in five days. The remaining 47', converted in the same way according to the hourly motion of the Moon, at the rate of 13° per day, is, I think, 33', giving us about an hour and a third. Adding, then, the 3 days, 1 1/3 hours, to the days of the first class of gestation, 273 and 1/3 days and the total is 278 days, 9 1/3 hours. If we subtract this from the number of days in going back from the day of birth, i.e., from the thirtieth of Athyr, the sixth hour, and we fall on the twenty-seventh of Mechir, in the eighth hour of the night. Subtracting again the intercalary 1/4 day, say, six hours, one arrives at the year 96, the tenth hour”.*⁸⁸⁴

I do not know if, on 27 Mechir 96, the Moon was found properly at the rendezvous indicated by the petosiriac rule, at 25° Aquarius. I do not know if Hephaestion were free from the rule mentioned above, nor do I want to find out.

Proclus attacked the opposite problem, more interesting to pregnant women and to anyone in a hurry. Given the moment of conception, predict the length of the pregnancy.

*“Suppose that there are 30° between the preceding conjunction and the hour of conception (σποωά). It is necessary to take these 30° plus a third (of thirty), that is, 40°, consider them as so many days and subtract them from the preceding conjunction. Since it passed the syzygy which followed the fertilization, the fetus will be born in seven months. If you take a smaller number of degrees, for example, 15 and a third (of 15), in subtracting them as days beginning with the day of the preceding conjunction, you will conclude that infant was conceived at this hour will be born at nine months.”*⁸⁸⁵

The explanation does not shine with clarity. I suppose, without looking closer, that “subtract” (ἐκβάλλειν) signifies, for our author, movement in the sense of daily motion.⁸⁸⁶

In the end, establishing the chart of conception had so many difficulties that serious astrologers classed it as a useless discussion. They probably regretted that they had let themselves be dragged onto this terrain where objections swarmed. They contented themselves with speculation on the horoscope of birth.⁸⁸⁷

II. Determination of the Ascendant

Here there was no lack of difficulties, rationalizations and theories from which it was necessary

to choose. The Ascendant, the intersection of the Zodiac and the eastern horizon, did not become the fundamental dogma of horoscopy automatically. The oldest text which deals with the question that of Chrysippus,⁸⁸⁸ shows us that the Ascendant was not necessarily a point on the zodiac. We have explained clearly, farther back, that the concentration of astral forces in the zodiac is an artificial thing. It was a postulate of Greek origin, with a practical goal. Moreover, extrazodiacal influences were never completely eliminated. The text already cited gives us the key to a problem which is not the most simple. In it, the “rising of the Dog” can hardly mean anything other than the heliacal rising of the constellation Sirius. What did it mean, in the world of the astrologers, to be “born under such and such a sign?”

For the horoscopists of the classic age, this question was not posed, or was posed completely differently. The “horoscope sign,” was the one which the daily movement made rise from the horizon at the precise moment of birth. Either as constellation, or as Ascendant, this sign had only a secondary importance. In the theory of “places,” the Ascendant is no more than the ascending degree. This degree serves principally to establish the position of the other centers, among which the Midheaven disputes the primacy of the Ascendant. The influences calculated are distributed among the twelve places and exercised by the planets. They were subordinated to the planet which was “master of the geniture.” This was the point of arrival for horoscopy. The point of departure cannot have been much different. The idea which, even today, survives from the shipwreck of astrology, is that one is born under the sign in which one finds, at that moment, the Sun. Now, the astrologers call the date when one begins to distinguish a star in the first light of the dawn the heliacal rising of that star.⁸⁸⁹ It follows that the sign rising heliacally is the one in which the Sun lodges at that moment, when the sign “raises itself.”

So, from the beginning, the dominant sign of the geniture was the sign rising heliacally. It had primacy over all the others, by virtue of an exalted energy, as if superheated by the presence of the Sun. It was this theory which took precedence over the charts of conception for Antiochus of Commagene and for Augustus.⁸⁹⁰ This is the theory which Manilius explained in his poem, along with another concurrent theory, which he distinguishes.⁸⁹¹

This first system, easily understood, had one major inconvenience, which brought it into discredit in the view of the logicians. It was the uniform assignment of one prediction, temperament or destiny to all individuals born in the same month.⁸⁹² The astrologers, surrounded by skeptics, went on to more exact measures. They wanted to mark not just the epoch, but the hour of birth when the destiny of an infant was fixed. The indicator of the hour was the Ascendant or horoskopos, which changed from moment to moment. It was the sign holding the Sun. However, this reconciliation of the two systems worked only for infants born at dawn.⁸⁹³ Other considerations also contributed to abandoning the sign which is rising heliacally, the solar mansion. First, one could also look at the sign occupied (for a short time)⁸⁹⁴ by the Moon. This was very easy to see and it could be either on the horizon or above the horizon, in the night as well as in the day. It was, in effect, a principle of common sense, held stubbornly by Ptolemy that the stars, once below the earth, no longer effected its upper surface or had only a negative effect.⁸⁹⁵ Even the doctrine of the Ascendant supposes that the initial action upon which the whole chart depends begins at the rising of the horoscopic star. From this point of view, the sign occupied by the Sun has an effect only in daytime horoscope. The nocturnal ones – that is, the majority, according to the statisticians – escape its influence⁸⁹⁶

Various expedients were tried.⁸⁹⁷ Recourse to the positions of one or another of the two luminaries relative to the zodiac was abandoned. Eventually, learned astrology created the purely Greek doctrine of the instantaneous Ascendant or horoskopos, neither sign nor planet,⁸⁹⁸ but a geometric position, the point of departure for the graduation of the circle of geniture.

We may adjourn, without inconvenience, discussions of the difficulty of determining the horoscopic point precisely. (The adversaries of astrology said it was impossible.) Direct observation was usually impractical, and the astrologers used tables of rising times, ἀναφοραί. With these tables, it was enough to know at what degree of a sign the Sun was found at a given moment, and what the angle was between the Sun and the horizon. The angle was measured, perhaps directly with an astrolabe or gnomon, perhaps, as a function of time, with a clepsydra, a water clock.⁸⁹⁹ Ptolemy wanted neither method. What made him look for another viewpoint was not solely the chances of error inherent in the operation (which he did not hesitate to make the most of). The motive, which he does not admit, was the desire to evade a redoubtable objection, impossible to refute directly. It was the

knowledge that childbirth is not an instantaneous event, and it could not be described by an instantaneous Ascendant. Ptolemy found an ingenious solution, based upon postulates which it is impossible to restore. Just as childbirth, although made up of successive stages, is nevertheless a unique act, so, in a rising sign taken as a whole, there must be a point, a degree, which is excellently and especially horoscopic.⁹⁰⁰ This point must be in a natural relationship, exactly defined, with the universal generators, the luminaries. It must have a similar relationship with the particular patron which the astrologers call the “oecodespot” or “master of the chart.” This individual patron, itself in relationship with two luminaries, concentrates in itself the energy of which it is the transmitter. It dispenses that energy to its client, while marking it with its own imprint.

Determining the ascendant degree returns, then, for Ptolemy, to discovering the master planet of the birth chart and assumes that the ascendant degree is placed in its sign exactly as this planet is in its sign. Look at the method which he recommends to his followers, complex enough to confuse those who make objections. Observe first the lunisolar syzygy, conjunction or opposition, Full Moon or New Moon, which preceded the birth. That is, point out its place on the circle. That done, look for the planet which “dominates” the place mentioned above. The reasons (λόγοι – ψήφοι) may include because the place is in its triangle, whether in its triplicity or in its domicile or in its exaltation, or in its ὅρια. It may dominate even because it is itself, relative to the Sun, in a particularly effective aspect or phase (for example, in oriental phase). Note the degree which this master planet occupies in the sign where it is found. Next, look up the ascending sign in the tables, and place the Ascendant at the corresponding degree in this latter sign.⁹⁰¹ This rule was already complex, and in practice, it was encumbered with a great deal of casuistry. The syzygy of conjunction has only one place. The syzygy of opposition has two, however, between which it is necessary to choose. The choice must be made in favor of the place which is occupied by one of the two luminaries which was above the horizon at the moment of the syzygy.⁹⁰² But the big problem was comparing the rights of the planets to *oecodespotia* or rulership. First of all, as has been seen, not everyone agreed on the respective value of these rights.⁹⁰³ It might happen that, when all is taken into account, several planets might be equally qualified. Then it was necessary to bring in new principles of classification, for example, sex, αἰρήσις, which planet is closest to the Ascendant. However, this relationship based upon distance created a new problem. When the chosen planet was closer to the culmination, one applied the rule to the culmination and one determined the Ascendant from this. Subordinated in this way, it hardly deserved its own name, *horoskopos*, marker of the hour.⁹⁰⁴

Whether Ptolemy created his method from whole cloth or only perfected it, ⁹⁰⁵ he had imitators, perhaps even predecessors. Annubion, probably earlier, had simply applied the formulae used for the dodecatemoria and the κλήροι to the new invention, the Ascendant. For daytime charts, take the distance from the Sun to the Moon, and “subtract” it when leaving the Sun. The Ascendant is where it ends. For night-time charts, do the same thing with the distance from the Moon to the Sun.⁹⁰⁶ Paul of Alexandria explains (following the “wise Egyptians,” the eternal breastplates of mystificators) up to five “natural” methods to find the necessary Ascendant degree. For these people, “natural” means whatever is not geometric. Once the Ascendant sign is designated, they put the Ascendant degree within it, especially where some elective affinity attracted their imaginations. One takes a table in which the planets are assigned to degrees within each of the signs, an assignment identical for signs of the same triplicity.⁹⁰⁷ As the ascendant degree, Paul selects a degree in the ascendant sign belonging to the planet which became “master of the epoch (κύριος τῆς ἐποχῆς).” He did so because the luminary which is the chief of the sect (τὸ αἰρετικὸν φῶς) found itself actually in a degree to which it belongs. (The Sun is the chief of sect for the daytime charts, the Moon for night-time ones.) Another astrologer, applying the same idea in a different way, put the Ascendant in the ὅρια of the planet which had, at that moment, the Moon over its designated properties. A third took as point of departure, like Ptolemy, the syzygy preceding the nativities. He sought the planet to which it was related, either by means of a term (ὀριόκράτωρ) or a domicile (οἰκοδέκτωρ). Then he found the place of the syzygy and balanced the titles of the planets to mastery. Finally, he chose the planet which owned the greatest number of properties in the sign where it was present. These became the properties of the Ascendant. It is a sketch or a simplification of the method of Ptolemy, which is mentioned briefly in the fourth rank and without enthusiasm. One had to choose the best, in effect. The height of virtuosity was to begin a competition between the planet which dominated the syzygy before the conception and the one which had the same right over the syzygy before birth. This right was based upon the theory of the triplicity

combined with the αἵρεσις. The honor of determining the Horoscope was given to the most deserving.

It would be a waste of time to look for logic in these arcana. Their reasons for existing are outside logic. They are expedients for people unhappy that birth did not take place in an indivisible instant to correspond with an equally instantaneous Horoscope.

III. Interpreting the Birth Chart

Let us suppose, then, that the Horoscope has been conveniently rectified. The natal chart has been divided into four quadrants and twelve places. The luminaries and the planets are in relationships with the signs, the places are positioned upon the circle, and there have been aspects duly determined. This is the theme or horoscope (θέμα – διάθεμα – γένεσις - *constellatio*). Now we need to interpret it, in order to draw out all the predictions which it contains.

The system of “places” was imagined precisely to localize the predictions, both from the point of view of their nature and from the point of view of their maturity in the four ages of life. It would seem that one need only examine the compartments of the horoscope successively. One noted the signs and planets which were found there, presuming the effects of their presence, their aspects, relationships, combinations and reciprocal reactions. This is what the average astrologer understood, before and after Ptolemy. They counted the effects of the celestial bodies, especially the planets, in the twelve compartments, giving special attention to the “centers.” They began again patiently to count connections for each planet taken in isolation, for planets associated in twos or even threes, by contact or not. Nor did they forget to note their relationships with their own domains or the domains of others. Also, we have seen that the theory of fixed places was checked and adulterated by the concurrent systems of mobile places, dodecatemoria or lots. These supposedly had a more effective or more specific influence. From all these procedures, tangled and combined at random, Ptolemy wished to make an original work. He took parts from the various systems which could be fastened together into a coherent whole and banished the rest from systematic horoscopy. As much as possible, he removed interference from *elections*.

Ptolemy put predictions into four categories, which made up the “horoscopic melody.” These predictions were:

- A. The facts before birth
- B. The facts preceding and following birth
- C. The file accompanying the birth
- D. The facts after the birth

Ptolemy did not forget, on this occasion, to declare that he proposed to simplify the doctrine, to eliminate useless refinements and to admit only “natural” explanations.⁹⁰⁸ We are used to this prudish refrain. After listing the requirements of the simplified art, one wonders what must have been the task of the astrologers before Ptolemy relieved them.

For each of the problems posed in the four categories mentioned above, it is convenient and sufficient to seek:

1) Certain “proper places” (οἰκῆτοι or ὠκειωμένοι τόποι) where the various influences which rule human life are fixed. They were based upon a choice made in the systems explained above and also according to correspondences between the places and the sign of the zodiac;

2) The planets which are masters or “oecodespots” of the contemplated place, by one of the five modes listed above.

That is the tool kit. Let us go on now to the interpretation. In order to predict, one used:

1) The quality (τὸ ποῖον) of the presage. This depended on the natures of the planets and of the signs they occupied as much as on the places.

2) The intensity (τὸ μέγεθος) of the attendant effect. This depended on the energy of the planets, an energy which varies depending on their position in relation to the stages of their own movements or of the daily movement.⁹⁰⁹

3) The time or maturity of the presage, from the position of the planets relative to the Sun and to the Ascendant.⁹¹⁰

A. –The Facts Already Existing at Birth (τὰ πρὸ τῆς γενέσεως). Astrology claimed to be in full possession of the divinatory tripod, the past, present, and future. Whether one ascends or descends the immutable chain of causes and effects, one may draw conclusions from a given fact equally well about the future or the past.⁹¹¹ The destiny of the parents automatically contained that of their posterity. Likewise, the chart of an infant's nativity inevitably gives information about the destiny, past, present, and future, of those who engendered it.

Evidently, the astrologers did not notice this at once. They were pushed by the debates of the metaphysicians,⁹¹² or by suggestions from their own casuistry.⁹¹³ Perhaps they were even stimulated by the curiosity of clients who, possessing a known theme, that of a child, consulted them about an unknown theme, that of the parents.⁹¹⁴

It was for predictions about parents that Ptolemy reduced the category mentioned above.⁹¹⁵ The scholiast here distinguishes four principal questions, to wit first, are the parents happy (εὐτυχεῖς, that is, rich) or unhappy? Second, will they transmit their infirmities to their infants? Third, will their lives be long or short? Fourth, how will they die?

In the system of the “places,” there was, a compartment (the fourth, with the Lower Midheaven) consecrated to “parents,” under the patronage of “father Saturn,”⁹¹⁶ (above, Fig. 32). The method of κλῆροι (p. ???) allowed this compartment to be replaced with one or two others, the place of the father and the place of the mother. One may extract the predictions from this. Ptolemy rallied to another method, which distinguished between the father and the mother. It consists of observing in what conditions the planets which symbolize paternity (☉ in daytime births, ♄ for night-time ones) and maternity (♀ for daytime births, the ☾ for night-time ones) were found. If their respective positions are in a favorable “aspect” and their entourage (δορυφορία) to their taste, the prognosis could only be favorable. (An example of a good entourage is if the Sun is surrounded by planets in matinal phase and well-lodged, the Moon, by planets in vespereal phase and well-lodged.) It was vice versa for the opposite case, especially if Mars follows close behind the Sun, or Saturn follows close on the Moon, because of the opposition of sect (αἵρεσις). The father's life will be long if Saturn is associated with Venus. It will be precarious, if Mars accentuates its interference or if Saturn is in an awkward aspect with the Sun. It will be menaced by a sudden, soon, end by the exaggerated predominance of Mars. The same conclusions are made about the mother's life, based upon the respective positions of the Moon, of Venus, and of Jupiter, with or without the interference of Mars or of Saturn.⁹¹⁷ If one wants more ample, more precise, details on the accidents and maladies which befall parents, it is necessary to construct a special theme with the master planets as the Horoscope.⁹¹⁸ One also brings into the calculation the character of the signs in which the operant planets were found. This an interpretation will, farther on, signal, to us, heart-breaking puerility.

B. – Events Before and After Birth (τὰ πρὸ τῆς γενέσεως καὶ μετὰ τὴν γένεσιν) – Predictions in this category⁹¹⁹ applied only to brothers and sisters born of the same mother. Consanguinity is not enough. It is in the mother that the beginning of life is localized, whether conception or birth. So, the first thing to do is to determine the “place of the mother.” In other words, find the place occupied by Venus, if the birth is in the daytime; by the Moon, for nocturnal genitures. If this place is in relationship with a greater or lesser number of sympathetic and beneficent planets, the number of brothers will be larger or smaller. The character of the signs in which the planets are found may weaken or strengthen their fertilizing influences. For example, they will be stronger in the bicorporal signs than in the simple signs. Likewise, the malefic planets tended to produce sterility. One understands, too, that the masculine planets announce brothers, feminine planets, sisters. Planets in the East rule the earlier brothers and sisters, and planets to the West, the later ones. Finally, the positions of the planets relative to the “places” (the place of the brothers (the third), the Lot of Fortune, etc.) and their greater or lesser mutual sympathy may give information on the degree of prosperity or of concord which the brothers attain. For more information, Ptolemy advises drawing up a special theme for each brother or sister, taking the planet which “gave” them existence as Horoscope.

Eclectic as ever, Ptolemy has constructed his method with the debris of other procedures. The simplest of those which he eliminated consists of returning to the fixed “place” especially consecrated to “brothers” in the circle of geniture.⁹²⁰ Another is to seek a place of fraternity particular to the theme, by the method of κλῆροι⁹²¹ Finally, one may speculate upon the influence of the planets which represent paternity, Saturn or Jupiter, and thus double the observations carried to the mother.⁹²²

C. -- The Events which Accompany the Birth (τὰ κατὰ τὴν γένεσιν⁹²³ -- We can only repeat what has been said above, to wit, that predictions concerning facts openly revealed by the birth are less interesting than those formulated before birth, according to the chart of conception. Ptolemy, who was isolated on this, wanted either of two things. He wished to dispense with teaching how to foresee the sex, the number, the conformation of the infants to be born. Otherwise, he wanted to announce that he taught these subjects for love of the art. No one should believe the astrologers were unable to answer questions which other diviners know how to resolve.⁹²⁴ He was content to say, in an evasive tone, that the facts “depend principally on the horoscope of the conception, but also, in a more general manner, on that of the birth.” That is, the horoscope of the birth served to verify, after the fact, the deductions which had been based on that of the conception.⁹²⁵

There are many things to consider in judging a baby's sex. It is necessary to see if the planets in relationship with the positions of the Sun, the Moon, and the Ascendant are masculine or feminine. (They may be so either by nature or by position.)⁹²⁶ One must also take into account the sex of the signs in which they are found.⁹²⁷

The question of sex would have been easy for the astrologers, if they had been content to explain without risking predictions. Once their principles were accepted, their explanation was much simpler than that of the naturalists. Saying that an infant took its sex from the one of its two progenitors. Some said the parent which furnishes the most abundant seed (Alcmaeon). Others credited the one whose seed reaches the goal first, that is, in short, the one which was the stronger at the moment. However, this was to answer one question with another. The other systems came close to that of the astrologers and seemed to find in it their ultimate reason. According to some, sex depends upon temperature, heat producing the masculine sex, and cold, the feminine (Empedocles) or vice versa (Parmenides). Pythagoreans, who distinguished left from right in the generative organs, said the right side produced males, the left, females (Anaxagoras, Leophanes, etc.) Likewise, the masculine planets were, in principle, warmer and drier than the feminine ones. We have seen that, in the theory of the domiciles (above, p ???), the right hemisphere was entirely solar or masculine. The professors of astrology easily appropriated physical “reasons” alleged before their time and easily adapted them to their dogma.⁹²⁸

The question of the sexes mingled with the following ones. Would birth be single, double, or triple? Would twins or triplets would be of the same sex? What proportion would be dominated by one or the other sex? As a general rule, if two of the three places mentioned above, or even all three, were found in “bicorporal”⁹²⁹ signs, one may predict the birth of twins. This was especially true if the “oecodespot” planets of these places are in part or in whole in the same compartment, or reunited in pairs or more. It is not hard to understand that, the more of these causes are in action,⁹³⁰ the more intense the effect will be. Given multiple births, their sex may be the same or mixed. These are, moreover, among those tours de force from which Nature does not always extricate herself to the advantage of the new-born and which rarely succeed outside of legend. Thus, Ptolemy has recourse to mythology (for the one and only time in all his works) to give a reassuring and popular turn to his thought. He assimilates the birth of three boys (produced by the association in aspect of ♄, ♃ and ♂ to that of the Anactores or the Cabeiri. Three girls (product of ♀, ☾ and an “effeminate” ♀) were assimilated to the three Graces. Two boys and a girl (a product of ♄, ♃ and ♀) were compared to the Dioscuri [and Helen]. The birth of two girls and a boy, to the group of Demeter, Ceres, and Dionysius.⁹³¹

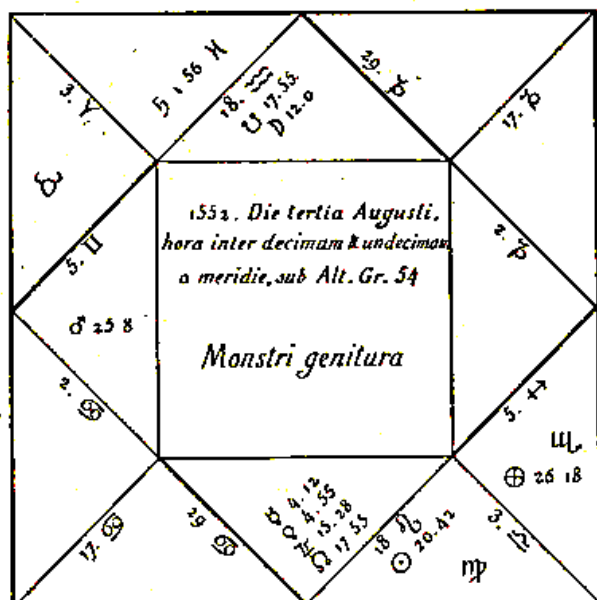


Fig 41 Birth chart of a deformed child.

A much feared eventuality, which must have provoked many consultations, was the birth of monsters or deformed children (τέρατα).⁹³² The popular imagination, encumbered by ancient totemistic superstitions and by reincarnation, could not suggest any reasonable explanation for these mistakes of nature to the philosophers. Astrology, with its enormous storehouse of numbers and of combinations, was not embarrassed here. It could choose from a number of perturbing influences which hindered and interfered with the normal functioning of the cosmic mechanism.

Thus, when the two “luminaries” are found far from the Ascendant and the malefic planets are installed on the “centers,” it is certain that the attendant birth will be unfortunate, perhaps even

monstrous. To be more precise, it is necessary to note the syzygy which preceded the birth with its cortege of oecodespotic planets. One must consider as well as the positions of the Sun and the Moon at the moment of birth, their relationships with the Ascendant. If the relationships between all these positions or the majority of them are “disjointed” (ἁσύνδετα), a monster, a deformed child will be born. If, furthermore, the “luminaries” are found in “quadruped” or “animal” signs, the monster will not have human form. It will be like a wild animal, if some benefic planet does not come to ameliorate the prognostic. By the grace of Jupiter or Venus, it will look like a domestic animal (dog, cat, monkey). It will resemble a useful sort of animal (chicken, hog, goat, cow), if it is Mercury which intervenes. If, on the contrary, all other things being equal, the “luminaries” are found in a human sign, the child will be human or quasi-human. The anthropomorphic monster will be deprived of reason if the “luminaries” and the “centers” are in relationships with the malefic planets. However, connection with a beneficent planet may attenuate the deformities and reduce them to infirmities which might be objects of curiosity or even of veneration. Examples were the hermaphrodites, the harpocratians (deaf-mutes), the idiots. The industrious Mercury even knew how to fashion cripples, malicious and twisted, who lived off of charity and public credulity.⁹³³

There is a case which Ptolemy examines separately, that of the ἄτροφοι atrofoi, the infants which are not nourished, either because they die or because they were expelled from their father's household. Our teacher has lost an opportunity to use his talent for classification, for he looks at the two cases in the same chapter,⁹³⁴ and both in a vague fashion. It filled, without conviction, a framework created by others. The case which interested him most was the one of non-viable infants. He wished to save his disciples from laughter and contempt, brought on by astrologers who calculated the stages of an existence destined to have no career.⁹³⁵ He called the infants who did not live a whole year ἄτροφοι atrofoi. Here are the indications.

First one of the “luminaries” must be at a “center,” and a malefic planet must be found in exact conjunction or in exact opposition with it.⁹³⁶ There cannot be any benefic planet. The planet which is oecodespot of the place occupied by the luminary must itself be a malefic.

Second The action of the luminaries is countered by malefic planets which follow them closely (in ἐπανάφορά) or are in diametrical opposition. This is especially the case if these planets occupy places belonging to the master planets of the chart, i.e., of those which are associated either with the luminaries or with the Ascendant.

Third in the case where the two luminaries are angular and both checked by diametrical opposition, life will be stopped before birth or soon after. The infant will be born dead or half-dead.

For certain temperaments provided with a mixture of compensatory influences, the infant may live a longer or shorter time. However, it may be removed from the family by being exposed or in some other way.

I do not know where Ptolemy found the elements of his doctrine in this case. However, it is

clear that he followed pre-existing traditions and recoiled from the consequences of his own principles. He only used the luminaries and planets when these stars were above the horizon. This is a principle which he affirmed more than once ⁹³⁷ and to which he returned later, when he worked on calculating the length of life of individuals born viable. One cannot see why the case of the still-born is separated from the general methods for estimating the length of life. ⁹³⁸ It would be enough, one would think, to establish that the usual conditions of vitality were not fulfilled. For example, it ought to be enough that the “aphetics” not be above the horizon in the aphetic places. However, in order to make sure that there were always “aphetics” available, this method was rejected for another one. The second one required that the lower hemisphere be used just like the other. Otherwise, infants born on moonless nights were condemned to an instant death.

Ptolemy did not want to enter into obstetrical details although others did. ⁹³⁹ Nor does he want to get entangled in the bonds of solidarity which make the destiny of an infant depend on that of its parents. He does not pose the case, for example, where the infant cannot live because its mother was destined to bring into the world only non-viable infants. ⁹⁴⁰ As for exposed infants who survive, are rescued or even adopted and become either slave or rich, he felt that this subject ought to go with the predictions about conditions and professions.

D. – Events After Birth (τὰ μετὰ τὴν γένεσιν). – In the end, Ptolemy freed himself from all these importunate preliminaries. He approached frankly the problem of calculating the destiny of an infant born viable and capable (save for accidents) of fulfilling a normal career.

The ancients usually thought that, since all was ruled by nature, that there must be a normal lifespan for every sort of living being. It would be the same for all individuals of a species, if some perturbing cause did not counteract the action of nature. ⁹⁴¹ From this came the efforts to determine the maximum length of human life. ⁹⁴² Either empirical means were used or a priori deduction. Philosophers, physicians, haruspices, and astrologers all had their systems on this point. Nearly all of them were disdainful of experimental statements. The astrologers succeeded no more than the others in reaching agreement. ⁹⁴³ In fact, this purely theoretical question was not very important to the doctrine. Thus, Ptolemy, without making the least allusion, found it simpler and more judicious to judge the years of life given to each individual (ἔτη βιώσιμῳ) from the energy of the stars.

1) Estimating the Length of Life. Calculating the length of life, with indications of the method of death foreseen by the stars, is the masterpiece of astrology. It was the operation judged to be the most difficult by its adepts, the most dangerous and the most worthy of condemnation by its enemies. ⁹⁴⁴ It is said that this chapter of the doctrine was uncovered and adapted in emulation by all the dreamers or charlatans desperate to pierce the mystery. We may find there no more than a doctrine imposed as orthodox. Ptolemy’s method, saturated with mathematics, is complicated enough that we have the right to consider it later. Simpler methods start with ideas accessible to ordinary people.

The simplest idea is that each individual took his vitality, like his other aptitudes, from the star under which he was born. Doubtless, it was for long good enough in theory and in practice. However, there was disagreement about knowing whether a star, a planet or a sign was “master of the geniture,” and which one. We have seen that there was an agreement between the sign sheltering the Sun (the Time Lord [Time Lord] of the month) and the Horoscope sign. Either could be the “giver of life,” the βιοδοτήρ (= *dator vitae*). Manilius did not test the need to find out about the matter above. However, he knew very exactly “how many years fit with each of the signs.” One hears with pleasure that the rule followed is a simple one a sign gives as many years as its ἀναφορά has degrees. ⁹⁴⁵ A life is, then, short with rapid signs, long with the slow ones.

If the signs dealt out a fixed number of years, there was no reason to refuse the same prerogative to the “places” or compartments of the horoscope. Thus, Manilius passed immediately from the signs to the “temples” or places on the circle, assuring us that to consider the signs “was not enough.” The place which decided the length of life was the one which was occupied by the Moon. ⁹⁴⁶ One understands easily that the strongest number (seventy-eight years) would devolve upon the Horoscope, and the weakest (twelve years) upon the sixth compartment, the receptacle of illnesses and temple of Mars. However, it is impossible to find any reason for the sequence given by the poet. ⁹⁴⁷

These methods of calculation usually stayed independent. Sometimes they were combined with another more learned one, which made the planet which was “master of the geniture” (οἰκοδεσπότης or κύριος τῆς γενέσεως) into the dispenser of the years of life. The first difficulty was to agree on which planet had the right to this dignity. The astrologers here made an assault of

inventiveness. The multiplicity of systems was increased even more by the unintelligence of those who combined them without understanding them. They then created subtle distinctions between terms with the same meaning. The confusion was so great that even Firmicus noticed it. One agreed to put the cause of the Sun and the Moon first. Having a general domination over all genitures, they need not be present in any particular one.⁹⁴⁸ This admitted, the concord between the five planets involved all sorts of combinations. One may distinguish, among the many variants, two groups of opinions. Some give primacy to the planet which is best lodged in its properties. The rest give primacy to the one which is honored by relationships with the luminaries and with the centers.⁹⁴⁹

Once the master planet of the geniture is found somehow, it was natural to think that, among other prerogatives,⁹⁵⁰ it had also the one of measuring the length of the life. This was a principal duty since it had, so to speak, given the initial impulse to life.⁹⁵¹ Firmicus explains how the master of the chart, the dispenser of life, bestows the maximum numbers of years. It disposes them when it is conveniently installed in one of its fiefs and supported by beneficent planets. It does not reach more than the minimum when it is badly placed and badly surrounded. The master of the chart stays more or less between these two limits, depending on whether it is more or less opposed. There are, in this chronographic scale, 3° the maximum (τέλεια ἔτη), the medium (μέσα ἔτη) and the minimum degree (ἰδιὰ ἔτη).⁹⁵²

It remains to fix the numbers which measure the life-giving energy of each planet. The astrologers, seeking a principle which could be understood, fumbled around for a long time. The physicists demanded, no doubt, that the energy of the planets could be calculated from both their size and their distance from the Earth. However, these facts were poorly known, and this reasoning was contrary to the astrological and philosophical principles. These principles made vital fire descend from the upper spheres. One might reason otherwise. Since life was a movement, its length was ruled, according to sympathetic analogy, by the movement of the planet which gave it the initial impulse. This mechanical theorem fit very well with the idea of the solidarity of the universe and the microcosm. However, it had the inconvenience of reserving long life to children of the slower planets, which were largely malefic and "murderous." The astrologers, rightly or wrongly, did not adopt any theory. They said that, in practice, the solution to the problem was found completely in the table of the ὅρια. These had been drawn up by the science infused or acquired from the Egyptian sages. They left each person free to see if the numbers of the ὅρια represented the periods of revolution of the planets well. When one asks them why these figures exist, they respond that the ὅρια correspond to the years of life imparted by each planet. When one wants to know how the number of these years was found, they said that the sum was prefixed by the ὅρια.⁹⁵³ The astrological circle is the vicious circle par excellence.

The partial totals of the ὅρια (whose sum is 360) were then taken as a maximum for the number of the years given to the children of the planets which were "masters of the birth chart."⁹⁵⁴

To fix the minimum, the astrologers took randomly from those who knew astronomy or pretended to. I believe that Scaliger and Saumaise did them an undeserved honor in striving to discover a reason for their figures.⁹⁵⁵ One sees easily that the minimum for Saturn (30 years) is equal to the length of its revolution (ἰδιὰ περίοδος). The same is true for Jupiter (12 years). However, 15 years for Mars, 8 years for Venus,⁹⁵⁶ and 20 years from Mercury should probably be classed among the arcana. As for the average, it is, reasonably, half of the sum of the two extremes.

Although the luminaries were not masters of birth charts and were excluded from the table of the ὅρια, they ended up back on the list of "givers of life."⁹⁵⁷ It was, in effect, a bit of a shock that they lost a prerogative which they possessed par excellence. They resumed it when they were found in the conditions imposed by the "oecodespots of the geniture." They elevated the maximum, which is not given by the ὅρια of the Egyptian tradition, to over one hundred. The minimum was affected by the Metonic cycle (nineteen years) for the Sun, and, for the Moon (twenty-five years), by the approximate length (in days) of the tropical month.⁹⁵⁸

PLANÈTES	MAXIMUM	MOYENNE	MINIMUM
♄	57 ans.	43 ans.	30 ans.
♅	79 —	45 —	12 —
♆	66 —	40 —	15 —
♁	120 —	69 —	19 —
♂	82 —	45 —	8 —
♂	76 —	48 —	20 —
♁	108 —	66 —	25 —

Givers of Life

One draws up, then, for the seven *datores vitae* the following table. Of course, the eclectic astrologers did not err – especially when they give a reason for the length of an existence already ended. They did not err in mixing the different proceedings, or in borrowing from signs or “places” which may lack the contributions of the planets. Nor did they err in combining a maximum and a minimum, or by making convenient subtractions, by invoking the intervention of antagonistic planets or by climacteric crises.⁹⁵⁹ An intelligent astrologer was never short of reasons for saving theory from the blunders of practice.

Ptolemy did not take the terms (ὅρια) seriously. He knew where the pretended planetary “period” included there came from. He made a tabula rasa of all these arbitrary manipulations of numbers. Ptolemy wished to institute a geometric and mechanical theory based upon the influence of the places and the ascensions (ἀναφοραί) of the planets.

His theory reposed upon assimilating the zodiac to a wheel. The life of an individual was thrown upon the wheel with a force more or less great from a certain point of departure (τοπὸς ἀφετικός). It was stopped (or risked being stopped) by barriers or destructive places (τόπος ἀναιρετικός) and was without power to go beyond a quarter of the circle, in any case. The number of degrees converted into degrees of right ascension gave the number of years of life.⁹⁶⁰

The chief idea of the system did not come from Ptolemy. Comparing a life to a race in a track where death marked the goal was and is a literary commonplace. For the astrologers the career was completely laid out. Life, starting at the Ascendant, like the stars, must come to an end, like them, in the Descendant. However, in view of the habit of counting a year by degrees of a circle, this course was too long. It was necessary to find another maximum which would fit experience better. The school of Nechepso and Petosiris found it convenient to appeal to the theory of aspects. Since life never was able to reach the diameter (180°), it became stubborn at the square aspect, which was just as menacing as the diameter or more so. From this came the rule, empirical and logical at the same time, that the zodiacal quadrant (90°) was the extreme limit of life. Thanks to conversion into degrees of right ascension, this limit could, depending on the latitude, pass 90°. ⁹⁶¹ This rule was judged completely “natural” and a Pythagorean was found to give it the necessary arithmetic consecration. He remarked that since Saturn was the dispenser of time (Κρόνος = Χρόνος) and the number 3 was the universal regulator, 90° or years represented exactly three revolutions of Saturn.⁹⁶² It remains only to arrange the interior of the quadrant with obstacles destined to trip the runners who were unable to reach the final goal. This the astrologers were in position to do sufficiently for all, with their aspects, their malefic planets, present or represented by their aspects or their domains, the signs which rise slowly or quickly, their dangerous degrees, etc.

However, this did not resolve every question. Where to place the vital quadrant? Symbolism would make the Ascendant the point of departure for life. However, it would also make the Descendant represent death. It also required, and more imperiously, that the Midheaven stand for the apogee, the fullest part of life. Now, placing the point of departure (τόπος ἀφετικός) at the Ascendant would make the end of mortal life (τόπος ἀναιρετικός) coincide with the Midheaven. It would be better to take the Midheaven as the point of departure and use the character standing for the Descendant as the end-point. From this came a system which is brought, whole, into the theory of Ptolemy.⁹⁶³ This system had one grave objection against it, among others. If the Descendant was no more than the maximum limit, one which was reached rarely by a few privileged people, it was necessary to seek other “anaeretic” places on the path. Symbolism rarely had a more practical application. On the other hand, if one used it in every instance, it was necessary to bring the point of departure closer, in order to shorten the course. One found on that side only one favorable place (the ninth, place of Θεός) which could be considered as a source of life. Nevertheless, although intervening planets furnished the

means of adding and subtracting years of life, the ninth place was retained as the “aphetic place,” along with the Midheaven or the place of the Midheaven,⁹⁶⁴ and the Ascendant was kept as the only “anaeretic” place.

On their side, the supporters of the Ascendant as the aphetic place did not run out of reasons. They were traditional reasons and nearly common sense ones. Some astrologers stubbornly clung to the quadrant between the Ascendant and the meridian for the course of life. Perhaps they appealed to the legends which attributed a deadly character to the mid-day Sun. Others had the idea, also traditional and magnificently symbolic, of placing the dead far below in the subterranean region, at the Lower Midheaven.⁹⁶⁵ However, they were forced to reverse the movement from the Ascendant and have it follow the proper movement of the planets. In this way, according to the theory of the ἀκτινοβολία (which may have been created or systematized for this purpose), a life was assimilated to a movement pierced by the dart of the anaeretic planets, Mars and Saturn.⁹⁶⁶ One could either think of life as going to its meeting with Mars or Saturn, or think of it as being dragged to the encounter by the daily movement.⁹⁶⁷ Since the daily motion and the degree were the common measure of speed and space in all the systems, it is evident that one may stop with this second conception of the approach and encounter. It goes without saying that the anaeretic planet was always found within the course of 90°. If it were not there physically, it was there by one or more aspects. So then, as far as one can judge from conjecture, Ptolemy found several aphetic theories ready-made. Each had different points of departure and with different meanings for the symbolic course which represents life. This was without counting the rival doctrine of the “master of the birth chart” dispensing years of life. It was from these elements that he fabricated his theory. It was a pure masterpiece, according to his disciples. In any case, it was proof of his eclectic dexterity, dressed up to mask the incoherence of certain connections.⁹⁶⁸

Ptolemy began by lining up a series of postulates drawn from pre-existing traditions. Since he proposed adopting several points of departure (τόποι ἀφετικοί), it was necessary that choice of the aphetic place depend upon a planet which played the role of master of the geniture. It became, for this reason, ἀφότης, that is, a planet which shoots the vital movement from the place which it occupies. This place must also be an aphetic place. The two conditions are thus connected. It is necessary to have an “aphetus” in an aphetic place. In consequence, Ptolemy drew up a list of aphetic places and the ἀφείται possible.

Ptolemy proposed the principle that the aphetic places must all be above the horizon. He eliminated the hemisphere below the horizon, as he did in his universal apotelesmatica.⁹⁶⁹ In the upper hemisphere, the aphetic places are all those which are in a defined relationship, an “aspect,” with the Ascendant.⁹⁷⁰ One would expect to see the Ascendant represented in the first line and next, the favorable aspect par excellence, the trine or triangle. The unfavorable aspects are relegated to the end. But not so. Certain “centers” go first, before the other places, and among them the Ascendant does not hold the first rank.

- 1) The first rank is reserved for the superior culmination (Midheaven), in square aspect with the Ascendant. Evidently Ptolemy the “physicist” evaluated the physical energy of the stars and thought that they reached their maximum at their meridian.⁹⁷¹
- 2) Next came the Ascendant, aiming at the fifth degree of the sign or the “twelfth” which began to emerge from below the horizon.⁹⁷²
- 3) The third place falls to a place (the eleventh) said to be that of the “Good Spirit.” It was preferred, no doubt, to another because it was in the Eastern side, in sextile aspect with the Ascendant.
- 4) In spite of its symbolic incapacity, the Descendant figures here as a “center,” to represent the diametrical aspect.
- 5) Finally, in last place, although in trine aspect with the Ascendant, came the place (the ninth) said to be “God.”

Let us now look at the list of the *apheti*. Ptolemy drew it up with the intention, evidently, of accepting only those doctrines about the master of the chart which pleased him. He planned to put the Sun and the Moon in the first rank, in accord with popular opinion. He classed, with much method, and even more symmetry, the circumstances which were present in the birth charts, whether day or night.

For the daytime charts, the aphetus (ἀφότης) will be:

- 1) The Sun, if it is found in an aphetic place.
- 2) Lacking the Sun, the Moon, in the same condition.
- 3) Lacking either luminary, the planet which, being in an aphetic place, was found to have the most rights to mastery (οικοδεσπτεία). It might be the place occupied by the Sun, or the place of the last syzygy (New Moon), or of the Ascendant itself.

For the nocturnal charts, the ἀφέτης will be:

- 1) The Moon, in an aphetic place.
- 2) Without the Moon, the Sun, in the same condition.⁹⁷³
- 3) Lacking either luminary, the planet which, being in an aphetic place, was found to have the most rights of mastery. It might be to a place occupied by the Moon, or to the place of the last syzygy (the Full Moon), or to the Lot of Fortune.
- 4) As a last resort, the Ascendant. Ptolemy, however, for whom the Lot of Fortune is a “lunar Ascendant,”⁹⁷⁴ decided that one should take this special Ascendant if the last syzygy had been a Full Moon. One used the Ascendant proper, if this syzygy had been a New Moon.

In a general manner, if there is a choice between several possible apheti, choose the best placed of the two luminaries. Prefer even a planet which is found in the most qualified place according to the list mentioned above and has exceptional rights (for example, three over five) to the simultaneous mastery of useable points. The usable points may be in either of the two sorts of charts (diurnal and nocturnal) – i.e., the positions of the Sun and the Moon.⁹⁷⁵

First, the aphetus is found, after difficult calculations. Next, it is necessary to determine the direction in which it throws life when it leaves its aphetic place. It throws life directly (that is, in the same direction as the proper motion of the planets) when it follows the order of the signs (ἄφεις εἰς τὰ ἐρόμενα τῶν ζωδίων – *directio – prorogatio directa*). It throws life retrograde (ἄφεις εἰς τὰ προηγούμενα τῶν ζωδίων – *directio conversa*)⁹⁷⁶ when it follows the daily movement. We have said how and why these two modes of projection (τρόποι τῶν ἀφέσεων) were invented. No doubt they prevented, by their concurrence, the institution of a single system.⁹⁷⁷ In every case, there was the same unit of measurement on either side, the daily movement. In the direction here called direct, the daily movement leads the planet called ἀναρέτης or the “following” place (ἐρόμενος τόπος) to meet the “preceding” place (προηγούμενος) where the aphetus is lodged. In the opposite direction, it is the aphetus which is drawn to the anaeretic place, which is always the Descendant. Either way, the length of life was equal to the number of degrees of right ascension between the aphetic place and the anaeretic place, one year for each degree.

We already know, moreover, how hard it was to convert degrees of the zodiac into degrees of right ascension measured along the equator, a conversion necessary to measure time. It was this calculation that the learned astrologers used to overwhelm the more ignorant ones with their disdain. These last were so ignorant that they did not even understand the wording of the problem. However, they could use the canons or tables drawn up by their learned colleagues.⁹⁷⁸

One would misunderstand the spirit of Greek astrology to assume that, once the points of departure and arrival were fixed, calculating of the length of life would be reduced to simply measuring the arc between these two points. If there was one subject of consultation about which the astrologers had to be circumspect, it was this one. Likewise, the raw result from the estimate of the ἀναφοαί was itself reworked, subject to additions and subtractions based upon various motives. This state of affairs came from many sorts of influences working at once, able to hurry or delay the fatal moment. The influences varied in quality depending on the nature of the interfering planets. Their energy depended on the positions of the said planets in relation to the aphetic and anaeretic places, to the Sun (oriental and occidental phases), to the “centers” and especially to the Ascendant. Nor could one forget the combinations in which the planets were found engaged with the signs and the planetary domains inscribed within the signs. To the number furnished by measuring the course of life, the beneficial planets added and the malefic ones subtracted a certain number of years. Complicated rules were followed which rendered the balance always uncertain. When the course of life was to the west of the meridian, with its point of arrival fixed at the Descendant, the malefic planets encountered along the route (physically or by aspect) did not kill. They did not have their darts or rays turned towards the ἀφέτης.⁹⁷⁹ However, they did reduce the length of life. The effect became stronger as they approached the Ascendant. The benefic planets lengthened the life in the same proportion.⁹⁸⁰ With the ἄφεις turning away from the Ascendant, in the “direct” sense, the astrologers, for whom it was the preferred

method, had a very ample casuistry. The point of arrival was no longer fixed. They had to choose between two anaeretic planets, and between their real presence and their aspects. Finally, they had to choose between these aspects. On the one hand, the anaeretic planets did necessarily kill, whether by real presence or by square or diametrical aspect. they might be countered by the rays or beneficent planets.⁹⁸¹ If they did not have the same latitude as the ἀφῆτης, their blows might miss.⁹⁸² On the other hand, in certain conditions, they were deadly by sextile aspect or even trine.⁹⁸³ From an excess of resources, the Sun could replace an anaeretic planet surrounded by its rays, if the Moon was aphetic. It established a struggle between the benefic and malefic planets in which life was the stake. It made the estimate of the respective forces of the combatants more difficult.⁹⁸⁴ Thanks to timely help, such a mortal situation could be passed through. This might be no more than a “climacteric,” a crisis which could be either avoided or rejected, concerning things less precious than physical life.⁹⁸⁵

I do not mean to push farther into the labyrinth of exceptions, compensations and other formulas which Ptolemy accumulated. He brought them in with the detached air of a man who seems to want to render a problem insoluble rather than teach how to resolve it.⁹⁸⁶ One may say that he felt the eyes of the imperial legislators upon him. The authorities were very sensitive about predictions of peoples' deaths, and Ptolemy arranged the discussion so that his disciples would not become suspects.

Ptolemy is a little more at ease when he comes to the related question, that of the manner of death, in another part of his book.⁹⁸⁷ The calculation which determined the deadly point allowed one to judge to which planet the “lord of death” (κυρία τοῦ θανάτου) belonged. This is the planet which has titles of property to the place of the mortal encounter or its immediate vicinity. It is necessary only to consult the temperament of the planet, more or less modified by its position. In general, Saturn causes death from chronic cold illnesses, such as rheumatism, liver problems, and similar things. Jupiter, the windy Jupiter, kills by exhaustion, spasms, flatulent maladies and bad odors of the throat, of the lungs, of the heart, or lightning strikes, such as apoplexy.⁹⁸⁸ Mars uses various inflammations and fevers. Venus, causes death by putrid humidity, abscesses, fistulas, and the like and Mercury, by dry maladies, nervous and mental illnesses, such as epilepsy.

These are “natural” deaths. Violent deaths (βίαιοθάνatoi) are the work of the two astrological executioners, Saturn and Mars,⁹⁸⁹ alone or assisted by other planets. Saturn procured violent deaths when it dominated the place of the Sun or that of the Moon, or both. It might do so either by real presence or by square or diametrical aspects. The type of death was specified by the nature of the signs in which it was found. Placed in the “solid” signs (στερεά) and dominating the Sun, Saturn presaged strangulation or stoning by a mob. In the animal signs, Saturn death by the teeth of wild animals. This would be in the arena, if Jupiter collaborated, by the bite of venomous animals, if the signs are themselves are snake-like or terrestrial (χερσαῖα), especially if Mercury intervened. Saturn would kill with poison or entrapment by women, with the collaboration of Venus. Placed in the humid signs (including, unexpectedly, Virgo)⁹⁹⁰ – and dominating the Moon, Saturn provoked death by drowning and shipwreck. If Saturn was in the tropical signs or the quadruped sign, and in aspect with the Sun and Mars, it announced death from falls. The victim of the accident would be crushed under ruins, or themselves fall from a height, if the operant planets were at the top of the sky.⁹⁹¹

Look now at the misdeeds of the executioner per excellence, Mars, when it is in opposition or in square aspect, whether with the Moon, or, what is worse, as being in the opposite sect (παρ'αἴρεσιν), with the Sun. If it occupied a “human” sign, it caused death by foreign or civil war, or by suicide. Death would be by women or because of them, if it is in relationship with Venus. However, death would be by the sword of brigands and assassins if it collaborated with Mercury. Lodged in mutilated signs or one which rises with the Gorgon of Perseus, Mars provoked death by decapitation or some other kind of mutilation. If it is in Scorpio or Sagittarius, its malice led to death by burning or in surgery. It killed by crucifixion, if it was found at the upper or lower culmination, especially if associated with Cepheus or Andromeda.⁹⁹² If setting or rising, the subject would be burned alive. In the quadruped signs, Mars, like Saturn, caused death by falling or crushing. Help from Jupiter indicates, as it did a little while back, that these were not accidents, but legal torture, ordered by a king or a potentate of some sort.⁹⁹³

Finally, if the two destructive stars work together, and in particularly deadly conditions, there may be aggravated forms of death.⁹⁹⁴ For example, there might be double torture, death in a foreign land and especially, deprivation of burial, the body prey to wild animals. The sort of animals were indicated by the signs of the zodiac which sheltered the homicidal planets.

There is a disquieting logic throughout this chapter, which recalls the associations of ideas familiar to monomaniacs. Ptolemy coordinated a certain number of scattered traditions, associating them by their points of contact. One of these traditions, probably the oldest, took the predictions of the variety of death from the Rising Sign. They did the same with all other predictions. We have already cited the “Chaldaean” proposition discussed by Chrysippus, to wit “A person born at the rising of Sirius will never die at sea.”⁹⁹⁵ The arguments of Carneades, which asked if all the soldiers killed in a battle were born under the same sign, were aimed at similar affirmations. Sextus Empiricus preserved several examples for us, saying:

According to astrological reasoning, an individual born under the arrow of Sagittarius must have his throat cut. How did so many tens of thousands of barbarians all come to have their throats cut at the same time at Marathon? They could not all have had the same Ascendant. If anyone born under the urn of Aquarius must die in a shipwreck, how did the Greeks returning from Troy all come to be drowned on the rocks of Euboea? It is impossible that so many different people were all born under the urn of Aquarius.”⁹⁹⁶

It was to escape these objections (already refuted by others) that the rising sign was replaced by the sign which sheltered the murderous planet.

Before arriving at this combination of signs and planets, one used a simpler procedure. It consisted of taking the opposite of the Ascendant, the sign placed in the Descendant, as the sign determining the manner of death.⁹⁹⁷ This was the method which was displayed at length in the “prognostics of the Sphaera Barbarica” collated by Firmicus, and unknown, he said, to Petosiris and Nechepso. Firmicus examined the rising and setting of certain extra-zodiacal constellations. They were in correspondence with the signs of the zodiac by the hour of their risings (παρανατέλλοντες). He details their action on life at their rising, on death at their setting.⁹⁹⁸ The same reasoning had been done, with more reason, for the signs themselves.

The idea that death is at the Descendant, an idea which completely fit with natural symbolism, could be used with the planets as easily as with the signs. From this came a system, as simple as the preceding one. It attributed the office of ἀναιρέτης to the planet at the descendant in the horoscope. A natural death is brought by the beneficent planets, a violent death by Saturn and Mars. It goes without saying that a prognosis drawn from a planet must be combined with one drawn from a sign or modified by the collaboration of other planets.⁹⁹⁹

We have already seen three distinct approaches. The manner of death is indicated first by the nature of the rising sign. Second, the manner of death is indicated by the nature of the descending sign. Third, the manner of death is indicated by the nature of the planet at the Descendant. The signs and planets here owe their office to their position relative to the horizon.

If the Descendant symbolizes death, the hemisphere below the horizon symbolizes it even more. One may do what Ptolemy forbade,¹⁰⁰⁰ assume the upper hemisphere holds the causes of life with its vicissitudes, and seek the causes of death in the lower hemisphere. This was the system which Bardaisan seemed to have in mind. He asked if the Medes “who throw the dead to the dogs while are they are still breathing (sic), all have a diurnal geniture, Mars with the Moon in Cancer and beneath the earth, the Sun with Mars in Leo, ὄρια (term) of Mars.”¹⁰⁰¹ One may see here a subterranean drama in which violent death is the denouement. The deadly planet assaults one of the two luminaries in its own house, the Moon in Cancer, the Sun in Leo. There was one refinement. The luminary under attack, while in its own house, is in the ὄρια of its adversary.¹⁰⁰²

The idea of attack, of conflict, of blockade, which gave birth everywhere to a strategy explained in an earlier chapter (Chapter 8), did not avoid being exploited in the question of death and the manner of death. We know that the Moon is the principal actor in such affairs. It was the principal actor here, advisedly, as particular representative of physical life.¹⁰⁰³ Thus the contacts and separations of the Moon were much used as a solution for the problem. At each instant, in the census of Firmicus, one sees violent death caused by the misfortunes of the Moon. It always entered into an unfortunate contact or was speared by the ray of a malefic or ill-disposed planet.¹⁰⁰⁴ The principles applied to the Moon could also be applied to the Ascendant or to both together, a new source of combinations.¹⁰⁰⁵

It was from this chaos of systems, crazy notions the mass of which is like the foam from

fermenting brains, that Ptolemy extracted his theory. It is limpid by comparison. He is to be applauded for having traced a road through it all. He probably flattered himself for not having lost his rationality along the way.

2) On the Shape and Temperament of the Body. In speaking of death, we have departed from the order followed by Ptolemy. He went through all the stages and particularities of life before considering its end.¹⁰⁰⁶ We will return to the point where he left his explanation, at the chapter “On the Shape and Temperament of the Body.”¹⁰⁰⁷

Ptolemy did not deign to make an allusion to a system which, before and after him, was good enough for merchants of astrological predictions and of which Manilius thought so highly. It consisted of taking as a model the zodiacal sign holding the Ascendant or the Sun at the moment of birth. Then one enumerated the qualities and flaws, physical and mental, of the individuals born under this sign.¹⁰⁰⁸ The influence of the signs could only modify the preponderant influence of the planets to a degree. Ptolemy also isolates a contrary system, one just as simple. It consists of deriving everything from the planet which is “master of the chart.” According to him, the modifiable action is exercised in the first place by the planets which are masters of the Ascendant and those which are near it.¹⁰⁰⁹ It was exercised in the second place by the Moon and the planets which are masters of the place it occupies. These planets tend to produce their type (μόρφωσις – διατύπωσις). They work with all the more energy when they are more oriental in relation to the horizon (ἀνατολικοί), and more matinal (ἑωτοί) in relation to the Sun.¹⁰¹⁰ It is necessary to consider their positions in the zodiac in relation to the solstices and the equinoxes. In effect, the spring quadrant (from ♈ to ♋) gives warmth and humidity, the summer quadrant (from ♋ to ♌), heat and dryness. The autumnal quadrant (from ♌ to ♏), is cold and dry, while the winter quadrant (from ♏ to ♈), is cold and humid.¹⁰¹¹ From this comes the various temperaments (κράσεις).

The physics of astrology is generally much more ridiculous than the superstitions which Ptolemy wanted to eliminate. Here, the eminent doctor forgot that the quadrants of the zodiac get these supposed qualities from the presence of the Sun. They could only pass on influences to another planet which they influenced in turn. Finally, Ptolemy consented to use parts of the signs of the zodiac in which the Ascendant and the Moon was found and even certain extra-zodiacal constellations.¹⁰¹² The signs themselves tended to create their types.¹⁰¹³ The human signs gave more harmony to the proportions. The large signs (such as Leo, Virgo, Sagittarius) increased stature, the small or narrow signs (e.g., Pisces, Cancer, Capricorn) shortened it.¹⁰¹⁴ Parts of signs also gave vigor the anterior in Aries, Taurus, Leo, the posterior in Sagittarius, Scorpio, Gemini. Finally, just as there are harmonizing signs (Scorpio, Libra, Sagittarius), so there are asymmetric signs (Scorpio, Pisces, Taurus) which create disequilibrium in an organism. “All things which it must show collected and combined,”¹⁰¹⁵ following the formula inserted everywhere in Ptolemy to preserve scientific decorum at the moment when it is least deserved.

To foresee “physical infirmities and maladies,”¹⁰¹⁶ it is necessary to examine the relationship between the malefic planets and three “places” in the birth chart. They are the Ascendant, the Descendant, and the sixth house, the dwelling place of bad luck (κακή Τύχη – σίνους τόπος -- *Valetudo*).¹⁰¹⁷ If one of them or both together are present where they see along the diameter or the square aspect, the prediction is very regrettable. It is still bad if either or both the Sun and the Moon are countered in square aspect by the malefic planets, which in this case are at a center. If the planets are rising, their accrued energy produces permanent infirmities (σίνη). They give illnesses (πάθη) when they are setting.¹⁰¹⁸

The natures of the infirmity or illness and of the organ menaced are indicated by a series of detailed statements. They are based upon the respective positions and the comparative temperaments of the assailant planets and the attacked planets. The positions are relative to the horizon, to the Sun and to the signs of the zodiac. They collaborate passively with evil influences by their specific nature and also indicate, in the fashion of a target, which side deals the blows. Thus, to cite only one example, one of the eyes will be lost when the Moon is full or new (a position relative to the Sun). It will also be lost when it is at a center (a position relative to the horizon), or when it is in contact (συναφή) with something “nebulous” such as in Cancer or in Taurus (the Pleiades), with the arrowhead of Sagittarius, the sting of Scorpio, the mane of Leo and the urn of Aquarius.¹⁰¹⁹ If it is attacked by Mars or Saturn in the East or in oriental phase (that is, at their maximum energy),¹⁰²⁰ an eye will also be lost. Blindness

will be complete, if the attack is made on both “luminaries,” the Sun and the Moon, at the same time. If the offensive action came from Mars, the loss of the organ will be caused by a blow, iron or burning. If it came from Saturn, loss will be caused by a chilling action producing cataracts and glaucoma, a sort of freezing of the eyes.¹⁰²¹ One may go further in taking into account the collaboration of Mercury, who is sometimes on the side of the evil-doers. Thus, in the case where the eye will be punctured by Mars assisted by Mercury, one foresees that the blow will take place “in gymnasia and in wrestling rings or in some attack by a thief.” Hermes was the god of good education and also of bad morals.

To help in these delicate analyses, the astrologers determined, in advance, all the sympathetic correspondences between the celestial world and the human microcosm. Ptolemy avoided the zodiacal melothesia as much as he could. He combined some of it with the planetary melothesia which he doubtless accepted completely. More physiological than the others, it escaped more easily from control. He understood the quarrels of Venus with Mars and Saturn. If the Moon, especially, is badly treated by them or if the Sun helps its opponents, the result is the birth of powerless and sterile beings. The malevolent intervention of Mercury resulted in eunuchs and hermaphrodites. Mercury also collaborated with Saturn in the infirmities of stutterers and deaf-mutes. The malefic planets, attacking the luminaries and surprising the Moon in the infirm and mutilated signs, produce one-eyed people, blind people, hunch-backs, one-armed people, and cripples in general.¹⁰²² In spite of his distaste, Ptolemy is obliged to return to the zodiac. He admitted that the animal signs promoted scrofula and elephantiasis and that Sagittarius and Gemini caused attacks of epilepsy.¹⁰²³ Finally, as was said a little earlier, each sign is a target which marks direction of the blows. Consider, for example, gout. If the interested planets are lodged in the last degrees of the signs, it is thrown into the feet and not into the hands.

Of course, the prognosis may be improved by the intervention of beneficent planets. Jupiter gives riches and honors to make up for the illnesses and infirmities.¹⁰²⁴ Venus reveals remedies for healing,¹⁰²⁵ Mercury, natural medicines. Venus could even prevent illnesses from being disgraceful.¹⁰²⁶ Mercury could help those related to good living.¹⁰²⁷ The astrologers did not forget to discourage no one and remembered that faith needed hope.

3) The qualities of the soul. After the body comes the soul, which, according to Ptolemy, is formed later than its envelope.¹⁰²⁸ Our philosopher did not mean to split the solidarity which unites them. There may have been a category of intellectual aptitudes in the soul (νοερόν – λογικόν – διανοητικόν), which depended especially on Mercury. However, there was another, of moral penchants, passions and irrational impulses (ἡθικόν περὶ ἄλογον – παθητικόν ἡθικόν περὶ ἄλογον--παθητικόν), which were regulated by the more material influences of the Moon and those of the planets which are found in contact or in separation from it.

Above all, the prediction depends on an infinity of considerations. They include the temperaments of the operant planets and of the signs of the zodiac in which they are found, their relationships among themselves, with the Sun, with the angles of the chart, and so on. Ptolemy restricted the role of the zodiac signs as much as possible. In the end, however, he accepted that the tropical signs produced rhetorical and ambitious minds, such as politicians, lawyers, demagogues, diviners. The bicorporal signs made incoherent individuals, such as liars and con-men. The fixed or solid signs created simple people, sure of themselves, all of one piece. The preponderant action belonged to the planets. From them, it is necessary to choose one as the “ruler of the soul” (κυρία ψυχική – οἰκοδεσποτεία τῆς ψυχῆς) according to known procedures. It was the one which had the most titles to dominate the places of Mercury and the Moon. That said, in accumulating qualifications, Ptolemy enumerated the condition of the planet-rulers of the soul in order. First, he considered each of them alone, then associated with another. He looked at all from two points of view, in good or bad disposition. This torrent of adjectives is dammed and channeled by a no less astonishing series of adverbs. Their goal is characterizing the nuances and modifications brought to the decrees by the concomitant influence of the Moon. They describe each of its phases, and also the Sun, well or poorly placed.¹⁰²⁹ The only clear-cut idea which springs from this is that the Greek vocabulary is inexhaustible. Translators would do well to lay down their pens without attempting an unequal struggle.

Like the body, the psyche has its illnesses¹⁰³⁰ which sometimes attack the intelligent and active part, sometimes the passionate and passive one. The illnesses of understanding (τοῦ διανοητικοῦ) include all those which modern pathologists call the nervous or mental illnesses. They range from idiocy to mania, including exaltation, ecstasy and demonic possession.¹⁰³¹ All depends on Mercury

and the Moon, especially the qualities of the illnesses. That is, the illness is caused by assaults which these planets endured from the malefic planets and upon conditions more or less favorable, whether for the attack or the defense. One may well imagine that if the planets under attack are not associated with each other or with the Ascendant, and if the assailants are angered by the antipathy of sect (which meets the nocturnal planets in diurnal charts and vice versa), one may expect the worst. Nevertheless, the benefic planets often soften the prognosis and generally make the illnesses curable. However, enfeebled by position, they may not be allowed to defeat the enemy and only increase its fury.

The intellectual illnesses, which are always exceptions, interested the clientele of the astrologers less than the emotional illnesses. All these are rooted in perversions of the sexual instinct, by too much or too little, according our moralists. It is prudent to shorten this topic, upon which the authors, notably Firmicus, are very long-winded.¹⁰³² He is all the more full as he speaks again on certain passions completely comparable to these “illnesses”. Like the illnesses of understanding, these maladies are caused by the conflict of two antagonistic [planetary] couples, but not the same ones. In the attacking pair, Venus replaced Saturn, and, in the assailed pair, the Sun is substituted for Mercury. Room is left, as always, for the interference of the other planets. The action of the system is relatively simple and perfectly symmetrical, which one must credit evidently to Ptolemy.¹⁰³³ If the two pairs are in the masculine signs, the predominance of virility makes men of extreme lubricity and makes women into shameless tribadists. In the opposite case, the men are effeminate and attracted to vices contrary to nature, while the women are insatiable and take on all comers. Moreover there is no lack of intermediary sexual possibilities, corresponding to the possible combinations of the sex of the planets and the sex of the signs. To these erotic possibilities may be added other sexual modes, due to the combined actions of the planets. Ptolemy adds nuances by adding qualifications in his usual way.¹⁰³⁴

4) On social conditions (*goods - honors - professions*). Ptolemy's symmetrical classification goes on, after studying the client's person, body and mind, [he added] to the list of things which he bypassed earlier. He organized the jumble of wild astrological imaginings about everything in a person's life under a number of headings, the first deals with wealth and honors. The author thought he rediscovered here his fundamental distinction between the body and the soul. The “acquisitive Fortune,” (Τύχη κτητική) corresponded to the body and the “honorific Fortune” (Τύχη ἀχιωματική) corresponded to the soul.

It was to wealth alone¹⁰³⁵ that he related the “Lot of Fortune” (κλῆρος Τύχης), using it as the point of departure and the key to the predictions. The master planet where the Lot fell is the one which gives or refuses fortune. It depended on whether the planet was well or poorly placed, well or poorly surrounded. Whether diurnal with diurnal places or vice versa, supported or not by the “luminaries” also mattered. Each planet led to fortune in its own way. Saturn enriched by agriculture or sea-born trade.¹⁰³⁶ Jupiter made one prosperous by reputation, by being a guardian and by priesthoods. Mars gave a fortune by means of weapons. Venus made one rich by friends and “women's property,”¹⁰³⁷ Mercury, by eloquence and business. Saturn, representing fatherhood and inheritance from fathers, also procured inheritances with the help of Jupiter. He even gave inheritances outside the natural or legitimate family, by adoption or despite an irregular birth, if Jupiter (which here represents authority, and civil law) sits in a bicorporal sign or is in contact with the Moon. The odds of getting an inheritance may be judged more precisely. One must calculate the distances between the planets which procured them and the “centers” or the places following them (ἐπιναφοραί) in the birth chart.¹⁰³⁸

However acquired, fortune will be stable if the planets which collaborated with the master planet are of the same sect (αἵρεσις) as it. It will be unstable in the opposite case.

For “Honors”¹⁰³⁹ (another way of saying the rank occupied in the social hierarchy), the principle is to observe the position of the luminaries and the number as well as the quality of the planets which escort (δορυφορούντων) them. A new born child will become a king, even a powerful king, a master of the universe under certain unlikely conditions. Both Sun and Moon must be in masculine signs. Both must be on centers. Alternatively, only one need be on a center, if it is the same sect as the chart. The luminary which is the same sect as the chart must be escorted by the five planets and be in the appropriate phase. That is, the Sun must be in matinal (ἑωοί) phase, or the Moon must be in vespereal (ἑσπέραιοι) phase. Then the new born will be kings, even powerful kings, masters of the universe,¹⁰⁴⁰ if the escorting planets themselves were angular or were associated with the superior culmination by aspect.

Fig 42 The Lion of Commagene



* Fig. 41. Le Lion de Commagène.

of beasts and domicile of the Sun, king of creation.¹⁰⁴² At the heart of the Lion, there is a star of the first magnitude, which the astrologers named the "little king" (βασιλίσκος - *Regulus*),¹⁰⁴³ As one cannot proclaim all babies born under the Lion as candidates for royalty, one may ask if it is enough for the Horoscope to fall exactly upon Regulus. However, this still does not eliminate enough people.¹⁰⁴⁴ Perhaps there was a meeting of planets in this sign which bore the symbolic idea of power, of force, of primacy. Perhaps even of all the planets met there. On a relief recently published, we still have a horoscope which may have been the chart of conception for King Antiochus I of Commagene (see above).¹⁰⁴⁵

There is, in the sign of the Lion, a meeting of the luminaries and the planets which lacks only Saturn and Venus. The presence of the Sun is taken for granted, because Leo is here the solar sign or the Time Lord of the month and domicile of the Sun. The Moon is represented by a crescent at the animal's throat (in the place where amulets are worn). In the field of the bas-relief, the three planets which get their energy from their heat are portrayed, *Πυρόεις Ἡρακλ[έους]*, *Στίλβων Ἀπόλλωος*, *Φαέθων Διός*. The presence of the planets with cold temperaments would have been doubtless considered as a dissonance rather than a reinforcement.

The astrologers pretended to base their theories upon experimental evidence and that they could draw up a birth chart even for Agamemnon. It is possible that they were open to extending the privileges of Leo to other signs. However, it is yet more likely that they seized, at will, upon the associations of ideas with which their theories were stuffed. It is obvious that those who placed a royal Ascendant at the twenty-third degree of Libra were thinking of the *dies natalis* of Augustus (23 September).¹⁰⁴⁶ Those who would put it between the horns of Taurus,¹⁰⁴⁷ however only speculated upon the offensive force of the animal. Aries must have seemed just as qualified as Leo to be a royal sign. Aries was a quarrelsome person, and as leader (*principes*) of the zodiacal menagerie. He was also "head of the universe" and exaltation of the Sun. If the one was the heart, the other was the head. Also, Manilius would no doubt have reserved the quality of a royal sign to Aries, if the birth of Augustus had not made him assign it to Libra. He knew nothing of the Lion save ferocious instincts.¹⁰⁴⁸

Predictions based exclusively upon the properties of the signs represented only the rudiments of the art of astrology. The partisans of planetary astrology, disciples of Ptolemy or not, emphasized the positions of the planets, planetary domains or bearers of a sex or members of a sect. Sometimes they looked at the planets' relationships to "centers," with or without regard to the signs. They also considered their reunion (σύννοδος) with or without regard to the place of their meeting, sign, "place" properly so-called, or center. From this came many known variants, and more or less possible.¹⁰⁴⁹ Finally, since the destinies of kings were connected with those of their peoples, royal birth charts are dominated by general, "universal" conditions. These were posed by the births of the peoples and cities to which they belonged.¹⁰⁵⁰

Beneath the sovereigns came the potentates of the second order (ῥηγεμόνες), the high functionaries, providers of the *jus vitae necisque*. They were born under the same conditions as the

kings, save that only one of the two luminaries, the Sun, need be in a masculine sign and at a center. If the hangers-on were not at the centers, either personally or by their aspects, the dignity declined. One dealt with the “great” magistrates or officers, of less power and less stability. If the luminaries were not at the centers, but their hangers-on were, one is looking at civil functionaries, honest mediocrities.¹⁰⁵¹ If the hangers-on were not ἐπίκεντροι either, one fell to the category of people who succeed at nothing. Below this, there was only the servile or quasi-servile condition. One arrived here when there was no luminary either at a center or in a masculine sign nor an escort of benefic planets. This was the chart of the humble and the unlucky (ταπεινοὶ καὶ κακοδαίμονες).¹⁰⁵²

The astrologer might intercalate the degrees in this summary scale, by observing more closely the conditions of the luminaries and of their satellites. When the better-placed among them were of the same sect as their chief, and were benefic planets, social position was more assured. It was more precarious in the opposite case. One might also foresee the road by which the new-born achieved honors. They did it by inheritance with Saturn, ruler of “patrimony,” but through the influence of friends with Jupiter and Venus. They gained high position by force, with Mars, but by knowledge and skill, with Mercury.

One may have already seen that the rigid lines traced by Ptolemy's classification do not follow the wavering contours of reality. One finds parts of the same subject in different compartments. A certain quality is assigned to the soul when it ought to be with the body. Wealth recurs, as means, not as goal, in the chapter on honors. More artificial yet is the distinction between physical, intellectual, moral and other aptitudes listed earlier, and the “acts” of the individual to whom they belong. Ptolemy disguised, under the general and philosophical term of “the quantity of the acts,”¹⁰⁵³ a category of predictions which his less learned confreres used for the professions and derived in all sorts of ways. It is clear that in establishing the ranks of the social hierarchy our doctor of astrology had already established the framework of the professions.¹⁰⁵⁴ There is nothing left save to fill the framework with specific labels. However, from the point of view of method, Ptolemy has given to the chapter on acts or professions an autonomy. This is more or less justified by changing the key, finding the criteria in another list of reasons.

One may well wonder if Ptolemy wanted to avoid returning, at least by a direct route, to naive predictions. We have already given a sample in listing, following Manilius, the signs of the zodiac and their clients (Chapter 5). He sought a planet which would be the “mistress of the action” (κυρίατῆς πράξεως). It must itself be in conditions of a particular energy. Now, the energy of the planets depends on their phases (ἑὼι – ἐσπέριοι) and on their positions relative to the horizon (ἀνατολικοί – δυτικοί). The oriental phase increased their intrinsic vigor; the superior culmination, the external effect of their radiation. Ptolemy then assigned the mastery of the action to a planet which preceded the Sun by at least 30°. If this was lacking, he used the one which was found at the meridian.¹⁰⁵⁵ If more than one planet met the conditions, it was necessary to judge the respective titles of the planets. One looked at the five usual modes or “allowances,” in adding, as a supplementary title, the fact of being in contact with the Moon. The absence of a planet in a position to take mastery presages good-for-nothings (ἄπρακτοι).¹⁰⁵⁶

Up to this point, Ptolemy seems to have followed his predecessors.¹⁰⁵⁷ He separated himself from them only in limiting the collations of mastery to only three planets, Mercury, Venus and Mars. This was for supposedly scientific reasons which the commentators needed to explain. These three planets are supposed to exercise a preponderant action. They were the closest to both the Earth and the Sun, and the quickest as well. They were the ones who returned most often to replenish their energy in the solar radiation. The two upper planets intervene as well, but in the second rank, as witnesses (μαρτυροῦντες). This allows one to vary the prognosis as easily as with the older system. The master planets determine the type of prediction and the witnesses make the place more precise, in return for which all takes on an scientific allure.

Ptolemy then drew up an inventory in which he piled up, in a hurry, without any commentary, all the rubrics and instructions in the jumble of his predecessors. They were sifted and sorted into distinct groups, with the names of the operant and collaborating planets. A first series gives us the professions assigned by each of the three master planets, first alone,¹⁰⁵⁸ or in collaboration with each of the two “witnesses.” A second series presented the result of the three combinations of the two master planets. First, it gave the product of two planets, then of this pair associated with each of the two witnesses. He pretended to thus use, not all the possible combinations, but the effective ones.

Nevertheless, the chaotic tradition which he wished to discipline forced his hand. It obliged him to concede, under the form of supplementary considerations, a place to systems (or at least to practices) which did not fit with his method. This is why he took into account, after the fact, the influence of the signs of the zodiac. Likewise, he drew up a new table of professions with vaguer and more general rubrics. In effect, the question of the crafts was one of those where zodiacal astrology was most quickly and freely given rein. The elastic symbolism which played around the baroque figures in the circle easily found room there for all the professions. We know that Manilius' Muse disdained the associations of ideas which hung from all the details of the traditional images. It is enough to recall, for example, that hydraulic engineers were born under Aquarius and jurists under Libra. The system was extended to the whole sky (or nearly so) with the help of the paranatellonta. These were constellations which rose at the same times as the signs and were connected with them by the line of the horizon. Within the twelve zodiacal constellations which determined the broad categories, these extra-zodiacal correspondences determined the sub-categories.¹⁰⁵⁹

The naive inventors of the mechanism did not always know very well themselves if their dominating sign was the Ascendant or the actual lodging of the Sun. As for the collaboration of the extrazodiacal stars, Ptolemy had to take pity on the ignorance of people who did not know that the line of the horizon changed with latitude. This meant that the correspondence established between the signs and the other constellations is different for each clime. He then eliminated totally the influence of the extrazodiacal stars, and reduced that of the signs to a minimum.¹⁰⁶⁰ The active signs are neither the rising sign, nor the sign occupied by the Sun, but those in which the planets called "masters of the action" are found. Thus, the "human" signs promote the arts and sciences; the "quadruped" signs, commerce, industry, constructions.¹⁰⁶¹ The tropical (and the equinoctial) signs predisposed one to working with transfers and exchanges and correction of records. Also to geometry and agriculture and religious professions.^{***} The humid signs led one to professions which live from water, from shipbuilders to embalmers who wash corpses.

Ptolemy did not ignore the zodiac after this. He did not dare break with what was called lunar astrology, the most popular of all. Nor did he break with those people who made profession depend upon the position of the Moon in the zodiac. He agreed to consider a particular case where the Moon, leaving conjunction with the Sun, is associated with Mercury in various signs. However, he only gave predictions for ten of twelve signs. One senses that he hastened to leave these indirect roads, susceptible to infinite ramification, to return to the logic of his own system. In the guise of an epilogue, he drew on the energy from the master planets. He looked to their phases, position and entourage, for indications concerning the intensity, the success or failure, and the age at which these heights and depths of existence came into being.

For those who have faith in the details of the astrologers' psychological observations, all these inventories of moral qualities and professional aptitudes are useful. They give notable support to those who want to know ancient ideas about the classification of various professions and esteem in which public opinion held them.¹⁰⁶² One could bring up more than one satirical account to add to the depiction of Juvenal. For example, on athletes and actors, who were crowned by men, enriched by women. At need, they satirize the astrologers themselves and other exploiters of human credulity, especially feminine credulity. However, we do not have time to plunder along our route. It is necessary first, to deal with questions of sentiment, of love and friendship.

5) Affections and the Family. – To tell the truth, love was not necessarily one of the motives leading to legitimate marriage. One could say that the astrologers saved it, at least when it reached the level of passion, for illicit liaisons, considered separately. To avoid prejudging anything, Ptolemy entitled the chapter on relations between the sexes *Περὶ συναρμογῶν*, in the vague sense of "agreements" or "mutual agreements."¹⁰⁶³

**** [A footnote is added here as it was omitted in error from the list.]. Evidently, because placed on two perpendicular axes, they represent a sort of celestial groma, the usual surveyor's instrument, the equivalent of a modern transit. So the person is drawn to geometry used in agriculture and especially to the important religious surveyors, the haruspices and the augurs. On the other hand the μεταβολικαί (τέχναι) are equivalent to τροπικαί: a "traduction" is a "turn" (τρόπος) BL. [The transit B-L refers to here is an instrument similar in function to a theodolite. KM.]*

Legitimate marriage is considered from the points of view of the two contracting parties. From the masculine side, one seeks a woman, and in consequence, it is the position of the Moon which decides. From the other side, it is the position of the Sun. (Astrology knew how to foresee everything in the two parts.)¹⁰⁶⁴ On one hand, it dealt with unusually early or late marriages. It also worked with differences in age between the spouses, or the number of times an individual will contract a marriage. In the opposite sense, it could judge his vocation as a celibate. Finally and especially, astrology could judge the degree of agreement based upon the qualities and the flaws of the spouses. One may be assured that the astrologers researched this subject with special care. The curiosity of women about an offer of marriage or of love-sickness has been at all times the principle resource of those who tell of love affairs. However, most clients wanted advice on finding a person or an opportunity rather than a completely dry revelation of the future. For them, horoscopy, essentially fatalistic, was not enough.¹⁰⁶⁵ It was necessary to turn to lay astrology, that is, to *καταρχαί*, elections. The learned rendered judgments and did not give advice.

We have noted how often Ptolemy shows disdain for the system of the fixed places. Therefore, one should not be surprised that he does not simply have recourse to the house (the eighth) where the "Egyptian" tradition lodges "Weddings." He had more than one reason for this. We saw further back, in the system of the octotopos, that the Descendant, while housing "Weddings," is no less the place of lying down, and, as such, symbolic of death. With modifications, this is also true in the concurrent system of the twelve places, of the seventh place. It is here that Manilius installed Pluto. According to his legend, he could preside over marriages preceded by abduction. There was another house (the tenth at Midheaven) where Manilius also mentioned marriage, that of Venus and Fortune. However, it was a question of marriage considered as a result of wealth. Moreover, Ptolemy, who did not want to be a slave of the current tradition, wanted still less to be one of the dissidents. On the other hand, it did not please him any more to turn to the system of the variable places derived from the *κλήροι*.

The system adopted by Ptolemy is as simple as an astrological procedure which must serve many different questions could be. Let the search for a spouse and the future of the marriage be considered from a masculine point of view. If the Moon is in the oriental quadrants, it meant precocious marriage or marriage with a young woman. In the occidental quadrants, it meant late marriage or to an old woman. If the Moon is, or is becoming, New, approaching the Sun by no less than 15° and in aspect with Saturn, the client will be celibate. The cold and age of Saturn was added to the inaction of the Moon drowned in the rays of the Sun. If the Moon is in a simple sign (*μονοειδές*) or in contact with a single planet, the client will be monogamous. If it is in a bicorporal sign, or in contact with several planets, he will contract, successively, two or more marriages. The character of the woman depends on the planets associated with the Moon, whether by contact or by aspect. Collaboration with Saturn makes women hard-working and austere. The Moon with Jupiter, however, makes them grave and economical. They are bold and intractable with Mars, pretty and cheerful with Venus, lively and intelligent with Mercury.

To make the same calculation from the female side, substitute the Sun for the Moon. One hardly need to say that there was, from each point of view, several planets involved and that the predictions would thus vary.¹⁰⁶⁶ Predictions about harmony in the family come from comparing the birth charts of the couple. It is necessary to see if, between charts, the two luminaries regard one another by a trine or sextile aspect. Likewise, are they in conjunction? Do they lend one another, mutually, their respective domiciles (*ἐναλλαγή*)? It is also important, to know if, on the contrary, they are in hostile aspect, or in any aspect. The whole would be modified by the collaborating planets, which might lead to divorce.¹⁰⁶⁷

The planet Venus, which leaves the premier role to the Moon when it comes to legitimate marriage, takes it back when it comes to passionate love. It is at the head of the planetary trio which lead their conveyances. The trio includes, unfortunately, the two malefic planets, Mars and Saturn. The astrologers did not admit that one went to them to research with pure concern of a moralist, to symbolize the sad consequences of the passions and also to use mythology. They invoked all kinds of natural and necessary affinities, mathematically expressed by the distribution of the domiciles and exaltations of the planets already mentioned. Mars, in effect, had its *ὑψωμα* in the triangle of Venus, and vice versa. Saturn has its in the triangle of Mars. The same is true of the domiciles. The intervention of the domicile-signs and the exaltation-signs, added to the combinations of the three

planets in pairs or trios, opened a large field to casuistry.¹⁰⁶⁸ This casuistry became very ample, for the individual rules reunited by Ptolemy constituted one of the longest chapters in his classifications. He put what was left over into the chapter "On the Illnesses of the Soul" or the one on "universal" ethnography.¹⁰⁶⁹ Nevertheless, he is here concerned less with the vices contrary to nature than with passions unrecognized by the laws of society and the ties of blood. The most repugnant form of incest was fixed in the Greek imagination by the legend of Oedipus. Incest in all its forms found its explanation in the glances and approaches of the planets in the signs where they possess joint domains under various titles. Likewise, certain angles and certain places of the chart were associated with incest.¹⁰⁷⁰

All is not shadow, however, in this tableau. An astrologer during the Empire was not a monk writing a guide for confessors. Venus tempered by Saturn sometimes produced, even without the legal formalities, unions which lacked neither charm nor fidelity. Later they changed into legitimate unions.

Well or badly matched, the union of the sexes has reproduction as its goal. However, one knows only too well that, when it comes to the number of children, their sex, how many of them, and their chances of life, of fortune, of affection,¹⁰⁷¹ there was no visible connection between cause and effect. Also the two clues which had served in the predictions about love were no longer in place. Again, Ptolemy did not want to return to the system of fixed places, which placed "sons" in the fifth place, with Good Fortune and Venus. Nor did he want to return to the method of special κληροι which found the place of the sons by measuring the distance between Venus (reproduction) and Mercury (education). Nevertheless, he did not pretend ignorance of all places other than the centers. He consented to make an addition to the principle place, where he found the planets and the signs effective under the circumstances (MC). He added the "following" place (the eleventh place), that is, that of the "Good Spirit."¹⁰⁷² Lacking these two places, one takes "their diameters" (fourth and fifth places).

The planets which are present personally or by aspect in these houses are the "givers of children" (δοτῆρες τῶν τέκνων). The prediction resulted from the temperaments of the planets (the more humid being the more fertile, the drier, the more sterile).¹⁰⁷³ Likewise the collaboration of the signs, estimated from the same point of view played a role.¹⁰⁷⁴ Each planet taking part did not give, by itself, only one baby. It gave two in the bicorporal signs, more in the "polysperm" signs such as Cancer, Scorpio, Pisces. The masculine planets (or the ones masculinized by position) give male infants; the others, girls. A predominance of the malefic planets or of the sterile signs produces deformed infants and those unlikely to live. Ptolemy indicated the means of foreseeing, roughly, the destiny of a client's future children. He encouraged those who wished to push the analysis further to institute a special chart taking as Ascendant the planet which was the "giver of children."¹⁰⁷⁵ It was a method analogous to that of the κληροι and to which he had already referred several times.

Friendship¹⁰⁷⁶ is a form of sympathy clear of any admixture with sexual appetite. The first astrologers found a very simple reason for friendships and enmities. They were caused by the accord or antagonism of the signs of the zodiac which dominated the chart. The relationships themselves came either from the natures or the respective positions of the signs. We have seen already how, according to Manilius (who seems to have been inspired by Empedocles) the effluvia of love and hate crossed each other eternally from all points of the zodiac.¹⁰⁷⁷ In the system of "houses," the third house contained, all mixed together, brothers, friends and trips. Ptolemy intended not to confuse these three subjects for research. Common sense (which the astrologers approached when they could) indicated that friendship presupposed similar tastes. The common tastes were due to similarity between the charts. Manilius was not concerned to examine only one birth chart, but to make comparisons between the two.

Whether following the philosophical tradition,¹⁰⁷⁸ using several earlier methods, Ptolemy distinguished, from the point of view of motive, three sorts of friendship and as many modes of concordance between the charts. They were spontaneous friendship (κατὰ προαίρεσιν), friendship with usefulness as a goal (διὰ χρείαν), friendship with pleasure as its goal (διὰ ἡδονὴν καὶ λυτὴν)¹⁰⁷⁹ The first is born from the concordance of the positions of the two luminaries in both genitures. The second comes from the concordance of the two positions of the "Lot of Fortune." The third is based on the concordance of the Ascendants. "Concordance" here means position in the same sign or in signs exchanged by mutual reception or at points connected by a sympathetic aspect.¹⁰⁸⁰

The disposition of the planets more or less indicated the spontaneity, the usefulness, the agreement of the friendships. It also told their greater or lesser solidity and duration. The planets'

respective “superiority” (καθυπερέτης) between one chart and another was especially important. Duration, with or without freshening, may be calculated most exactly by the aphetic method or the wheel system (above, p. ??? sqq.). One put the point of departure in one chart and the point of departure in the other. Finally, there was no point in nuancing the friendships (philosophical, religious, artistic, others) which could not be noted in the planetary combinations. Moreover, substituting discordance for concordance permitted one to predict enmities in a similar way.

In classical society, there were no worse enemies and sometimes no better friends than the slaves. Thus there is the chapter on friends and enemies has an appendix on slaves.¹⁰⁸¹ For relations between masters and slaves, it is necessary to look to the place “of the bad spirit” (the twelfth) and also to consult the opposite place, dedicated to “Bad Luck” (the sixth),¹⁰⁸² the place which decreed servitude. Look to see if the planets which were found there genuinely or virtually by aspect are of the same natural temperament (φυσική ἐπιτηδεύσις). Check especially if the planets which have a “domination” with the places which make friendship and enmity.¹⁰⁸³ Ptolemy is here as brief as an oracle. He was not concerned with the slave as such, considered as a disinherited being, placed at the lowest degree of the social hierarchy.¹⁰⁸⁴ He leaves the need to invent rules on the acquisition and freeing of slaves and for seeking those who have run away to the vendors of καταρχαί (elections).

He would have done well to leave to them, as well, a subject which was completely their jurisdiction, the subject of “voyages” (χενιτεῖαι -- peregrinationes)¹⁰⁸⁵ The idea of consulting the state of the sky at the moment of leaving on a trip seems natural. However, it seems bizarre to look in a birth chart for an indication of the number, the length, the direction, of the amount of difficulty in the impending voyages. Likewise, for the chances of returning or of profit and the nature of the dangers foreseen. Also the key to the predictions is made with the most tortuous and enigmatic associations of ideas. The prediction was deduced, as a general rule, from the position of the luminaries in relation to the angles and to the signs of the zodiac. One looked especially at the Moon, the traveling star par excellence. Their position in the ἀποκλίματα, i.e., in the places (third, sixth, ninth, twelfth), which preceded the visible centers, and especially the Descendant (seventh place), announced frequent voyages. Perpetual voyages were announced if the Lot of Fortune falls in one of the places mentioned earlier. The voyage would be unfruitful and dangerous, if Mars is in a bad aspect.¹⁰⁸⁶ It would be happy and aided by helpful friends, if Venus intervenes, or by local authorities with the help of Jupiter. Mercury made the voyage lucrative.

The signs of the zodiac which correspond to the “places” mentioned above, have an influence, too, a considerable one. First, they influenced the frequency of the trips, which were rare and short with the simple signs, long and often with the double ones. Then they influenced the dangers connected with the malefic planets,¹⁰⁸⁷ which work differently depending on the nature of the signs within which they lay in ambush. There, the revealing symbolism is sometimes transparent, sometimes troubled and arbitrary. Thus dangers came from shipwrecks, if the malefic planets were in the humid signs.¹⁰⁸⁸ They came from cliffs and storms, in the solid signs. The dangers came from famine and disease, in the tropical or equinoctial signs.¹⁰⁸⁹ Human signs meant danger from bandits. The terrestrial signs meant danger from wild animals, or if Mercury joins in these same signs with the other two, from poisonous bites, informers, etc.

These perils sometimes led to death. Ptolemy used the chapter on travel as transition to speaking of the manner of death. However, this question of death had been discussed elsewhere in our explanations, where we adapted it, a little artificially, to the related question of the length of life.¹⁰⁹⁰

No more need be done, to complete the analysis of Tetrabiblos, than to probe the obscurity of the last chapter entitled “On the Distribution of the Times” (Περὶ χρόνων διάρξεως).¹⁰⁹⁰ However, this epilogue was attached to horoscopy by only a loose connection. It is good of Ptolemy. It represents a late concession, made by the author to the competing system of the *elections*, which earlier he had rejected completely.¹⁰⁹² Ptolemy piled up all which he knew or judged useful from the methods of popular astrology. It was better than horoscopy for holding the curiosity of the clientele and offering advice on the little incidents of life at any moment. It had a vast repertoire of empirical procedures which supposed Fate to be flexible and open to modification by human effort. Ptolemy kept only the complicated arithmetic of the “Time Lords,” intelligible only for one who could put it back into the context where it was born.

Chapter Thirteen

Elections or General Opportunities

The theory of καταρχαί, or elections, (*electiones*) forms a complete “apotelesmatica” or method of predicting the future. It is self-sufficient, but open to making more or less shaky alliances with its rival, horoscopy, casting horoscopes. Horoscopy was a true work of the Greek spirit, of Stoic fatalism. It was based upon the fundamental idea that all events are part of a chain of cause and effect, extending from the far past to the far future. The eye which looks along the chain from any point may rediscover the past and foresee the future. Horoscopists chose, as we have seen, the moment of birth as the main viewing point. The theory of elections, on the other hand, was born in the womb of religion and popular beliefs. Far from metaphysics, it dealt only with immediate and successive causes. It did not deal with our acts, which were freely chosen, but of happy or unhappy consequences, of the success or failure of human actions. It limited itself to selecting the best moment to act in all sorts of enterprises or elections (καταρχαί). It was based upon the actual positions of the heavenly bodies.

Here we will study the general theory (καταρχαὶ καθολικαί) which interprets the present state of the sky, the same for everyone at the same place and time.¹⁰⁹³ We will reserve the theory of individual elections (which is a combination of the system with horoscopy) for the following chapter.

Before we venture into this new labyrinth – just as tortuous as the one we have just left – it is necessary for us to seek a guide. To find it, let us leave, for a moment, the domain of astrology proper. Superstitions about lucky (αἱσίοι) and unlucky (ἄποφράδες) days, born from fetishistic and animistic beliefs, are found in all lands and at all times. It is enough for us to go back to the time of Hesiod. In his work we find it organized and explained in the context of the primitive “year,” that is, the month.¹⁰⁹⁴ We are here in the cradle of the theory of elections, which, moreover, did not deny its origins. People said later that Hesiod had used astrology without knowing or admitting it. He had been taught by a revelation of the Muses or a disciple of the Egyptians.¹⁰⁹⁵ He admitted it so little that he attributed the distribution of the favorable and unfavorable days to the will of Zeus¹⁰⁹⁶ His Zeus, moreover, had nothing in common, in his eyes, with the planet of the astrologers. He used Zeus as a type of explanation completely foreign to astrology. Hesiod considered the anniversaries of mythological events to be worthy of special notice. The seventh of the month was good because Apollo was born (ἑβδομαγένης) on it. The fifth of the month was bad, as it was the day on which the Eumenides made their rounds looking for perjurers.¹⁰⁹⁷ Hesiod did not limit himself to distinguishing between lucky and unlucky days. He also and especially appreciated opportunities, the days suitable for specific acts. Sometimes he made subtle distinctions between various opportunities available in the same day. A day might be favorable to certain acts, unfavorable to others or varying depending on whether the opportunities were taken in the morning or the afternoon.¹⁰⁹⁸ There was already a table of predictions, comparable to the future ephemerides of the astrologers and there was no lack of astrological reasons.

It would be an exaggeration, nevertheless, to assume that they were understood that way. The month was only the length of a lunar revolution. Moreover, belief in the influence of the Moon's phases was too popular in every country¹⁰⁹⁹ for Hesiod not to take it into account. What he wanted to do was to add more learned and less well-known reasons to the popular beliefs. From what traditions did he borrow them? It was unlikely that they came from arithmetic speculations similar to those which later occupied the Pythagoreans. At the time, Greek civilization was still connected to the Orient in a thousand ways. One had an embarrassment of choices between Egypt and Mesopotamia. Chaldaeans and Egyptians had their sacred ephemerides indicating to which gods each day of the month was consecrated and what sacrifices were required for each of them.¹¹⁰⁰ The character of the days depended naturally on the character of the deities, some benevolent, others fearsome. The days of these gods (some of them at least) were identified with the stars. Then, but only then, these ephemerides entered into astrology and served to feed its speculations. I do not know if this assimilation of gods to stars may be considered primordial, or even as general, among the Chaldaeans. It does not seem likely that it was part of the fetishistic religion of the Egyptians.¹¹⁰¹ Herodotus assures us that the Egyptian priests knew how to predict an individual's destiny from the day of birth. However, I believe that we should omit it from the history of astrology. The reasons invoked may have had nothing to do with astrology. One can understand, without recourse to the stars,

that an individual born on 17 Athyr, the day on which Typhon killed Osiris, would be in danger of a violent death. One can understand that another birthday (28 Phaophi) destined one to be eaten by a crocodile. Likewise, another (27 Phaophi) destined one to be killed by a snake.¹¹⁰² It was nevertheless the Egyptian tradition which claimed – and with reason, no doubt ¹¹⁰³ - elections as its own. This was because it was based essentially upon the system of the “chronocrators.” [Time Lords] This was the belief in the domination, in the preponderant influence, of a star which was personally the master of the time.¹¹⁰⁴ This domination may last a year or more, a month, a day, an hour, even less, it matters little. The principle is safe. It was the same principle which had given birth to horoscopy, its signs or natal planets and its oecodespots. The divergence between the two rival methods began with a metaphysical coup d’état by the horoscopists. They tried to concentrate all the causes predetermining destiny into a single moment. In elections, birth figured, strongly, among the facts from which an opportunity was calculated. However, it only opened the series. It was continuously affected proportionately by the influence of the celestial combinations lined up along its course.

Distinguishing opportunities began with the days of the month or the primitive year. It was necessarily based upon, from the astrological point of view, upon the movements of the Moon. The Moon was the main creator of universal predictions.¹¹⁰⁵ One might consider its phases, limited to four or twice that. They were within understanding of the ignorant and, in consequence, were not enough for the pretensions of astrology. Astrology opened a more diverse series of predictions by considering the position of the Moon in the twelve signs.¹¹⁰⁶ The combination of the phases with the influence of the signs already gave a good supply of nuances. The addition of the planets extended the field of observations as far as the eye could see. The associations of ideas which determined the predictions are the same as in horoscopy and they were applied in the same fashion to all the acts of existence.¹¹⁰⁷ The big difference – it is capital – came from the fact that the prediction was limited to a given act. It did not depend upon the horoscope of the consultant, which was an initial act, conditioning and causing all the others.¹¹⁰⁸ It depended solely upon the state of the sky at the moment when an activity was supposed to begin.

Καταρχαί or elections was based upon the common sense principle that, if the stars have an influence, they exercised it actually, by virtue of their actual position and all in the same manner. The method of elections could count on a large clientele of believers, those who could not see the contradictions hidden in the most simple reasonings.¹¹⁰⁹ It was much easier to apply than horoscopy. The client did not need to bring his horoscope, something impossible for those who did not know the year of their birth. On the astrologer's side, they were supplied with ephemerides drawn up once for all by the princes of the science, Petosiris, Thrasyllus and other “Chaldaeans” or “Egyptians” of note. This book told which days of the year, or even the hours of the days or nights were the most opportune. The literate might even do without a practitioner and have their own domestic oracle, at home or carried in the hand.¹¹¹⁰

Obviously, these perpetual almanacs could not be other than gross, fraudulent, instruments in the eyes of anyone who knew anything about astronomy. The lunisolar calendars, continued to the end of the Metonic cycle or an alternative, at least pretended to take into account all the phases of the Moon. With the Egyptian or the Roman year this was no longer the case. One dealt with a fictional Moon, which let itself be enclosed in twelfths of the solar year. There was even more reason for the ephemerides to ignore planets other than the Sun and the Moon. Eventually, the makers of predictions for universal use must have abandoned, little by little, the form of the ephemeris. They adopted a classification by acts, the only one which we find in the collections of elections. The ephemeris format was retained for the collections of “catholic” predictions (above, p. ???-???). Moreover, they removed their system from any connection with the agricultural, meteorological, ecliptic, and other calendars, by erasing all correspondence between their predictions and the days of the solar year. They arrived easily at this result by eliminating predictions drawn from the position of the Sun in the zodiac. They also took more than lunar positions in the zodiac into account. This combination of lunar influence with that of the signs is the principal tool of elections.¹¹¹¹ It was not handy at first, since only experts could precisely identify the combinations.¹¹¹² Considering the phases, in other words, the relationship between the Moon and the Sun, which could be understood by ordinary people, had its importance, but secondary. One had to analyze the specific characters of the signs, the positions of the Moon (contact, separation, various aspects) and the relationships with the planets. The help of a professional astrologer was necessary.¹¹¹³

Initiative predictions rest upon the associations of ideas with which we have become familiar. There is not one which is not used in horoscopy. The originality of the method consists of limiting the fated event to a short span of time and allowing people the liberty to pursue or to abstain from the opportunities grouped together.

There is nevertheless one opportunity from which the person concerned could not abstain, birth. Here, one could deliberate upon the opportunity only after the event. In effect, Hesiod indicated the days favorable to procreation, as we have seen. We do not see our manipulators of opportunities lavishing this sort of advice on their clients, at least in their writings.¹¹¹⁴ The problem of conception was one with which they did not grapple. Even the horoscopists had abandoned it. The way to be most certain about one's fate would be to make the birth take place at a moment judged opportune. To halt birth was perhaps not possible for medicine. To slow it was possible only to magic.¹¹¹⁵ Pseudo-Callisthenes tells how when Olympias was about to bring Alexander into the world, the magician Nectanebo, the true father of the baby, delayed his delivery twice. He was waiting for a conjunction that would assure that the new-born would rule the world. For a horoscope, which held a person's entire destiny, the work might be worth the trouble. In initiative theory (in so far as it remained independent), a fortunate birth was, after all, no more than a good beginning. The calculators of opportunities would have been almost uninterested. In their eyes, a horoscope was no more than one more past occasion, to which there was no return.¹¹¹⁶ Nevertheless, they drew general indications serving to regulate all future opportunities for an individual. Thus, an individual born while the Moon is waxing will always succeed in whatever plans he makes at the moment when the Moon is in conjunction with Jupiter or Mars or Mercury. He should wait when the Moon is in conjunction with Saturn or Mars. The advice was doubtless the opposite for people born when the Moon was waning. The same was true for the relations of the Moon with the signs of the zodiac. Wherever the Moon was found in a horoscope, there would be opportunities each time the sidereal revelation of the Moon¹¹¹⁷ returned to the same point (ἀποκαταστατική). The same was true, when the Moon came to the point diametrically opposite (ἀνταπιστατική) or was in square aspect with either point.

However, these rules already presume a compromise between elections and horoscopy. They exceed the framework limiting ordinary elections, drawn up for everyone's usage. It is the beginning of the combinations which we will study in the next chapter.¹¹¹⁸

A review of the subjects treated¹¹¹⁹ does not tell one much about associations of ideas at work. We know them already or can guess them without trouble. See, for example, the chapter "buying slaves." It was best to buy slaves for domestic service when the Moon was in a sign with a human shape. The humid signs make people into sailors, fishermen, launderers. The animal signs make shepherds, even fullers (with Aries) or cooks (with Taurus). Virgo (the head of grain) makes bakers. Scorpio (or the Ζυγός considered not as Scales but as a Yoke) makes workers. We relapse into the fastidious refrains of the astrological sequences. The chapter on marriage is not the most optimistic. It is full of remarks about peevish women, perfidious women, women given to adultery, even with slaves. First, marriage was absolutely prohibited at either the Full or New Moon. In the first case, the Moon is in opposition to the Sun and in the second, is annihilated by it. A bad family was implied in either case. The prediction is the same when the Moon is in its own house [sign] (Cancer) or in the house [sign] of the Sun (Leo). It was hardly possible that Sagittarius, Pisces, or Aquarius could preside over happy marriages. Capricorn is not good for second marriages and very good only if one marries a widow.¹¹²⁰ The same was also the case for marriage under Virgo, which was unfriendly by definition to the marriages of young girls.

The theory of opportunities, when kept within narrow limits by reasonable people, did not go farther than telling people to act or abstain. However, what satisfied logic did not satisfy the customers. If the astrologers wanted to attract clients, they had to be able to answer any and all questions, just like the competition. The competition was omniscient and included haruspices, dream interpreters, drawers of lots. Since necessity is the mother of invention, we see a new sprig of superstition growing on the complacent stump of astrology. In fact there were an abundance of empirical procedures. Their inventors did not bother to justify them theoretically at all. This is the branch of astrology called by the vague name of "Horary" (ἐρωτήσεις -- *interrogationes*). One might want to know where this treasure or that gossip was hidden, how long a person would be gone on a trip, if a late ship was lost at sea or not, if a woman had had sexual adventures (ἐὰν πεπρόνευκε) or who the true father of a baby was – the list of questions is endless.¹¹²¹ The astrologer began with the

time of the event in question. Then he determined the state of the sky at that time with an instrument. Finally, he tried to find the desired response. This was still not the summit of the art. It was not always possible to learn the state of the sky for a past moment. If so, the present state could be good enough. The same horoscope could answer the most varied questions at the same time. One could never demonstrate this to a skeptic, but believers who reflected upon the mystery ended by discovering an explanation. Since the positions of the stars were causes of all that took place on earth, they also caused the desire to consult an astrologer as well as his response.¹¹²² Sometimes, virtuoso astrologers stupefied the client by telling him what his question was, since they knew it in advance from inspecting the sky. This was in direct competition with the oracles, who also responded to sealed questions.¹¹²³ The rationalists (if any still existed) might think that the astrologer had informed himself by other means or drawn the information out of the client himself, all unwittingly. Simple people could only admire. Nevertheless, there were two possible explanations for believers to choose, one followed the usual custom of believers in astrology, crediting its science, its geometry and its physics. The other followed the custom of mystic and timid souls, who suspected the intervention of demons and recoiled from the redoubtable power of magic. Also this aberrant excrescence of astrology was itself classed as a magical operation and renounced by those astrologers who wished to live in peace with religion and the law. The Renaissance astrologers repudiated it in general, as diabolical and dangerous to society. They turned the objections and the anathemas of their adversaries upon it.

The compilers, who completely mixed elections and horoscopy together, had all the more reason not to distinguish between elections or opportunities properly so-called (*electiones*) and the "interrogations." The distinction, in effect, is completely moral. One may formulate it roughly by saying that, in the "elections," the client asked about himself. In the "interrogations," he sought to dig into the lives or the consciences of other people. Again, this line of demarcation is itself twisting and unclear.

I believe, however, that I can discern another method in the mass of transmitted materials which otherwise belongs with elections. At least it goes with the ordinary means by which one finds the responses. It consists of putting into the zodiac either a harmony or a conflict between points representing the persons or the things interested in the question.

Let us suppose, for example, that a lender was worried about his money. The lender is represented by the Ascendant, the borrower by the descendant. The expert examined which had more opportunities on its side.¹¹²⁴ Look at one example with which we are well-acquainted, that of a master seeking a runaway slave. The case was one of the most common. There were ready-made procedures, where one took into account the sign in which the Moon was found and the planets with which it was in contact.¹¹²⁵ However, one might also modify the problem by considering not only the acts, but the thoughts, of the fugitive. From this one could calculate the nature and the date of the denouement. We will not refuse, as an intermediary, the pleasure of following the logic. We do not feel obliged, however, to dissect the associations of ideas which form the assumptions. The actors are the four centers, the stage is the state of the sky at the moment of the flight.¹¹²⁶

"The Ascendant is the fugitive and the time of his arrest. The Midheaven is the reason for flight. The Descendant is the future of the aforesaid fugitive. The Lower Midheaven is the clime in which he lived and the place in which he will stop." There follows an examination of these four points of view, relative first to the signs, next, to the planets.

If the subject has fled, and Aries is at the Ascendant, he will be recaptured promptly. If it is in Taurus, within one year; in Gemini, in twelve days; in Cancer, in sixty days; in Leo, he will never return; in Virgo, he will be gone sixty days; in Libra, he will return on his own; in Scorpio, he will remain gone about two years; in Sagittarius, three years; in Capricorn, in the first degree, he will be recaptured promptly, in the last degree, in about six months; in Aquarius, within fifteen months; in Pisces, in seven months. Also observe the planets at the Ascendant. If Saturn is there, you may reduce the period by half; if it is near Mars, by a third; if Jupiter, double the time; if it is Venus, announce a long time; if Mercury, he will escape permanently. II. If Aries is at the Midheaven, the subject fled for no reason. If it is Taurus, after a mistake; if Gemini, with inner hesitation; with Cancer, after losing or breaking something of his master's; If Leo, on the advice of another; if Virgo, he was decided by a word or action; if Libra, by fear and is on the lookout; if Scorpio, by desire for a prostitute; if Capricorn, by torture and fear; if Aquarius, by drunkenness; if Pisces, because of women. Observe the planets at the Midheaven, too. If Saturn is culminating, the slave fled because of mistakes; if Mars, because of blows and injuries; if it is Jupiter, he fled for no reason; if

Venus, after accusations and calumny in the household [lacuna here]. III. The Descendant establishes the prediction. If Aries sets with Mars, the subject will be punished, but he will be pardoned and will run away again; if with Taurus, he will be put in irons; if Gemini, he will be sold; if Cancer, he will be saved by intercession and will not flee again; if Leo, he will run dangers from dishonest people and ferocious animals; if Virgo, he will encounter dangers from himself; if Libra, in perpetual flight, he will into the fire; if Scorpio, he will be his own enemy and kill himself; if Sagittarius, he will lead a useful life; if Pisces, he will be returned by a woman. Also observe the planets in the setting sign. If Saturn is setting, the subject will not profit from flight; if it is Mars, he is brought out to die by iron; if it is Jupiter or Venus, he will take silver or gold or clothing with him; if Mercury, he will take bronze. IV. The Lower Midheaven indicates in what clime he fled and where he will live. If Aries is at the lower culmination, the subject is not far away and he will be captured in a field; if Taurus, he is in a town, near a restaurant or a hardware store; if Gemini, he is not far away, but nearby; if Cancer, he is in the same town and another person will bring him back; if Leo, he is in an uninhabited place; if Virgo, not far; if Libra, in the same region; if Scorpio, outside the town, in a sacred place and not far away; if Sagittarius, he will go by sea; if Capricorn, in lonely, holy, places in the West; if Aquarius, near the shore, not far away; if Pisces, on the seacoast. Observe also the planets at the Lower Midheaven, etc.

I have abridged several confused, uncertain, lines in the specimen of astrological exegesis. It is not a masterpiece, far from it. However, it is enough to give us an idea what an expert might have done with the same pieces on the chessboard. He introduces consideration of the planetary domains and the positional relationships of the planets into the analysis. That is, he pours in the whole mixture of geometry and etiquette which we have tried to sort out and to explain (above, Chapters 7-8).¹¹²⁷ With these resources, there is no doubt that one could push investigations to the last details. The same method was applied to every form of concurrence or struggle. It was used with struggles of force or of cleverness, war, games, commerce, navigation, investigations following loss or theft, even medical treatment. This latter was treated as a struggle of medicine against malady.¹¹²⁸

This excursion through the collections of the elections, short as it may have been, risks making us lose sight of the principle generator of the method. That is the idea that each fraction, big or small, of time is dominated by a master influence, by a stellar Time Lord.¹¹²⁹ It pleased the calculators of opportunities to take the Moon for perpetual Time Lord. They divided the period of its revolution into steps of about two and one half days, just long enough for the Moon to traverse a sign of the zodiac (ἐρέμβασις). It is easy, however, to understand that the principle could be applied in other ways so as to put either the Sun or the other planets on the same footing as the Moon. From the beginning, horoscopy had accepted the solar fiefdom, divided in the same way into steps of a month or a twelfth of a solar year. This procedure was not practical, however, for planets with slow periods, those whose revolution lasted longer than a year. It was not in this way that they got the cycles of planetary fiefdoms of which we will continue to speak. One of these, at least, fiefdom of the “week,” holds a very important place in the customs of all civilized peoples. It is to the traditions of Egypt, once more, that we must turn to tie up the loose ends. We do not know if the zodiacal dodecatemories known as Chaldaean, a subject for the next chapter,¹¹³⁰ were ever used in an ordinary and universal form. In Egypt, we know or think we know that each of the thirty-six decans was in turn the Time Lord of each of the thirty-six decades. The system would have engendered an annual cycle, complete and closed, if the solar year had been exactly the length assigned to it. Doubtless this was by the same people who divided the circle into 360°. It was an ideal to which the astrologers were attached all the same. For we have seen that, in their calculations about the length of life, one degree always corresponded to one year or one day or one hour. The Egyptians based their divisions into decades and decans upon this estimate. However, Nature, disturbed perhaps by some mysterious cause,¹¹³¹ refused to make the movement of its regulators, the Sun and the Moon, fit with this arithmetic. It is possible that the Egyptians let their decades run through the year of 365 days, without interrupting the continuity for the epagomenal days. This was done with the *nundinae*. In this case each decan took its turn in being “the lord of the beginning of the year” or, in astrological language, the annual Time Lord.¹¹³² The lordship of this decan imposed its own specific influence, lasting all year, upon that of the lords of the individual decades.

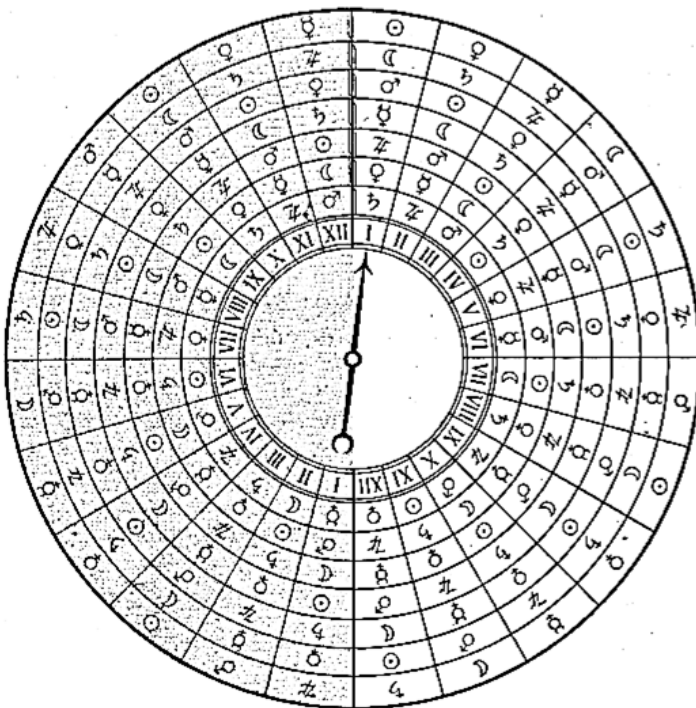
In fact, the only system of general Time Lords which we know well, and whose origins we have researched, is that of the hebdomadary cycle or the week (ἑβδομάς – ἑπτάζωνας – *septimana*).¹¹³³

The latter is no less attached to the zodiac and knows no other patronages than those of the

planets. Since it has survived astrology and is incorporated into the religions of the higher races, there is a real interest in understanding how it works. It is important to distinguish, first of all, between the week considered as a period of seven days and the astrological week,¹¹³⁴ which attributed the patronage of each of the seven days to a predetermined planet. The first, of Mesopotamian origin without any doubt, appears even in the beginning of Genesis. It is the measure of the length of creation in Hebraic cosmogony. It is astrological, too, in the sense that the number of days in the period is ruled, perhaps by the number of planets, perhaps by the approximate length of the four lunar phases, and probably represents an accord judged mysterious and divine between these two astronomical facts.¹¹³⁵ It may have been that the Mesopotamians themselves had imagined the planetary patronages disposed in an unchanging order, like those in the actual week. However, we do not know positively if they had. Nor do we know in what order they may have arranged their planets.¹¹³⁶

It is from the same principle, but applied in other ways, and in another country, that our astrological week seems to have come. It was a late and complex product of Greek astrology working upon Mesopotamian data conveniently rectified. It also used Egyptian traditions which originally had nothing to do with astrology. Egypt is the true homeland of all systems of fiefdoms. Over the centuries, the Egyptian priests had time to perfect their instruments of domination. They divided and subdivided time into parcels. Each parcel was the title of a divine property, a patronage which it was necessary to appease with prayers and magical spells if one wanted an action to begin at a good moment. Fertilized by personal interest and leisure, their imaginations must have produced various systems of Time Lords ruling years, days and hours. Some were regular and relatively intelligible. Others were irregular and unintelligible and were all the more taken for arcane revelations.¹¹³⁷ Some were fixed relative to the year and displaced only with the year within the Sothic cycle of 1461 vague years. Others, like the ten day "weeks," shifted within the framework of the year. These Time Lords were not necessarily sidereal deities, capable of being easily identified with stars or planets. The Egyptian monuments have preserved for us tables of hours, day and night (twelve in each group), which are personified with autonomous titles, without names of protective stars.¹¹³⁸

Fig 43 The Planetary Week



However, time is always measured by the celestial clock. Astrologers in search of visible realities need only replace the abstract hours with the planets to bring about, finally, the astrological week. It was a harmonic construction in which the astrological numbers par excellence, 7 and 12, are entered, as unique materials. Let us imagine an astrologer, a Greek from Egypt or a Hellenized Egyptian, knowing the order of the planets which had been established by Greek science.¹¹³⁹ (It followed the distances of the planets from the earth an order guaranteed by Hipparchus and later, Ptolemy.) Let us imagine I say, this astrologer proposing to distribute the fiefdoms of the hours of the day and the night through a period of seven days among the planets. He does not hesitate about where to begin the series. It is the Sun which carries the day. The first hour of the first day belongs to the Sun. From

there, the series descended successively to Venus, Mercury and the Moon. Saturn begins at the head of a new descending series, until the 168 hours making up the seven days are filled. The Time Lord of the first hour of each day becomes, moreover, the Time Lord of the entire day. The astrological week was thus created, without variants, the very one we still use today, just as it appears in the table

[Fig. 43 above].¹¹⁴⁰ A glance at this table reveals an arcanum which must have caused great wonderment in simple souls. It was that all the Time Lords of a given hour were arranged in the same order as the Time Lords of the seven days of the week. Finally, the planetary series continued without interruption from one week to another. Mars, the patron of the last hour of the seventh day called in turn to the Sun, who began the new septenary cycle.¹¹⁴¹

This is one of the possible origins of the astrological week, and it is likely to be true. One can find another origin story, which may have served to confirm the first. It is no less Egyptian than the first explanation, in associating the decans and the planets. We have already seen (p. ???) the table of the πρόσωπα or planetary decans. We noticed that on this occasion the planets are arranged – in descending columns – exactly like the Time Lords of the days of the week. I am persuaded, for my part, that the author of the system of the πρόσωπα had the system of the week in front of his eyes. He noticed this agreement, and saw it as a confirmation of the excellence of his combinations.¹¹⁴² In themselves, these combinations did not create the week. It lacks the characteristic beginning, the “day of the Sun.” It especially lacks the cyclic order, for the series cannot repeat once it comes to an end. Thirty-six is not a multiple of seven. Mars, which corresponds to the thirty-sixth decan, reappears in the place of the first. It begins and ends the list.¹¹⁴³ Moreover, the association or confusion of the decans with the planets does not appear later in the astrological texts. Ignored by Manilius, passed over silently by Ptolemy, it was destined, in the final count, to annihilate the decans to the profit of the planets. It is based upon a belief from a later period, when the astrological week began to be fashionable.

Fig 44 Theory of Intervals



Fig. 43. Théorie des intervalles.

the intervals represented by chords, as one usually does to render the above mentioned order intelligible.

It is clear that this star of seven branches must have seduced the mystics. It did not displease the astrologers who saw in it the seven rays or aspects of the stars (above). However, a circle divided into seven arcs is a monstrosity in astrology, since neither the angles nor the lengths are required by the geometry of the aspects.

The astrological week is, then, a Greek adaptation of Egyptian theories born before astrology. It was transformed by substituting the Mesopotamian planets for the hour-spirits of Egypt. One may say that three peoples, three civilizations, took part in forming it. Also, it is a relatively recent creation, very likely later than the time of Hipparchus. The little we know of its history confirms this deduction. Dio Cassius, speaking of the week in connection with the Jews and their Sabbath, “the day said to be of Saturn,” expressed himself thus:

I will not say much about the explanation preferred by Dio Cassius, save as a memory or to show how it travesties the facts. He was dazzled by the theories of the Pythagoreans, who speculated upon the laws of harmonies and drew the work of the astrologers from them. One learns from them that the harmony διὰ τεσσάρων has a great reputation in music. If one applies it to the spheres of the planets, it is realized by the interval of a third (a fourth, counting from a point of departure).¹¹⁴⁴ Beginning with Saturn, one rejoins the Sun, then the Moon, whence one re-ascends and descends once again to Mars, and so on. The series of the Time Lords of the days of the week is a result. The descending and ascending oscillations have nothing in common with astrological series or cycles. The system is even more contrary to the geometry of the astrologers if one imagines the planets arranged around a circle,

The habit of assigning the days to the seven stars called planets comes from the Egyptians,¹¹⁴⁵ and now exists among all humanity, even though it was not invented a long time ago. In fact, the ancient Greeks, as far as I know, had no knowledge of it. However, since presently it is implanted among all other peoples and among the Romans themselves, and it has become a sort of national custom for them, I wish to say a few words on this subject.¹¹⁴⁶

Dio did not pretend that the Romans had abandoned the traditional division of their months into Calends, Nones, and Ides, nor the continuous series of their *nundinae*. Within these limits, his assertion is confirmed by the official calendars. We see the hebdomadal series appear upon them from the time of the first Caesars, marked with the first seven letters of the alphabet, alongside the *nundinal* series of eight letters.¹¹⁴⁷

This sudden and universal vogue is not explained solely by the progress of the astrological faith. This faith had another faith as auxiliary, the Jewish religion. It was more accessible to ordinary people and animated, at that time, by a great zeal for propagation. The Jewish religion, in turn, gave support, comfort, and a return to its Mesopotamian origins in astrology. Greeks and Romans until this point, were at a loss as to just what the Jews worshipped. They had taken them in general for atheists. Now, they believed that they had discovered that this people, observing the Sabbath so rigorously, worshipped the Time Lord of the Sabbath day, which was the "day of Saturn." It was the universal notoriety of the Sabbath which was the vehicle for the equal notoriety of the planetary week.¹¹⁴⁸ Once the week had spread through the world, people hurried to efface its origins. They pushed the invention back to the great prophets, Pythagoras, Orpheus, "Zoroaster and Hystaspes," and, in a general way, to the authors responsible for all of astrology, the "Egyptians" and "Mesopotamians." It was good to hide the mechanism, which was a little too easy to understand. It was better to seek all sorts of mystical reasons for the order of the daily Time Lords. Read the Pythagorean explanations in the work of John Lydus,¹¹⁴⁹ drawn from the specific properties of the numbers one through seven. One can hardly doubt, in that this enormous jumble of mysterious reasons had been pulled together after the fact to hide the infantile proceedings, the childish arithmetic, which had produced the week. It is as if one were stunned by this foolish pretentiousness. From its middle, the names of the philosophers, in turn, sound loudly and with an air of bravery, in honor of the number seven, which ended the exposition. One almost regrets the true astrologers, who are also maniacs, but with minds a little less confused.

If one seeks to know which part of the planetary week came from the astrologers, one finds their contribution hard to distinguish in the mass of popular superstitions. Disconnected from the calculation of the twenty-four hours which had engendered it, and reduced to a short list of daily Time Lords, the week escaped from their monopoly. Each person was free to insert whatever associations of ideas pleased him best.¹¹⁵⁰ It constituted an independent system of elections, which could, at need, take the place of all the others. Paul of Alexandria judged it proper for all the matters which he dealt with. These included contracts, engagements, civil or criminal trials, relationships with the authorities, voyages, battles, marriages, illnesses and other incidents of existence. According to him, physicians and surgeons found them especially useful.¹¹⁵¹

The memory of the planetary fiefdoms still survives in the names of the days of the week and has a chance to last forever in this fashion. It has not been the same for another superstition of obscure origin, the *dies Aegyptiaci*. An astrological or Pythagorean invention, or a revival of some old Egyptian belief, it penetrated the official calendars at the beginning of the Late Empire. Twenty-four or twenty-five days were called by this name. They were distributed irregularly throughout the course of the year, at the rate of two a month. They were days of death, "shadowy" days, during which it was prudent to undertake nothing and especially not to let oneself be bled.¹¹⁵² The equipment of astrology is so complicated that, in looking over the arcana of the ὅρια, of the decans, of the full and empty parts, etc., one may perhaps arrive at a reason for the distribution of the "Egyptian days." However, it would be better to renounce making the most of astrology's rights over this mystery than to exhaust the patience it would take to make a new appeal. The arithmetic games of the ordinary and universal elections are nothing beside those of individual opportunities. They were based upon the fiefdoms, which took their point of departure in the horoscope and entangled in an inextricable jumble.

Chapter Fourteen

Individual or Horoscopic Elections

The system of elections could not continue to be independent forever. Some eclectic astrologer was certain to want to combine it with horoscopy. Those who dealt with general opportunities could not have missed the radical vice in their system. It assumed that very different fates were caused at the same moment by the same influences.¹¹⁵³ If popular logic was too clumsy to unravel the sophistry, at least the partisans of elections ought to fear the contempt of their learned colleagues, the horoscopists. The latter, on their side, were forced to refine their doctrine that one's fate was stamped on one at a single instant. It was perpetually at war with common sense. They had Stoic metaphysics on their side, the doctrines of fatalism and of predestination. However, they had physics against them, to which Ptolemy appealed so often. Physics knew only actual effluvia, of immediate and successive actions. For example, the Moon did not move the tides all at once. It ruled them in proportion to its movement. Certain horoscopists came to relax the rigors of their dogma and consented to extend their observations for several days after birth.¹¹⁵⁴ Likewise, those who believed in universal elections taught that the initiative par excellence, the horoscope, modified the prediction drawn from the actual positions of the stars somewhat. There was a place for reconciliation which the eclectics could discover. It was enough to organize the zodiacal or planetary fiefdoms in a series beginning with birth. In consequence, there was a different point of departure for each individual. The correspondence of the future positions of the phases of existence depended on this first moment because of the mathematical regularity of the celestial movements. The horoscopists were nearly satisfied. On the other hand, these positions, which it was possible to preview all at the same time, still exercised their influence successively. The partisans of elections had nothing more to proclaim.¹¹⁵⁵

The astrologers must have been placed on this road by the divisions, seven-fold and others, into which the philosophers, physiologists, and physicians divided human life. They needed only to substitute celestial causes for unknown ones and to reshuffle the periods to their taste.

Since Manilius, our oldest witness, was forbidden to speak of the planets, the oldest system we know of for the individual fiefdoms is purely zodiacal. It is the system used in natal or "Chaldaean" work known as the dodecaeteria.¹¹⁵⁶ Manilius went on to teach how it is necessary:

*to return the times to the signs which belong to them. Divided among the signs, unroll the times themselves in the years which belong to them. Likewise the months, the days and the hours during which each of the times manifests its principle forces.*¹¹⁵⁷

This is, to paraphrase, a definition of the personal and limited domination or fiefdom of the signs. The series begins with the sign in which the Sun is found at the moment of birth, the sign which also regulates the length of life.¹¹⁵⁸ This sign is Time Lord for one year. Later, rulership passes from sign to sign in the standard order. Within the interior of the cycle, the months are dominated by another series of signs. They begin with the sign occupied by the Moon in the horoscope.¹¹⁵⁹ The days have a third series of signs as Time Lords, which begin with the rising sign.¹¹⁶⁰ Finally, the Ascendant is equally the point of departure for a fourth series of signs, which dominates the hours.¹¹⁶¹ One thus obtains a frame painted in many colors in which "The bad are interlaced with the good, where tears follow satisfied desire, and where Fortune does not give the same to all." Upon each of these scales of hours there was a four-fold influence from Time Lords of the hours, of the days, the months, and the years. They were stacked up hierarchically. Probably all four were dominated by the hegemony, twelve years long, of the first annual Time Lord. It became the general Time Lord of the dodecaeteris or even the perpetual Time Lord.¹¹⁶² This ingenious system leveled the playing field, or nearly so, between the partisans of the Sun-sign and those of the rising sign. It must date to a period when the two systems of genethliology [natal chart reading] were equal in importance. We know, however, that the rising sign ended by being the more important. Manilius also knew a second rank system in which the rising sign is the unique departure point of four series. It did not prevent anything, but it did restore the various

series unrolling themselves differently at unequal speeds.¹¹⁶³ In one way or another, each individual had his own calendar, within which the series of years, months, days and hours were counted from the year, month, day and hour of his birth.

However, the purely zodiacal combinations, the most childish of all, had no credibility with serious astrologers. They thought, with good reason, that without the planets, the zodiac did not exist. Zodiacal Time Lords could only be evicted by planetary ones.¹¹⁶⁴ The difficulty was in finding a principle which allowed organizing the moving pieces into one plausible system, which at least looked reasonable. Each piece had its own revolution and moved independently of the others. Should we proceed to take the position of each planet in each birth chart? This would create an individual cycle for each of the positions, calculating for all the length of a human existence. Not only were the inventors unable to do this but they did not want to do it. Time Lords were needed for limited periods, which were cyclic. Within these periods, there had to be Time Lords of years, months, days and hours, one for each period of time. The indispensable mixture was obtained, as in the zodiacal dodecaeteris, by piling up fiefdoms. In these conditions there could be no question of following the astronomical facts. Our astrologers found it easier to invent the strange mosaic of which we have tried to explain.

We take Firmicus¹¹⁶⁵ as our principle guide, for want of a better. He had written a special treatise on the subject.¹¹⁶⁶ He does not inspire greater confidence because of it, either, for one is surprised to find inserted, right in the middle of his explanation, a fragment detached from the system of Manilius.¹¹⁶⁷

The planetary Time Lords formed a chorus, as in a Greek play. The leader should have been, one would think, the planet which measured the length of life, the oikodespot of the horoscope. [Ascendant ruler]. The “Greeks,” however, decided otherwise. The initial Time Lord, the one which set the wheel of Fate rolling, was the Sun in day horoscopes, the Moon in the nighttime ones.¹¹⁶⁸ This initial Time Lord held dominion over ten years and nine months, or in other words, over one hundred twenty-nine months. Why one hundred twenty-nine? Because it is the number of months which the Time Lord has to distribute among the seven planets,¹¹⁶⁹ including the initial Time Lord. Each of them received a number of months equal to the number of years which represented the length of its “proper period” (ἰδία περίοδος). This number of years determined the quota of years (or months or days) of life left by the Time Lord when it is master of the geniture.¹¹⁷⁰ Look at one admirable reason, of a nature to stop the objections of the hard to please right at the beginning. The sum of the proper periods (☉ 19 + ☾ 25 + ♄ 30 + ♃ 12 + ♂ 15 + ♀ 8 + ♅ 20) is 129. It is like a contribution from the celestial bodies which is repaid in honors. Each one is subtracted in advance from the sum of the months which it had given. The order, however, had nothing to do with the natural order of the distances nor with the order of the sexes nor that of the sects (αἰρέσεις). Thus, the Sun, the initial Time Lord, – assuming a daytime horoscope – kept the first nineteen months for itself as the particular Time Lord. After this, it ceded the particular dominion to the planet which came after it, following the order of the “places” in the birth chart. It did not, however, renounce a general dominion over the entire cycle (χρονοκράτωρ Καθολικός).¹¹⁷¹ The office of Time Lord thus passed from planet to planet until the end of the cycle.¹¹⁷²

Once the cycle of one hundred twenty-nine months was over, the Sun abandoned the general dominion of the second cycle to the planet which had followed it in the first distribution. The distribution started over again in the same order, starting from the next Time Lord. Given the number of months since birth, one always knew, first, in which cycle the consultant was found. Consequently, one also knew under the domination of which general Time Lord the consultant was found. Lastly, one always knew in which part of the cycle (and, in consequence, under which particular Time Lord) one could find the consultant.

These two simultaneous dominions are material for different deductions. Of course, one must add the dominion of the perpetual (diurnal or nocturnal) Time Lord, stamped upon all else.¹¹⁷³ It was all the more important as expert practitioners took into account the transmission (παράδοσις – παράληψις) of the fiefdoms. Each planet modified its humor depending on whether it received a sympathetic planet or an antipathetic one as its lot. Take, for example, the planet Jupiter. First, Jupiter has as many ways of working as there are cycles. It may work one way if it is the general Time Lord, and another way if it is a particular Time Lord at different positions, in each of the other cycles. Next, its mode of action is modified depending on whether it follows, as leader of a cycle or as subordinate, this or that other planet.¹¹⁷⁴ The number of possible arrangements can become dizzying if one

considers, at the same time, not only the planet from which the Time Lord received the hegemony but also the one to which it will be transmitted.¹¹⁷⁵ Firmicus patiently lists the predictions to be drawn from each planet considered as general Time Lord and as particular Time Lord. One learns again the irksome recommendations with which even the most inexperienced astrologer must have been saturated.¹¹⁷⁶ This must have been especially true when he worked on the masterpiece, the general Time Lord, at the moment when it was also the particular Time Lord of the first division of its cycle. This was, in effect, the moment which it chose to fulfill the promises or threats attached to its position in the horoscope. It was as if this were a way of judging the likelihood of the main event foreseen by the natal method.¹¹⁷⁷ There was a supplementary connection, a most ingenious one, between natal work and the system of elections. One could say the same of the very strong influence attributed to the planet which is “oecodespot of the chart,” whether as general or particular Time Lord.¹¹⁷⁸

This system was open to all sorts of modifications and variations. Rather than make the distribution of times start from the Sun or the Moon, one might make it begin at the Horoscope, or with the Sun or Moon. Then one could continue the distribution from the ascendant. One might also not follow the order indicated by the positions of the planets on the circle of geniture. Instead, one could follow a supposedly natural order in which the first two parts are assigned to the luminaries because of their dignity. The others were given to the planets in descending order, beginning with Saturn. There were several rival systems. For example, one which consisted of substituting variable periods of years corresponding to the ἰδία περίοδος of each planet for the cycle of one hundred twenty-nine months. These periods were subdivided into parts corresponding equally to the ἰδία περίοδος of the planets to which these parts were assigned, but as months or twelfths of years. Thus, if Mars was general Time Lord of a period, Mars kept 15 months for itself, and then distributed 19 months to the Sun. Eight months went to Venus, 20 to Mercury, 25 to the Moon, and so on down to the end of the fifteen years. Those who found these periods too long reduced them to a quarter as much. This permitted them perhaps to arrive at the week, by reducing the interior subdivisions of the months to quarters of what they had been earlier.¹¹⁷⁹

With all these irregular numbers, none of which is a multiple of twelve, it was not easy to define the Time Lords of the days and the hours. Moreover, for the one who wanted to apply the doctrine of natal interpretation strictly, there were only days or natural twenty-four hour periods, the day beginning for each person at the precise hour of his birth. Also the days and hours and even the minutes.¹¹⁸⁰ were cut-up into fractions assigned to the different planets. Firmicus himself gives our meditations a secret to which he brings the key. He said,¹¹⁸¹

In whatever sign that the year is found, the master of this sign receives the first days, and, after it, the others following, each one in its position. This is how many days each planet gets: the Sun, 53; the Moon, 71; Saturn, 85; Jupiter, 30; Mars, 36; Venus, 33; Mercury, 57.

One can well see that in this baroque combination of the zodiacal and planetary fiefdoms, the sum of the days equals the number of days in the solar year (365) or the lunar year (355). It is a question, therefore, of an annual fiefdom. However, the principle for distributing the days among the planets escapes me. There is an analogous division, but only analogous. It is that of the ὅρια among the 360° of the zodiac. Saumaise found a word for the enigma in Valens. It is a division by 12, twice repeated, of the ἰδία περίοδος of each planet. For example, since Saturn had 30 years as general or cyclic Time Lord in one of the systems listed above, Saturn also had to have 30 months, or 75 days, as particular Time Lord. One need only continue the division by twelve to have Time Lords for shorter and shorter periods.¹¹⁸² Unfortunately, the quotients obtained in this way do not agree with the numbers given by Firmicus, nor with those gained by Valens using another method, said to be equivalent.¹¹⁸³ We may leave Saumaise in his embarrassment and escape finally from this arithmetic Hell – to fall into another, at least recommended to us by the name of Ptolemy.

It was perhaps the ambition to expel these incoherent calculations from well-ordered science which made Ptolemy take up his pen again. It completed his work but left half of the entire art outside his own astrology. No doubt, he understood that there was a common sense idea at the basis of the system of elections which long prevailed against the basic principle of natal work. He did not wish to let it be said that he had sacrificed a major branch of the art to the scruples of strict logic. It could be

re-attached to the speculations of the physiologists about the stages of human life. So in his turn, he sketched out a system of successive protectorates which the stars exercised over human existence.

Following his usual habit, Ptolemy sought to find an agreement between common sense and tradition. He wanted to inspect the associations of ideas and to reject the contradictory ones. As far as possible, he avoided using the terms "Time Lord," and "fiefdom" ["chronocrator and chronocracy"]. The sketch of his method is entitled "Distribution of Times."¹¹⁸⁴

One loves to picture the inventor of learned astrology in quest, like Descartes, of a first principle, a foundation for certainty. This principle is the one which engendered the theory of the microcosm and all of astrology. It was the idea that the part resembles the whole and that the order of human life was modeled on that of the planets. But did this order follow the ascending or descending order of the planets? There was much material for reflection here, and the reflection muddled the question. If the part resembles the whole, a human being must have the same stages. Now, an old tradition assures us that the first humans lived in the reign of Saturn. There was even an extremely ingenious system built on this fact, too ingenious to have been invented by Firmicus.¹¹⁸⁵ Firmicus outlines a sort of cosmogony, in which he combined the divine revelations of Mercury (Thoth), transmitted by Aesculapius and Anubis, with the Stoic doctrine of ἀποκατάστασις, apocatastasis, eternal return. There was a chance that Posidonius was the author of this abridged universal history which we see in outline. The human race was represented by the Moon. She was married, that is, associated and subordinated, from the beginning, to Saturn. "To him she gave dominion over the times."¹¹⁸⁶ This was an age of barbarism, wild and inhumane, conforming to the temperament of the planet. The Moon then carried the rulership to Jupiter as a dowry. This signaled a considerable advance in civilization and in morality. Next, the rulership went to Mars, which was not the Age of Iron in the usual sense taught by legend, but the Age of Industry. The reign of Venus marked the most happy stage of history, where the cultivation of intelligence was an element of concord and of happiness. With Mercury, the present age began, one in which the human race, "full of malice," turns its creativity to treacherous machinations.¹¹⁸⁷

The Platonists added the history of the soul to this history of humanity. Descending from the sphere of the fixed stars, it crossed each of the planetary spheres, in the same order. In the process, it was imprinted with the planets' characteristics and the elements, which the soul fastened to the body. The conclusion was the same. This conclusion was corroborated again by an idea from mythology and astrology. It was that Saturn, "Father Saturn," was the dispenser of semen, the first cause of generation.

On the other hand, it was not hard to find the elements of an opposing theory in the enormous collection of associations of ideas used in astrology, one just as philosophical and more "physical." The physicists associated generation with the principal of humidity. Semen was liquid and was replaced, in the case of spontaneous generation, by humid rot. The latter was provoked especially by the influence of the Moon. It is enough to review here the universal agreement which had made the Moon the eternal feminine, the worker par excellence of generation. It was all the more active because it was closer to the earth than the other planets and in most intimate communion with it. The Platonic sequence of the descending stages of the soul might be used – as it has been – to regulate the phases of life in the womb. Platonism itself, however, traced conscious life over an inverse route. The goal of life was to re-open the road to the upper regions for the soul. It was drawn up there first by desire, in attending to its deliverance. In this burst of enthusiasm of intelligent will, it pulled the body along with it, so to speak. The Stoics, heirs of Heraclitus' physics, said that as the soul dried out and became more and more fiery, it became more intelligent. Moreover, the stages of life followed each other in the ascending order of the planets. At the bottom, there was the humid Moon and the age of diapers, of breast-feeding,¹¹⁸⁸ and of mush. Old age, cold and dry, stood at the top of the staircase, with Saturn.

One always finds Ptolemy on the side of "physics." Thus, he began his sequence with the Moon and ended with Saturn. But how to measure the intercalary periods? The physiologists the arithmeticians and Pythagoreans of all sorts, wanted seven-fold or nine-fold periods. They were to be equal or unequal periods, separated by "critical years." These the astrologers had made or were going to make into the "climacteric years," irregularly or even capriciously sown along the route.¹¹⁸⁹ Ptolemy was guided by an equal care to follow "nature" and to connect his system of fiefdoms with natal methods.¹¹⁹⁰ He decided on numbers which were supposed to represent the "proper periods" of the planets. However, the sum of these periods comes to one hundred twenty-nine years.¹¹⁹¹ This led to

problems one cannot prolong infancy to the twenty-fifth year, or begin old age at ninety-nine. One had to make cut-backs and find reasons for doing so which appear reasonable. Ptolemy, always prudent, gives his reasons when he has them and leaves the chore of finding the others to his disciples.

First of all, the period of the Moon or first infancy (βρέφος) is reduced to four years. Why? No doubt because the Moon has four phases. Perhaps because these phases fit almost evenly into four years (lunisolar tetraeteride or pentaeteride) at the same points of the zodiac.¹¹⁹²

Childhood proper, the age of education (παιδεία), is dominated by Mercury. Nature had put it at just the right place, but its numbers were reduced from twenty years to ten. The reason, the commentators say, is that, being double, [natured] it only worked on one half of the period. Others said that, being mixed, that is, medium, its influence is represented by the exact middle.¹¹⁹³

Arriving at the age of 14 years, the adolescent (μειράκιον) is under the influence of Venus for 8 years, keeping its entire number.

At 22 years, youth proper (νέος), which lasts 19 years under the entire rulership of the Sun.

The bearded man of the 41st year enters the age of maturity (άνήρ) and the domination of Mars, which also keeps its 15 years of hegemony.

With Jupiter, the period of repose and honors that one calls “age” (πρεσβυτική ηλικία) opens in the 56th year and lasts 12 years.

Finally, at 68 years, old age (γεροντική ηλικία) comes, under the patronage of Saturn. It lasts until the end of the old person’s life. Ptolemy did not want to set a maximum length to life. Nor did he want the old person to fall into infancy again, by supposing a new septenary cycle began with the Moon at 88 years, the natural end of Saturn’s hegemony.¹¹⁹⁴

Evidently Ptolemy has made the best of things. Ingenuous souls here found occasion to admire once more the common ancestry of humanity and the universe. There is nothing bad in a man believing himself freed from Venus at the age of 22 years or that everyone remained young until 41 years. As for enthroning Mars between 41 and 66 years, this was precisely the age at which one ceased active military service. However, this no doubt referred to ordinary people, those who have passed the age of Achilles, of Alexander and of Pyrrhus. Ptolemy refrained from making objections himself. He was obliged to work with the inept consequences of principles he accepted. It was, moreover, no more than the preface of the system. The real astrological calculations began later. When he had fastened his fiefdoms tightly to the natal system, Ptolemy returned to his method of aphetic wheels. He had used them earlier to calculate the length of life. Now he applied them to the various aspects of existence, as he wished to do at the end of each of his chapters. These aspects (parallel and simultaneous, but distinct, paths) he reduced to five. He gave each one a different point of departure (ἀφεσις), and a different transmitter (ἀφότης).¹¹⁹⁵ They were

1) the Ascendant, for everything which concerns the body (τὰ σωματικά), the physical life, including “voyages”

2) the Lot of Fortune, for possessions and acquisitions

3) the Moon, conforming to the doctrines of the author, for the “passions of the soul” and conjugal associations (συμβιώσεις)

4) the Sun, for what concerns dignities and reputation

5) the Midheaven for everything else actions, friendships, offspring,¹¹⁹⁶

This classification was not so clear that it discouraged lovers of variants.¹¹⁹⁷ However, the spirit of the system is not in the classification. The basic idea is that five varieties of domination stretch themselves out in parallel lines, all working at the same time. This explains how a person could be happy and unhappy at the same time, miserable at the loss of a parent and happy to gain an inheritance, ill and covered with honors. In each of the five series, it is possible to predict events and how likely they are. One uses the order in which the various planets (ὑπαντήτορες) line up (genuinely or by aspect) on the course. It begins at the point occupied by the ἀφότης or κρονοκράτωρ καθολικός. It continues, in the order of the signs, for a distance previously fixed by the calculations for the length of life. The nature of these planets indicated the nature of the prediction. The likelihood of the prediction is shown by the distance from the ὑπαντήτωρ to the ἀφότης. This distance was measured along the zodiac in degrees of right ascension (ἀναφοραί) and converted into years at the rate of one year per degree. It is understood that the chances thus calculated and the predictions themselves take second place to the general laws imposed by age, climate or nationality. If one found a chance of marriage (γαμικὸν σχῆμα) addressed to a four-year old, one said at the most that he would marry at a good

hour. Likewise, if the prediction “birth of an infant” comes to a 94 year old, one will assume that this predicts not a son but a grandson or another descendant. “The general moves and modifies the particular.” ¹¹⁹⁸

We still must distribute the years, months, and days within each aphetic course among the annual, monthly, and daily Time Lords. (Ptolemy spares us the hours). These are still Time Lords, but no longer ἀφαιτάι like the general or universal Time Lords.¹¹⁹⁹ By good luck, Ptolemy had found a unique rule for the three calculations. It was enough to look at two facts, the aphetic place marked on the birth chart and the actual age of the consultant. Is it necessary to determine the Time Lord of the present year? One need only take the number of years since the birth of the client. Then place that number on the zodiac beginning with the aphetic place, in the order of the signs and at the rate of 30 years or degrees per sign. Where the number ends is the spot for Time Lord or oecodespot of the year. That is, the planet which has that spot in one of its domains, or is in aspect with it, is the Time Lord of the year. The practitioners had to balance the titles. They had to see if the titles preferred one sort of property to another. Were they satisfied with fiefs which occupied the whole sign, such as domicile, exaltation, triplicity? Or did they prefer to push the estimate to the precise degree, by considering the ὅρια or the aspects?

The monthly Time Lord, lieutenant of the annual Time Lord, was determined from the position of the latter. The position was set by the point of departure. From this point, count, along the zodiac, a number of degrees equal to the number of months since birth. Always count in the direction of the signs and at the rate of 30° per sign.¹²⁰⁰ The place where the number ends is the Time Lord of the present month. There is a similar calculation for the days. From a starting point occupied by the monthly Time Lord, count as many degrees as the number of days since birth. This time, however, count at the rate of 2 ½° per sign, so that the 30 days of the month make a complete circuit of the circle. Without any doubt, the distribution of the number of hours, at the rate of 2 per sign gives one the hourly Time Lords in the same way. (24 hours form a complete cycle of the circle).

In short, each day of existence is ruled by a special planet, subordinated to a monthly planet. The monthly planet, in turn, is subject to an annual planet, which depends on the general Time Lord. All this took place in five different series. One has, then, a display rack festooned with opportunities. The astrologers could search on it at will to find the due date of the events foreseen by a horoscope, or the opportunity for starting a particular act. This singular mixture of fatalism and faith was found, ready-made, in the brains of the Stoics. They found here an excellent occasion to practice virtue, that is, to go freely to the goal which they thought predestined.¹²⁰¹

There was one refinement of the art, which may have been Ptolemy's invention, for it assumes an interest in astronomy proper. It graduated the intensity of the planets' action, depending on the speed of the planets' proper motion. In consequence, the character, more or less pressing, of the deadline or the opportunity also varied with the proper motion. In other words, the planets' power is weaker or stronger depending on the relationship between their movements and the length of their periods as Time Lords. The speed is measured by the ἐπὶ μῶσις, the time needed to pass through a sign of the zodiac. Saturn, for example, has the most powerful action when it is the general Time Lord. It takes 2 ½ years to go through a sign. Jupiter, which needs just one year, was especially valued as annual Time Lord. With Mars, the retrogradations hinder the calculations, but on the average, it goes through a sign in three months. The Sun, Venus, and Mercury go through one sign a month. They are the different types of monthly Time Lords. Finally, the Moon, which passes nearly 30° in two days, is the daily Time Lord par excellence.

One can see that Ptolemy tried to incorporate both natal work and elections. He consented to make predictions based upon the influences accumulated in the course of a life, but he assumed everything to be conditioned by the birth chart. A nativity took many things into account. The difficulty of doing this suggested an approach which gave the majority to opportunities drawn from the present state of the sky.

The nativity was not abandoned but was renewed each year at one's birthday.¹²⁰² It was, moreover, understood that the predictions drawn from these annual horoscopes revealed what was implicit in the nativity. This was called the “revolution of the nativities.” I abstain, from weariness as much as from prudence, from entering into analysis of this frightfully complicated construction. It seems to me to come from astrological scholasticism, a series of verbal and numerical manipulations without supporting reasons. I am willing to believe that the supposed “Hermes the philosopher” ¹²⁰³ is

an Oriental of some sort. His originality consisted perhaps of having been disfigured by the bits of nonsense piled up from the scraps of doctrines levied from these incoherent readings.¹²⁰⁴ In revenge, there was an idea which was very clear but hard to attain, an ideal which he believed had been realized at another time. It had been in a sort of Golden Age, where science clarified the mysteries of nature and turned fatality itself to the profit of humanity. He said,

*The Babylonians, and the Persians and the Indians and the Egyptians, as well as their kings, did not undertake an affair in any year before examining first the anniversary of their births. And if they found that it was a good year, they did the affair. In the opposite case, they abstained. As for the kings, they examined the nativities of their generals and observed the returns of the years, and if they found that for one of them the return signified power and victory, they sent them against the enemy. If not, they kept them home. And it was not only the nativities of the generals which they observed, but also those of the ambassadors, to see if their anniversaries announced a prosperous result. If it signifies prosperity, they send them. If not, they name in their place others whose anniversary predicts success. In the same way, the king chose, according to the return of the years, useful medicines, food and drink, timber and purchases and all decisions. And they left to one side those things which would be harmful that year. In effect, they made decisions based upon their own nativities and those of others. Men who wanted to beget sons observed not only their own years but those of their women. And if both figures signified procreation, they lived together. Otherwise, they chose others whose nativities signified giving birth to boys. This thing is just as useful as the study of the annual return.*¹²⁰⁵

Can anyone believe this? Or should one not give these inept people a more reasonable chance? After all, the dream of our astrologer is no different than that of Plato. His compass and his scales replace the wisdom of the philosopher kings who regulated, among other things, the procreation of children in *The Republic*. How could one not arrive at these wise precautions? Especially if the heads of state have need, as Proclus wished, to choose the best-tempered souls at the moment of the στροπή !¹²⁰⁶

This supervision of conception brings us to a subject which also preoccupied the natal readers. The astrologers had extended the domination and protection of their Time Lords to life within the womb. Otherwise, there would have been something missing from the system of elections. This lack was filled. There must have been much fumbling, for the problem was difficult. Neither the physiologists nor the astrologers agreed among themselves on the length of gestation. Also, it was hard to intercalate a fixed number, seven-fold or nine-fold, within the floating limits of the series. The seven-fold cycle was generally too short and certain physicians, not fascinated with the virtues of the number seven, abandoned it without discussion. In the fourth century, the Head and Tail of the Dragon were probably not yet counted as planets. Therefore they could not enter into a nine-fold cycle of the planets.¹²⁰⁷ The best answer was to take the seven real planets, but to restart the cycle or lengthen it with symmetrical additions. But in what order to arrange the planets? As we have seen, Platonic theory recommended the descending order. On the other hand, the ascending order, which was used for the stages of life after birth, could be applied to life within the womb for the same reasons. Finally, there were astrologers who claimed to know, from the physiologists, in what order the organs of the embryo developed. Since they also knew the astrological patrons of these organs, they created a marvelously "natural" order.

If the astrologers invented this last combination, the texts mention it only implicitly without affirming it explicitly. The descending series, simply lengthened by starting the cycle over again in the eighth and ninth months, is found in an Arabian author,¹²⁰⁸ with supporting reasons which are always excellent. Saturn, origin of the seed, clots it first of all. Jupiter gives it "breath" and mixes it with the body. Mars, the red Mars, produces the blood. Next, the Sun lights the vital fire, the soul proper. At the fifth month, Venus gives gender and Mercury, the tongue, in the sixth month. Finally, in the seventh month, when the Moon finished its own image, an infant was capable of viable birth. (No doubt she was the prototype of the human face.) At the eighth month, the fetus falls again under the domination of Saturn and dies in birth.¹²⁰⁹ In the ninth month, on the contrary, the good Jupiter is its protégé, and, as the Muslim astrologer says, "it will live, God willing." Omar probably did not believe births were possible in the tenth month, where it would be an affair of the terrible Mars. It is true that once this

barrier was crossed, one found the Sun again. In the eleventh month the Sun was able to give an exceptional amount of energy to the infant.

From the point of view of the astrologers' special logic, the system holds together. The same is true of the opposite system, which is not as completely coherent, but which is constructed in a more symmetrical fashion.¹²¹⁰ The seven-fold cycle in ascending order began with a prologue based upon Saturn, the "father."¹²¹¹ In the second month, the Moon succeeds Saturn, then passes its place to Mercury, and so on. It ended with an epilogue in which the Moon resumes and achieves its office of maternity. The influence of Jupiter in the seventh month explains, as before, the birth of viable babies, while that of Saturn in the eighth explains non-viable ones. In the ninth month, the Moon finishes the baby and brings it into the light. It took the patronage of the first infancy.¹²¹²

The author does not seem to have been very sure of having good reasons. He hardly gives any. He even says that Venus in the fourth month gives "physical impulsion." He may, however, have been embarrassed to explain why intelligence, represented by Mercury, went earlier. He did not continue the planetary series throughout life beginning at birth. Moreover, he ventured to reshuffle the *cursus vitae* ordained by Ptolemy from top to bottom. The excuse was taking into account "the distance and the period" of each planet "observed." The first of the seven periods of existence is a perfect septenary cycle. It was presided over by the Moon and subdivided into years assigned successively to the seven planets in the ascending order. Afterwards, each period increased by one year and the subdivisions disappeared. After the seven years of early childhood (ἡλικία βρεφική), came later childhood (παιδική) which Mercury supervised for eight years. Adolescence (μειρακική) lasts nine years under Venus. Young adulthood (ἀνδρική), was ten years, under the Sun. Maturity (ἀκμαστική) was eleven years long, under Mars. Late middle age (πρεσβυτική) twelve years lasted with Jupiter, while old age (γερωντική) was thirteen years or more with Saturn. Saturn opens and closes the cycle, from conception to death. The length of a normal life is thus seventy years long. If, as the author assures us, it is "measuring the hebdomad with its limits," it is necessary that his seven periods average ten years each. It is, however, useless to talk with this spoiled craftsman. He comes from the school of Plato without being enrolled there as a geometer and seems quite ignorant of the "periods" of the planets' revolutions.¹²¹³

We are now in a position to compare the two applications of the method of elections. One was independent of natal work. The other combined and juxtaposed elements of natal work. We are able to understand the work of the imagination which is made from both of them, within their inner domain. Banal universal elections came from the same basic principle as natal interpretation. It was that the present state of the sky has an influence on present activities and (by right of initial impulse) upon the future. One immediately meets the point of departure, however. The natal readers wanted two things. First, they wanted a given prediction not be the same for all individuals at the same time. Second, they wanted the prediction delivered at an individual's birth to include the entire future of that individual. The "initiativists" originally maintained contrary principles, but with a hesitation that became stronger and stronger. The necessity of distinguishing the two sorts of destiny imposed itself with the force of the evidence. Hence the attempts to combine the rival methods, and complete confusion in the minds of the eclectic astrologers. In this confusion, catarchists and natal readers forgot the reasons their calculations existed. They maintained a connection with reality on one point, that is, the real state of the sky at a given moment. They did not want the real position of the planets at some moment for the patronage of the hours of the day and night or the days of the week. They wanted a mystic privilege which was devolved upon them once for all. They wanted a divine attribute, an article of faith, a fragment of theology inserted into astrology. The same was true for the fiefdoms distributed through the whole of life, beginning with birth or conception. The idea that the later positions of the planets were conditioned by their positions in the horoscope may have served to quiet the scruples of the natal readers. It was a deceitful teaching, however. In fact, there was not one of these fiefdoms which did not correspond to a position foreseen by the Time Lord. The succession of the planets had nothing to dispute with their movements and astronomical positions. It did not matter whether the cycles which unrolled mechanically by periods, years, months, and days, or according to the unequal stages of existence. One can hardly comprehend that a Ptolemy dared to slip in here a reference to the "proper periods." He justified at least some of these mystical constructions, completely foreign to astronomy, with his name.

The mind of the Arabs was made to believe and not to understand. It must have been choice

terrain, where the unintelligible bore fruit a hundredfold. The systems of fiefdoms were never a large or lasting success among the Greeks, it seems. On the other hand, natal work had requirements which were impossible to satisfy in practice, such as that of the exact hour of birth. Moreover, while useful for strictly individual consultations, it was of little or no use when it had to choose opportunities common to several individuals or to masses of people. It offered nothing to a crew about to go to sea or to an army waiting for the moment to give battle. For such people, raw elections, without any admixture of natal charting, had all the advantages. By itself, it could resolve the problem as a whole and compete with the augurs and other predictors of the near future. It even supplanted natal work on its own terrain. It was a very quick way to study very deeply a particularity in the life of an outstanding person. It was very useful for a life mixed with different external circumstances and in which, moreover, one did not know the starting point. The astrologer cut, so to speak, a trench into the biography of the person in question. He fixed the opportunity for the act which had begun it and there found what motivated the denouement. This was especially easy since, if the denouement were already known, he need do no more than explain it after the fact.

For example, take Theodore, the prefect of Egypt (*praefectus Augustalis*) during the reign of Zeno. Let us look at the explanation of why an honest magistrate, and famed as such among the Alexandrians, was nevertheless denounced and condemned as an embezzler.¹²¹⁴ This started with the state of the sky at the moment when he formally took office. This was his “Καταρχή when he entered Alexandria.” It was Monday, 23 March 487 CE,¹²¹⁵ at the midpoint of the second hour of the day. The Sun was at 26° ♄. The ☾ was at 27° ♊. Saturn was at 11° ♄, and Jupiter at 27° ♃. Mars was at 25° ♀, Venus at 12° ♄, Mercury at 23° ♄ and the Ascendant at 26° ♀. The Midheaven at 10° ♊, the ascending node (ἀναβιβάζων) ☊ in ♄, and the Lot of Fortune (☿) at 27° ♎.

“Consider,” the astrologer said,

that Mars was at the Horoscope and enthroned (ἰδιοθρονοῦντα),¹²¹⁶ and seen in trine by Jupiter and Saturn; Venus and the Lot of Fortune with the Lot of the Good Spirit (ἀγαθοδαιμονοῦντας);¹²¹⁷ The Moon at the upper culmination; Jupiter and Venus, the patrons (κυρίους) of the city,¹²¹⁸ in ἐπαναφορά relative to the Horoscope.¹²¹⁹ You will find the beginning of a nice, easy, magistracy, full of praise. But if you now seek the oecodespot¹²²⁰ of Fortune and the Moon, you will find Saturn declining (in the ἀπόκλιμα) and falling in the malaise of the ecliptic places,¹²²¹ this produces destitution with violence. What hastened the replacement (of Theodore) is that Mars, the Horoscope, and the Moon are found in signs which are, at the same time, tropical and of rapid ascension (ὀλιγαναφόροις). His condemnation is due, in the first place, to the master of the Lot of Fortune being in decline. Next to Mars, who, contained for a certain time by Jupiter and Venus providing support for the city, was shown to be opinionated and violent by nature and also because the Horoscope is contrary to its sect (αἵρεσις).¹²²²

The agitated reign of Zeno had far more important events than the disgrace of a prefect of Egypt. On 27 June, 484, at the first hour of the day, the general Leontius was “crowned” emperor at Antioch.¹²²³ He had taken the precaution of choosing this day with the advice of two astrologers (ἀπὸ δύο μαθηματικῶν λαβῶν καταρχήν). Nevertheless, his fall came soon after. The two astrologers had made mistakes which their colleague Palchos reviewed at his ease, better informed after the event. The Sun was in ☊ 26°, the Moon in ☊ 7° (?). Saturn was at ♄ 15°. Jupiter was at ☊ 5° and Mars was at ☊ 20°. Venus was at ♀ 27°, Mercury at ♄ 19°, Ascendant at ☊ 13°, the Midheaven at ♀, [the number is missing], and the descending node at ♊ at 14°. The σύνοδος (the place of the next conjunction or New Moon) was in ☊ and the Lot of Fortune was at ♄ 17°. The Δαίμων was in ♀, the ὑψωμα γεννήσεως, in ♀ as well. “What so greatly seduced they who calculated the election” our critic says,

was the presence of the Sun, Jupiter, and Mars at the Horoscope and the ἐπαναφορά of Mercury and the fact that the Moon was found in Good Fortune (ἀγαθοτυχεῖν) relative to Saturn and to Jupiter.¹²²⁴ But they did not first pay attention to Mercury, Time Lord for the day and the hour,¹²²⁵ which was found fallen into suffering. In effect it was too far from the Sun,¹²²⁶ which

*produces violent death, and it was not in aspect with Saturn ¹²²⁷ for Venus is not able to heal the suffering by it, until the Sun strikes it with its ray.¹²²⁸ On the other hand, they did not see that the Moon, here mistress of the Sun and of the Horoscope and of Jupiter and of Mars and of the conjunction, ¹²²⁹ was itself humiliated and badly placed. Moreover, the fact that none of the (fortunate?) aspects were enough to destroy the effect of the reunion of the Sun of the Ascendant and of Jupiter. But how could they forget the chapter in Dorotheus where it says 'observe the great Sun and the rapid Moon and the rulers of the mansions in which the two luminaries have entered, and then the Ascendant and the sign which, at the height of the ether, touching and surrounding the middle of the sky, and which of these places the Moon occupies, and also which is its master (ἄναξ), and if it is found in the decline (ἀποκλίματα). For if it is found in the first centers, it will manifest a propitious and brilliant action; but then it lies and the end will be complete ruin.' ****

Leontius, blocked in the fortress of Papyrion in Isauria had the head of his advisor Pamprepios cut off, before killing himself. Pamprepios was probably one of the two astrologers responsible for the predictions which were so disappointing. As always, the astrological faith is washed clean of all reproach. The blame is put on the interpreters of the election, the καταρχή. Among other things, they had not taken into account the fiefdoms and the “suffering” of Mercury!

We would be finished with elections, pure or mixed with natal work, if it were not appropriate to consider separately a special application of all the resources of the art which is interesting and popular for all, the healing of illnesses.

**** The reader is encouraged to check the relevant notes before embarking on a long study of this passage with its preceding planetary positions. Despite the efforts of several scholars there are errors, which reduce its usefulness as a guide to ancient techniques. B-L himself said his source texts were in a 'pitiful state'. KM*

Chapter Fifteen

Astrological Medicine

There is one aspect of elections which Ptolemy left completely outside his scientific astrology. It was medicine directed according to astral opportunities, or "iatromathematics." In this way, he renounced a practice which appealed most surely to the faith of the believers. Born in time of need, in his time, it assured the continuing vogue for medical oracles. It was not that he believed astrological fatalism incompatible with medicine. He cites it precisely as an example of what people might do to restrain the role of fate in their existence. He also classed astrological medicine among the benefits of the science of the stars. Rather, he leaves the need to teach the doctrine and to apply these useful consequences to the "Egyptians, who have made the most progress in this branch of the art."¹²³⁰ He renounced making common cause with Petosiris and Nechepso, who had amply supplied the world with medical predictions and propitiary prescriptions. In the course of his work on infirmities and physical illnesses, he alludes to remedies. Some were revealed, which he calls the influence of Venus (religion), others were natural, the influence of Mercury (science).¹²³¹ However, he passed on to other ideas at once. Also, he explained, in this connection, the canvas of iatromathematics, that is, the anatomy and physiology related to the planets. On the question of origins, the witnesses are unanimous.

Iatromathematics was the invention of the "Egyptians" and remained the monopoly of the "Egyptians," almost without fail. But which Egyptians? We have no need today of express witnesses¹²³² to guess that the Egyptian priests were sorcerers, witches, and healers, makers of amulets and phylacteries, knowing the occult powers of stones and plants. They were like their colleagues in all countries with rudimentary civilizations. However, it is necessary to know when this archaic magic was joined with astrology. It was this combination which constituted iatromathematics.

Some believe that evidence has been found, in the tomb of a Ramesside Pharaoh, in the ninth century BCE.¹²³³ According to them, the various parts of the human body had been placed in relationships with the constellations which rose during the hours of the day and of the night. This could have been a table of medical opportunities or elections. However, it has since been recognized as a sort of astronomical chart and not an astrological one. It indicated the hour at which the constellations rose, from fifteen days to fifteen days. We are also right to eliminate the books written under the name of Pythagoras or Democritus, so-called inheritors of "Egyptian science," as apocryphal. To the astrologers, all means were fair to gain the confidence of people. People wanted to support their faith in the traditions and revelations proven by the experience of centuries.¹²³⁴

We always fall back, in the end, on the two pillars of Egyptian astrology, Nechepso and Petosiris. That is, we rely upon a pseudepigraphal book dating to the beginning of our era. In a Greco-Roman world already half conquered by the "Chaldaeans," [Mesopotamians] they introduced competition based upon the pretensions of Egypt. This compilation, once known as the receptacle of Egyptian science, must have been itself enlarged. Supplements were added in proportion and by measure by all those who had any ideas to put into circulation. Their ideas were guaranteed by the revelations made to Nechepso and Petosiris by the gods Hermes (Thoth) and Asclepias.¹²³⁵ Asclepias especially was responsible for the medical prescriptions, whose redaction seems to have been attributed, especially again, to the "king Nechepso."¹²³⁶

Before analyzing the debris of iatromathematical science, which is a combination of astrology and magic, it is good to separate the ideas which are confused there, and to mark out the part of astrology proper.

Reduced to its own resources, astrology would have developed only one part of medicine. It was one which interested the sick the least, the art of diagnosis and prognosis. Astrology's proper job was to look at the past and to preview the future. Its fatalistic logic forbade astrology to seek means to change the future. This would have frustrated its own predictions. The natal system especially had to refuse. Medicine intervened to frustrate – or at need, to promote – the end of life. Natal chart calculations on the length of life, for example, would have become completely problematic. On the other hand, the astrologers had stopped from pushing on to the logical goal of their system. That would have made their art appear not only immoral but useless. From this came a certain embarrassment.

Ptolemy removed it by making a short allusion to medicine and by not dealing with the climacterics. The theory of climacterics, years, days, or hours of crisis was given to astrological medicine by the natal system. We will come back to this in a few minutes. The manipulators of elections were infinitely more comfortable in giving satisfaction. People wanting not only foreknowledge of illnesses but information on how to heal them when they arrived. They could not formulate therapeutic prescriptions. An unadulterated astrology was not enough for this. However, elections indicated occasions good for applying these sorts of remedies, and counter-indications, according to the actual state of the astral positions.¹²³⁷

We find ourselves in the presence of two astrological systems which we know. These two distinct systems, as always, penetrated one another and disfigured one another. Thus obscured, they were infused in the unnamable mixture which is iatromathematics. To begin with the simplest example, let us examine the application of general or universal elections to medicine.

In all the treatises on elections one finds at least one chapter entitled “On Illnesses” or “On Surgical Operations.” The Moon is the usual indicator. It was supposed to have an immediate influence on the body in general and particularly on the humors. They were submitted to a sort of flux and reflux with the circulation and recirculation.¹²³⁸ The prediction was drawn from the position of the Moon relative to the signs of the zodiac or to the planets. There is no question of anything but prediction yet. When there is a question of an illness, it is the beginning, the moment when the sick person takes to his bed [Decumbiture] which carries the prognosis about the seriousness, the length, the outcome, of the illness.¹²³⁹

To combine the Moon with the signs is relatively simple, and the astrologers who distinguished the “days” did not complicate it more, since the Moon does not spend more than two days in the same sign. As a general rule, each sign threatened the part of the body with which it was connected in the melothesia. Thus, people who fell ill when the Moon is in Aries were not in danger, at least if they did not have headaches. Taurus is benign, too, save for angina sufferers. Likewise Cancer, save for those with chest problems, and Pisces, save for those with foot problems. Beyond the correspondence between the signs and the parts of the body, one also had to think of the temperaments of the signs. Aquarius, for example, was dangerous to those with dropsy. The astrologer established a special prognosis, one for each sign, for premature births. They were classified as illnesses and rarely without danger. Premature childbirth was always mortal in Libra, which no doubt did not tolerate errors in counting. The length of an illness was predicted mainly by a quicker or slower movement of the signs (ἀναφορά).¹²⁴⁰ The rules, moreover, are not without capricious exceptions. Such and such a sign is favorable on the first day, dangerous on the second or vice versa.

In relation to the planets, the Moon is not considered save in its contacts (συναφαί). It goes without saying that, with Jupiter, Venus or Mercury, lightens and shortens the illnesses, which became sad and endless with Mars and Saturn.¹²⁴¹ For abortions, contact with any planet is awkward. They went best when the Moon is void of course (κενοδρομία).¹²⁴² The chapter on surgery¹²⁴³ is devoted almost exclusively to contraindications. There should be no operations when the Moon is in a tropical sign nor when it is in Taurus, Capricorn or Virgo.¹²⁴⁴ Likewise, there should be no surgery when it is new or full, nor when it is in conjunction or contact with Mars or Saturn. In the first case, there would be hemorrhages or it would be necessary to start the operation over. In the second, the consequences would be long and the outcome deadly. The surgeon who wanted to succeed must choose the moment when the Moon was waning, preferably after the last quarter, when it was in contact with Jupiter or Venus. Without contact with the Moon, the collaborating planets produced the same effect when they were at the ascendant. One is surprised not to see the zodiacal melothesia used here. It gave the simplest of rules do not touch any member with iron while the Moon is in the corresponding sign.¹²³⁵

Aside from surgery, which was a form of therapy, medical therapy is nearly absent from the texts seen above. One encounters here and there some advice on the opportunities for certain remedies. Maximus recommends “purging the belly” with all possible speed if an illness begins when the Moon is in Leo, which rules the belly.¹²⁴⁶ Another announces that purges have less effect when the Moon is in conjunction with Jupiter.¹²⁴⁷ Another, who may have been proud of his discovery, thought that when the Moon is with a retrograde planet, the purgative would reverse itself and become in effect a vomitive.¹²⁴⁸

All these bits of systems, wrecks of systems or sketches of systems, dispersed and wearied the attention. Practitioners needed guides giving short cuts to rules for diagnoses, prognoses, and

treatments. We possess one such guide, in two different redactions, published under the name of Hermes Trismegistus and addressed by the god to his compatriot, the Egyptian Ammon.¹²⁴⁹ The physician must take the exact hour at which the patient takes to his bed. He must know where the Moon is, in which sign, in what relationships with the planets. Especially he must know if it is opposite or in square aspect with a malefic planet. Finally, he must check to see if it is waxing or waning, for illness waxes and (when it must end happily) wanes with it. As there were two malefic planets, one cold (ἥ), the other hot (σ), there were, in general, two sorts of illnesses, cold humors and inflammations. Adding Mercury to Saturn and the Sun to Mars allowed an early refinement of a general etiology, which allowed modification of general rules for treatment. This followed the method of contraries, medications of opposing martial and solar natures. “Warm” (θερμαίνοντα) medications countered saturnine or mercurial illnesses, and vice versa.

Etiology, diagnoses, prognoses, treatments, were made more precise by considering the signs and the aspects formed between the Moon and the planets. Our Hermeticist drew up a summary calendar, in which one sees the relationships of the Moon, first, with Saturn, then with Mars, for each month. One or the other planet would be “in opposition or square or conjunction.” The Moon for its part would be waxing or waning, whether in “numbers” or in “light.”¹²⁵⁰ To these facts are added the absence or the aid of the benefic planets in effective aspects. Also the possible collaborations of the two malefic planets are added. The goal is to increase the numbers of variables. Look at a sample of this genre of consultation:

*If someone takes to their bed with the Moon in Aries, Saturn in opposition to it or in square or in conjunction with it, especially if its numbers are declining and its light is growing feeble, the illness begins with a growing chill, and this will be known in the head. For there will be heaviness on the side and on the eyes, ... pulse feeble and irregular, ... face drawn, extremities cold, fainting, anorexia and untimely sweating. It would be right to use warming medications, medications to relax and loosen the belly. Bleeding is not useful. If a benefic planet is not associated with the Moon by square or opposition aspect, the sick person will not resist the illness, but will die. With a benefic concord, after a time, he will recover... If Mars also occupies the same aspect in relation to the Moon, the sick person will definitely die [in the span of time which goes from there] as far as the diameter. If someone takes to their bed when the Moon is in Aries and in the aspects mentioned above with Mars and the Sun, the illness will come from the head, and the meninges will seem paralyzed. There will be continuous fevers, insomnia, a burning mouth, immoderate thirst, a troubled tongue, inflammation of the chest, inflamed liver, a strong and irregular pulse. For these last, bleeding would be useful as well as all medications which chill and soothe. The patient will be delirious and frenzied. If a benefic planet does not help the Moon and Saturn joins the mix, the patient will die at the diameter or the square, especially if the Moon advances upon the numbers. But if a benefic planet regards the Moon, after undergoing danger, the patient will recover.*¹²⁵¹

One may also apply to maladies a method [decumbiture] which has already been mentioned as a part of “interrogations” and which gave a response to everyone.¹²⁵² One thus gains information of all sorts, even, if one thinks it appropriate, on medicine. For example, if the physician is represented by the ascendant and the medication by the MC, the Midheaven,

*if a malefic planet is at the ascendant and a benefic one at the MC, this shows that the first physician, no matter what he did, would not relieve the illness, but that another physician intervening later would do better. In examining the IMC, see if the following planet is on its throne or not, for if it were in its own triangle or domicile, the physician would be a native and not a foreigner. If it were in places belonging to others, the physician would be a foreigner.*¹²⁵³

But, in spite of all these refinements, one cannot get to the fundamentals with universal elections. Since they were general, they did not allow one to make a diagnosis or a treatment for a particular case, a particular temperament. Interpreted with discretion, they hardly leave the domain of ordinary hygiene, where they agreed with a crowd of popular sayings¹²⁵⁴

It was obvious to the most obtuse that the present state of the sky is not enough to establish the prognosis. If two people fell ill or were operated upon at the same time, one might die and the other might recover. This reasoning, irrefutable in its simplicity, obliged the astrologers to reject natal work. Combining elections and natal work in the form of rule by Time Lords starting with the horoscope could well have been used to fix medical opportunities. This was done in fact, but tangled with other consideration. It became a separate theory, the theory of climacterics (κλιμακτῆρες – κλιμακτηρικοί ἐνιαυτοί or μῆνος or ἡμέραι or ὥραι). This comes from a collaboration of physicians and astrologers. The former used astrology without knowing that it was not just a question of the influence of the stars. Meanwhile, the astrologers incorporated well-known medical traditions into their art.

When one reads Saumaise's work on the question, one may be excused for not understanding just what a climacteric is. He challenged all the definitions and modified his own. He stitched together the digressions and the citations and drew all of astrology, in a chaotic state, into his subject. As a result, the estimable scholar made the edifice which he had promised to build collapse on the head of the reader. By etymology, the climacteric is a step on a ladder (κλίμαξ) ¹²⁵⁵ it was a dangerous rung, noted in advance as able to bend or even break under the foot at the moment chosen by Destiny. Saumaise crossed rungs which broke from the list of climacterics. The purpose of a degree is to be a transition and a step which one cannot cross is not a step but a barrier. The ancients had done wrong, according to him, to speak of "deadly" climacterics. No climacteric was more dangerous than another. ¹²⁵⁶ Nevertheless, the calculation of the climacterics always allows for a dangerous climacteric. It also allows for the possibility of a moral crisis of a sort which falls upon the climacterics properly so-called and also upon the terms at the same time. These are recognized after the fact as not climacteric. This is what Saumaise calls clarifying the questions.

His work is more useful in distinguishing the astrological climacterics from the "critical" periods (κρίσιμοι ἐνιαυτοί, μῆνος, ἡμέραι). Before any intrusion from Mesopotamian astrology, the physicians knew that an illness would progress in predictable stages. The difference between climacterics and "critical periods" is threefold. Critical periods did not so much foresee illnesses. They made predictions based upon the nature of the disease or the properties of odd and even numbers. It could even foresee critical moments in good health as well as in bad. The climacterics' predictions were deduced from astrological calculations. They were applied to all sorts of dangers, including those which menaced wealth, reputations and other good things of existence. They foresaw more than dangers. ¹²⁵⁷ Saumaise has texts where the different astrological theories which he forcibly united are seen all together and in confusion. He does not distinguish enough, on the one hand. On the other, in exaggerating the difference between the critical periods and the climacterics, he does not perceive that the astrologers invented their climacterics in order to find astrological reasons for the critical periods of the physicians and to take possession of their system.

Hippocrates and his disciple taught that there were, in the course of a disease, indifferent days and critical days or "generators" of effects (γόνιμοι). An illness did not end either in death or in recovery, save on a critical day. ¹²⁵⁸ They then drew up lists of "critical days." For diseases which progressed slowly, there was a list of critical months and years. The distribution of critical years, under the influence of pre-existing traditions and of Pythagorean speculations, tended to be regularized into seven-fold or nine-fold periods, counting from the beginning of existence. We have met them often before. The passage from one period to another was supposed to be critical. As the dominant idea here was one of change, the result was that the critical years could be both healthy for invalids and dangerous for the healthy. Just as the Pythagoreans attributed a particular energy to the square numbers, the partisans of the seven-fold computation gave particular attention to the forty-ninth year. The partisans of the nine-fold one thought the year eighty-one especially important. The eclectic "Egyptians" – we know that there was no Greek more Egyptian than Pythagoras – thought of combining the two systems. They marked as the dangerous year par excellence the point where they met, the sixty-third year, which was critical in both systems ($7 \times 9 = 63$). This year was the due date of life, for most of humanity. It was the one which "broke people" (ἀδροκλᾶς – ἀνδροκλάστης). ¹²⁵⁹

This system independent of astrology from its beginning and remained. That was one more reason for incorporating it, when astrology was on the point of becoming a universal science. It is not possible to fix a date, even a rough one, for the entry of astrology into physiological and mystical speculations. ¹²⁶⁰ We have enough to do in noting the meeting points and in following the relationships of the ideas.

Astrology limited to the universal elections might be added to all the systems of critical dates, but it did not appropriate them or replace them. The client who went to consult an astrologer of this sort to know if he would escape a fatal date or not could have found out simply by counting his age. Only the natal system was able to take up the problem and provide a substitute for the mechanical procedures of the Pythagoreans. These procedures have, moreover, a trait in common with natal work. The point of departure of all the calculations was the moment of birth. The natal chart readers sought to create “climacterics” which were dependent upon the birth chart and independent of simple arithmetic. They were able to reach the goal in several ways, following the methods they used to calculate the length of life. We have shown above how the circle of geniture, conveniently narrowed, had constituted the race-course of life. Likewise, we have shown how its dangerous or deadly stopping places, depending on the case, were arranged around it. These stopping places became the climacterics of the natal system, unequally spaced and in consequence far from Pythagorean calculations.¹²⁶¹ The natal readers made the length of life depend upon the planet which was master of the chart, or upon that planet and a collaborating sign. Altogether, they had twenty ways for a person to insert the climacteric periods.¹²⁶² Finally they resorted to the tangled method of the fiefdoms. With its unequal periods, and all its methods for punctuating life with irregular stopping points, it gave excuses for climacterics of every sort. Also, using the climacterics was a marvelous headache, full of secrets and empty of ideas. It was at home among the eclectics who wanted to lose none of the secrets of the art and extend it to put the climacterics in the framework of Pythagorean arithmetic. I will not make the mistake of entering, as Saumaise did, into this melee of numbers where one seeks in vain for a directing principle. Just when one thinks one is dealing with a mathematician, one learns that certain signs of the zodiac are “climacteric” by nature. Some, like the “tropical” signs, are in the seven-fold computation (κλιμακτηρικὰ ἐβδομαδικά). Others, the “simple” signs, are in the nine-fold computations. The double signs finally, are in both computations (ἐπίκοινα). Evidently, these three groups of signs each form a square upon the circle. There was no mathematical reason for these different aptitudes. The tropical signs were critical or climacteric by their very name, indicating a “change.” First, this series is assigned to the seven-fold climacterics, completely arbitrarily or because the seven-fold ones were better known than the nine-fold ones. Next, the latter were attached to a second series. The nature of the “double” signs was offered at the right time to embarrass the astrologers who had three series to distribute between two computations.¹²⁶³

Not all these tricks and complicated calculations were used by practitioners. They wanted the results cataloged in charts. The usual instrument of calculation, pure natal methods, could not do the job, as each individual had his own curriculum vitae. The mixed method of fiefdoms was too complicated. It required, at a minimum, that the customer know the exact date of his birth, day or night. To know under which sign one was born was a little too general and broad. The decans, each of which occupying only a third of a sign, a period of ten days, were a less vague measure. From this came the system described by Hephaistion. He attached a certain number of climacteric years to each decan. The number varied from one decan to another and was always irregularly spaced. One thus acquired the indispensable dose of mystery. The divine character attributed to the decans transformed scientific fatalism into subjective will. The subjective wills of the decans could then be plied with incantations or swayed by prayer.¹²⁶⁴

However obtained, whether limited to years or taken as far as climacteric months, knowledge of the climacterics was not directly useful to medicine. It gave prognoses, not remedies and even suggested that all should be left to destiny. Pliny the Younger describes a collector of death-bed wills. He cries out, with pretended force: “you have a climacteric epoch, but you have escaped. So that you may be more convinced, I want to consult a haruspex whom I have often used.” Later, the wily legacy-hunter “ offered a sacrifice, to assure the dying person that the entrails confirm the indication of the stars.” He gained a legacy as a result. However, there was no question of countering the illness with something curative.¹²⁶⁵ The physicians had nothing to gain by exchanging their “critical” period for the climacterics of the astrologers. They wanted to exploit the vogue for astrology, without becoming dependent upon the natal chart readers. They did so by using calendars drawn up for universal elections.¹²⁶⁶

Iatromathematics proper was completely different. It was, as we have defined it, a combination of magic and of astrology.¹²⁶⁷ Pure magic is a chaos, invulnerable to rational argument. Let us see if astrology introduced any discipline.

First of all, astrology gave diagnoses. Nechepso, Firmicus says, had examined very nearly the whole zodiac. He noted which parts of signs, stars and nebulae were able to produce illnesses and infirmities. The main concerns were the position of the luminaries or of the sixth place (consecrated to health) in the horoscope. He found correspondences between certain maladies and the signs, degrees poorly noted, empty, etc.¹²⁶⁸ The decans were examined in the same way, by Nechepso or by others after him. In the same way, the planets, signs, decans, planets, were placed in correspondence with the different parts of the human body. One knew exactly whence came the infirmities and maladies of these organs. They were produced by too much or too little influence from the signs, decans and planets. The signs, decans and planets were considered either as pieces on the chessboard of the birth chart, or as universal or individual Time Lords.¹²⁶⁹ This is enough discussion of this conglomerate of causes, concerning which we will consider ourselves sufficiently edified.

The same system of correspondences, applied to the three kingdoms of Nature, gave the elements of treatment. The astrologers had a choice between at least two ways of understanding treatment. One was both magical and scientific,¹²⁷⁰ opposing the noxious influence with another one. The other understanding was also magical and religious as well. It considered the occult author of the illness as the only one able to heal it. The sign or decan did so by ceasing to cause the illness, which it might or might not want to do. It is likely that our magicians have not chosen between the two approaches. Every invitation to Reason and all the things which Reason gains had been removed from their faith.¹²⁷¹ They thought, I suppose, that if the "master" star of an organ caused its illnesses, it was because of some personal problem and a lack of the correct influence. One might be cured with the aid of stones or plants impregnated with the effluvia of the right star, supplementing the lacking sympathetic energy. All the remedies used are considered to have natural affinities with the sick organs as intermediaries for the stars. As natural as these curative properties were, they became even more sure with the aid of an appropriate formulaic incantation. The author who recommends this precaution for the plant and for the moment it is gathered is the same one who outlined a quasi-scientific theory to explain why the plants in cold countries were less effective than those in hot countries.¹²⁷² There was room for everything in these encumbered brains, save logic. Those who did not break completely with ordinary medicine composed rules. They weighed and mixed drugs, making patients drink potions and placing plasters upon them. Astrology only taught them the choice of medications and the manner of incorporating ingredients so that they did not lose the specific virtues emanating from the stars. Harpocration tells how, after applying the prescriptions of Nechepso without any success, including his "solar pellet,"¹²⁷³ he had concluded that the king was a braggart. But the god Asclepius, evoked by a Theban priest, explained how Nechepso had not been fooled in his choice of drugs. He had only lacked knowledge of "the times and places to gather the plants." There were opportunities, elections, to observe. Consider, for example, hemlock, a plant produced by the effluvia of Mars. Italian hemlock is a poison because Italy is under Scorpio, the domicile of Mars. But in Crete, where the influence of Mars is weakened by that of Sagittarius, hemlock is a food. Look at the place. It is necessary to know astrological geography. As for the time, there were different sorts of opportunities. First of all, the season. When the Sun is in its ὕψωμα or exaltation, in Aries, the powers of all the planets is increased.¹²⁷⁴ No doubt it increased the powers of the plants assigned to a given planet when it entered into that planet's ὕψωμα. Next, the day and hour. One must collect a plant on the day of the week which bears the name of its planet, and at an hour dominated by the said planet. It is good, too, that the Moon be full, or at least, in the domicile of the planet associated with the plant.

Up to this point, iatromathematics remained in contact with common sense. However their properties were explained, the remedies worked physiologically. One step more, and we enter the laboratory of magic, where phylacteries were made according to the rules of astrology. The charlatan who wrote the "Sacred Book" of Hermes Trismegistus created a masterpiece of this genre. His thirty-six prescriptions were associated with the thirty-six decans, which themselves were associated with the parts of the body. They combined the properties of precious stones, of plants and of the figure of each decan, animal or human, and divine into the bargain. It was Hermes Trismegistus who dictated these marvelous secrets to his son Asclepius. He did so in the language of a god who did not believe in the duty to be modest. He was modest neither on his own account, nor on that of the "half-divine humans" initiated by him and destined to manage the entire world. For example, consider the prescription for the "grand phylactery." It was related to the first decan of Aries and protected one from headaches. After a description of the god Lachori:

Engrave it, then, just as described, on a stone of Babylon, well-chosen, and, after placing it upon the plant of Mars, enclose the whole in an iron ring and wear it. Avoid eating goats' heads.

And so on, until the end of the list.¹²⁷⁵

As tired as one may be of the fantasies of the astrologers, one senses that magic is a step lower in the unraveling of human reason. If astrology was a poison to intelligence, magic was its disgrace.¹²⁷⁶ Nevertheless, before closing this chapter it is still necessary to indicate other combinations of medical astrology. We will give no more than a word to combinations with divination based upon the mystical properties of names interpreted as numbers. They were inventions of the late era, placed impudently under the guarantee of Democritus and of Petosiris to do everything. Petosiris was supposed to have passed these latest discoveries on to king Nechepso.¹²⁷⁷

It is not a question, this time, of drugs or of amulets, nor of some therapy. Prognosis was the only concern. This instrument of divination seems to have been made for people who did not want to heal anyone. Rather, they wanted to know if someone would live or not, and, if not, how soon would they die. People speculated on this eventuality as they might on the outcome of a battle, of two gladiators' combat, of a lawsuit, on the chance of recapturing a fugitive slave, of outliving a given person, etc. The method was the same. Originally, the method was purely arithmetical and used to foresee the chances of victory or defeat for two antagonists. One took the two names, converted them into numbers and submitted the numbers to certain arithmetical operations. From the results (πυθμην), whether the remainder was even or odd, one judged which name weaker or stronger, hence which person must be conquered or conquer.¹²⁷⁸ The astrologers who wanted to appropriate this method added the quantity of the Moon to the numerical value of the names. They drew up a table with compartments labeled ζωή μεγάλη μέση, μικρά. They compared them to θάνατος μέγας, μέσος, μικρός, or more simply ζωή, θάνατος, κίνδυνος. Even more simply, Life was on top, above a line representing the horizon (ὑπέργειον) and Death at the bottom (ὑπὸγειον). The figure, supposedly a circular drawing, is called a "sphere," even when it is changed to a rectangular shape.

In the "Sphere of Democritus," the rectangular table contains the thirty days of the month. They were arranged in three columns and in a mystical order, 18 in the upper part, 12 in the lower. Look at the recommended rule:

*Sphere of Democritus, prognosis of life and death. Know in which lunar month the patient took to his bed and the name of the day he was born. Add the calculation of the Moon and see how many times there are thirty days. Take the remainder and look in the sphere. If the number falls in the upper part, he will live. If it is in the lower part, he will die.*¹²⁷⁹

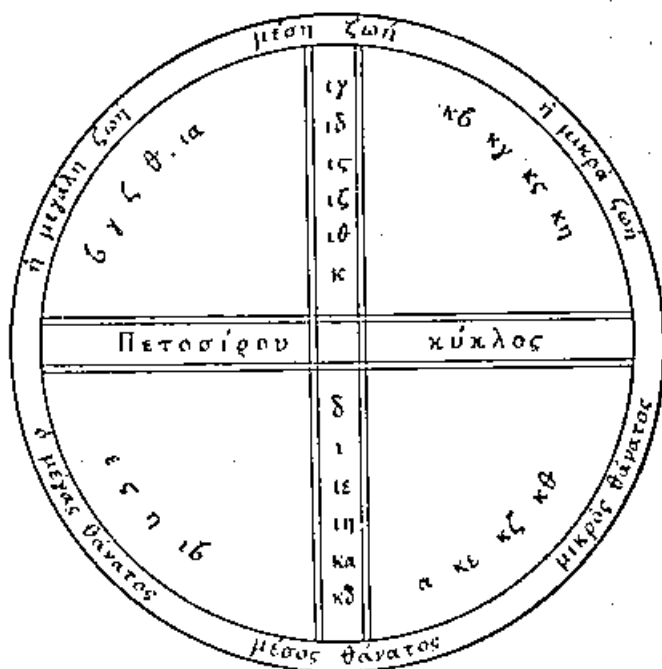


Fig 45 The circle of Petosiris

One added up the numerical value of the name given at birth (the Roman custom) as a quantity and divided it by 30. This divisor, 30, corresponded to the length of a fictional lunar month. Instead, the authors of the "circle of Petosiris"¹²⁸⁰ used 29, the average of the various ways of estimating the length of the Moon's revolution around the Earth. Whether the divisor was twenty-nine or thirty, the procedure was the same. [Fig. 45. The Circle of Petosiris] The followers of Petosiris explained it in excessive detail, telling us that it worked for everything, not just illnesses.¹²⁸¹ The procedure was always add the name to the quantity, divide by twenty-nine or thirty, then see what prognosis the rest of the circle

Finally, the moment has come to abandon a task which has become too thankless. The stream of folly poured out by astrology is mixed with those of other forms of divination, even the oldest of all, oneiromancy. The interpreters of dreams became astrologers rather than decline. They sought to know which dreams had a chance of being true or false in which phases of the Moon or under which signs of the Zodiac. The cleromancers or drawers of "lots" wanted to imitate the astrological "lots" with their own or with points disseminated upon the sand, which chance grouped into constellations.¹²⁸⁹ Even the physiognomists substituted astrological correspondences for their own vulgar notions about temperaments. They summarized the whole body, the soul, the destiny, in a hand full of signs, aspects and planetary domiciles. One may imagine a long line of charlatans and mystics, walking along behind the astrologers of high places with pointed hats and robes covered with stars.

This infatuation is not completely without explanation. Humanity always follows those who lead in the direction it wants to go and those who promise what it desires. What is perhaps more surprising, was that so few people were found willing and able to react against this intellectual contagion. The elite was otherwise so highly-developed in this Greco-Roman society. I have shown to the best of my ability how, with many deviations, logic had ended on the side of the astrologers. It remains for me to outline the history of astrology in the ancient world. I will note the efforts which were made to see through these endless postulates, and eventually, whence came the blows which could not be dodged.

Chapter Sixteen

Astrology in the Roman World

There was no obvious progression among the precursors, the proponents and the opponents of astrology in Greece. One cannot find successive periods of development, struggle and triumph in the history of astrology. The principles of astrology were always subjects of debate. These debates, in fact, spurred astrologers to re-think their principles and practices, to fill in gaps and to modify the theories or practices to which critics objected.

It is not surprising that astronomers were hostile. They were happy to receive the data which Mesopotamian astrologers brought them. However, they did not want astronomy to become the slave of astrology, a mere door to a laboratory where numbers and figures were changed into the infallible decrees of destiny. Cicero lists Eudoxus, Anchialus, Cassander, and Scylax of Hallicarnassus among the astronomers who opposed astrological predictions.¹²⁹⁰ Hipparchus, according to Pliny, ¹²⁹¹ was certain that the stars had the same ancestors as the human race and that our souls came from the sky. However, this belief, which might make his catalog of the fixed stars sound like a list of deified souls, is far from accepting astrology as a predictive discipline. Hipparchus probably agreed with Aristotle that the orbit of the Moon was the unbreakable boundary between the divine sky and the changeable earth.

In the philosophical schools, astrology was disdained, save by the Stoics. The Epicureans flatly rejected it. The Aristoteleans divided natural sciences into a collection of autonomous disciplines, which in turn undermined such basic principles as the unity of all parts of the universe. The mysticism of Pythagoras saw innate powers in numbers. The New Academy were Platonists, but they abandoned Plato's interest in number mysticism. Instead, they emphasized logic, using it to attack any doctrine which claimed to provide certainty, let alone infallible conclusions.

However, in the Stoics, astrology found tireless allies. If not for them, the discipline would have been left to the simple, those incapable of understanding anything. Stoicism provided a philosophical defense against all other intellectual attacks. The alliance went back to the beginning, when Berossus brought Mesopotamian learning to Greece and Zeno founded the Stoic school. Systematic astrology was largely based upon Stoic dogmas and the Stoics had no desire to attack it. (Panaetius was the major exception.)¹²⁹² Others sought to compromise in order to avoid a split in the school. Diogenes of Seleucia on the Tigris, called "the Babylonian," reduced astrology to physiognomy, that is, a method for analyzing an individual's characteristics.¹²⁹³ Evidently Diogenes was intimidated and Panaetius convinced by the arguments of Carneades. Carneades was a New Academic and able to destroy almost any philosophical argument. Posidonius, however, was a very learned man and he was able to prevent Stoicism from making concessions. He completely reformed astrological theory. He strengthened the shaky parts, filled in the gaps, and linked disparate assertions and far-fetched ideas. These assertions and ideas proved just as effective against critics as logic and were harder to refute. Possibly it was Posidonius who created the astrological fortress against which sceptics, moralists defending of free will, and theologians defending their religions, struggled for centuries to come. All struggled against arguments that they poorly understood, and when they appealed to common sense, they were accused of ignorance.¹²⁹⁴ When astrology left the hands of Posidonius, it was not just a method of divination but a general theory of the forces of nature, as flexible as and more universal than the modern discovery of the micro-organisms which cause fermentation.

It was at this time that educated people, who earlier had been hostile or indifferent, adopted astrology. Posidonius was a renowned scholar and intellectual who included many Roman aristocrats among his students. The curiosity of these dilettantes gave rise to a new generation of practitioners, people expert at all sorts of numbers and geometric figures who reclaimed the title "mathematicians," which had fallen into disuse since the school of the Pythagoreans disappeared. These astrologers had nothing in common with the old street-corner "Chaldaeans".

Astrology and Roman Society

Charlatans had long exploited popular credulity in Rome. We can no longer recognize their nationality under their common designation of "Chaldaeans," but we would hardly be fooled in thinking they were Greeks, drawn by the nascent fashion for Hellenism. Greek literature and astrology arrived at the same time, literature to conquer the aristocracy, astrology, the plebeians. At first, the educated had only disdain for the soothsayers, the "astrologers of the circus."¹²⁹⁵ Cato the elder advised his audience of farmers to avoid the Chaldaean astrologers.¹²⁹⁶ In 138 BCE, the praetor peregrinus, Cn. Cornelius Hispalus, thought it necessary to intervene. By virtue of his right of jurisdiction over foreigners, he "decreed by edict that the astrologers must leave the city and Italy in ten days, seeing that, in the name of a fallacious interpretation of the stars, these people threw a lucrative blindness by their lies over light and incapable minds."¹²⁹⁷ Doubtless we do not have the reason for the magistrate's thought. Concerns for the citizens' purses can only have been a pretext.

The dangers of unsupervised astrology appeared more clearly as belief in it increased among the upper classes. The invasion of astrology may be attributed, for the most part, to the influence of Posidonius, as noted above. It seems to have happened quickly enough. By the time of the civil wars and revolutions started by the speeches of the Gracchi, one could no longer believe in a divinely maintained equilibrium, a simple cause and effect relationships between desires and actions, on the one hand, and consequences, on the other. Instead, one believed in Fortune, which was chance according to some, predestination according to others. When Cn. Octavius was assassinated by Marius' killers, a "Chaldaean astrological diagram" was found on his body. Faith in it had kept him from fleeing Rome.¹²⁹⁸ Nevertheless, the astrologers did not replace the Etruscan haruspices. Instead, since the two often worked together, the haruspices borrowed whatever would rejuvenate their discipline from astrology, whenever they needed it.¹²⁹⁹ One can cite the haruspices who worked with Gaius Gracchus, with Sulla, and with Julius Caesar. We do not know who their staff astrologers were.¹³⁰⁰ We know, however, from Sulla himself, that he expected to die at a time predicted by the Chaldaeans.¹³⁰¹

*I know the Chaldaeans predicted to Pompey, to Crassus, to Caesar himself that each of us would not die, save in old age, in peace, with glory! At this point, I am stupefied that there is still anyone who believes these people when we see their insane predictions contradicted by reality every day.*¹³⁰²

It may be said in passing that there is nothing surprising about this except Cicero's surprise. People believe whatever gives them hope and faith always escapes from the failures of experience. Sulla believed that the goddess Venus favored him. Julius Caesar believed that he was descended from her. Suppose an astrologer knew this and told one of them that the planet Venus favored them and guaranteed them long life and prosperity. They might well believe in their star for no better reason.¹³⁰³ Cicero himself scoffed at astrology when he wrote as a philosopher. When he wrote as an orator, however, he used the astrologers' technical vocabulary. When he put the souls of famous men into the Milky Way, he was only repeating one of Plato's myths. However, when he said that the planet Jupiter was "a thriving torch and good for the human race" and the planet Mars "a red fire and feared upon the earth,"¹³⁰⁴ he was putting technical language into the mouth of Scipio Africanus.

Astrological ideas began to come into everyday use, to become part of the intellectual baggage of ordinary people. They slipped in as part of literature, where astrology and astronomy were mixed together. "Catasterisms," which had been greatly increased by the Alexandrian writers, seemed like new subjects to the Romans and stimulated their imaginations. They especially entered popular culture through a big opening when the rules were put before the public. The major popularizers were Varro, the encyclopedic writer of the era, and Nigidius Figulus, his contemporary and an eager student of all occult practices.¹³⁰⁵ The comet which appeared at Caesar's death encouraged the spread. As a "prodigy," it was officially interpreted by the haruspices. However, we may believe that the astrologers also had something to say. The astrologers benefitted most from the grave debates which were inspired by the comet. What was Rome's destiny? When was it founded and how long would it last?

Would there be a renewal of all things? If so, would it take place at the end of the astrological “great year?” The Stoics certainly placed their ἀποκατάστασις (*apocatastasis*) or “renewal” at the end of the “great year.” Caesar’s heir chose the explanation which fit the literary tradition best and which was the most useful for starting a system of dynastic apotheosis. He “wanted the comet to be the soul of his father.”¹³⁰⁶ The astrologers, however, pleased him no less than the haruspices did¹³⁰⁷ or the Sibylline Oracles¹³⁰⁹ when they announced the beginning of a new order. He promoted the idea that the comet was also his own star, the horoscope of his new birth as the adopted son of Julius Caesar.¹³⁰⁹ The astrologer who created this “interior joy” for him was probably Theagenes, who was already his confidant and nearly became his collaborator. In effect, Augustus asked astrology to prove that his power was legitimate, surely an original use for the discipline. Suetonius says “He soon such confidence in his destiny that he published his and struck silver coins with the sign under which he was born.”¹³¹⁰

The comet of 44 BCE gave excuses to everyone. It excused those who glorified Julius Caesar and his adopted son, as well to those who announced a new “*saeculum*” (era) in the name of Etruscan doctrine, and those who predicted bloody civil wars and revolutions in the name of astrological orthodoxy. If eras of crisis promote fatalism and superstition by baffling rational foresight, the Romans made rapid progress in learning to trust the occult arts between the Ides of March and the Battle of Actium. Haruspicy and astrology disputed this faith. Haruspicy appealed to its tradition, astrology, to its novelty. The Greeks were more ingenious, the Etruscans, more skillful. Astrology was better for outlining an entire life, but the haruspices had the advantage when it came to dealing with incidents within life, particularly with those supernatural warnings called “prodigies.” Mathematics had no place for “prodigies.”¹³¹¹ There were also admirers who tried to compare or combine the two disciplines. Nigidius Figulus had already done this, and Varro, who knew everything, also combined everything. His friend, who was the friend of Cicero as well, Tarutius Firmus, who cast the horoscope of Rome several times,¹³¹² may have been an Etruscan (as his name implies) whose curiosity went beyond haruspicy. In Rome, there was contact, rivalry, and reciprocal adulteration between the two. One could see how much one had reacted to the other. They must have met on common subjects, such as the interpretations of lightning strikes and other “celestial” phenomena or locating astral or divine influences in the organs of animals.¹³¹³

During the time of Augustus, astrology was definitely in fashion. Everyone was interested enough in it to know something. Writers multiplied allusions which they knew would be understood even by ordinary people. The stars never had a greater place in literature. Catasterism or being turned into a constellation, following Alexandrian writers, became the normal end to many legends and the ordinary form of immortality promised to famous men.¹³¹⁴ The stories about the famous diviners of mythology, Melampus, Teiresias, Calchas, Helenus, were updated to include astrology, or they would have lost their reputations.¹³¹⁵ The author of the *Georgics*, Virgil, is unrivaled in his use of astrology. Horace, however, shows some coquetry in showing that he knows something about astrology. It was not a disciple of Apollo, but a disciple of the Chaldaeans who would class himself among the “children of Mercury,” who congratulate Maecenas for having escaping the deadly influence of Saturn through the protection of Jupiter. Confused, probably by the disorder of the calendar before Julius Caesar’s reform, he asked if he had been born under Libra or Scorpio, “the dangerous part of a horoscope,” or Capricorn, “Tyrant of the Hesperian Sea.”¹³¹⁶ Maecenas and he had consulted some astrologer who had found “incredible agreements” between the horoscopes of the two friends.¹³¹⁷

Propertius, like Horace, was not willing merely to allude to the details of astrology. He put an astrologer on stage, the son of the “Babylonian Horops,” who knew “the happy star of Jupiter, that of the violent Mars, and the star of Saturn which weighs on every head, and the one which brings Pisces, the impetuous sign of Leo and Capricorn which bathes in the waves of Hesperia.”

His mathematician was one of those who were good at “turning the airy bowl of the signs,” the “redoubtable signs of the oblique route.” To inspire confidence, he thundered against charlatans. He gave Propertius a consultation which ended by warning him to fear the “sinister back of Cancer.”¹³¹⁸ Perhaps the pleasant poet only seems to believe. Perhaps he brought this threat from an astrologer’s desk and took it seriously. The author of *Ibis*, Ovid, displayed his enemies’ horoscope and used the language of an expert. He said:

*You are born unfortunately and no star was propitious or easy at your birth. Venus did not send its rays at that hour, nor Jupiter. Neither Sun nor Moon were in a good place, and the one which brilliant Maia engendered with great Jupiter did not dispose his fires in a way useful to you. Upon you the star of Mars weighs heavy (which only presages brutalities and never peaceable things) and the old man with the scythe. Your natal day, in order to be completely sad, appeared nasty and black on a bed of clouds.*¹³¹⁹

One need only add numbers to make this a professional's document.

Descriptions of the stars, of real celestial phenomena and of prodigies of interpretation like the one Ovid gave above became a literary fad.¹³²⁰ Astrology and astronomy found clients and even practitioners in the Imperial court, and it set an example for high society. Germanicus used his spare time to translate Aratus' *Phaenomena* into Latin verse, as Cicero had done earlier. Germanicus may even have corrected Aratus. Probably Manilius wrote his *Astronomica* for the highest circles. It is a singular mixture of eager faith and dubious science. It deserved to survive as a literary work, to the discredit of the doctrines which this casual astrologer learned hastily. We do not know if Manilius paid court to Augustus, or to his heir presumptive, Tiberius,¹³²¹ so that the pen would not be snatched from his hands by fear of Tiberius' measures against astrologers.

Astrology was, in effect, an aristocratic practice. It seemed made to arouse and nourish great ambitions. Tiberius, we are told, knew this from his own experience as well as Augustus'. We are told that when in disgrace and exiled to Rhodes, he took lessons from the "astrologer Thrasyllus." Later, he divined that Galba would be a man "who would one day taste the empire."¹³²² The legend became confused. Eventually it claimed that Tiberius had a sort of black cabinet, where astrologers brought the horoscopes of their customers. Tiberius or Thrasyllus would examine the horoscopes and note the people with high destinies.¹³²³ Many stories grew up around the oracles, tending to show that they were infallible and that it was pointless to try to escape their decrees. In a similar way, astrology, once it was accepted, was thought to outline a famous person's career in advance. Believers were happy to see predictions come true in some unexpected way, in spite of doubts and precautions. For example, Tacitus tells us that when Tiberius left Rome for Capri in 26 CE,

*Those who understood astrology assured everyone that Tiberius left Rome because of the movements of the stars, which made his return impossible. This caused the ruin of many people who believed that he would soon die, and spread rumors to that effect. They did not foresee a seemingly impossible situation, that for eleven years he would voluntarily exile himself from his country. One saw from this how close art is to error and how truth is hidden in obscurity. The announcement that he would not re-enter the city was not false, but the majority of the people who acted in this way did not understand its meaning.*¹³²⁴

Astrological consultations invaded historical writings. It was a service to writers who wanted curious stories and psychologists who wanted to repeat rumors heard in the antechamber. Sometimes the story is about Caligula whom "the astrologer Sulla told that his death was definitely approaching"¹³²⁵ Sometimes it is Nero, to whom "the astrologers had predicted that one day he would be destitute."¹³²⁶ His mother, Agrippina, had been told "that he would have the empire and kill his mother,"¹³²⁷ or she waited for "the favorable moment indicated by the astrologers" to proclaim him emperor.¹³²⁸ One story said she had countered the dangers of a comet by organizing a series of executions as the equivalent of human sacrifices, on the advice of the astrologer Balbillus.¹³²⁹ Tacitus knew that "the boudoir of Poppaea employed a number of astrologers, detestable furniture of princes' households."¹³³⁰ Otho visited Poppaea often and it may have been there that he met the astrologer Ptolemy, who later went to Spain with him and encouraged him to revolt against Galba.¹³³¹ Next came the Flavians, all three of whom had their astrologers and tolerated no others in Rome. Vespasian hired Balbillus again.¹³³² Titus was skilled enough to compare two ambitious men's horoscopes himself. He was also generous enough to pardon them and warn them "of a danger which would come to them from another."¹³³³ Domitian was like another Tiberius and "examined the days and hours of leading citizens' horoscopes."¹³³⁴ He also kept notes on the horoscopes, for he put Musonius Pomponianus to death for having an imperial horoscope, something already known in Vespasian's time.¹³³⁵ He spared Nerva, however, because an astrologer had told him that the old man had not long to live.¹³³⁶ He did not realize that Nerva did not need to live long to succeed him. A man who seeks to kill his

successor is quite silly ¹³³⁷ and historians had fun at Domitian's expense. One story is that he had arrested "the mathematician Ascloterion," probably for predicting Domitian's death. Domitian badly wanted to prove him a fraud, but the attempt backfired.

*He asked how he, Ascloterion, would die. Ascloterion replied that he would be torn to pieces by dogs. Domitian ordered him executed at once and cremated carefully. However, when his orders were carried out, a sudden storm came up and over-turned the pyre, and dogs tore up his half-burned corps.*¹³³⁸

According to Suetonius, Domitian had known the year, hour, and day when he would die.

He was still very young when the astrologers predicted all this to him, so much so that one day at dinner when he declined to eat mushrooms, his father teased him, saying he did not know his destiny well if he did not fear the sword instead.

In effect, on the day before his death, he displayed his knowledge of astrology, by announcing

*the next day the Moon would be covered with blood in Virgo and that when it happened, there would be an event which people would discuss throughout the whole world.*¹³³⁹

Stories of emperors consulting astrologers did not end with Suetonius' biographies. Far from it! His continuators, the authors of the *Historia Augusta*, needed to temper their boring half-barbarous prose with stories of all kinds, and astrology was not forgotten. Consider Hadrian, who was curious about everything, and especially himself.

*He thought that he knew astrology so well that he could write on the Calends of January everything that would happen in the rest of the year. Thus, in the year he died, he wrote down what would take place down to the very hour he died.*¹³⁴⁰

The writer credits this detail to Marius Maximus, a writer who, on this scale, we may classify as a mystifier. It may be true that Hadrian believed in astrology. However, if, as his biographer says, he included astrologers in the circle of scholars, artists and literary people in which he lived, it was also, I suppose, to give himself the pleasure of competing with Favorinus, the most subtle quibbler of the age, who willingly exercised his deadly wit upon astrological dogmas. Marcus Aurelius, we are also told, consulted astrologers about the sexual secrets of Faustina, his wife. Upon their advice, he bathed her in the blood of the gladiator who fathered Commodus.¹³⁴¹ This is the point where the story-tellers begin to confuse astrologers with magicians.¹³⁴² Then there was Septimius Severus, who before he had even become governor of Gallia Lugdunensis,

*studied the horoscopes of eligible young women, since he was himself expert in astrology. When he found a woman in Syria whose chart said she would marry a king, he asked for her hand – it was Julia – and he got her through the mediation of several friends.*¹³⁴³

As one can see, astrology, a universal system of knowledge, perfected the art of success through marriage with a woman. It also made it easy for a man who knew his destiny in advance to pass his rivals by.¹³⁴⁴ Severus knew his destiny well enough to know that when he left for Britain, he would never return. He knew it from his horoscope, which he had ordered painted on the ceiling of his praetorium.¹³⁴⁵ The same stories are told of Caracalla as of Tiberius, about deaths ordered according to the "diagrams of the planet's positions."¹³⁴⁶ Alexander Severus was also an expert in astrology. We are told he founded academic chairs of astrology funded by the State, with scholarships for students.¹³⁴⁷ Historical anecdotes made him into a pedant, with some of the attitude of the astrologer who, eyes turned to the sky, fell unexpectedly into a pit.

The astrologer Thrasybullus, his close friend, told him that he was destined to die by the sword of a barbarian. At first, he was enchanted, for he was to die a warrior's death, worthy of an emperor. Then he

*spoke of all the famous men who died by violence, citing Alexander, his namesake, Pompey, Caesar, Demosthenes, Cicero, and other famous people who did not have peaceful ends. He exalted it to the point that he judged himself comparable to a god if he died in battle. However, events fooled him, for he was killed by a barbarian's sword, in the hand of a barbarian buffoon, and in wartime, but not as a combatant.*¹³⁴⁸

The first two Gordians did not have time to reign, but they knew, it seems, their destinies.

*The elder Gordian consulted an astrologer one day about his son's horoscope, who told him that his son would be the son and father of emperors, and an emperor himself. When the elder Gordian laughed, the astrologer showed him the arrangement of the stars and cited passages from old books to prove that he told the truth. He even predicted, to the younger and the elder, the day and manner of death and the places where they would die, and this with firm confidence of being right.*¹³⁴⁹

We can eliminate these dull stories, fishy anecdotes and sayings forged after the event from history, and keep the benefits. That is, we can use them to judge the state of belief and the dangers which were presented (from the point of view of national security) by a method of divination reputed to be infallible. The exact truth of the facts does not matter much here. What counts is the idea that astrology could predict the future precisely. This idea is as important as what really happened and had more consequence. It encouraged others to consult astrologers. It was not the simple whim of a tyrant which made Tiberius set his police on the heels of the astrologers. Already, fifty years earlier, Agrippa had "chased the astrologers and magicians from the city, at a time when imminent war between Antony and Octavian excited peoples' imaginations."¹³⁵⁰ By the end of his reign, Augustus had forbidden private consultations by any sort of diviner. Consultations about someone's death, even performed in public, were forbidden.¹³⁵¹ The measure was wise, as useful to ordinary families as to the state, but impossible to enforce. Take, for example, the trial of Drusus Libo (16 CE), whom Tiberius decided to treat severely. Libo was a young fool whose ambition was exploited by diviners – astrologers, dream interpreters and necromancers.

*The Senate issued decrees to chase the astrologers and magicians from Italy. One of them, L. Pituanus, was thrown from the Tarpeian Rock. L. Marcius was brought to the Esquiline Gate by the consuls and there, after sounding the trumpets, he was tortured in the ancient fashion.*¹³⁵²

The astrologers learned to hide a little better. Four years later, the trial of Lepida revealed that this aristocratic adulterer and poisoner had also "investigated, by means of Chaldaeans, the family of Caesar."¹³⁵³ There were new scandals under Claudius. Lollia, who had competed with Agrippina to marry Claudius, was accused, at the instigation of Agrippina, of consulting "Chaldaeans, magicians, and a statue of Apollo of Claros about whom Caesar would marry."¹³⁵⁴ Scribonius was exiled with the usual accusation of "having sought to know, by means of astrologers, when Caesar would die." After this, it was decided to expel the astrologers from Italy once again, and there was a "rigorous but useless senatorial decree" on the subject.¹³⁵⁵

Persecuted astrologers became all the more interesting, and, even though expelled from Italy, one could always consult them by letter. Tacitus tells us about one of these exiles, Pammenus, "famed in the astrological art and thus with many connections," who received messages from, and sent replies to, some Romans in Rome. They were Anteius and Ostorius Scapula, who were denounced to Nero as conspirators "studying the destiny of Caesar."¹³⁵⁶ The astrologers showed spirit – or foresight – the day when Vitellius, to punish them for encouraging Otho, "issued an edict ordering them to leave Rome and Italy before the Calends of October. A lampoon was immediately pasted up, defending the astrologers to Vitellius Germanicus, predicting where he would be on the same Calends."¹³⁵⁷ The mockers were mistaken, for Vitellius lived for more than the three months indicated. The expulsions began again under Vespasian, who, while he had his own astrologers, did not want to let the others exploit the public.¹³⁵⁸ Domitian honored the astrologers by expelling them at the same time, and in the same document, as he did the philosophers.¹³⁵⁹

It goes without saying that all this public uproar, this intermittent harassment, did not discredit

astrology. It increased its prestige and the place it held in public preoccupations. The doctrines which frightened the rulers so much could no longer pass for games. For example, the most frivolous of women, those least capable of understanding the basics of astrology, fell in love with the great art suspected by the police. They did not renounce their other superstitions, Juvenal says,

*but it was the astrologers in whom they have the most confidence. Anything said by an astrologer passes in their eyes as coming from the spring of Ammon, since the oracles of Delphi are silent and the human race is condemned to be ignorant of the future. The one who prevails over all the others is the one who has often been exiled, whose friendship and whose big expensive grimoire has caused the death of that great citizen, Otho. People have confidence in an astrologer's skill if his wrists have jingled with iron chains, if he has done time in some military prison. No mathematician can be a success if he has not been condemned. Those who are not put to death may have the good luck of being imprisoned on an island in the Cyclades, and perhaps returning from tiny Seriphos. Look at the man whom Tanaquil consulted about the slow death of her jaundiced mother, and her inheritance. When will she bury her sister and uncles? Will her beloved survive her? This is the greatest favor which the gods could give. This woman knows what will come from the threat of Saturn, what position with Venus makes it favorable, which months mean losses and which hours bring gains. Be careful to avoid the woman who holds an ephemeris in her amber-encrusted hands. She no longer consults astrologers, but is consulted by others. If her husband leaves to take up a command or to visit his hometown, she will not go along unless the calculations of Thrasyllus give permission. If he wants to go for a drive, even just a mile outside of Rome, she checks the hour in her book. If he scratches the corner of his eye, she inspects his horoscope before demanding a purge. If she is genuinely sick in bed, she will not eat save at the times listed by Petosiris as favorable.*¹³⁶⁰

Juvenal is given to hyperbole, but we may believe that he would not exaggerate the attraction of the forbidden fruit. Attacks and jokes are a sign of popularity. It was the "glory" of the period. There are some funny stories in the epigrams of Lucillus, a contemporary of Nero, who loved to make jokes about astrologers. There is one, for example, about the astrologer Aulus, who, when he found out that he had only four hours to live, added a fifth out of respect for Petosiris.¹³⁶¹

This Petosiris (who became the breviary for the most highly trained astrologers) was supposed to have been an Egyptian priest, who lived seven hundred years before the Common Era. He supposedly collaborated with Nechepso, a no less fictional king and prophet. The book which they supposedly produced was a large book, cut up into extracts, in the form of ephemerides or almanacs. It was supposed to have been discovered in the priestly archives of Egypt. In reality, it was invented in Alexandria, like all the other apocrypha, by frauds who wanted to profit from the growing fashion for the cults and traditions of the Nile by claiming for Egypt the fame of the science said to be Mesopotamian. Whether it was published in the time of Sulla or a century later,¹³⁶² from that time astrology, considered to be an inheritance of the two most ancient eastern civilizations, had a greater certainty. It also enriched itself with a new branch, iatromathematics or astrology applied to medicine. Every doctrine, science or religion which could change itself into a medical art achieved success very quickly. Little known, the prescriptions of Nechepso won a fortune for the physician Crinias of Massilia, who

*by regulating the diet of his clients according to the movement of the stars, following a mathematical ephemeris and observing the hours, left to his heirs six million sesterces, after having spent the same amount rebuilding the walls of his native city and on other constructions.*¹³⁶³

Pliny, who did not like physicians, attested to the taste for astrology among his contemporaries, by deploring it. It had become a religion for those who had no other. From one end of the world to the other, he said, people invoked Fortune at every moment.

However, one part of humanity scoffed at Fortune and based its future upon that star which laid down the law for its birth, thinking that a divinity had decided everything at birth and did not concern itself

*with the rest of life. The idea began to spread and the masses, people educated and uneducated, hurried its course.*¹³⁶⁴

Astrology was all things to all people. In the crowd which followed the tastes of the day, some took astrology for a natural science, others for a religion, still others for an improved variety of magic. All flattered themselves, basically, that they were born with the stars and had their stars in the sky. The simplest people thought that each person literally had his own star. Its brightness reflected his earthly status. It was born with him and fell from the sky when he died.¹³⁶⁵ Those who had a basic understanding of the movement of the stars and knew the moments at which they were born found their nourishment in ephemerides adapted to all sorts of purposes. Finally, educated people, those who wished to base everything in rational principles, had complete satisfaction when the greatest astronomer of the era, Claudius Ptolemy of Alexandria, organized and purified astrology. In the middle of the century of the Antonines, he made astrology into a collection of scientific doctrines. He arranged the facts of experience into theories bearing the imprint of the most ingenious speculations of the Pythagorean, Peripatetic, and Stoic philosophers.¹³⁶⁶

Faced with this general development, the juriconsults applied (or did not apply, depending on the case) repressive laws. After the publication of Ptolemy's *Tetrabiblos*, it was hard to maintain – as had been Ulpian's professional habit¹³⁶⁷ – that all the “mathematicians and Chaldaeans” were con men exploiting fools. However, a science can be both real and dangerous. It was exactly because they believed in the power of astrological calculations that the jurists opposed astrology so strongly. However, before the fact of astrology, jurisprudence hesitated. Lawmakers thought that one should not punish knowledge but practice. Later, after this fit of indulgence, they considered both the astrologers and their clients as offenders. Punishments were graded depending on the importance of the consultation. Researching the “health of the emperor” was always a capital offense.¹³⁶⁸ Under Commodus, Septimius Severus avoided being condemned for this.¹³⁶⁹ In spite of the protests of all astrology's theoreticians, what kept the legal scholars from classifying astrology among the harmless or useful pursuits, was that the public stubbornly identified it with magic. Magic was anti-social by nature, since it was the art of suspending all laws, whether divine, human or natural in order to violate them. “Chaldaean” and “magus” were synonyms from the beginning, and the “Egyptians,” with their magical chemistry and pharmacopeia, deserved the reputation of sorcerers even more. It was after capturing Alexandria (296 CE), where books and practitioners of the occult sciences swarmed, that Diocletian issued an edict which is substantially preserved by the legists of Justinian. “It is in the public interest that geometry be understood and practiced. However, the art of mathematics deserves to be condemned and is completely forbidden.”¹³⁷⁰ The rulers of the Late Empire periodically renewed edicts which struck indiscriminately at all who consulted diviners. The *mathematici* were part of the group, since the word was a synonym for “Chaldaeans,”¹³⁷¹ that is, magicians, as well as “astrologers.” Sometimes astrology is specifically targeted, as in the edict of 409 CE, from Ravenna, which ordered the books of the astrologers to be burned “under the eyes of the bishops.” Astrologers who had not converted to the Catholic religion be expelled, “not only from Rome but from every town.”

The mood which was usually encountered in the turmoil of the imperial chancery was not the religious zeal which here motivated Honorius. It was fear of what the politically ambitious might do with foreknowledge and fear that the ruling family might be bewitched. The astrologers therefore came up with a radical way to calm the worries of the police. They taught that the emperor was ruler of the earth for God and hence was not subject to the stars, who were lesser gods.¹³⁷² Firmicus Maternus, who dedicated his astrological treatise to a high civil servant under Constantine and Constantius, did his best to encourage this doctrine. He says:

You should give your responses in public and you should take care to warn those who come to you, in a loud voice, that you will not answer illegal questions. Be careful not to say anything, even if they do ask, about politics or the life of the emperor. For one must not, one is not allowed, to speak, moved by a criminal curiosity, of the state of the empire. Whoever answers questions about the destiny of the emperor is an evil-doer, deserving every punishment. One is not able to say or discover anything to say on this subject. You should know that whenever the haruspices are consulted about the emperor, and they want to answer the question, the entrails and the veins are thrown into complete confusion and

*cannot be interpreted. Likewise, no astrologer can find out the truth about the destiny of the emperor. For the emperor is not subject to the influence of the stars; he is the only person whose destiny is not in their power to pronounce. In effect, as master of the universe, his destiny is ruled by the will of the Supreme Deity. Since the surface of the earth is subject to the will of the emperor, he is himself a god, the principle god, doing and conserving all things. This is the reason for the confusion of the haruspices. The supernatural being whom they invoke, being of only average power, is not able to reveal anything about that superior power which resides in the emperor.*¹³⁷³

The reasoning is admirable and classes Firmicus among those whom popular speech calls malicious people clothed in white, that is, obvious mischief-makers. Firmicus may have been influenced by the Gnostics, who said that Christians were freed from domination by the stars by baptism, or by theologians who maintained that Jesus Christ was never subject to them. The problem was accepting, even believing, the claim. Firmicus seems to have forgotten that he had given an overview of the great men of history in his preface. There, he had shown that the masters of the world, like Sulla and Caesar, were masters because of the decrees of the stars. After that, he addressed a prayer to the Sun and the Moon and to the five planets, asking them to preserve the empire for Constantine and his heirs forever.¹³⁷⁴ If the stars had no power over the emperor, why ask them to do something they could not do?

Evidently these lawyer's tricks did not fool anyone and those who seemed to take them seriously no doubt had good reason to pretend to be naive.¹³⁷⁵ In later times as in earlier ones, astrological books – at least those which circulated privately – continued to be concerned with the life spans of the emperors and to give predictions useful to politicians. Common sense wanted the destinies of kings to be written in the heavens, not merely those of ordinary people. The art would have lost its prestige if it gave up these glorious risks.¹³⁷⁶ The astrologers did not want to give up their omniscience nor were they able to. Instead, they preferred to surround themselves with shadows and mystery. They made their students take an oath not to reveal the secrets of their methods. They pretended their teachings were like those of a mystery religion or the esoteric doctrines of Plato and Pythagoras.¹³⁷⁷ There was as much flirtation as prudence in these precautions.¹³⁷⁸ By the fourth century, astrology hardly needed special surveillance, because it was everywhere. It infiltrated all methods of divination, and many people even thought that oracles of the gods worked by astrology. From time to time, some scandal would remind people that the astrologers could not always see enough of the future to save their protectors from falling. When the prefect of Egypt, Parnasius, was disgraced under Constantine, it was probably for consulting an astrologer “about things one is not allowed to know.”¹³⁷⁹ Julian did not need an astrologer to know the hour that Constantius would die, since he was able to interpret for himself what was said to him by a nocturnal phantom, that Constantius would die when Jupiter entered Aquarius and Saturn was at 25° Virgo.¹³⁸⁰ In the famous trial of 374 an astrologer, Heliodorus, figured. Nearly uniquely, he was an informer, not a defendant. The “consultation about who would be the next emperor,” which so angered Valens, was done with a magic table and a ring hung on a string as a pendulum over it.¹³⁸¹ We are poorly informed about the details of the palace revolutions which took place between Theodosius and Justinian. However, the astrologer Palchus tells us that, in 484, the usurper Leontius chose his moment according to the researches of “two mathematicians.”¹³⁸² This story is one reason to believe that the astrologers continued to keep an eye, as earlier, upon the stars of the ambitious.

Astrology never had a direct hold on the masses but had all the luck in the Greco-Roman world that it could handle. The persecution, more virtual than real,¹³⁸³ to which it was subjected, never harmed it. If one were to look at the progress astrology made between Juvenal and Ammianus Marcellinus, in what concerns the inhabitants of Rome, the city which had the most trouble with astrologers, we are able to criticize the two authors, the one for exaggeration, the other for bad temper. Ammianus Marcellinus, when he came to Rome in 380, was scandalized by the vices of the Roman aristocracy, weak, addicted to games, sterile, unbelieving, superstitious.

*Many of them deny the superior powers in the sky, but never appear in public, neither to dine nor to bathe, without consulting their ephemerides to know, for example, where the sign of Mercury is or what part of Cancer holds the Moon as it crosses the sky.*¹³⁸⁴

According to our severe provincial, the men believed what the women had in Juvenal's time. A certain belief in astrology was part of common sense, and only excessive belief was superstition.

II

Astrology and Science

We should not think that astrology met only social resistance when it peacefully invaded its preferred environment, the educated mind. The absence of opposition implied indifference, and doctrines which no one discussed died a peaceful death. Greek astrology, shaped by Stoicism and furnished with rational principles from the Stoics, was not considered a trivial superstition by the other philosophical schools. From the beginning, it was part of the scientific milieu, a place which it could not conquer but where it could defend itself. At first, the debate was carried on by the New Academy. Later it was continued by the Sceptics, the neo-Pyrrhonians, and the Epicureans. It was opposed by physicists who thought it a repulsive crooked addition to astronomy, by moralists who thought its fatalism harmful, and finally by theologians who found it incompatible with their dogmas.

From Carneades to the Church Fathers, the struggle did not stop for a moment. However, they were running in place, so to speak, for the first assaults created all the arguments, which were repeated without change. There can be no question here of following, step by step, era by era, the strategy of the combatants and the relationships between the arguments.¹³⁸⁵ It is enough for us to put them into order and examine their value logically. Perhaps we will see the major parts after distinguishing the first attempt at a complicated construction. These parts are, at the same time, the most in ruins, since the opponents of astrology were unable to make a suggestion which the astrologers would not use to improve their methods. The opponents would thus look ignorant, using outdated arguments.

Let us leave to one side, for now, the concern which dominated and perpetuated the debate, the need to separate human free will and astrological fatalism. Greek astrology was just as fatalistic as Stoic philosophy, no more, no less. Stoicism had an impact upon astrology's theories and, against the moralists, it could shelter astrology behind moralists of great repute.

It was the Stoics, too, who put beyond reach, so to speak, the main principle, the first and last reason for faith in astrology. The unity of every part of the universe; the similarity of the part to the whole; the common ancestry of humanity and the universe; the intelligent fire which animates the stars, whence (in turn) descends the spark of life; the affinity of the human body with the elements in which they swim, and which are (in turn) subject to the influence of the great cosmic regulators; the theory of the microcosm, in short, furnished an inexhaustible reservoir of responses to hesitant attacks. However, between the principle and the consequences there was room for some objections. Mesopotamian astrology was based upon naive ideas. They dated to a time when the sky was just a cover to the earth. The stars were close to each other and the planets moved among the stars much as shepherds move among their flocks. Greek science expanded the universe and the influence of the stars, receding to enormous distances, were only a theory to common sense. The planets are too far away, Cicero said, at least the upper planets were, and the stars were farther still.¹³⁸⁶ The astrologers answered that the Sun and Moon are far away, too, and still managed to move the seas.¹³⁸⁷ No doubt, the Mesopotamians had not known how large the universe was. The planets, however, which they had believed to be small, were now known to be vastly larger, which compensated. It was enough to identify the planetary action with light to maintain the astrological dogma. Wherever light could penetrate, planetary action did too.¹³⁸⁸

There was a vulnerable point in this victorious response which the opponents of astrology discovered. If the light of a star radiates in all directions, why does its astrological action only take place at certain angles, the aspects? The astrologers were not short of reasons, but they were of the mystical sort. Because there were seven planets, universal harmony required that there be seven senses or aspects and no more.¹³⁸⁹ No doubt, pure logicians were not persuaded by an argument of this sort. However, the astrologers had Pythagoreans and lovers of mystical reasons instead. Was it certain that there were only seven planets? If there were more, were not the calculations of the astrologers, which did not take them into account, false? ¹³⁹⁰ The astrologers were able either to avoid the theory, or to respond that the action of these planets was negligible so long as they were invisible.

Moreover, they were best understood as comets when they appeared. No doubt, it would have been better to enter all the stars into the calculations of the astrologers,¹³⁹¹ rather than contenting themselves with the planets or with the signs of the zodiac. However, what science ever attained its ideal? Modern astronomers are no more able to bring into their calculations the infinite network of attractions assumed by the theory of universal gravitation.

The discussion may have shaken the idea that the stars did affect the earth, but it was left standing. Even the more precise idea that the astrologers, if they could not calculate all the influences, at least saw the principal ones, was not destroyed. A delicate point arose, however, a redoubtable question which the opponents of astrology put to good use. How did one know the nature of the influences? How did one know which planets were benefic or malefic, and how much so in a given instance?¹³⁹² How to justify the ridiculous associations of ideas attached to the purely imaginary shapes of the constellations of the zodiac? The reciprocal influence of the planets upon the signs and of the signs on the planets? They were long known to be at great distances from one another and could not have lived together, save by an effect of perspective? The astrologers had answers of several sorts. They told positivists that the suspected facts were based upon experience, upon a series of observations lasting for centuries. Some claimed the records covered the cycles making up the lifetime of the universe,¹³⁹³ which, finished, to start over again. When one has removed the unbelievable numbers of the Mesopotamians, enough remains for a respectable tradition. Cicero felt this when he took shelter behind Panaetius to say:

*When one goes on to say that the Babylonians have observed the stars and the horoscopes of children for 460,000 years, it is a falsehood. If they were in the habit of doing so, they would not have stopped. There is no guarantee that they did what they say, or that they could do it.*¹³⁹⁴

The argument is rather weak. It is not necessary for something to be done in the present to show that it was done in the past. When it was in the past, the astrologers were not wrong to maintain that there were Mesopotamian records in existence and that it was not enough to ignore a tradition to suppress it.¹³⁹⁵

The mystics were even easier, since they credited all human inventions to divine revelation. There were traditions of all sorts on this point, and none more confused than those on astronomy and astrology. One idea dear to the Greeks was that divination had been invented by rebel or overthrown gods. Foreseeing the future, after all, had the goal, whether admitted or not, of changing that future.¹³⁹⁶ For example, Atlas, son of Uranus, or the Titan Iapetus, father of the Pleiades and of the Hyades, or by Prometheus, maker and teacher of humanity, or even by the centaur Chiron were credited with inventing divination. At least this is what the Orphics said, if one did not substitute the revelators Orpheus or Musaeus or Eumolpus. Chiron supposedly became the constellation Sagittarius in the zodiac. The certificate of inventor of astrology was up for auction, and judged by the myth writers. However, the rights of Mesopotamia and of Egypt were not diminished in this way. The neo-Egyptians invoked revelation by their Hermes, Thoth, or their Asklepios, Eshmun, who instructed Petosiris and of Nechepso. According to the euhemerists, the Mesopotamians credited Ishtar or Venus, who had taught astrology to Hermes, who, in turn, brought together Mesopotamia, Egypt, and the Greco-Roman world. All these legends, mixed up and retold by the story tellers, who borrowed from each other, lent themselves to these fantasies. The palm disputed by the Egyptians and the Mesopotamians was taken from them by the Africans, under the pretext that Atlas was a Libyan or a son of Libya.¹³⁹⁷ In making Herakles-Melqart a disciple of Atlas, one made him a sort of traveling salesman of astrology, planting it wherever the myth writers wanted to send him.¹³⁹⁸ With his Phoenician connections, Hercules voluntarily entered the Mesopotamian circle of attraction. Even the Jews – those of Alexandria, probably – brought their own contribution, in crediting the Mesopotamians with the role of propagators of the science of the celestial bodies, to the detriment of the Egyptians, Phoenicians and Carians.¹³⁹⁹ According to the Jews, Abraham brought this science from Mesopotamia, his home country, to Egypt. The Phoenicians, in the person of Cadmus, instructed by the Hebrews, brought astrology to Boeotia, where Hesiod had collected some bits.¹⁴⁰⁰ In a word, all the gods, heroes, kings and founders of ethnic groups¹⁴⁰¹ made contributions to the greater glory of astrology and astronomy. They were nearly always confused under a single name and gave one another mutual support.¹⁴⁰²

Every faith engenders its own proofs and does not hesitate, at need and in the interest of the cause, to give them a suitable air of antiquity. To support their inventions, the writers of apocrypha composed treatises on astral science under the names of Orpheus, of Hermes Trismegistus, and of more ancient patriarchs and philosophers.¹⁴⁰³ The admirers of revelations and of unbroken traditions, thus dug-in, had nothing to fear from the rare skeptics who had not been converted by the example of the great astronomer and astrologer, Claudius Ptolemy. There was a sort of universal consent, aided by revelation and experience at the same time. It defined the nature, quality and quantity of the effluvia or sidereal influences. The most inept associations of ideas were justified in this way. The more bizarre they were, the more obvious it became (to some people) that they must have been revealed.¹⁴⁰⁴ So it was that the essential parts of the astrological toolbox, which were found to be, at the same time, the most indispensable and the most unreasonable, were not only imposed by faith, but escaped discussion for the most part. I speak of the planetary domains encrusting the zodiac and also of the specific properties of the “places” or houses of the sky. A dissident astrologer, of course, might say: why do the planets have houses when they are always moving? ¹⁴⁰⁵ However, the adversaries of astrology did not know how to persuade the sort of people who thought physics was an occult art. Still, one may imagine, in a pinch, that the stars genuinely present on the radius of a circle exercised a combined influence, using the theory of rectilinear effluvia with the Earth situated at the center of a sphere. This was nearly intelligible with the ricochets that presume the ballistics of the “aspects.” However, it became functionally and irremediably absurd when substituting houses, exaltations, ὅρια and other imaginary entities for the real presence of the planets.¹⁴⁰⁶ The rationalists lacked a good opportunity to reason.

Once the general principles of astrology were admitted, objections only showed the astrologers how to perfect their procedures. Cicero assures us that the astrologers did not take positions into account, only the times. For them, all who are born at the same time, no matter in what country, have the same destiny.¹⁴⁰⁷ Favorinus and Sextus Empiricus say the same ¹⁴⁰⁸ It is likely that Cicero had not kept up to date with the technical developments of astrology in his era. Those who repeated his objections were certainly mistaken. We know too well what place the question of climes and of oblique ascensions (ἀναφοραί) play in Manilius' poem and in other treatises later in the Christian era. The astrologers had profited from the criticism and deserved it no longer. Nevertheless, it was fair, if addressed to the genuine Mesopotamian astrologers. They had no idea of the climes. However, they believed that the same events did not have the same effects everywhere. They wrote on their tablets: “If the Moon is visible on the thirtieth day of the month, it is a good omen for Akkad, bad for Syria.” ¹⁴⁰⁹ Likewise, the magi of Xerxes assured him that an eclipse of the Sun threatened the Greeks, while an eclipse of the Moon was favorable for the Persians.¹⁴¹⁰

However, the progress of geographical and historical knowledge provided material for a multi-pronged attack, very embarrassing, which almost certainly was formulated by Carneades.¹⁴¹¹ Using the simplest elements, it may be summarized as follows. First, there are individuals who, although born under different circumstances, have the same fate. Second, there are individuals who, although, born under similar circumstances, have different aptitudes and different destinies. Let us see the use to which this engine of war was put.

If each individual has his or her particular destiny, determined by his or her chart, how do groups of people come to die all at the same time, when they are not all born in the same place, or at the same time? In a shipwreck, for example, or a battle or an assault? Was everyone (Cicero said) ¹⁴¹² who died at the battle of Cannae born under the same star? The astrologers responded by saying that universal influences over-power the weaker influences which fashion individual horoscopes. Storms, wars, epidemics, disasters of every sort, prevail over the results of smaller scale calculations. Also, Ptolemy explicitly recommended making an allowance in personal genitures for the effects of “catholic” (universal) phenomena.¹⁴¹³ The response was easy, since the dominance of the general over the particular, of the whole over the part, seemed to be common sense. However, the offensive argument was not exhausted. How can it be, Carneades ¹⁴¹⁴ said, that there are whole peoples in which everyone shares the same temperaments and habits? Were all members of each ethnic group born under the same sign? If Virgo makes one have pale skin and smooth hair, Sextus Empiricus¹⁴¹⁵ says three centuries later, are no Black Africans born under Virgo? By the time of Sextus Empiricus, however, the breach made by the question of Carneades had been repaired. The Pyrrhonian philosopher had to take the trouble to read Ptolemy, whom he cites explicitly, in order to show that he was responding

to the question about the Ethiopian's skin being always black and the skin of the German or the Gaul, which was always white.¹⁴¹⁶ The astrologers again invoked the predominance of general influences, not only on incidents, but working in a continuous fashion and thus creating the ethnic types. They adopted for their own use a theory which is both ancient and modern, so modern that the belief was born yesterday.¹⁴¹⁷ They said that humans are made by the environments in which they live. They adapt or disappear. It was enough to add one more link to the series of causes, in relating the influence of the stars to those of the soil, the waters, the air, and the hereditary aptitudes which they determined. This was as difficult to refute as to demonstrate. We have seen that the astrologers have invented astrological maps of astral influences in order to specify their ideas. It supplied an affirmative response to the question which used to be so embarrassing: "are all the members of the same race born under the same sign?" They expected, no doubt, that the critics would not be patient enough to demand that they justify this division in detail. They had so little to worry about on this point that the astrologers never had to agree on a single system.

Since race was explained by environment and environment by the stars, it seems that the quarrel was empty. However, the very theory of influence, affirmed against the astrologers when they were not yet divided, was turned against them when they rallied. It was an historic argument which was repeated by all the Christian polemicists after Bardaisan.¹⁴¹⁸ If racial and ethnic peculiarities were fashioned by earthly and astral influences on their habitats, how did certain groups such as Jews and Christians or even the Persian Magi keep the same habits and laws in every clime? The Jews escaped the influence of the stars because they carried everywhere "the mark of nature," Gregory of Nyssa says.¹⁴¹⁹ The argument was weighty, and was hardly weakened by saying that Jews and Christians took their Law with them wherever they went. That admitted that the Law was stronger than the stars. Bardaisan reinforced the argument with the observation that a despot or a legislator might change the laws of a people *in situ*, even though it supposedly remained subject to the influences of its environment. However, the astrologers were not the only ones at whom this argument against all forms of scientific determinism was aimed. They were no more embarrassed than the modern Darwinist is when one asks why the various races keep their specific characteristics outside of the habitat where they evolved. They had the same advantage in making concessions to their adversaries, in order to avoid the accusation of strict fatalism. They thus gained on one side what they lost on the other. It was enough that the ethnic heritage might be related to an origin which itself depended upon the stars.¹⁴²⁰

This discussion about the physical conditions of life and the relationship between environment and the stars caused other difficulties and other solutions to arise. The rationale for the races of humanity could be applied to the species of animals. Whether widespread or confined to their chosen countries, they were even more dependent upon natural fatality. Cicero says

*If the state of the sky and the arrangement of the stars has an influence on the birth of all living things, one is obliged to admit that this influence is exercised not only upon human beings but also upon animals. Can anything be more absurd?*¹⁴²¹

Favorinus amused himself by asking for the horoscopes of flies and grubs¹⁴²² Sextus Empiricus laughed at the embarrassment of the astrologer faced with a man and an ass born under the same sign, the one destined to honors, the other to the grindstone.¹⁴²³ One must use the word "absurd" carefully. There was a time, no doubt, when many spoke of slaves and humble people as the logicians here speak of animals, when many found it absurd that their destiny might be written in the sky or that they might pretend to immortality. The progress of democratic ideas has shifted the barrier now planted between humanity and the animals. The astrologers hesitated to reverse it. Moreover, logic pushed them, even their special logic. Why, for example, should the animal figures, which filled the greater part of the zodiac and tended to produce similar images upon the earth, not have an effect on human beings? Finally, the practitioners, if not the theoreticians, of astrology bravely accepted this consequence of universal sympathy.¹⁴²⁴ They worked with those tender souls who wanted horoscopes for their dogs or for livestock breeders who consulted them about the abilities of their animals. The hostile jokers who brought the horoscope of an animal to an astrologer without telling him what it was, emerged marveling from his office that the practitioner knew what the client had done.¹⁴²⁵ The reasoning was even extended to the plant and mineral kingdoms. The plant connection was justified

by the traditional farmers' calendar. The mineral connection prepared the way for the extravagant ambitions of the alchemists, who sought the proper conjunction of the stars to grow metals or precious stones.

Thus, a series of difficulties led the astrologers to create theories which gave them a reputation as scientists. The difficulties came from a simple question: "why do groups of individuals not have the same temperament or the same destiny?" They ended with theories about the varieties of human beings and the species of animals, the effect of the environment upon heredity. They handled the inverse argument just as easily. Given the large number of people being born at a given moment, under the same stars, why were there not more Homers, more Socrateses, more Platos? ¹⁴²⁶ The argument had some value in the time of Cicero, but Favorinus must have known that it was no longer useful. With the precision required by the methods of learned astrology, it was highly unlikely that there were ever any identical charts. The elements of calculation were enough for millions of combinations, arrangements and mathematical permutations. They included the seven planets and their reciprocal aspects or their dodecatemoria, the twelve signs of the zodiac, their aspects and their relationships with the planets, the decans, the fixed places, the mobile places or lots, etc., all measured to the degree and minute. If even twins did not have the same horoscope, as we will see, the same was even more true of individuals not born in the same place at the same time. The Stoic astrologers would have promised Favorinus a new Socrates and a new Plato when the ἀποκρίσεις brought about a new copy of the universe and all events which had taken place before happened again. Meanwhile the variety of horoscopes was nearly infinite.

This where the rationalists helped the astrologers. From the famous example of the potter's wheel ¹⁴²⁷ we know how the astrologers explained the very different destinies two twins could have. There were many examples of twins, one of whom died young, the other living into great old age. The difficulty tormented the astrologers. They explained the fact with the speed of the rotation of celestial sphere, a speed which separated the ascendants of the two twins on the zodiac by an appreciable difference. However small the difference this interval might bring about, it could produce an enormous difference in the prediction. ¹⁴²⁸ However, this claim raised a chorus of recriminations. One could ask the astrologers if their observations could ever attain, in practice, the degree of precision which their more exact predictions required. Sextus Empiricus pressed this question hard, sensing that he was on solid ground. ¹⁴²⁹ He imagined a pair of Mesopotamian astrologers, one observing the actual birth of a child, and signaling the critical moment to the other on the roof by striking a gong. He clearly demonstrated the silliness of their precautions.

First of all, the necessary condition for defining the horoscopic moment did not exist. The moment did not exist. Neither parturition nor conception took place in an instant whose exact time might be determined. Moreover, if a horoscopic moment did exist, the astrologers would not be able to measure it. Given the slow speed of sound, it would take time for the astrologer observing the birth to strike the gong, time for the sound to reach the astrologer on the roof, and time for the latter to make the observation. By this time, the correct moment of birth would have passed. Due to inevitable delays, the horoscopic moment would be lost. The observation, moreover, would be falsified by errors. These included the displacement of the true horizon by the altitude of the place of observation, by the hills which blocked the horizon, or by the refraction of the atmosphere. The faulty sight of the observer and the impossibility of seeing the stars in the daytime also caused problems. Even at night, it was hard to see the ideal divisions which rarely coincided with actual stars. Things were even worse if one calculated the time by the method of ascensions (ἀναφοραί) because the ascendant cannot be seen directly. When one used a clepsydra (a water-clock), the period measured is necessarily variable, depending on the fluidity of the water and the resistance of the air. Even if one supposed that the craftsmen were able to overcome the possibilities of error, it was certain that the ignorant people who consulted the astrologers had not, and brought suspect facts to the astrologers, from which erroneous predictions were drawn.

These objections were very strong. They would have produced even more of an impression if our philosopher had presented them in an order of increasing strength. Instead, he put the strongest first and the weaker ones later, ending by discussing already rejected theories. ¹⁴³⁰ The first argument, the impossibility of defining the precise moment of birth, crushed the imprudent who, overly subtle, had spoken about the indivisible moment and the instantaneous strike. What stage of parturition should count as birth? If twins had such different horoscopes, the same reasoning ought to apply to a

single child. The head and feet of the baby were under different stars.¹⁴³¹ There was plenty of discussion among philosophers, physiologists, even moralists, about the mystery of life, organic life, conscious life and about what gave the initial impulse to life.

The astrologers accepted all the theories, such as the one which made "human" life proper begin when the new-born drew its first breath and received its first influx from the exterior world. However, the most sure approach was to let a certain haze hover over questions where the rigor of logic only created obscurity. Common sense found many questions less complicated than logic did. It saw no problem with treating the birth of an infant as a simple fact and the births of twins as a double fact, composed of two distinct and discernable acts. We have seen how, to finish with the logicians, Ptolemy decided not to seek for the exact moment of birth, but to calculate the ascendant from other data.

However, what is important to notice here is not that the argument could not be refuted, but that it only attacked astrologers and their practices, not astrology, its principles and theories. One could say much the same, with more reason, about their errors in observation. One may say that it is impossible to make one perfectly exact observation. However, this does not prove that the truth which cannot be attained does not exist. Science as an institution cannot be blamed for the mistakes of individual scientists.¹⁴³² With their improved instruments and their formulae of correction, our modern astronomers and physicists do not attain perfection, but only approach it. The ancient astrologers also tried their best to approach it and it would be unreasonable to ask more of them. Their opponent forgot, moreover, that they were not obliged to make at once, as he says, all the deductions which can be drawn from a horoscope. With their tables and reference works of every sort, they could, beginning with a single point on a circle or a single fixed period of time, determine the simultaneous position of the signs and planets at their leisure, without needing to look at the sky at all. Our astronomers today can do the same with the *Connaissance des Temps*.¹⁴³³

Thus, the ceaseless assault upon those practices which required determining the ascendant for a particular instant did not cause any appreciable damage to the theory. Had it been victorious enough for astrology to abandon the most scientific of its methods – natal interpretation.¹⁴³⁴ – the astrologers would still have prospered by concentrating upon the most popular proceedings, elections and horory. They were quite good enough for nine tenths of their clientele.

What was there left to object to? That the chain of causes and effects was endless? That the destinies of babies were included in that of their parents and so on back to the beginning of the species? Not only did the astrologers agree with this, but they may have been the first to notice it.

There is a house of parents in every chart, where these retrospective conjectures are lodged. Likewise, there are houses of marriage and of children, which tells us about the future descendants of the unborn baby. One might also criticize the astrologers, not for accepting the task, but for believing it possible in principle. Favorinus criticizes them for this, upon an extremely specious rationale, one too subtle to be practical. He began by stating that the destiny of each person in each generation has been written in the stars since the beginning of the world. Now, (he says) this destiny, which never changes, has been predetermined once and for all by the dispositions of different stars, since each horoscope is unique. It follows from this that different predictions may lead to the same goal. If one admits this conclusion, there are neither principles nor method in astrology.¹⁴³⁵ Astrology crumbles due to its own foundations. Thus, by virtue of their doctrine, the astrologers are forced to admit a contradictory postulate that astrology did not work. It would take the patience of a Scholastic philosopher to analyze this sophisticated mixture and there was no great interest in doing so. Predestination is a question which interests not only astrologers. The astrologers did not claim to push their researches into the past or into the future to the limits of human intelligence. Let us say only that the spiritual improviser fell into absurdity in wishing that the chart of one ancestor would contain implicitly the charts of all his descendants in his own. This meant that each star had to be in several different positions at the same time, and that a grandfather, for example, could be his own grandson.

We have finished with the thinkers who appealed only to reason, who sought to destroy astrology, but not to replace it with another faith of their own. After Sextus Empiricus, pure logic is no longer represented. One encounters only theologians. The battle waged against astrology in the name of reason did not end in rationality. It left alive the idea that the errors of the astrologers could be blamed upon the imperfections of a perfectible science. The stars genuinely affected the human destiny by means of a physical energy, known from experience. This energy might be difficult to define

and measure, but it was not impossible to do so. The polemic of the theologians – Neo-Platonists and Christians – would be even less effective. The adversaries differed only in nuances, and they were less interested in destroying astrology than in making it orthodox.

III

Astrology and Philosophy

At the boundary of science and faith is the study of morality. It is the remainder and summary of the habits of the human race, an eternal compromise between the diverging solicitations of self-interest and of what ought to be. It takes part in both science and faith, but is little affected by the progress of the one, and the variations of the other. Above all, it is more independent, if one believes the moralists. The question, whether astrology was, in essence or in fact, contrary to morality always remained undecided. It is certain that there were always a sizeable number of moralists and that, working on common ground, there was no way to tell the philosophical moralists from the religious ones. A glance at the subject shows that astrological fatalism was an easy way to pass between the two.

Since morality assumes free will, any doctrine which tends to represent our acts as decided without the intervention of our wills is legitimately suspect to the moralists. This applies to all forms of divination. If astrology was a particular target, that was only because its claims were more trenchant and the consequences of its principals were more easy to discover. However, on the other hand, there were conditions and obstacles which hindered the free exercise of the will with a degree of fatalism. Reasonable moralists did not dream of contesting this. One is, for example, the fact of birth at a certain time and place, with certain physical and mental abilities. Astrologers claimed, not to create, but to explain and to exploit, this fact, for purposes of predicting the future.

We have said repeatedly that Greek astrologers had learned, early, of the fatalism inherent in their principles from the Stoics. The same Stoics believed that they had reconciled astrological faith with morality. Panaetius aside, there was hardly any Stoic save Diogenes who had any doubt of the fatalistic character of astrological predictions. More, they believed that the astrologers could “say in advance what temperament someone would have and what career they were especially suited for.”¹⁴³⁶ In general, one conceded willingly to the astrologers that the stars might affect the body. Once this was proposed, the principle of the solidarity of body and soul might lead one to admit a mediated influence, more or less strong, upon the will. It was for the philosophers to debate this point. Astrology accommodated itself to all systems. The partisans of absolute free will, Epicureans and skeptics, took care not to open this crack to determinism.¹⁴³⁷ Moreover, if current opinion forced their hands, they hastened to say that the influence of the stars, if it were real, was beyond our ability to investigate. Nevertheless, one can see that they hesitate. Favorinus accepted, if absolutely necessary, that one could foresee “accidents and events which are produced outside ourselves.” However, he declares it intolerable that one might pretend to make the stars intervene in our inner thoughts. Humanity, the rational animal, could not be changed into a puppet (*neurospaston*) with the planets holding the strings. Is it conceivable that the whim which makes a man decide to go the baths, then decide not to go, then again decide to go is connected with the actions and reactions of the planets?¹⁴³⁸ This is very well said, but even our most spontaneous acts may depend, and closely, upon “exterior” circumstances. Let us suppose that our man was near the bath-house when he decided to return because an earthquake had made it collapse, an earthquake itself triggered by a certain conjunction of the stars. Who would say that the stars did not influence his decision?

Favorinus thought that he had extracted a confession from the astrologers that the stars did not rule human existence down to the smallest detail. He turned on them again by maintaining that if one could predict the outcome of a battle, one ought to be able to foresee the roll of the dice or where a roulette wheel will stop.¹⁴³⁹ He is fighting with shadows here, for there was no lack of charlatans to give him satisfaction,¹⁴⁴⁰ and if this was not enough for him, to justify their mistakes. They could always be blamed on the ignorance of the practitioners and not on astrology itself.

Sextus Empiricus went back to an old philosophical war of words,¹⁴⁴¹ already used for or against divination in general. Since each event were due to three preceding causes, Necessity, Fortune or pure chance, and Free Will, it was useless to foresee the future. One could not change

what must necessarily arrive, and one could not predict what was the result of pure chance or free will. It was doubtless very hard to take Necessity into account, perhaps too hard for the astrologers. For them it was enough to define chance and to specify what they left to free will. To say that astrology was useless because it could not change Fate was not to discredit astrology as a science.

All these dialecticians, more or less skeptical, were not much concerned with moral criteria as such, that is, with judging doctrines by their applications and rejecting as false those considered immoral.¹⁴⁴² They thought that when something that had been scientifically verified was also contrary to morality, it was the job of the moralists to revise their principles and to draw the line between good and evil elsewhere. Moreover, in so far as Stoicism went, it proved that fatalism was compatible with vigorous and active virtue. It was otherwise for the theologians, Neo-Platonist and Christian. They attacked fatalism, represented principally by astrology, as doubly impious, because it destroyed human responsibility and it made God the author of both good and evil.

The astrologers had time to prepare themselves for this battle. They realized very well the difficulty in maintaining human responsibility in the face of predestined events foreseen and announced in advance. The problem was not new. It had often been posed about the “infallible oracles” of Apollo. They took the wise position of compromising with logic. On the one hand, they did not deny their principles and, on the other hand, they held, nevertheless, to universal morality. They spoke of inexorable Destiny, of Necessity and of the crimes which it made people commit. “That is no reason,” Firmicus says, “to excuse vice or deprive virtue of its rewards... It does not matter much why a crime takes place. It is enough that it is a crime. Fate also makes one expiate one's crimes.”¹⁴⁴³

The good sense of this Roman (who may have been a Greek) opened a constant refuge: faith in two logically irreconcilable principles at the same time. This paradox which saved morality from danger. Ptolemy avoided posing the antithesis so bluntly. He knew the danger into which logic invincibly pushed those who obeyed it, and barred the door against it. As he understood it, astrological forecasts are, like all scientific forecasts, inevitable and conditional at the same time. That is, they have an inevitable result if the calculations of natural forces are not contradicted by other unknown natural forces. The modifying forces, however, are often set in motion by human beings. This is what happened when a physician stopped the progress of a disease with an appropriate medicine. The disease which would have otherwise led inevitably to death. If the worst came, and an unavoidable fate approached, knowledge of the future gave people – so the Stoics said – the time to prepare to meet the event with calm and dignity. Ptolemy went to an extreme with his concessions, without any care save that of claiming for astrology the title of a “useful” science.¹⁴⁴⁴ One could not say that morality gained much here. A mitigated fatalism was more dangerous than one which promoted complete resignation. All the crimes supposedly instigated by astrologers had changing the predicted future as their goals. Absolute fatalism, on the other hand, left everything unchanged. As common sense ignored it in practice, it was reduced to nothing more than a metaphysical conception.

Such was the state of the question of morality when the theologians seized upon it. The name “theologian” was applied even to the Neo-Platonists. They hoped to justify to everyone the lengths to which their obsession with the divine and the demonic went in their doctrines, replacing the ideas of natural law and of mechanical force. They did not lack the characteristic habit of theologians, that of invoking supposedly infallible texts and putting their authority in the place of logic. In the third century of our era, mystical literature, invented in unknown offices, abounded everywhere. It stifled the free flight of intelligence and diminished the dose of common sense necessary for the equilibrium of reason. In these books dictated by gods, the sons of gods, by kings, prophets or sibyls,¹⁴⁴⁵ astrology had a portion, a big portion. Its vogue was such that the Mesopotamians were said to have the most ancient revelations, the most divine oracles. It allowed one to get further away from the Jewish and Christian traditions. A certain “Julian the Chaldaean” or “the Theurgist,”¹⁴⁴⁶ made supposed “oracles in verse” (Λόγια δῖ' ἐπῶν). They were a potpourri of all sorts of oriental superstitions, a mixture of magic, of theurgy, of delirious metaphysics. The oracles seduced even the rebel spirits of astrology and relegated the Greek gods and their oracles to second place.¹⁴⁴⁷ This book became the breviary of the Neo-Platonists in search of a Bible to oppose to that of the Jews and Christians. As a summary of divine wisdom, they even placed it above the *Timaeus* of Plato, that excellent work of human wisdom.¹⁴⁴⁸

The Neo-Platonic school, issuing from the Pythagorean tradition and developing in a similar milieu, could not be hostile to astrology. However, to assure the unity of its system of metaphysics, it

had to remove from the stars the quality of first or efficient causes. In the astrology systematized by the Stoics, the stars had been efficient causes, and in the polytheistic astrology of the Mesopotamian Sabians, the stars had been even more. Plotinus did not believe that the stars were even secondary causes.¹⁴⁴⁹ Taking an idea from Philo, he reduced them to the role of divinatory signs, comparable to signs interpreted by other methods. He returned in this way, moreover, to the unity of the theory of inductive divination or indirect revelation, accepting this without objection and entire. He therefore taught that “the course of the stars announces the future for each thing, but does not make it happen.”¹⁴⁵⁰ Because of universal sympathy, each part of Being communicated with every other and could, so to speak, teach the others. Inductive or conjectural divination is only “reading natural characteristics.”¹⁴⁵¹ It is not necessary to follow Plotinos' explanations further, if one wants to keep a clear idea of his doctrine. According to his understanding, it ought to weaken astrological fatalism and preserve human freedom. This doctrine, which destroyed the basis of Ptolemy's disciples' “physics”¹⁴⁵² was of great consequence. For by considering the stars to be just mirrors reflecting Divine thought, and not autonomous agents, it made astrology compatible with all theologies, even monotheistic ones. Their positions and configurations were assimilated to writing. Jews were scandalized by the planet-gods or planet-decans and abominated the idols drawn in the constellations. Nevertheless, Jewish astrologers attributed, without scruple, the rules for deciphering this celestial Kabbalah to Enoch or Abraham.

The successors of Plotinos attached themselves to astrology in order to domesticate it, to bring it into their system. They did not want to dominate it, but to use it as proof and as a point of application. Porphyry, a strong defender of free will, always maintained a certain hostility towards astrology. He began and ended by declaring the science to be excellent, no doubt, but inaccessible to mortals and even to the intelligence of the gods and spirits of the sublunary world.¹⁴⁵³ However, his religious respect for the *Timaeus* kept him from breaking the chain which united humanity with the stars. He was led by this to explain to himself, that is, to justify a good number of astrological theories, precisely those which conflicted most with common sense. According to Porphyry,¹⁴⁵⁴ Plato reconciled effective fatalism with free will by saying that the soul itself chose its destiny before being incarnated. The soul had previously been placed on high, in the “celestial earth” where it passed its “first existence,” able to see the various destinies, human and animal, written in the stars “as on a tablet.” Once chosen, the destiny could not be changed. It was the Atropos of mythology. This explained how men, women and animals could be born under the same signs. They may have been born under the same sign, but not at the same moment. The souls were equipped for their lot (κλήρος) and descended from the upper spheres. They entered our sublunary world when the cosmic machine, by rotating, had brought into being the astral positions previewed by their lot. One should imagine in the East, at the ascendant, a troop of souls ready for incarnation. They wait in front of a narrow passageway alternately opened and closed by the movement of the great zodiacal wheel, the wheel pierced by the points which were the degrees. At the desired moment, a given soul, the soul of a dog, for example, was pushed by Justice (also called Fortune) through the horoscopic point. An instant later, the soul of a human being passed through via another point.¹⁴⁵⁵

It is hard to take these flights of imagination seriously. One must believe in a queue at the door to the theater of life, with figures handing over their tickets, stamped with astrological signs, to Justice. Porphyry does not say if the souls, once they enter through the ascendant, go to embryos or to bodies already born, inhaled with their first breaths of atmospheric air. However, he knew two variations on the system, and he showed that it is possible to combine them in an elegant solution. It excused him from resorting to the exhibition and assignment of lots in the “celestial earth” described above. It was enough for him that the soul had made the choice of a condition at the moment when the ascendant of conception passed by it. It then entered the embryo, and the ascendant of birth, when “second life” began, was only a manifestation of the earlier choice.¹⁴⁵⁶ In this way he satisfied both the astrologers and the physicians. The latter obliged them to calculate the ascendant of conception because they believed that an embryo could not live without a soul.

From this admission by Porphyry, one of the stronger minds among the Neo-Platonists, one can judge the faith of an Iamblichus or a Proclus, mystics starving for revelations. They would have become tireless astrologers if magic, in the form of theurgy, had not offered a shorter, quicker, way to communicate with the divine Intelligence.¹⁴⁵⁷

Thus, the first and last word of the Neo-Platonic doctrine about astrology is that the stars are

“signs” (σημεῖα – σημαντικόν), and not efficient causes (ποιητικόν) of destiny. Souls are free, not obedient to a mechanical Necessity, but only to a destiny (εἰμαρμένη) which they have freely chosen themselves.¹⁴⁵⁸

Understood in this way, astrology became even more infallible. It was the decipherment of a divine scripture according to revealed rules. The astrologers owed the prime explanation for the instantaneous effect of the Ascendant, the dogma which most conflicted with common sense, to the Neo-Platonists. Thus we are not surprised to see Firmicus treat Plotinus as an enemy, the enemy of Fortune or astrological fate. He made a sermon on the horrible end of this virtuous but proud savant. Plotinus died the death of the impious, seeing his own gangrened body fall to rags and become, beneath his own eyes, an unnamable thing.¹⁴⁵⁹ If the death of Plotinus was so “famous,” we must believe that certain astrologers considered the metaphysical distinction between the signs and the causes to be an affront to their science. Thus, Plotinus had attracted to his memory the thunderbolts of the odium theologicum.

They were able to reassure themselves. Infallibility and fatalism, when applied to the future, are synonyms. We will see new battles around this new master idea of the theologians, who are at the same time the disciples, the allies and, the enemies of the Neo-Platonists.

We have said, and repeated, and (it would seem) demonstrated, that astrology could be either a religion or a science, depending on the personalities of the astrologers and what they wanted. As science, it could accommodate itself to all theologies. There were a certain number of parallels which the astrologers of the sixteenth century rediscovered, when they sought and succeeded in living in peace with the Church. As a religion, astrology tended to supplant the existing religions, whether by absorbing them or eliminating them. Firmicus calls it a religion and speaks of an astrological priesthood.¹⁴⁶⁰ The old mythology was easily absorbed. The great gods found an honorable refuge in the planets or the elements and the legends served to people the sky with “catasterisms.” Platonic daemonology was not able to resist any better. Astrology even offered its own ten thousand spirits, confined to the sub lunar world or outside of it. These last were often used by astrologers to read the stars, their divine scriptures. They were closer to the star than human beings were, and dispensed all forms of divination from what the stars revealed.¹⁴⁶¹ As for the solar religions, they crossed the same terrain as astrology, which, far from stifling them, aided their progress. The solar cults and astrological dogmas formed a complete religion, which took such a strong hold on the minds of certain astrologers that they promoted it aggressively. Pseudo-Manetho wrote,

*Why, O man, why do you sacrifice uselessly to the Blessed Ones? There is not a shadow of profit in sacrificing to the Immortals, for no one can change the horoscopes of human beings.... Do homage to Kronos, to Ares, to Hermes and to Cytherea and to Zeus and to Mênê and to king Helios. It is they, in effect, who are the masters of the gods, masters, too, of humanity and of the sea and all the waves, storms and winds and of the fruitful earth and of the ceaselessly moving air.*¹⁴⁶²

This is the language of an apostle who, to ordinary mortals, seems remarkably like an atheist. In general, the astrologers avoid this degree of imprudent zeal. Far from declaring war on any religion, Firmicus assures us that astrology promotes piety. It teaches human beings that their acts are ruled by the gods. Likewise, astrology teaches that the human soul is the child of the star gods, its elder brothers, givers of life.¹⁴⁶³ All religions, even the monotheistic ones, if they ever tolerated the metaphor, were able to accept these elastic formulae. All save Christianity, which remained faithful to the Judaic spirit which had engendered it and which saw in astrology a pagan superstition. Nevertheless, it is hard to find a vein of doctrine completely free of all compromise with astrology. Certainly neither Alexandrian Judaism, nor in early Christianity, so quickly encumbered with Gnostic and Platonic speculations were. Astrology was an obsessive, insinuating, and protean mania which became a sort of intellectual disease. The ferment described in Genesis (which is ruled by the number seven) heated the mystics' imaginations and pushed them in the direction of astrological reveries. It was around the beginning of the Christian era that the Book of Enoch seems to have appeared, relating the voyages of the patriarch in the celestial regions, in 366 books written by Enoch himself.¹⁴⁶⁴ One finds a description of the seven heavens where the seven planets circulate. God lives in the eighth heaven, thus replacing Anu-Bel or Saturn. Paradise is found in the third heaven, probably that of Venus,¹⁴⁶⁵

while the disobedient angels are in the second and the fifth heavens, doubtless those of Mercury and Mars. The celestial spheres shelter the souls, which pre-exist the body, as in the Platonic systems. Man was made by Wisdom from the seven substances in the image of the universe, and the name of the first man, Ἀδάμ, Adam, is an anagram of the four cardinal points. It is not just an indifferent metaphor, but a reminiscence of the Book of Enoch which falls from St. Paul's pen when he wrote to the Corinthians that he had been "taken up into the third heaven, to Paradise."¹⁴⁶⁶ The apostle knew also of spirits which need to be redeemed, "whether they are on earth or in the sky,"¹⁴⁶⁷ and of the "lying spirits in the celestial places,"¹⁴⁶⁸ which can hardly refer to anything but the visible sky. It was from there, moreover, that Satan fell, himself as visible as a "lightning bolt."¹⁴⁶⁹ Astrological numbers are easily found in Revelation. The visionary addressed seven churches. He saw seven gold candlesticks, and in the midst of them a figure like a Son of man, who holds seven stars in his right hand. The Book has seven seals. The Lamb, seven horns and seven eyes, the Beast, seven heads. One can extend the analogies to the seven thunders and the seven trumpets of the seven angels which announce to the world the spilling of the seven vials filled with the anger of God. As for the number twelve, it is the number of the stars which surround the head of the Woman "dressed in the Sun and having the Moon beneath her feet,"¹⁴⁷⁰ the number, too, of the gates of the celestial Jerusalem and of the foundations of its walls, foundations which are made of twelve varieties of precious stones.¹⁴⁷¹ The tree of life planted in the middle of the city bore twelve varieties of fruit in one year.¹⁴⁷² No doubt all this is not astrology but a related mysticism which fed the astrological faith.

One knows with what intemperance the Gnostics pretended to infuse a grandiloquent and incoherent metaphysic into Christian doctrine, a metaphysic made up of the debris of all sorts of international superstitions. We will not stop to analyze the chimeras enclosed in the brains of these Orientals which all the Christian churches have repudiated and which we eject willingly from Greco-Roman civilization. The numbers and the associations of astrological ideas are sown here in profusion. The 365 heavens of Basilides are dominated by the great Abrasax or Abraxas,¹⁴⁷³ a name made from numbers which equal 365. We find him in good company, with, among other combinations, a Dodecad and a Hebdomad. The author of the *Filosophumena* says that the doctrine of the Peratics was completely impregnated with astrological theories, and was, for this reason, extremely complicated.¹⁴⁷⁴ The Manichaeans, we are told, compared the zodiac to a waterwheel with twelve amphorae. It lifts out the light lost in the lower world, the kingdom of the devil, some falling into the wherry of the Moon, some into the bark of the Sun, which brings it to the upper world. All these dreamers were drunk with revelations and emancipated from common sense. They ground up, disfigured, and combined in innumerable mixtures, traditions and texts of every provenance. They drained Pythagorean, Orphic, Platonic, Biblical, evangelical, and Hermetic allegories. These delirious groups threatened the carnival of human reason. They rained a mass of celestial communications, oracles and apocryphal gospels, magical and divinatory prescriptions, talismans and phylacteries upon the astonished crowd. Not all were partisans of astrology. We can attribute a refutation of astrological fatalism to the Syrian Bardaisan, more Christian than the others. However, some counted precisely upon attracting the astrologers to them by making a place in their doctrines for "mathematical" doctrines and dogmas. The Peratics mentioned earlier performed prodigies of ingenuity towards this end and especially in re-interpreting the traditional catastersisms as Judaeo-Christian symbols.¹⁴⁷⁵

IV

Astrology and Christianity

It was necessary to wait for all this tumult to calm down in order to distinguish that current of Christian doctrine which became orthodoxy and to deal with those teachers who made lasting marks on dogma.

This dogma does not come from a simple crisis. It was a result of the need to find responses for questions which were raised. When they could find no answer in the revealed texts, they were influenced by philosophy and especially by the one which was still alive, even rejuvenated, Platonism. Christian teachers recognized Plato and Socrates as precursors of the messianic revelation. They were fascinated by the epic of the soul, which Plato showed them came from the celestial spheres and

returned there when leaving its prison of clay. No doubt, they reserved the right to pick and choose from this legacy and even to be on a war footing against the Neo-Platonists. They were, however, more than half disarmed against the abundance of hypostases and emanations of all sorts, against the demonology, magic and theurgy which the Neo-Platonic school welcomed. In general, they held that divination, and astrology in particular, was a diabolic invention.¹⁴⁷⁶ This admitted that divination worked and perhaps even made the forbidden fruit taste sweeter. At the same time, they could not push the theory too far, since the demons hardly did more than parody the divine acts. The Fathers had to be careful not to discredit the true revelations while attacking the false ones. Now, it was a given that God was the creator of the stars, which he had made to be “signs”¹⁴⁷⁷ which sometimes were used to reveal His designs. Witness the shadow moving backward on the sundial of Hezekiah,¹⁴⁷⁸ the star of the Magi,¹⁴⁷⁹ the obscuring of the Sun at the death of Christ,¹⁴⁸⁰ and the celestial signs which will announce his return, the obscuring of the Sun, the extinguishing of the Moon, the stars falling from the sky into the roaring waves of the sea and “the shaking of the powers in the sky.”¹⁴⁸¹ The case of the Magi – who were not yet kings – was a more grave embarrassment for the Christian exegetes and polemicists. It was astrology, the real thing, that of the Mesopotamians or Magi,¹⁴⁸² at the birth of Christ, whose star announced his royalty. A horoscope, even a royal one, for Jesus Christ, was meant that the God-Man was subject to Fate like everyone else. It was also a certificate of the truth of astrology, since it was calculated by skilled men. It was calculated even by God, who had followed the rules in order to pass on a presage which could be understood. To say that God used a star to send a message to the Magi, simply because they were astrologers,¹⁴⁸³ did not weaken the conclusion. They had been told because they understood the celestial signals.

There was one explanation, and that was the one tried first by learned Christians. It was that astrology was a practice invented, or a secret unveiled, by the demons. This admitted that astrology or magic had worked until the birth of Christ. However, he had come to end the rule of the demons. Astrology had then abdicated, so to speak, in the persons of the pagan Magi, at the cradle of the Redeemer. This was the explanation of St. Ignatius and of Tertullian.¹⁴⁸⁴ The Valentinian Gnostics had dug more deeply into the subject and had come up with a more seductive theory. According to Theodotus, the star of the Magi had “abrogated ancient astrology” in taking away its reason for being. The grace of baptism “transported those who had faith in Christ to the regime of predestination under the providence of Christ himself.” The Christian, especially if he is a Gnostic, escapes from Fate and the competence of its interpreters.¹⁴⁸⁵ Fine! However, this admits that astrology was valid in the past. It continued to be valid for its pagan clientele, and no doubt the astrologers against whom they struggled did not ask for more. The basis of the debate had been conceded to the astrologers, and they could take pity of the arrogance on people who put themselves outside nature. The Fathers of the Church sometimes repeated the argument that astrology and predestination were excluded from the regime of the New Law.¹⁴⁸⁶ However, they sensed that this argument, of suspect orthodoxy, did not resolve the difficulty but raised greater ones. They sought other reasons. They said that the star of the Magi was not an ordinary star, neither fixed star, nor planet, nor comet. It moved differently from other known stars, because it had brought the Magi to Bethlehem. Therefore, it was not a star which could be used as a horoscopic star. The astrological ascendant predicted the destiny of babies after birth, and did not announce their births.¹⁴⁸⁷ The reasoning is not very acute and could be reversed easily. It could be said that the astrologers had interpreted the sky correctly. If the star was new, it showed admirably the surety of astrological methods which were good enough for a completely unforeseen case.¹⁴⁸⁸ It was no doubt because they had seen the miraculous star diverge from the ordinary route of the planets. They had then had followed it, and did so by calculation. If they had obeyed a divine suggestion – taught to them by demons, St. Jerome said – one could not see why God would prefer to speak to astrologers.

The proof that the debate did not necessarily lead to the confusion of the astrologers is that the Christian author of the *Hermippus*. He took advantage of the evangelical story of the Magi to show that belief in astrology was compatible with the Christian faith. One took the star as a sign and announcement, not the cause, of the “birth of the divine Word.”¹⁴⁸⁹ He interrupted himself, it is true, to recommend bolting the door, knowing that his opinion would not please certain people. We see the scruple which excited the zeal of the teachers return once more. Once more, calmed by the distinction between the signs and the causes, they were left without peremptory reasons to be hostile. They were even disposed to indulge the other pretensions of astrology. The astrologers renounced saying that

the stars ruled destiny. Like Plato, Philo, and the Neo-Platonists, they attributed only the role of indicative signs to the stars. The stars were divine scripture. Like an adversary laying down arms, they said that there was no more astrological fatalism and that the management of the world is left to God alone. Basically, Origen asked no more of them.¹⁴⁹⁰ He did not fail to make the usual objections, the argument of the twins, the inverse argument of the races, the precession of the equinoxes, finally, the impossibility of satisfying the theoretical requirements. However, against astrology itself, as a system of interpreting the divine stars, he had nothing to say, save that it was beyond human understanding. He is not very firm on this ground, either, for in the end, God does nothing in vain. Would not these revelatory signs be useless if they could not be understood? They are not causes. The “angels” (ἄγγελοι), however, are, by definition, the messengers of God. The prophecies, moreover, show that God did not always refuse sometimes to reveal the future to human beings. Moreover, there was no need to press Origen for concessions. He only denied that human beings could have “exact” understanding of the meaning of the celestial signs. For all his reservations about practice, he believed in astrology for the same reasons as the Neo-Platonists. He even supported it, at some risk, with texts drawn from sacred Scripture.¹⁴⁹¹

Posthumous misfortune, in the fourth century, removed Origen from the number of the Church Fathers. Nevertheless, we know well how much authority Origen had, especially in the Greek Church. Thus, it is not surprising that a number of Christians, even among the clergy, thought that they could accept the doctrines or even devote themselves to the practice of astrology. We are told of the bishop of Emesa, Eusebius, who was in this situation, and lost his seat as a result.¹⁴⁹² St. Athanasius, so rigid in theology, found a trace of astrology in Job, and, in consequence, confirmation of one of its most characteristic theories, that of the oikoi or domiciles of the planets.¹⁴⁹³ Eusebius of Alexandria says – and deplores – that Christians used expressions like: “A plague on his star!” or “A plague be on my ascendant!” or “He is under a good star!” He adds that some went so far as to address prayers to stars and say, for example, to the rising Sun, “Have pity on us!” as if they were “Sun-worshippers and heretics.”¹⁴⁹⁴

The danger was this, in effect. The Church did not care to enter a struggle with scientific astrology. However, it could not allow its religious foundations, Mesopotamian astral religion, to resurface. Mesopotamian religion had given birth to astrology, and the Stoics and the Platonists had naturalized it in Greece. In proportion, as it kissed the level of general culture, it tended to regain its original force.¹⁴⁹⁵ This explains the resumption of the hostilities and flabby intrigues which we have seen concerning the star of the Magi. The Fathers of the later fourth century re-opened the conflict with astrology, in the name of morality threatened by its fatalism. They had no new arguments.¹⁴⁹⁶ As Origenists, they did not dare use the weapons of theology¹⁴⁹⁷ and as dialecticians they were well below their predecessors. They copied one another in saying that if human destiny were predetermined by the stars, then God, who had made the stars, would be responsible for their acts, even the evil ones. Their arguments are well summarized by St. Ephrem: “If God were just, he would not have established the stars of the horoscopes, which force human beings inevitably to be sinners.”¹⁴⁹⁸ This was the language of common sense, based upon empirical postulates. It was no more admissible in proper demonstrations than a punch in scientific fencing. Moreover, it was easy to reverse and use against Christianity. These teachers wanted to leave personal responsibility intact and did not want to know the natural limits to our liberty. They closed their eyes, pointlessly, to the formidable questions raised by faith in the foreknowledge of God. They also ignored the difficulties added to this general, insoluble, problem, by the dogmas of Christianity itself. Original Sin, Grace and the obligation to make these forms of fatalism fit with the idea of justice, are great mysteries. Compared with them astrological fatalism seemed flexible and accommodating. Moreover, these same teachers imprudently attacked science itself in the name of orthodoxy. If they had no precise texts to oppose to astrology, they found several which kept them from admitting that the earth was a sphere and which forced them to believe that there were reservoirs of celestial waters somewhere in the sky. They were thus forced to expose their naiveté, already turning into intolerance, and to take up arms in pointless quarrels, useful only to astrologers. It was the astrologers, in effect, who defended the prestige of Greek science, and they benefitted from the triumph of orthodox cosmography, which was that of the Mesopotamians.¹⁴⁹⁹ The struggle, thus widened, led astray, scattered, was mended and as it were concentrated in a last battle. The commander was the great tactician, the most imperious and most heeded of the teachers of the Church, St. Augustine. He was of another caliber from the Origenists of the Eastern Church. He

disdained the cautions of language, the arguments of the moralists, with their care for human free will. If he used logic rationally, it was as a weak weapon. He preferred to use the haughty affirmation and the authority of dogma to break resistance. It is not necessary to seek tight logic in him, and it is not easy to judge the goal which he pursued from his first blow. He did not fight for human liberty. Far from making common cause with its defenders, he considered them to be atheists. He hated the argument that knowledge of the future was impossible, thus negating divine foreseeing, which Cicero had used to oppose the partisans of divination.¹⁵⁰⁰ He admits therefore, without a shadow of a doubt, the possibility of knowing the future. Without that he would have to deny the prophets. He does not even consider divinatory practices to be necessarily illusory and lying superstitions. However, he abominates them even more as the inventions of demons. Demons were always on the lookout, spying out external indications of the Divine thoughts. They could thus lay hands on scraps of truth which they mix in with their lies, when they please.¹⁵⁰¹ St. Augustine accepted the usual demonology which had grown up during the centuries since the rise of reason. No mind was more obsessed with contact with the supernatural. Manichaeism or Orthodox, he saw the world, in history as in everyday life, as nothing but a battle between God and the devil, between angels of light and spirits of darkness. The spirits of darkness imitated the angels of light, opposing their oracles to the divine prophecies, disputing with true dreams for the waking soul in the sleeping body, combating true miracles with the blows of magical divination. Astrology benefitted, moreover, from the taste which he had once felt for it and the amount of time he had spent studying it.¹⁵⁰² It was not one of those vulgar traps which demons laid for simple minds. Rather, it was abusive, proud, atheistic, an extension of a science which was (in certain regards) one of the masterpieces of the human mind.¹⁵⁰³ If astrology were not atheistic, if the “mathematicians” had agreed to see the stars as signs and not causes, St. Augustine would have hesitated to condemn an opinion held by so many learned people.¹⁵⁰⁴ However, as it was, and as understood by the greater part of its partisans, it pretended to substitute a natural mechanical determinism for the will of God. It was thus on the path of falsehood and the champion of the Almighty attacked it with his usual ardor because of its “impious ravings.”¹⁵⁰⁵ Since theological weapons were long since blunted, he turned to dialectic. He repeats all the arguments of Carneades, adding hardly anything save his own vehemence, sarcasm, and a bit of sophistry. The argument about twins is hardly more convincing when the example used is that of Jacob and Esau than when it was the Dioscuri. The attack and the riposte end in the same place. He sensed this himself and turned to the devices of rhetoric and verbal traps. Take, he says, two twins, who have the same Horoscope. They ought to be alike in every way. However, experience shows that this is never the case. Or perhaps the small difference in time between their two births causes them to have different horoscopes, and then “I ask if they have different parents, which cannot be the case with twins.”¹⁵⁰⁶ With such requirements, parents could not have more than one child, an absurdity for which astrology is not responsible. These same twins are sick “at the same time.” The fact may be explained by the similarity of temperaments according to Hippocrates or by similar birth charts according to Posidonius. St. Augustine is not content to prefer the explanation of the physician. He wants the expression “at the same time” to mean a mathematically exact moment, and he cries:

*Why are they sick in the same way and at the same time, and not one first and the other later, since they were not born at the same moment? Or if being born at different moments does not require them to be sick at different moments, why claim that different times of birth matter for other things?*¹⁵⁰⁷

The astrologers had twenty ways of escaping from this dilemma, not to mention just not accepting everything Posidonius says. Astrology, warned by centuries of discussion, does not say (or no longer says) that twins must be alike in every way or different in every way. However, Augustine did not want to give up this line of argument. He clung to Posidonius. The latter claimed that sick twins, if they were not born at the same exact moment, were conceived at the same moment. He explained in this way the similarities in twins' destinies with simultaneous conceptions and their differences with birth at different moments. Posidonius was in a bad situation and Augustine leisurely jeered at this simultaneous conception which produced twins of different sexes and contrary destinies.¹⁵⁰⁸ However, this volley of arguments missed those astrologers wise enough to draw a veil over the mysteries of conception and to content themselves with speculating upon the Ascendant of birth. He also had logic,

but again did not use it well, when he pointed out a certain logical incompatibility between natal work and *karapχai*. The former assumed that all was decided at the moment of birth, while the latter claimed to choose the best moment for activities.¹⁵⁰⁹ These are different theories, which coexist and sometimes combine, without anyone trying to bring them into a single united theory. St. Augustine always imagined that he was dealing with a single fixed doctrine, immobilized in an orthodoxy which allowed him to seize it in a precise form and crush it. But, like a hydra or Proteus, astrology escaped from all his attempts to grasp it. It was necessary to stick to his principle, denying resolutely the influence of the stars or maintaining that if there were any, it was impossible to know. This Augustine did, but without the conviction of the “Epicureans” and the boldness of the Skeptics of other times. He did so with reservations and concessions which left the enemy in possession of the battlefield. He declared atheistic astrology unacceptable to simple deists.¹⁵¹⁰ However, he treated the transactional opinion which he knew had been that of Plotinos and that of Origen with respect. Then he noticed suddenly, not without surprise, that, basically, it was his own. He closed the discussion by saying that, if the astrologers “often made admirably true responses,” it was not because of their chimerical art, but by the inspiration of demons.¹⁵¹¹ He thought that he had destroyed astrology as a human science. He restored it, however, as demonic revelation, with a certificate of at least intermittent veracity. At the same time, he revived its fundamental dogma, for if the demons read the future in the stars, it was because it was written there. It was this which recommended astrology to pagans. They thought Augustin’s demons were gods. It did not frighten away the greater number of Christians who agreed that the signs and planets were demons. Nor did it intimidate those Christians who had re-interpreted the signs of the zodiac as the twelve Israelite patriarchs and who thought the planets were angels.¹⁵¹² These latter thought that they had suitably exorcized the astrological tool kit formerly managed by the pagans.

In the end, the Christian polemic against astrology was no more successful than that of the skeptics in earlier times. The Christians who did not believe in horoscopes feared comets and eclipses as did everyone else, because of the misfortunes which they announced.¹⁵¹³ Likewise, it was never agreed, once and for all, that one must abhor astrology to be a Christian. The Christian author of the dialog entitled *Hermippus* showed, on the contrary, the excellence and moral value of a science which elevated the human intelligence to the celestial things. Far from promoting fatalism, astrology taught us that the spiritual soul escaped the material influence of the stars.¹⁵¹⁴ The “catholic” Church had no definite doctrine nor any general measure either approving or condemning the beliefs and practices of astrology.¹⁵¹⁵ In the East, astrology was considered as a more or less controversial branch of astronomy, classed in the category of free opinions with which the Church did not bother. In the West, the authority of St. Augustine and the battle with the Manichaeans and the Priscillianists made the idea prevail that astrology was a variety of magic. It was an idolatrous religion which worshiped demons living in the planets and the decans of the zodiac. It was the mother of all the practices of sorcery applied to medicine, of chemistry, which spread, like a demonic obsession, over all the paths open to human thought and activity. However, no one held astrology and magic to be pure chimeras. In spite of all, astrology kept the prestige of astronomical science which give it the raw materials for its calculations. The orthodox teachers of the Middle Ages did not want to be suspected of ignorance by proscribing a science which was one of the glories of the Byzantines and the Arabs. They lulled their scruples with the moderate opinion that the stars had an influence over human beings, but not over their wills. This opinion implied a formal adherence to the basic principle of astrology. What killed astrology was not any of the arguments, philosophical or theological, directed against it over the centuries. Philosophy it took as an auxiliary. Dogma was forced to compromise with it.¹⁵¹⁶ It revived, stronger than ever, at the dawn of modern times. Then, however, it received a mortal blow, a blow which was not aimed at it, but which struck it from the side in an unforeseen way. So long as astronomy was content to expand the universe and leave the Earth in the center, the naive ideas which engendered astrology remained intact. They were bound together in a compact whole in the theory of the microcosm. This preserved the persuasive force of a tradition at once easily understood and mysterious, the key to the unknown, deposit of the secrets of the future. Astrological geometry continued to base its constructions upon their original foundations. They were diminished no doubt, but they remained at the convergence of all the celestial influences. Once the Earth was reduced to a planet and thrown into space, the foundation was stolen and the whole scaffold crumbled at one blow. There was nothing incompatible with astrology in the system proposed long earlier by Aristarchus of

Samos and revived by Copernicus. The incompatibility was such that there was no need to put it into logical form. It was felt better than understood. The movement of the Earth thoroughly broke the imaginary lines which connected it with the stars – the stars completely concerned with it – as a child does a spider's web.

However, the ideas which had been part of common sense for thousands of years did not disappear in a day. The defeat of astrology was slowed by the intervention of an ally, which defended the ancient conception of the universe in the name of sacred texts. Moreover, it did so in the service of people whom it had always been tempted to condemn. In forbidding Galileo to teach the movement of the Earth, the Church obeyed what was even more infallible than itself, the instinct to conserve. Religious faith could feel itself only at ease in the nest, so to speak, under the shelter of a sky closely connected to the Earth. The dignity of the “thinking reed” did not need, logically, to be connected with the primacy of the planet which carried it. Nonetheless, it seemed less qualified to be the center of a divine plan when it was known to be lodged on an atom and carried, with the whole solar system, into the silence of the infinite spaces.

NOTES

- 1 James Webb's two books, *The Occult Establishment* (LaSalle, IL Open Court Pr., 1976) and *The Occult Underground* (LaSalle, IL Open Court Pr., 1974) both outline the modern revival of occultism, particularly in France. For astrology in particular, see Ellic Howe, *Astrology A Recent History Including the Untold Story of its Role in World War II* (NY Walker, 1968) (Also printed as *Urania's Children*, 1967). For modern French astrology, see <http://cura.free.fr/docum/16afr-en.html>. LJN
- 2 I have taken the liberty of adding these groupings to the Table of Contents. LJN.
- 3 Apocryphal writings will often come up in this work. They are the natural fruit of all those believers who seek their proof in tradition and invent what they do not find. I use the word "apocryphal" in the usual sense, without distinguishing between "apocrypha" in the strict sense, which means "hidden" or "taken from a secret place" (ἀπόκρυφος) and "pseudepigrapha," i.e., "falsely titled," attributed to an author other than the real one. It is rare that pseudepigraphal books are not also apocrypha it is always the case for those supposedly ancient works recently discovered. [More is known about interactions between the Ancient Near East and Classical Greece than in Bouché-Leclercq's day. The subject is a complex one, but one good introduction is Walter Burkert, *The Orientalizing Revolution* (Harvard University Press, 1995). LJN].
- 4 That Ἀστρολογία and Ἀστρονομία are synonymous is a fact which I will not try to demonstrate. The words were synonyms for a long time, even in modern languages. For that reason divination from the stars was called "judicial" astrology. Today, the distinction is a fact, and *astrology* is not an equivocal term. The caprices of usage have reserved for the science the term *astronomy* – a bad word, for astronomers do not rule the stars. Astrology was also called "astromancy."
- 5 See the texts and references amassed by E. Zeller, *Philos. der Griechen* I³, pp. 165-179 (transl. Em. Boutroux, I, pp. 197-210). For the classification of the opinions of the philosophers, use the collection of H. Diels, *Doxographici graeci* I³, with prolegomena and *Indices*, Berlin, 1879. That Thales may have been in contact with Chaldaean or Egyptian ideas is likely. But we have learned to distrust more and more the "Egyptians and Chaldaeans" in whatever concerns astrology. The first to speak of Thales traveling to Egypt – and perhaps to Chaldea – is Eudemus (of Rhodes?), polygraph, author of an Ἀστρολογικαὶ ἱστορίαι later than Aristotle. One cites, as from Thales, a ναυτική ἀστρολογία or ἀστρονομία attributed also to Phococ of Samos. Most likely Thales wrote nothing καὶ κατὰ τινὰς μὲν σύγγραμμα κατέλιπεν οὐδέν. (Diog. L., I, 23).
- 6 Θαλῆς ... ὕδωρ εἶναι φησιν στοιχεῖον καὶ ἀρξὴν τῶν ὄντων (Aristotle, *Metaph.* I, 3); *Thales ... ex aqua dixit constare omnia*, Cicero, *Acad. Pr.*, II, 37, a translation into scientific language of Homeric traditions (Ὠκεανός, ὅσπερ γένεσις πάντεσσι τέτυκται Iliad, XIV, 246), Babylonian traditions (see below, Chap. 2), Egyptian traditions (cf. Horapollo, I, 10), traditions seen perhaps in Pindar (Ἄριστον μὲν ὕδωρ. *Olymp.*, I, 1), and used all the time by astrologers. The idea that humans were fish-shaped originally is also a Mesopotamian tradition (*Philosophoumena*, I, 5, p. 19 Cruice. Cf. Bouché-Leclercq, *Placita Graecorum de origine generis humani*, Paris, 1871, p. 40).
- 7 In quantity, the element of Anaximander is τὸ ἄπειρον (Aristotle, *Metaph.*, I, 3), in quality a μίγμα (Aristotle, *Metaph.*, XII, 2).
- 8 Δοκεῖ καὶ περιέχειν ἅπαντα καὶ Κυβερνᾶν (Aristotle, *Phys.*, III, 4.)
- 9 Ἀρχὴν εἶναι λέγει τὴν αἰδίων κίνησιν, καὶ ταύτην τὰ μὲν γεννᾶσθαι (Hermias, *Irris. philos.*, 4. Cf. E. Zeller, I³, p. 193, 3).
- 10 See the texts in E. Zeller, I³, p. 197. He assumes that Anaximander placed the Sun and Moon above the stars (see below, p. 42, n. 2). For the "scientists," the gods are the products, not the organizers, let alone the creators, of Nature. Since Greek theology did not require the gods to be first causes, these philosophers, who seem to be atheists to us, were in fact very religious. Heraclitus said that all things are full of gods, even food (Aristotle, *De Part. anim.*, I, 5).
- 11 It was the school of Pythagoras which created the title μαθηματικοί, later carried by the astrologers. It was reserved for disciples who, after they learned the over-all principles of the science (ἀκουσματικοί), arrived at a detailed understanding (Porphyry, *Vit. Pythag.*, 37). They were the second-degree initiates, comparable to the ἐπόπται of the Mysteries. Astrology and astronomy was not omitted from Pythagoras' cosmopolitan studies. It was the Chaldaean Zoratos (Porphyry, *Vit. Pythag.*, 12) or the Assyrian Nazaratos (Alex. Polyh. ap. Clem., *Stromateis*, I, 15) who taught him τὸν τε περὶ φύσεως λόγον καὶ τίνες αἱ τῶν ὄλων ἀρχαί. (Porphyry, *ibid.*). Astrology is personified in Pythagoras' entourage by Ἀστράϊος, a miraculous child taken in by Mnesarchos, the father of Pythagoras.

12 Superstition about odd and even numbers was very apparent in Roman religion and immortalized in the verse by Virgil "*Numero deus impare gaudet*" (*Ecl.* VIII, 75). It definitely goes back farther than Pythagoras. The rationalists said that an odd number is perfect, fertile (γόνιμος), masculine because (it was later believed) it engenders an even number by addition, while the even does not engender the odd (Stobaeus, *Ecl.*, I, 1, 10).

13 The role of Pythagoreanism, very large in astrology, is enormous in the collection which we call "the occult sciences." Its principle, that number is the essence of things, had a strong affinity with that of magic. This is that the knowledge of the reality of things is incorporated in their real names, properly pronounced, and in giving a fitting name to the beings which are named. From this comes the practice of turning names into numbers, used in mathematical onomatomania (see below, Chap. 15), and in the Jewish Kabbalah. [The practice is now commonly called *gematria*, a word borrowed from Hebrew. L.J.N.] It is the reason for all the numbers of the Antichrists, the Beast, etc., which fill the Judeo-Christian apocalypses, for amulets with names like *Abrasax*, and so on. The taste for mystical speculations on numbers is still very lively. The author of *Harmonies de l'Être exprimées par les nombres* (par P.-F.-G. Lacuria, 2 Vol. in 8°. Paris, 1847) was almost a *Pythagoras redivivus* or a Proclus turned into a Christian priest. He was an artless soul, the memory of whom prevents me from considering all contemporary mystics to be charlatans. J. Kuntze (*Proleg. z. Gesch. Roms* Leipzig 1882) is persuaded that the square is the symbol of a virile will, and for that reason the "temple" of the Roman augurs was square, and Rome was square, and the Roman Empire was square, or even a rectangle equal to two squares! Truly, this is a case of intellectual reincarnation.

14 The invention of the seven-stringed lyre by Hermes (Hymn. Homer. in *Mercur.*) served to demonstrate that astrology was revealed by Hermes-Thoth or Trismegistus, who signed all the hermetic works.

15 Cf. *Hist. de Chr. Colomb*, by Ferdinand Columbus, Chap. IX. He also had Aristotle on his side (*de Caelo*, II 14), Seneca (*Quantum enim est quod ab ultimis littoribus Hispaniae usque ad Indos jacet? Paucissimorum dierum spatium, si navem suus ventus implevit*) and Seneca, (*Q. Nat.*, I, praef.), and even claimed to fulfill the celebrated promise of the same Seneca in *Medea* (*Medea*, 375 f.). The Law of Titius or of Bode was founded on a postulate analogous to those of the Pythagoreans. It encouraged nineteenth century astronomers to seek a planet between Mars and Jupiter, where they have indeed found hundreds of small planets. In revenge, the Pythagorean dogma (*Gemin.*, *Isag.*, 1), popularized by Plato, namely that planets must move in circles at unchanging speeds – πάν γὰρ σώμα θεῖον κινεῖται κυκλικῶς (Proclus, in *Anal. sacr.*, V, 2, p. 76 Pitra) – prevented the predecessors of Kepler from admitting elliptical orbits. They never dreamed of the Orphics, who gave the universe the shape of an egg!

16 We refer you, to avoid repetition, to the following chapters, notably on the aspects, or regular polygons, paths traced by the movements of the stars.

17 The idea of the ἀρείων δυναμέων ἄπειροι συνδρομαί, which marks one the way a stamp seal does ἰδέα σφραγίδος which we also find in the pythagorizing system of the Gnostic Sethians (Philosophoum., V, 3, p. 212 Cruice). The καιρός, *modus* and also *opportunitas* Ἀθήνα, ap. Stobaeus, *Ecl.*, I, 1, 10), is the fundamental idea in the theory of the *καταρχαί* (see below, Chap. 13).

18 See below, p. 7, 1. There is the little τετρακτύς (four); the medium, sum of the four first numbers (1 + 2 + 3 + 4) or the decad; and the grand τετράκτυς, sum of the first *four* even numbers and the first *four* odd numbers (1 + 3 + 5 + 7) + (2 + 4 + 6 + 8) = 36. This may have been suggested by the system of the decans, or vice versa, the decans may have been suggested by it.

19 Manilius also refuted the Eleatics (I, 182 f.).

20 Heraclitus, who, it is said, thought the Sun was shaped like a ship (σκαφοειδής) and was one foot in diameter (Eusebius *Praep. Ev.*, XV, 24-25), may have taken literally the Egyptian myth that Ra was a new-born baby each morning, delivered each morning by Nut. The idea that the Sun was one foot across, born anew each morning, re-appears in the physics of Epicurus (Cleomedes, *Cycl. Theor.*, II, 1; Servius, *Georg.*, I, 247).

21 Macrobius, *Somn. Scip.*, I, 14, 19) recorded the definitions of the soul *Heraclitus physicus* [*dixit animam*] *scintillam essentiae*.

22 "The word *influence* comes from the old astrological superstitions ... the Italian word *influenza* alludes to a similar belief." (M. Bréal, *Essai de Sémantique*, p. 141). The words *disaster* and *star* in the sense of destiny, etc., are also left-overs from astrology.

23 This movement, slow at first, increased over time. As a result, the duration of the days and of the nights was shortened. (Empedocles never dreamed of a single diurnal movement.) From this came a very original theory of the length of intrauterine life. It was equal to the length of the day at the beginning of the human period, and never changed. (See below, Chap. 13).

24 Those who prefer to read the fragments of Empedocles in good verse, with an over-view of his philosophy (with the text in the notes) and a dramatized version of his legend, will find what they seek in *Pantheia, Étude antique*, by Felix Henneguy, Paris, 1874.

25 The idea that the sky is a museum of prehistoric curiosities is expressed by Seneca (*Hercul. fur.*, 65f.) The scholiast on Germanicus (p. 385 Eyssenhardt) thinks that Jupiter formed them to instruct humanity. The scorpion, for example, was a *Jove astris inlatus, ut ejus naturam futuri homines intellexerunt*. Imagine Jupiter a palaeontologist!

26 Lucretius, I, 717-734; Empedocles knew that *Ut vix humana videatur stirpe creatus*.

27 Diogenes Laertius, IX, 6, 33. We will see farther on that the order of the planets is of capital importance to astrologers.

28 Eusebius, *Praep. Evan.*, I, 8, 7. Perhaps Democritus had been affected by his contemporary, Empedocles and used here the theory of the acceleration of the sphere's movement (see above, p. 12, n. 2). Democritus also thought there were more planets than did the Near Easterners or the Pythagoreans. This is probably the sense of the ambiguous passage in Seneca *Democritus quoque ... suspicari se ait plures esse stellas quae currant, sed nec numerum illorum posuit nec nomina, nondum comprehensis quinque siderum cursibus* (Seneca, *Q. Nat.*, VII, 3, 1. Cf. E. Zeller, I³, p. 722, 3). In general, Democritus had the reputation for being very interested in astronomy and weather prediction. Cf. the fragments ἐκ τῶν περὶ ἀστρονομίας συγγραμμάτων (*Fr. Phil. Graec.*, ed. Müllach, I, pp. 368-369).

29 Plato, *Phaedr.*, p. 98B. Likewise, Aristotle said of Anaxagoras that he inserted νοῦς "like a machine" since he needed to find a cause. The rest of the time, πάντα μᾶλλον αἰπῆται τῶν γιγνομένων ἢ νοῦν (*Metaphysics*, I, 4).

30 Ὁ φυσικώτατος Ἀναξαγόρας (Sextus Empiricus, *Adv. Mathem.*, VII, 90).

31 Νοῦς the guide of the universe (Anaxag. ap. Diog. L., II, 6); the one simple substance (ap. Aristot., *De An.*, I, 2, 5); soul (ψυχή), that is, the principle of organic life, spread through all living beings, ζωὴς καὶ μεγάλοις καὶ μικροῖς (*ibid.*), and, as such, having or not having the personality supposed by its initial role, etc.

32 The line of demarcation has been smudged, even erased, over more than twenty centuries by the efforts of logic. The goal was to reconcile the notion of natural laws, necessary and immutable – the initial postulate of science – with divine Will, free by definition. It is necessary to keep science and faith in their respective domains. This is the only way for them to live in peace, keeping, at the same time, metaphysical speculations about initial or final things, that is, things a person may believe but not know.

33 I know that Socrates wrote nothing. Moreover, I am not so naive as to attribute to him all the things Plato made him say. The Socrates of Xenophon has a chance of being more true to life, save for one thing. As an apologist, Xenophon changed Socrates into a defender of tradition, of established laws. If Socrates said τὸ νόμιμον δίκαιον εἶναι (Xenophon, *Mem.*, IV, 4, 12), he meant on the condition that the laws be just. Socrates, earlier than the Apostles, had said to his judges πείσμαι μᾶλλον τῷ θεῷ ἢ ὑμῖν (Plat., *Apolog.*, p. 29).

34 The sentence of the oracle, γνῶθι σαυτὸν, meant that man, knowing his condition, ought to be humble before the gods. Socrates reversed the natural sense, so that the spiritual twist was forgotten.

35 Xenophon, *Mem.*, IV, 7, 6. Socrates cites as proof of Anaxagoras' madness the fact that he believed the Sun to be a flame, or a burning stone. How could he have dreamed this, as if he'd never seen flames or Sun? Not noticed that the Sun nurtures plants but fire destroys them? And so on. Socrates was all the more confused in that he never thought "scientifically." He had no truer disciples than the Cynics and the Cyrenaics. Others made excuses or refuted him (Seneca, *Q. Nat.*, "Praefat.", 10). Humanity is part of Nature and could not understand itself, if it did not understand the whole of Nature (Clement of Alexandria, *Strom.*, I, 60). Manilius refutes Socrates directly in saying that the gods themselves have taught humanity about the stars (II, 115 and I, 25-52); (IV, 922).

36 Hor., *Od.*, I, 28.

37 *Sermon sur la loi de Dieu*. One thinks, though, that Bossuet would not cite Socrates but *Ecclesiastes Quid necesse est homini majora se quarere?* etc. (VII, 1). [Or who can tell him what shall be after him under the sun? Rheim-Douay Version, L.J.N]. It is especially for his indifference to useless science that Theodoret praises Socrates (*Gr. affect. cur.*, IV, p. 799). Socrates thought *caelestia vel procul esse a nostra cognitione, vel, si maxime cognita essent, nihil tamen ad bene vivendum* (Cic., *Acad.*, I, 4, 15).

38 *Recherche de la vérité*.

- 39 Xenoph., *Mem.*, I, 1. Cf. IV, 7. In revenge, the author of the *Epinomis* (p. 900A) disdains astronomy used to regulate the calendar, rather than for contemplating τὴν τῶν αἰσθητῶν θεῶν φύσιν. Theon of Smyrna said much the same (p. 9 Hiller). Disavowing the Socrates of Xenophon, but not the Platonic Socrates, Firmicus (following Aristophanes, no doubt) classed Socrates among the devoted astrologers, those who believe *stellarum quidem esse quod patimur* (Firmic., I, 6, 4 Kroll). Socrates is made to look like a Janus with two faces.
- 40 We know what faith Socrates had in divination or revelation. (See above, p. 17 and *Hist. de la Divination*, I, p. 42-45).
- 41 *Socrates autem primus philosophiam devocavit e caelo.* (Cic., *Tuscul.*, V, 4).
- 42 We do not know if a Timaeus really existed or if his works were not Plato's fictions. Plato's habit of putting his views into the mouths of others encouraged the makers of pseudepigrapha. They did not need encouragement. Pliny the Elder (XVI 82) cites an astrologer, Timaeus Mathematicus, who attributed the fall of the leaves to the influence of Scorpio. What is more, we have the commentaries of Chalcidius, of Macrobius (on the *Somnium scipionis* of Cicero), and of Proclus on the *Timaeus* or *Περὶ φύσεως* of Plato (and on the 10th book of the *Republic*). All are of enormous volume and reunite the debris of a crowd of lost commentaries (849 p. gr. in-8^o, on the *Timaeus*, ed. Schneider, Vratislav., 1847, and 196 pp. in-4^o on the *Republic*, book ten, in *Anal. Sacr.*, V, 2, of D. Pitra, Rome and Paris, 1888). See, too, the work of Theon of Smyrna, *Τῶν κατὰ τὸ μαθηματικὸν χρηρησίμων εἰς Πλάτωνος ἀναγνώσιν*, ed. E. Hiller (Lips., 1878, 205 p. in-12^o).
- 43 Plat., *Tim.*, p. 38E and 39C.
- 44 Πρώτην καὶ πρεσβυτάτων θεῶν, etc. (*Tim.*, p. 40C) an archaic belief, abundantly attested. Plotinos distinguished it, outside the body (Γαίαν) τὸν μὲν νοῦν αὐτῆς ἐστὶν καλῶν, Δήμητραν δὲ τὴν ψυχήν (Proclus, *In Tim.*, p. 28 a2C). [Cf. Proclus, *Commentaire sur le Timée*, tr. A. J. Festugière, 5 vols, (Paris 1966-68) or Proclus, *Commentary on the Timaeus of Plato*, tr. Thomas Taylor (London, 1820; repr. Prometheus Trust, ND.). L.J.N].
- 45 Cf. L. Coutrat, *De Platonicis mythis*, Paris, 1896. The author maintains, with great vigor and erudition, that all the solutions to the great problems, the existence of the gods, the creation of the universe, the immortality of the soul, were proposed by Plato in the form of myths. He takes this so far that sometimes he rails against those who take the fables literally. Perhaps the thesis is excessive, certainly more renewed than new (ὄθεν καὶ μυθικώτερος ἐνίοις ὑπελήφθη, Diogenes Laertius, III, 80). However, it does not permit us to count Plato himself among the believers. We must not forget that the Skeptics of the New Academy also came from Plato.
- 46 An opinion attributed to Pythagoras, that is, to some Neo-Pythagorean (Macrobi., *Somn. Scip.*, I, 12, 3). Behold how etymology combines with metaphor to create dogma! The Milky Way, resting place of the souls before reincarnation (Heraclides Ponticus, apud Stobaeus, *Ecl.*, I, 41. Cf. I, 27, Περὶ γαλαξίου. Plutarch, *Plac. Phil.*, III, 1), of the souls of heroes after death (Cic. Macrobi., *Somn. Scip.*, I, 15, Manilius, I, 758-804), palace of Jupiter in the Empyrean, above the fixed stars (Marc. Cap., II, 208), etc. These chimeras are a facile invention. The Quapaw Indians also call the Milky Way "the road of the souls" (*Journal of American Folklore*, VIII [1895], pp. 130-131). The fall of the souls is compared by Plato (*Rep.* X), assimilated by others, to the paths of shooting stars, accompanied by thunder and earthquakes. It was something taken from vulgar opinion, that souls are stars or that each person has his or her own star (Cf. Pliny, II, 28; see below, chapter 12).
- 47 Macrobi., *op. cit.*, I, 12, 2. The reason for the choice (of the Tropics as poles of hot and cold) is not given by Macrobius. It is based upon Stoic physics, which is that of Heraclitus. Macrobius, who believed that Cancer is in the Milky Way, although it crosses the Zodiac between Gemini and Taurus; Macrobius, I say, mixed this system with the preceding one. He probably combined it with a third, which put the Tropic or summer solstice in Leo. He wrote *Ergo descensurae ... adhuc in Cancro sunt ... necdum Lacteam reliquerunt; cum vero ad Leonem labendo pervenerint, illic condicionis futurae auspicantur exordium ... quia in Leone sunt rudimenta nascendi et quaedam humanae naturae tirocinia*. Others put three gates, in trine, in the sky *unam ad signum Scorpionis, qua Hercules ad deos isse diceretur alteram per limitem qui est inter Leonem et Cancrum; tertiam esse inter Aquarium et Pisces*. (Varr. ap. Serv., *Georg.*, I, 34). Macrobius is misled by all these preposterous inventions. Moreover, he later says that the souls, before descending, drink forgetfulness from the *Crater sidereus in regione quae inter Cancrum est et Leonem locatus* (I, 12, 8). The constellation the Crater is outside the zodiac and not very close to it.
- 48 See above, under Empedocles, for the prehistoric catastrophisms.
- 49 The δαίμονες of the Neo-Platonists are the microbes of the universe. They do everything. They lodge in our organs, where they cause all manner of trouble ἔ τε πόλεσι καὶ ἔθνεσιν ὅλοις καὶ ἰδία ἐκάστω τῶν ἀνθρώπων. Hermippus, I, 16, p. 25 Kroll) – πᾶσα γὰρ τοῦ κόσμου μερὶς πλήρης ἐστὶ ψυχῶν μερικῶν ... συνεπομένων τοῖς δαίμοσιν (Proclus, *In Tim.*, p. 333A). There are no natural laws. An infant does not come to

term without prayers and incantations. Proclus (in the *Anal. Sacr.*, V, 2, pp. 177-178 Pitra) here agrees with the Toubmoulous of Celebes (*Internat. archiv für Ethnographie*, VIII [1895] pp. 89-109). One might well call him a “primitive.” There was all the more reason to deny natural law in the heavenly spheres. Proclus maintains there is no need for eccentrics and epicycles to explain the stations and retrogradations of the planets they walk wherever they want (ὅτι ταῦτα βούλεται δι’ αὐτῶν). They are gods, not machines (Proclus, *In Tim.*, p. 278D). He refused to believe in the precession of the equinoxes, which obliged him to believe that the sphere of the fixed stars had a slow retrogradation, because, like the planets, the stars knew their duty, which was to walk along in a single direction, “the Same.” Besides, Proclus can refute Ptolemy and Hipparchus with oracles (Proclus, in *Anal. Sacr.*, V, 2, pp. 77 Pitra, *In Tim.*, p. 278D-F; see below, chapter 4). Is it exaggeration to call this the reasoning of a savage? Later, in the Byzantine Middle Ages, Platonic and Christian demonology mixed. See the *Περὶ ἐνεργείας δαιμόνων* of Psellus [ed. Boissonade, Nuremberg, 1838], commentator upon *Timaeus* and upon the *Chaldaean Oracles*. This led to enormous extravagances, such as the idea that the Sun has a chair and a human form, (ἄνθρωπόσαρκος καὶ ἀνθρωπομίμητας), dresses, undresses, manages 15,000 angels, etc. (Vassiliev, *Anecd. graeco-byzant.*, Moscow, 1893, p. 184 f.) [Such remarks are found in the Rabbinic midrash and Hekhalot texts. Cf. Ness, 2000, the discussion of rabbinic astrology in chapter V. LJJN]. Finally, Plato, with his baroque etymologies, the best known of which are in *Cratylus*, affirms the idea which is at the basis of all magical spells. It is a sort of *onomatomancy* (see below, chapter 25), the knowledge of the names of objects, their definitions, their natures (φύσις), the substance of these objects. Plato said that these names had been imposed ὑπὸ θειοτέρας δυνάμεως ἢ τῆς τῶν ἀνθρώπων and conform to reality φύσιν ὀνομάτων οἰκείαν τοῖς πράγμασιν εὐρέσθαι (ap. Euseb., *Praep. Evang.*, XI, 6, 27-41). Greek as the primal language was contested – and denied in a general way by modern scholarship (Cf. M. Bréal, *Sémantique*, p. 277) – by Hebrew. The so-called language of revelation, the proposition seemed obvious to Jews and Christians (Euseb., *loc. cit.*). For the power of Hebrew names (or Chaldaean or Egyptian, depending on belief), see the formulae of conjuration in the magic papyri. Platonism has been a barrier to the scientific spirit. However, we must remember, in all fairness, Plato did not foresee that his every word would become an oracle. He became “divine” not so much because of his teachings as because of the great pride of his worshippers. [There has been a great deal of research on the Greek magic papyri since Bouché-Leclercq’s day. The classic edition of the Greek texts is K. Preisendanz, ed., *Papyri Graeci Magicae Die griechischen Zauberpapyri*, 2 Vols., 2nd ed., ed., Albert Heinrichs (Leipzig Teubner, 1928-31; 2d ed., Stuttgart Teubner, 1973-74; Reprint, Leiden E. J. Brill, 1984.) A convenient English translation with up-to-date bibliography and discussion is Hans Dieter Betz, ed., *The Greek Magical Papyri in Translation, Including the Demotic Spells* (Chicago & London University of Chicago Press, 1986, reprinted with new bibliography, University of Chicago Press, 1997). F. Graf, *Magic in the Ancient World* (Cambridge, Mass. and London, UK Harvard University Press, 1997) is a useful introduction, while Matthew W. Dickie, *Magic and Magicians in the Greco-Roman World* (London, Routledge 2001) is the most up-to-date treatment and will probably become the standard work in English. LJJN].

50 The Ἀνάγκη, following Proclus (*Anal. Sacr.*, V, 2, pp. 97-98 and 137 Pitra), is Lachesis; the souls which she sends forward are provided, by Clotho (the sphere of the fixed stars), with a flexible fabric of destiny, which was fixed and made immoveable by the intervention of the planets’ movements (Atropos). This is why the “Chaldaeans and Egyptians” need to consult the signs of the Zodiac and the planets at the same time.

51 Plato, *Sympos.*, p. 199A.

52 Save for a fifth element (quintessence, πέντη οὐσία), from which the stars were made.

53 Cf. Pluzanski, *Aristotelea de natura astrorum ejusque vices apud philosophos tum antiquos, tum medii aevii* (Lutet. Paris., 1887), a general review of all cosmographic systems. The author exaggerates when he says (p. 132) that with his animated and eternal incorruptible universe, Aristotle “followed and amplified the errors of Plato.” Aristotle did not begin a line of mystics. See below (chapter 4), the discussion related to the unity of movement in the universe. All movement derives from the Prime Mover (God), who make the “prime mover” (the sphere of the fixed stars) turn from East to West. The inverse movement (West to East) of the planets is explained by the stubbornness or resistance of matter. Aristotle used 47 (or even 55, according to some) spheres, because he refused to admit movements which were not perfectly circular (a Pythagorean dogma) and at a constant speed (ὁμοιοί). [For a more recent review of ancient cosmologies, see now P. Duhem, *Le Systeme du monde Histoire des doctrines cosmologiques de Platon à Copernic*, 5 Vols. (Paris A. Hermann, et Fils, 1913-59). LJJN].

54 It was Aristotle who formulated this teleological axiom ὁ θεὸς καὶ ἡ φύσις οὐδὲν μάτην ποιοῦσιν (*De caelo*, I, 4).

55 Θαυμασιωτάτην δὲ εἶναι φησιν ὁ Θεόφρατος, ἐν τοῖς κατ’ αὐτὸν χρόνοις τὴν τῶν Χαλδαίων περὶ ταῦτα θεωρίαν, τὰ τε ἄλλα προλέγουσαν καὶ τοῦ βίου ἐκάστων καὶ τοῦ θανάτου, καὶ οὐ τὰ κοινὰ μόνον, οἷον ξειμῶνας καὶ εὐδίας, κτλ. Proclus, *In Tim.*, p. 285F. It is a precious text it proves that genethliology preceded

elections (in Greece; see chapters 3, 13 and 14). Theophrastus was interested in meteorology (ἐν τῇ περὶ σημείων βίβλῳ) and may have believed that the appearance of Mercury in winter foretold more cold, and, in summer, more heat. One may suspect irony – but, whatever Proclus thought, I very much doubt that he would have admired “the rest.” Theophrastus, who railed against δεισιδαιμονία (*Character*. 16), made short work of occult causes.

56 The hypothesis of the πέμπτη (or sometimes πρώτη) οὐσία was directly contrary to the theory of the ἀπὸ ῥοία. However, they had no need to maintain the distinction (classic after Aristotle) between the ethereal world and the sub-lunar world. This no longer seemed to rend the unity of the universe. It was enough for the astrologers that the agitation of the sub-lunar world was caused by movement of the stars. The Renaissance astrologers, who wished to remain faithful to Aristotle, no longer dared to speak of the ἀπὸ ῥοία and had to content themselves with κίνησις. They would have been less embarrassed if they had known that a day would come when a theory that light was a wave (οἱ κίνησις) would replace the emission theory (ἀπὸ ῥοία). Thus, Fr. Böll is wrong to assume that “the Aristotelian construction of the world was very favorable to astrology” (*Studien über Claudius Ptolemäus*, p. 161). The Platonists, who rejected the quintessence, were the astrologers’ surest allies. So were, the Stoics, who, for all their talk of ether and the upper world, claimed that the stars were fed by vapors from the earth (see below).

57 Astrology could never capture people who said *acervum stellarum sine cause esse* (Servius, Georg, I, 252). Epicurus had a reputation for being crassly ignorant of astronomy (see Cleomed., *Cycl. Theor.*, II, 1 and above p. 10, 2. He was certainly indifferent, accepting all explanations as possible, and treating as frauds those who pretended to know the truth (Diog. Laert., X, 113-114).

58 They admitted a mechanical stratification of four (or five) elements, by order of density. Next came an accommodation with the work φύσις by προνοία. This, for example, battered the earth in contact with the air, in making water enter its cavities. Cf. Häbler, *Zur Cosmogonie der Stoiker* (*Jahrb. f. Philol.*, 1893, pp. 298-300). We know to what point the Stoics were preoccupied with the “goal” in all the details of the κόσμος. Stoic teleology was one of the most naive. [Cf. Samuel Sambursky, *Physics of the Stoics* (London 1959), as well as his other works. LJN].

59 The Peripatetics set the example, beginning with Aristotle, author of a *Περὶ βασιλείας* addressed to Alexander. Strato of Lampsacus, called to Alexandria as preacher to Ptolemy Philadelphus, wrote two treatises *Περὶ βασιλείας* and *Περὶ βασιλεῶς φιλοσόφου*. We have citations of treatises *Περὶ βασιλείας* from Persaeus, Cleanthes, and Sphaerus. As for Sphaerus, if he went to (as Diogenes Laertius says) πρὸς Πτολεμαῖον τὸν Πηλιοπάτορα, it could be only to be tutor to this son of Euergetes. One must say, in order not to exaggerate, that the philosophical fervor of the kings did not last long. The pretense of teaching them their business doubtless contributed to the cooling.

60 An opinion cited as “more specious than true” by the Stoic Heraclitus (in the time of Augustus) in his *Homeric Questions* (chapter 53, pp. 112-113, Mehler). His little work, and that of Cornutus, are the debris of the immense theological “literature” of the Stoics, who also counted Aratus and Eudoxus as theologians (Heraclitus, op. cit., chapter 69, p. 105). Homer became for them what *Timaeus* was for the Platonists, Plato seems never to have understood Homer, since he chased him from his republic. The Stoics made Homer into a book of high morality. Those capable of discovering that satyrs raping nymphs symbolized the advice to mix water with wine (Cornutus, chapter 30, p. 60, Lang) were truly virtuosi. In etymological *tours de force*, they imitated, then surpassed Plato. Look how Chrysippus explains the name of Zeus Ζεὺς μὲν οὖν φαίνεται ὠνομάσθαι ἀπὸ τοῦ πᾶσι δεδωκέναι τὸ ζῆν Δία δὲ αὐτὸν λέγουσιν ὅτι πάντων ἐστὶν αἴτιος καὶ δι’ αὐτὸν πάντα (ap. Stob., *Ecl.*, I, 2, 27). Or even Ζεὺς ἐστὶν ἀπὸ τοῦ ζῆν, because he escaped from Kronos (=Χρόνος) and was sheltered from time (Anon. ap. C. Lang, *Cornuti Theolog.*, “Praef.,” p. xiii). See the etymologies in Eusebius of Caesarea, *Praeparatio Evangelica*, III, 11. Those minds deprived of critical sense were defenseless against astrological associations of ideas. In the exegesis of Homer, they had predecessors, the disciples of Anaxagoras, who had enrolled Homer among the scientists (Diogenes Laertius, II, 11; Tatian, *Adv. Graec.*, 21, etc.).

61 Perhaps the Stoics were complacent enough to deify, not just the stars, but the constellations *singulas enim stellas numeras deos eosque aut beluarum nomine appelsas, ut Capram, ut Nepam, ut Taurjm, ut Leonem*, etc. (Cicero, *Nat. Deor.*, III, 16, 40).

62 This line of reasoning is “the citadel” of the Stoics, who *ista sic reciprocantur, ut et si divinatio sit; sunt autem di, est ergo divinatio* (II, 17). Otherwise, either the gods do not know the future or they do not like humanity, making divination useless. The Stoics left it to others to prove that divination is useful.

63 Chrysippus left nothing for the theologians of the sixteenth and seventeenth centuries to invent while disputing free will and grace.

- 64 *Ducunt volentem fata, nolemtem trahunt* (Seneca, *Epist.*, CVII, 11, following Cleanthes).
- 65 See chapter 16 on astrological fatalism, where we will see more of, and even examine, the concessions which the astrologers' made.
- 66 *Tetrabiblos*, I, 3; *Quae multo ante praevisa sunt, languidius incurrunt* (Seneca, *Consol. ad Marc.*).
- 67 The Stoic doctrine of ἀποκατάστασις or the periodic renewal of the universe by fire (ἐκπύρωσις) or flood (κατακλυσμός) at the end of the "Great Year," goes back, no doubt, to Heraclitus or the Pythagoreans. But the idea that the renewed universe would exactly reproduce the preceding universe definitely has an astrological provenance. *Genethliaci quidam scripserunt esse in renascendis hominibus quam apellant palliggenesían Graeci ... ut idem corpus et eadem anima ... rursus redeant in conjunctionem* (Varro apud Augustine, *Civitate Dei*, XXII, 29). It is hard to tell who pressed and who was pressed. In any case, the astrologers took advantage of ἀποκατάστασις (Cf. Firmicus Maternus, III, 1, Kroll, who combines the *diluvium* with the *pyrosis*). Likewise, the Stoics invoked the authority of Berossos, who assigned the cause of the conflagration, the reunion of the planets in Cancer, and, for the deluge, their reunion in Capricorn (Seneca, *Q. Nat.*, III, 29. Cf. below, chapter 2, p. 39. The Stoic Heraclitus knew that (chapter 3, [see above, p. 30, 1](#)) the conjunction of the seven planets in a single sign ushered in a σύγχυσιν τοῦ πάντος. Scaliger tells how (*Proleg. de Astrol. vet. Graec.*, fol. a 3), when the astrologers announced, in 1579, that a conjunction of all the planets would take place in the month of September, the human race lived in terror for seven years.
- 68 *Si quis oriente canicula natus est, is in mari non morietur*. Chrysippus, wishing to suppress here the conditional, *docet Chaldaeos quo pacto eos exponere praecepta oporteat* (Cic., *De fato*, 6-8).
- 69 [Enituit] *astrologia Berossus, cui ob divinas praedictiones, Athenienses publice in Gymnasio statuam inaurata lingua statuere* (Pliny, VII, 123). Pliny does not say if it was done in Berossos' lifetime. However, we can well see that it was the result of a taste for a novelty, and it is permissible to believe that the taste was not without rapport with the enthusiasm for Zeno (Diogenes Laertius, VII, 6). Stoicism, for that matter, was nearly as "Oriental" as astrology. Its founders were nearly all from Asia.
- 70 This opinion, banal after Alexander, appeared before him. Herodotus was convinced that even the names of the Greek gods came from Egypt, and that the oracle of Dodona had commanded the Pelasgians to adopt them (II, 52). It was Plato, especially, who made "barbarian wisdom" fashionable. They were children of nature, not perverted by civilization, and enjoyed free commerce with the gods – an idea that became popular in spite of Epicurus' protests. Diogenes Laertius was not content only to protest. He reversed the propositions: τὸ τῆς φιλοσοφίας ἔργον ἔνιοι φασιν ἀπὸ βαρβάρων ἄρξαι.... λανθάνουσι δ' αὐτοὺς τὰ τῶν Ἑλλήνων κατορθώματα, ἀφ' ὧν μὴ ὅτι γε φιλοσοφία, ἀλλὰ καὶ γένος ἀνθρώπων ἤρξε βαρβάροις προσάπτοντες (Diog. L. Prooem.). As for Egyptomania, after Herodotus, Plato made his contribution. He cites the words of the Egyptian priests to Solon ὃ Σόλων, Σόλων, Ἕλληνες ὑμεῖς αἰεὶ παιῖδες ἐστέ, γέρων δὲ Ἕλληνα οὐδεὶς (Plat., *In Tim.*, p. 22; Clem. Alex., *Strom.*, I, 15; *Protrept.*, 6; Euseb., *Praep. Ev.*, X, 4, 19.). The Greeks finally sacrificed even their Homer to Egyptomania, *siquidem Thebanus fertur, quae civitas est apud Aegyptum nobilissima* (Chalcid., *In Tim.*, 135). It is superfluous to look for more evidence after this example. The Mesopotamians were no less esteemed. The Neoplatonists were intoxicated by the revealed wisdom (θεοπαράδοτος σοφία) which lay, for them, in the "Chaldaean Oracles." Proclus, according to his biographer, was willing to sacrifice all of ancient literature, save only the Timaeus and these famous oracles (Marinus, *Vit. Procl.*, 38). At the basis of all these wanderings is one true idea the Greeks, using and abusing individual initiative, improvised systems, but did not have tradition or accumulated experience. This was their weak point, especially in astronomy, and the "Chaldaeans" of Diodorus (II, 28) did not hesitate to point this out. It was only in Alexandria that the Greeks began to amass scientific observations. [For the great respect some Greeks felt for the Ancient Near East, see Arnaldo Momigliano, *Alien Wisdom; The Limits of Hellenism* (Cambridge, Cambridge University Press, 1975) and Erik Hornung, *The Secret Lore of Egypt Its Impact on the West* (Ithaca Cornell University Press, 2001), especially Chapter Two, "Foreign Wonderland on the Nile." LJN.].
- 71 See the fragments of Berossus in *Fragm. Histor. Graec.*, II, pp. 495-510. [On Berossus, see Lehmann-Haupt, "Berossos, *Reallexikon der Assyriologie*, Bd. 3, pp. 1-17. Cf. also *Berossos und die baylonisch-hellenistische Literatur*, tr. and ed. Paul Schnabel (Leipzig and Berlin, 1923; repr. Hildesheim Georg Olms Verlagsbuchhandlung, 1968) for a critical edition of the Greek text with a German translation and commentary and *The Babyloniaca of Berossus*, tr. by Stanley Mayer Burstein (Malibu, CA Undena Publications, 1978) for an English translation. LJN].
- 72 *Primus Berossus in insula et civitate Co consedit, ibique aperuit disciplinam. Postea studens Antipater itemque Achinapolus, qui etiam non e nascentia, sed ex conceptione genethliologiae rationes explicatas reliquit* Vitruv., IX, 4 [7]. V. Rose recognized in Achinapolus one Athenodorus, a Stoic philosopher (?). We do not know at which date other disciples of the Mesopotamians lived, e.g., Epigenes, Critodemus (Pliny, *H. Nat.*, VII, 193)

and Apollonius of Myndos, (Sen., *Q. Nat.*, VII, 3). Schwartz (in Pauly-Wissowa, *R.-E.*, s.v., “Berossos”) believes that the school of Kos was a legend, under the pretext that the priest of Bel would not have left “his good prebend” in Babylon. However, if this were true, he would not have bothered to learn Greek or to write for an alien society.

73 It is necessary to challenge those legends made up after the events in order to reclaim and hide the origins of these new, very notorious, doctrines. Euripides supposedly made an allusion to astrology or astronomy practiced by Hippo, the daughter of Chiron the Centaur (ap. Clem. Alex. *Strom.*, I, 15). This served as a pretext for stories telling us that the father of Euripides consulted the Chaldaean astrologers about the baby. It born, we are told, on Salamis, the day of the Battle of Salamis (Theopomp., ap. Gell., XV, 20). In order to explain the presence of the Mesopotamian Chaldaeans, one assumed that they had come with Xerxes *Osthanes Xerxes regem Persarum bello quod is Graecia intulit comitatus, velut semina [magicae] artis portentosae sparsit*, etc. (Pliny, XXX, 8). Astrology came in with magic. However, this pretended incubation did not reveal a single historical fact. When Alexander entered Babylon in 324, the Mesopotamian Chaldaeans gave him an oracle of Bel (λόγιον ἐκ τοῦ θεοῦ τοῦ Βήλου) Arrian, VII, 16, 5). They did not speak to him of astrology, in which he did not believe.

74 Ἐπειδὴ [Βεροσσός] περὶ τε ἀστρονομίας καὶ περὶ τῶν παρὰ Χαλδαίοις φιλοσοφουμένων αὐτὸς εἰς τοὺς Ἕλληνας ἐξήγεγκε τὰς συγγραφάς Joseph., *C. Apion*, I, 129. *Berossus qui Belum interpretatus est* (Senec., *Q. Nat.*, III, 29). *Belum* is the title of a large work in 72 books, “The Illumination of Bel” or “The Eye of Bel (*Namar-Beli* or *Enu-Beli*)” which was written, they say, around the twentieth century (or eighteenth? Cf. *C. R. Acad. Inscr.*, 9 April 1897), by order of Sargon of Akkad and copied in the seventh century CE for the library of Aššurbanipal in Nineveh [Probably *Enuma Anu Enlil*. L.JN]. Epigenes, Pliny tells us (III, 193), cites these texts – *observationes siderum coctilibus laterculis inscriptas* – doubtless after Berossus. These texts fascinated Vitruvius, who probably confused them with astrological literature as a whole (IX, 4 [7]). Part of the fragments of the work retrieved from Kuyunjik have been published in the third volume of Rawlinson, *I.W.A. (Cuneiform Inscriptions of Western Asia)*. The British Museum owns nearly 20,000 fragments from the library of Aššurbanipal and more than 50,000 cuneiform inscriptions in all. It is good to insist at once on a distinction, intelligible even to amateurs, between the older texts of the seventh and eighth centuries and the texts from the times of the Seleucids and Arsacids (third and second centuries BCE). The former are nearly exclusively astrological, but without scientific precision, useless for astronomers. The latter are astronomical documents without relation to astrology, save for some genethliological horoscopes, which will be cited later. These astronomical texts are the only ones which concern Fathers Strassmaier and Epping, *Astronomisches aus Babylon, oder das Wissen der Chaldäer über den gestirnten Himmel*, Freib. i. Br., 1889. It is not necessary to credit the ancient Mesopotamians, whom we may consider tolerably ignorant astrologers, with the science of the more recent Mesopotamians, the astronomers of Uruk and Borsippa (cf. Pliny, VI 123) We may suppose the latter, until the contrary is proven, to be imitators and probably disciples of the Greek astronomers. Among these Mesopotamians, who broke down into three schools, there was even one which denied astrology προσποιῶνται δὲ τινες καὶ γενεθλιαλογεῖν, οὓς οὐκ ἀποδέχονται οἱ ἕτεροι (Strabo, XVI, p. 739). [Concerning *Enuma Anu Enlil*, see David Pingree and Erica Reiner’s ongoing text and edition, *Babylonian Planetary Omens, Part 2 Enûma Anu Enlil*. Malibu Undena Publications, 1981; *Babylonian Planetary Omens, Part 3* (Groeningen Styx Publs., 1998) and *Enûma Anu Enlil, Part 1 Tablet 63 The Venus Tablet of Ammisaduqa* (Malibu Undena Publications, 1975), also Koch-Westenholz’s introduction to Mesopotamian astronomy, *Mesopotamian Astrology An Introduction to Babylonian and Assyrian Celestial Divination* (Copenhagen Carsten Niebuhr Institute, 1995). L.JN].

75 The observations of Timochares and of Aristyllos, which permitted Hipparchus to discover the precession of the equinoxes, dated to 293-279 BCE. Ptolemy cites Aristarchus of Samos for an observation of 280 BCE.

76 The debate seems to have turned in favor of the Mesopotamians. We are assured that the documents in which we find the first mention of Babylon go back to the eighteenth century BCE (*C. R. Acad. Inscr.*, 28 August 1896). Cf. Fr. Hommel, *Der babylonische Ursprung der Aegyptischen Cultur*. München, 1892.

77 Pliny, VII, 193. Simplic. cf. Aristot., *De Caelo*, p. 47 B. The number given by Berossus varies in the authors who cite it 470,000 (ap. Cic., *Divin.*, I, 19; II, 46), 473,000 (ap. Diod., II, 31), 468,000 (*Fr. Hist. Gr.*, II, p. 510), 432,000 (*Ibid.*, p. 499). Naturally, the partisans of Egypt made a riposte. They assured all that, from Ptah to Alexander, 48,863 years elapsed, during which they had observed 373 eclipses of the Sun and 832 eclipses of the Moon (Diog. L., p. 812) Martianus Capella (VIII, p. 812) said of astronomy *Aegyptiorum clausa adytis occulebar quippe per CCCC ferme annorum M illic reverenti observatione delitui*. These ridiculous numbers have been inflated by the intrusion of a Stoic idea, that of ἀποκατάστασις (*redintegratio*) translated into astronomy as the “Great Year.” We are suppose to think that the Mesopotamians made observations from the beginning of a Great Year. Its length was increased to the period it took all the stars to return to the point

whence they began, which seems harder to calculate (Cic., *Nat. Deor.*, II, 20). We find sums of years in groups of eight (*octaeteris*) up to 17,503,200 years (Niceph. Chon., *De Orthod. fide*, I, 9). Firmicus (III, 1, 9 Kroll) allotted 300,000 years. In any case, the “Great Year” ended in reproducing the original disposition of the planets (Auson., *Edyll.*, 18, p. 536 Toll).

78 Cic., *Divinat.*, II, 46. Diod. II, 31. Syncell., p. 17A = *Fr. Hist. Gr.*, II, p. 498, 4. Pliny (loc. cit.) gives the impression that he believed the numbers of Berossus, Critodemus, and Epigenes, for he concludes *ex quo apparet aeternum literarum usum*.

79 What follows is based upon Jensen, *Die Kosmologie der Babylonier*, Strassburg, 1890. [Jensen is thoroughly out-of-date. See Koch-Westenholz, 1995. There is no up-to-date general over-view of Mesopotamian cosmology, but I personally suspect that the “camel-back trunk” cosmology which one finds in, e.g., I Enoch and in the *Christian Topography* of Cosmas Indicopleustes reflect the ideas of the later cuneiform astronomers. This remained the usual cosmology of people throughout Parthian and Sasanian Mesopotamia and Iran. On Cosmas and Iran/Mesopotamia, see Kevin van Bladel “The Syro-Iranian Cosmology of Cosmas Indicopleustes”, www.apaclassics.org/AnnualMeeting/08mtg/.../VAN%20BLADEL.pdf and Cosmas Indicopleustes, *Topographie Chrétienne*, 3 vols, ed. Wanda Wolska-Conus, Sources Chrésiennes 141, 159, and 197, Paris Éditions du Cerf., 1968-1973. For I Enoch (or Ethiopian Enoch), good starting points might be O. Neugebauer's *The ‘Astronomical’ Chapters of the Ethiopian Book of Enoch* (72-82) (Kobenhaven Det kongelige Danske Videnskabernes Selskab, 1981) and the critical edition by Michael Knibb, *The Ethiopic Book of Enoch: A New Edition in the Light of the Aramaic Dead Sea Fragments*. Oxford Clarendon Press; NY Oxford University Press, 1978. Older translations of both Enoch and of *Christian Topography* are readily available on the Internet, at, eg, <http://www.sacred-texts.com/>. LJN].

80 The Chaldaeans of Diodorus (II, 31) were philosophers who believed the world had no beginning and no end. It becomes harder and harder to believe that they are the Chaldaeans of Mesopotamia. The doctrines of the celestial waters went from the Mesopotamian cosmology to the Bible, and thence to the Christians, both Gnostic and Orthodox.

81 Μεγίστην δὲ φασιν εἶναι θεωρίαν καὶ δύνανται περὶ τοὺς πέντε ἀστέρας τοὺς πλανήτας καλουμένους, οὓς ἐκεῖνοι κοινῇ μὲν ἐμνηεῖς ὀνομάζουσιν – διὰ τοῦτο δ’ αὐτοὺς ἐρμενεῖς καλοῦσιν, ὅτι τῶν ἄλλων ἀστέρων ἅπλων ὄντων καὶ τεταγμένη πορεία μίαν περιφορὰν ἐρμενεύοντες τοῖς ἀνθρώποις τὴν τῶν θεῶν ἔννοιαν (Diod., II, 31, 3-4). We will return later to this text with its enigmatic meaning. The title “interpreters” is not part of the Greek tradition. [Ulla Koch-Westenholz, 1995, pp. 24-25, demonstrates that the “Ways” are zones along the eastern horizon, from which various stars and constellations rise. LJN].

82 The identification of the planets is one of the most controversial questions among Assyriologists. For the Arsacid period, the astronomical calculations furnish irrefutable arguments. P. Epping has decided on the following attributions Guttu (𐎡), Dilbat (𐎢), Anu (𐎠), Te-ut (𐎢), Mullatu (𐎠). But it seems that the names and attributions changed over the centuries. The general opinion, which is not complete, even for the Arsacid period mentioned above, is even less so for the many-named, protean-shaped, stars of the astrological period. A non-specialist reader, lost in these studies, confused by the equivalence of the most disparate phonetisms, Akkadian and Sumerian, will find in the works of Oppert, Sayce, Strassmaier, Epping, Jensen, Hommel, R. Brown, that they impose no doctrine concerning the names or the order of the Mesopotamian planets. The order given above 𐎠, 𐎢, 𐎡, 𐎢, 𐎠, is a hieratic order, unchanging and unexplained (it may be the order of brightness or supposed size) found in Jensen. Oppert and Sayce adopt the order 𐎠, 𐎢, 𐎡, 𐎢, 𐎠, concurrent with the order of the days of the week 𐎠, 𐎢, 𐎡, 𐎢, 𐎠, which they think they have found in a text of the *I.W.A.*, III, 57, 57-61. Moreover, the colors of the seven concentric walls of Ecbatana (Herodotus, I, 98) give us, if we accept the equation of colors with planets (see below, chap. 10), the following symbolic order 𐎢 (white); 𐎠 (black) 𐎡 (purple); 𐎢 (blue); 𐎡 (bright red); 𐎠 (silver); 𐎢 (gold). It is admitted that its stages are the same as those of the observatory of Nineveh, whereas at the observatory of Borsippa (according to Jensen), the order is the one which we find later among Greek astrologers and astronomers (the celestial order inverted) 𐎠, 𐎡, 𐎡, 𐎢, 𐎢, 𐎡. However, Borsippa (we are told) was rebuilt by Antiochus I Soter, and there may have been an intrusion of Greek ideas. As for names, we have several transcriptions and translations found in the Greek lexicographers thus (Hesychius, s.v.) Αἰδῆς, αἰδῶς, ἡ σελήνη παρὰ Χαλδαίους–Βελέβατος ὁ τοῦ πυρὸς ἀστήρ Βαβυλώνιοι (𐎡 ? 𐎢 ?) – Δελέφατ ὁ τῆς ἀφροδίτης ἀστήρ, ὑπὸ Χαλδαίων. – Μολοβόβαρ ὁ τοῦ Διὸς ἀστήρ, παρὰ Χαλδαίους. – Σαῶς· ἥλιος Βαβυλώνιοι. – Σεχῆς. Τοῦ ἑρμοῦ ἀστήρ (cf. below, p. 67 𐎢 σουχος.) Aside from the names of the Sun and Venus, to what language, in what era, do these names belong? *Grammatici certant*. Even the number seven for the planets – a dogma of great consequence – does not go back very far. It assumes

that the Evening Star (Ishtar) has been identified with the Morning Star (Belit). In mythology they are distinct deities. Sometimes they are even thought to have different genders. [Δελέφατ and Μολοβόβαρ are from the Sumerian names DIL.BAT and MUL.BABBAR. See David Brown, *Mesopotamian Planetary Astronomy-Astrology* (Groenigen Styx Press, 1999), for a very thorough catalog of the various names ancient Mesopotamian scholars used for the planets. LJJN].

83 See Lenormant, *Les origines de l'histoire*, 2e ed., Paris, 1880. Appendix III, *Textes classiques sur le système astronomique des Chaldéens* (pp. 589-595); texts in Diodorus (II, 30-31), in Philo (*de migr. Abrahm.*, 32, *de Abrah.*, 15), in the author of the *Philosophoumena* (V, 13). The text in Diodorus has been translated and commented upon many times, notably by Letronne, who thought it came from Ctesias, or in any case “from a period when the Chaldaean caste was already resting in the shelter of Greek influence. These authorities were, therefore, no longer subject to the chance of errors which enfeeble most of the Chaldaean astronomical texts.” (*Oeuvres choisies*, 11e série, I, p. 491). Letronne, who had snatched away so many Mesopotamian and Egyptian masks, thought he was obliged to respect these.

84 Letronne (op. cit., p. 499) saw that ὑπο δὲ τὴν τούτων φορὰν was a mistake for ὑπέρ. Even the ancient Mesopotamians did not put the stars below the planets which pass in front of them, and did not know that Anaximander had held a similar opinion. (See above, p. 4, 5).

85 This is the hermetic definition of the decans (chap. 7) and, as M. L. Havet reminds us, of the role of *Arcturus* in Plautus (*Rudens*), Prol.).

86 Diodorus, II, 30-31.

87 Vitruv., IX, 1 [4]; Plut., *Plac. phil.*, II, 29; Stob., *Ecl. phys.*, I, 25 pp. 552 and 556. The same explanation served for eclipses of the Sun. In the *Vedas*, the Sun has two faces; one white, with which it makes the day, the other black, with which it makes the night. India, where Greek astrology was later implanted, was previously affected by the Mesopotamians. Vitruvius has the air of finding the explanation of Berossus, in what concerns the moon, as good as that of Aristarchus of Samos, closer to ours. It is, in any case, progress over the infantile explanation that the stars were stripped naked by magicians or eaten by dragons.

88 Σκαφοειδῆ καὶ κοίλῃν (II, 31, 7). This was a boat turned upside down.

89 In order to submit this chaotic chapter in Diodorus to analysis, it is necessary to throw away any lingering respect for an author completely lacking in any critical ability. Likewise, and especially, we must throw away any respect for the so-called Chaldaeans who had taught him, people who mixed together the most disparate traditions, and not just because they were ignorant. That done (and it is annoying that Letronne did not dare to do so) we may proceed with the inventory. Set aside for the moment the points made elsewhere, such as the names of the planets, which, save for the name of Saturn “are the same in Chaldaea as in Greece” (what does that mean?). Set aside the incoherence of a description in which the planets are *above* the thirty βουλαῖοι θεοί, while still circling, with the Sun and Moon through the ζῳδία, presided over by twelve of the gods. He does not remember that the Moon is *beneath* all these other stars (ὑπο πάντα τὰ προσηρημένα). Let us continue with this theory of the βουλαῖοι θεοί. Are they thirty or thirty-six? Most scholars (Gesenius, Letronne, Lepsius, Hommel) correct *τριάκοντα* to *ἑξ καὶ τριάκοντα*, thinking that these gods are the “decans.” The decans, we know, are Egyptian. However, Hommel (“Astrologie der alten Chaldäer,” [in *Ausland*, 1892, nos. 4-7] – “Ueber den Ursprung und das Alter der arabischen Sternnamen und insbesondere der Mondstationen,” in *ZDMG*, XIV [1891], pp. 529-619) thinks he is obliged to reclaim the Chaldaeans of Diodorus for Mesopotamia – something done before him, and without greater surety. These Chaldaeans (or Diodorus) also confused two distinct systems, that of the thirty-six decans and that of the χρονοκράτορες, also Egyptian. The latter were gods presiding over the thirty days of the month. These thirty gods are known from the scholiast Demophilus (ap. Porphy., *Isagoge*, p. 200) where, in fact, “thirty stars of the first and second magnitude” collaborate with the ascendant. They will deserve the name of “counselors,” for Demophilus assures us that they affect the soul especially. Finally, the twelve κύριοι, the chiefs of the decans, are claimed for Egypt, and this time with the title of βουλαῖοι, by the scholiast on Apollonius of Rhodes (*Schol. Ap. Rhod.*, IV, 266). From this mixture of traditions comes the incoherent text of Diodorus. In any case, his Chaldaeans dreamed of thirty-six decans, for these are the decans which rise and set each 10 days. The twenty-four *δικασταὶ τῶν ὁλῶν* have also placed their imaginations in the field. Those of the living are above the horizon, those of the dead are below. Granted! Why twenty-four, however? Why below the horizon? Hommel professes faith in the number and the position. They turned into lunar stations, or, in any case, planetary ones, a singular way of using Diodorus' text. Sayce supposes Diodorus said East and West when he meant North and South. As a last resort, he states as fact that the pole-star is called “Judge of Heaven.” There is only one plausible solution. These extra-zodiacal stars are, once again *χρονοκράτορες*, the gods who preside over the twelve hours of daylight and the twelve hours of

darkness. They were the same ones who, conceived as *χρονοκράτορες* of the days of the months, number up to thirty. There is nothing of all this which is authentically Mesopotamian, from ancient Mesopotamia.

90 We understand that the burning Sun of Mesopotamia is primarily a destructive god. In India's astrology, the Sun is the chief of the malefic planets, the Evil One (cf. J.-M.-F. Guérin, *Astronomie indienne*. Paris, 1847, p. 83). The Moon, a philanthropic planet, has a superior morality, in their view. [Ninurta was king of the underworld and mainly associated with Saturn. But he was also god of the deadly noon-day sun. LNJ]

91 There was, moreover, a general idea in the cosmogonies that Night gave birth to Day, preceding it in time and dignity – καὶ γὰρ ἡ κοινὴν φήμη προτάπτει τὴν νύκτα τῆς ἡμέρας (Proclus, *In Tim.*, p. 266 D). Among the Germans *nox ducere diem videtur* (Tacitus, *Germ.*, 11). All calendars, from the beginnings, were religious institutions and ruled by the Moon.

92 The citations which follow come from A. H. Sayce's "The Astronomy and Astrology of the Babylonians, with Translations of the Tablets Relating to the Subject," *Transactions of the Society of Biblical Archaeology*, III [1874], pp. 145-339). The identification of the planets is subject to caution (see above, p. 41, but it is necessary, to have better guides, to await future works. [The future works Bouché-Leclercq awaited include S. Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Aššurbanipal*, SAA 10 (Kevelaer Butzon and Bercker, 1970); Hermann Hunger, *Astrological Reports to Assyrian Kings*, SAA 8 (Helsinki 1992; and Reiner's and Pingree's on-going text and translation of *Enūma Anu Enlil*. LNJ].

93 This means, I suppose, the stations (στηριγμοί) of the planets.

94 On the origin of the theory of the aspects (σχήματα), see below, chapter 4. [See now Francesca Rochberg-Halton, "Elements of the Babylonian Contribution to Hellenistic Astrology," *JAOS* 108.1 (1988) 51-62 LNJ].

95 A characteristic trait of predictions from eclipses is that they deal with different regions Akkad, Phoenicia, Elam, the kings of Dilmun, Gutium, etc. This is a doctrine which returns unchanged in the "catholic" part of Greek astrology (see below, chapter 11).

96 Or, to be more exact, they began with the appearance of the crescent of the New Moon, that is, more than one day after the astronomical syzygy. Also, the Full Moon divides the month into two unequal halves, without counting the inequality due to the Moon's apogee and perigee. The date of an eclipse oscillates between the thirteenth and fifteenth day (cf. J. Oppert, "C.-R. Acad. Inscr," 1896, p. 426). [In fact, Mesopotamian calendars used a calculated New Moon which did not always coincide with the genuine New Moon. This is still the case for calendars derived from the Mesopotamian calendar, such as the Jewish calendar and the Christian liturgical calendar. Cf. Otto Neugebauer, *The Exact Sciences in Antiquity*, 2nd ed. (Providence, RI Brown University Press, 1957), passim, and Frank Parise, ed., *The Book of Calendars* (NY Facts on File, 1982). LNJ].

97 The scientific reputation which the Greeks and symbolists such as Creuzer formerly gave to the Mesopotamians and the Egyptians is a mirage, which is slowly dissipating. P. Tannery (*Recherches*, pp. 306f.) thinks that the Mesopotamians knew of neither the tropical year nor the precession of the equinoxes. They did not need complete understanding of the causes of eclipses in order to notice the rare phenomenon of an eclipse of the Moon taking place at one horizon while, due to the effects of atmospheric refraction, the Sun is still visible at the opposite horizon (Pliny, II, 57). This fact was denied by Cleomedes (II, 6, p. 96), but noted by the Mesopotamians in the full Moon of 14 Iyyar 170, 28 February 141 BCE (*Z. für Assy.*, IV, [1889], pp. 169-170. Cf. above, p. 46-47, the case of the Moon and the Sun "seen together" in syncopation, and the eclipse of 11 Tammuz, when "the Lord of Light goes on his way"). We may doubt, in consequence, that the Mesopotamians had observed the revolution of the lunar nodes of the ecliptic through 223 lunations. We may also doubt that the *saros*, if it represents this cycle, dated this early (on the *saros*, see Epping, *Astron. aus Babylon*, p. 179. [Now, however, see, for opposing evidence, the works of Otto Neugebauer, particularly *The Exact Sciences in Antiquity*, 1957; *ibid.*, *A History of Ancient Mathematical Astronomy*, 3 vols., 1975.; and also B. L. van der Waerden, *Science Awakening*, II, *The Birth of Astronomy*, 1974, as well as the recent surveys of Koch-Westenholz, of Pingree and Hunger, and of Brown. Briefly, the reputation of the Mesopotamian astronomers was deserved. Why omen texts contain predictions for events which could never happen is not known (an exaggerated desire for comprehensiveness?), but the phenomenon is not restricted to astral omens. See Koch-Westenholz's remarks in the introduction to her *Babylonian Liver Omens The Chapters Manzazu, Padanu, and Pan Takalti of the Babylonian Extispicy Series Mainly From Assurbanipal's Library*, The Carsten Niebuhr Institute of Near Eastern Studies, CNI Publications 25 (Copenhagen University of Copenhagen, Museum Tusculanum Press, 2000). LNJ].

98 Hipparchus and Ptolemy did not use eclipses dating earlier than the era of Nabonassar (747 BCE). "It is certain," says Tannery (*Rech.*, p. 317, 1) "that the Chaldaeans gave to the Greeks a series of eclipses going

back to a fabulous antiquity, which was not able to inspire any confidence." Among those which have been verified, we may cite the eclipse of the Moon of 15 Shabat (18 January 653 BCE) which frightened the king of Babylon Saosduchin (dated by J. Oppert, *C.-R. Acad. Inscr.*, 30 Oct., 1896), that of 14 Tammuz (16 June 653 BCE) year VII [of Cambyses], in the month of Tammuz, the 14th night, one double-hour and 2/3 (three and 1/3 hours) after night-fall, the Moon was eclipsed. On the full face of the Moon, the half-diameter was eclipsed and the north remained invisible. The other eclipse (in Tebet, 10 January 522 BCE) was total. "In its full face, the south and the north were eclipsed!" These two eclipses figure in the *Almagest* of Ptolemy. See J. Oppert, "Un texte babylonien astronomique et sa traduction grecque par Cl. Ptolémée," *Zeitschr. f. Assyriol.*, VI [1891], pp. 103-123). The aforesaid tablet carries observations of the Moon on its recto. On its verso are the risings and settings of the planets and references to lunar eclipses.

99 It may have taken place, but not been visible in Nineveh.

100 Text translated by J. Oppert, "Die astronomischen Angaben der assyrischen Keilinschriften," *Sitzungsb. d. Wien Akad., Math.-Nat. Classe*, 1885, pp. 894-906. The substitution of Jupiter for Mercury is a later correction I owe to M. Oppert. [See Reiner and Pingree, 1975, *ibid.*, 1981 (and *ibid.* 1998). *Enuma Anu Enlil* is the most important collection of astral omens. Cf. the discussion in Lester Ness, *Written in the Stars Ancient Zodiac Mosaics* (Warren Center, Penn. Shangri-La Publications, 1999), pp. 48-52. Simo Parpola, 1970, deals largely with reports of astral omens. Older collections include R. Campbell Thompson, *Late Babylonian Tablets in the Bodleian Library, Oxford* (London 1922) and *ibid.*, *The Reports of the Magicians and Astrologers of Nineveh and Babylon* (London Luzac, 1900) LJN].

101 Cic., *Divin.*, II, 46. In spite of the risk of being accused of presumption, I believe I must settle here a grave question. Until better informed, I reject the assumption that the Mesopotamians practiced genethliology, the casting of horoscopes. All that is known may be found summarized, following the works of M. Oppert, in F. Lenormant, *La divination chez les Chaldéens*, Ch. VII. All the cited texts report on the birth of deformed children, comparable and compared to similar prodigies from the haruspices. There is not, in fact, the least allusion to combinations of stars which might have caused the deformities. There then comes a gratuitous hypothesis, adding "the consequences of these ideas [the ideas attributed to the *Babylonii* by Cicero] consider all these infirmities, all the deformities presented by the new-born infants, as an inevitable, irremediable, results of the positions of the stars. Given this assumption, the observations of similar deformities was seen as a reflection of the state of the sky, etc." (*ibid.*, p. 104). "This" is not "given" by the texts. The prodigy was valued for itself and Mesopotamian exegesis was only applied to the prodigies. [The birth chart definitely existed in Achaemenian Mesopotamia and later, but probably not earlier. See the discussion of Mesopotamian horoscopy in Ness, 2000, pp. 54-68. Abraham Sachs, "Babylonian Horoscopes," *Journal of Cuneiform Studies* 6 (1952) pp. 47-100 is the classic collection, while Francesca Rochberg, *Babylonian Horoscopes* (Philadelphia American Philosophical Society 1998) is the most up-to-date and complete. Brown, 1999, has the most up-to-date identifications of Mesopotamian and modern star and constellation names. LJN].

102 The Horn of the North must be β *Tauri* (see below, Fig. 4).

103 Fathers Strassmaier and Epping (*Z. f. Assyriol.*, III [1888], p. 149-150, p. 169-171). 6 Adar, year 170 of the Seleucid Era, corresponds to 28 February, 141 BCE. It seems that, when a verification is made, the state of the sky given above is exact, to such a degree that the Moon is 2-3° from β *Tauri*. The astronomical identifications confirmed in this way are *mashmashu* = Π ; *nune* = $\mathcal{H}$; *murū* = Ω ; *sakhū* = $\Upsilon_{\text{♂}}$; *A* = $\mathcal{Q}$; *Te-ut* = $\mathcal{A}$; *Dilbat* = ♀; *Anu* = ♂; *Mullalu* = ♄.

104 It is important to begin right now to emphasize a psychological fact, largely demonstrated by the history of the apocryphal literature. The whole doctrine appealed to faith in its antiquity. The individuals who developed it carefully hid the fact that their particular innovations came from their own imaginations. They escaped recognition under the cover of a mass (as big as possible) of experiences or unverifiable revelations. We have already encountered these piles of centuries. Given this position, let us record whom the authors credit with inventing astrology/astronomy, whether Mesopotamians or Egyptians. – I. For Mesopotamia, the majority of testimonies. They stress the fact that Mesopotamia, an immense plain, lent itself admirably to observations (cf. Ps.-Plat., *Epinomis*, 9, p. 987; Cic., *Divin.*, I, 1, who distinguishes between the *Assyri* and the *Chaldaei*, *non ex artis sed ex gentis vocabulo*; Joseph., *Ant. Jud.*, I, 8, 2; Amm. Marc., XXIII, 6, 25; Procl., *In Tim.*, p. 277D, etc.). – II. For the Egyptians, Aristot., *Metaph.*, I, 1; Diod., I, 28-29, 81 (φασὶ δὲ καὶ τοὺς ἐν Βαβυλῶνι Χαλδαίους, ἀποίκους Αἰγυπτίων ὄντας, τὴν δόξαν ἔχειν τὴν περὶ τῆς ἀστρολογίας παρὰ τῶν ἱερέων μαθόντας τῶν Αἰγυπτίων); Diog. Laert., *Prooem.*, 11; Lactant., *Inst. Div.*, II, 13; Clem. Alex., *Strom.*, I, 16, 74; Macrob., *Somn. Scip.*, I, 21, 9; Ps.-Lucian., *Astrol.*, 3-9, etc. I do not know if the compiler who called Nechepso Βασιλέα Ἀσσυρίων (ap. Iriarte, *Catal. Matrit.* = Riess, fr. 40) moved Nechepso to Assyria or made Assyria into an Egyptian province. – III. Mixed opinions, accepting both Egyptians and Mesopotamians, Cic., loc. cit. *Eamdem*

artem etiam Aegyptii – innumerabilibus paene saeculis consecuti putantur. Plin., VII, 56; Manil., I, 40-45; Ach. Tat., *Isag.*, 1, p 73; Isid. *Orig.*, III, 24, 1; etc. – IV. Eclectic opinions, which divide the object of debate, crediting astronomy to the Egyptians, astrology to the Mesopotamians (Theodoret., IV, p. 699, ed. Hal.), or vice versa (Palchos ap. Cumont, p. 6); making Egyptians and Greek disciples of the Mesopotamians (Suidas, s.v. ἀστρονομία), saying “mathematical” astrology came from the Mesopotamians, “pictorial” astrology from the Egyptians (Theo Smyrn., p. 177, Hiller). – V. Opinions which, considering astrology a form of magic, associated the Mesopotamians with, or substituted them for, the Persian magi (Suidas, loc. Cit. – πρῶτοι Βαβυλωνιοὶ ταύτην ἐφεῦρον διὰ Ζωροάστρου, μεθ’ ὃν καὶ Ὅσθάνης. cf. Io. Lyd., *Mens.*, II, 3 –οἱ περὶ Ζωροάστρην καὶ Ὑστάσπην Χαλδαῖοι καὶ Αἰγύπτιοι), or vice versa *Magorum scientiae multa ex Chaldaeorum arcanis Bactrianus addidit Zoroastres, deinde Hystaspes rex prudentissimus Darei pater* (Amm. Marc., XXIII, 6, 32). Later, we will find (Chapter 16) traditions attributing the invention of astrology to the Carians, to the Greek heroes, to the Jews, to the sons of Abraham, etc. If, from generalities we descend to details, the contradictions accuse themselves. Ptolemy (*Tetrab.*, I, 3) affirms that medical astrology is of Egyptian origin. However, Apuleius assures us that the Mesopotamians discovered [*luminum vagantium*] *varios affectus in genituris hominum necnon medendi remedia* (Apul., *Florid.*, II, 15, 57). Mesopotamian and Egyptian documents show that the Mesopotamians were very much concerned with the planets and with eclipses, the Egyptians, hardly at all. Seneca affirmed that Eudoxus got his theory of the planets from Egypt (*Eudoxus primus ab Aegypto hos motus in Graeciam transtulit*; Sen., *Q. N.*, VII, 3 cf. Aristot., *Meteor.*, I, 6), and that Conon of Samos also got his tables of eclipses from Egypt (*Conon defectiones quidem solis servatas ab Aegyptiis collegit*). Macrobius attributes to the “Egyptians” the opinion which makes Venus and Mercury circle the Sun, an opinion which goes back, at most, to Heraclides of Pontus (cf. Tannery, *Recherches*, p. 260) and so on. See later (chapter 4) the doctrine that Mars = Hercules credited here to the Egyptians, there to the Mesopotamians. The expression οἱ παλαιοὶ Αἰγύπτιοι, from the astrologers’ pens, designates the authors of an apocryphal work dating at the most to the time of Sulla, and perhaps later, even to the Christian era, the fabulous, fictional, Nechepso and Petosiris. Ptolemy himself, a contemporary of the Antonines, is very often called ὁ παλαιός for short by the commentators (cf. Anon., pp. 3, 49, 80, 94, 137, 143, 146, 156 etc.). It is enough for the moment to disturb the authority of the texts. Conviction will come little by little.

105 The demonstration was made in 1824, against the thesis of Bailly and Dupuis, by Letronne in two works, *Obss. critiques et archéol. sur l’objet des représentations zodiacales qui nous restent de l’antiquité* (Oeuvres choisies, 2e série, I, pp. 172-246). *Sur l’origine grecque des zodiaques prétendus égyptiens* (*Ibid.*, pp. 423-457). See also the valuable reviews of Ideler (*Ueber den Ursprung des Thierkreises*. Berlin, 1839), by R. Lepsius (*Einleitung zur Chronology der Aegypter*. Berlin, 1848). R. Brugsch (*Thes. Inscr. Aegypt.*, Tom. I, *Astronomische und astrologische Inschriften der altägyptischen Denkmäler*, Leipzig, 1883, devotes 65 pages (1-65) to inscriptions on the ceilings of the pronaos of Denderah.) On the other hand, Egyptologists and Assyriologists contest the second part of Letronne’s thesis, that the Oriental zodiacs, including those of India and China, are imitations of the Greek zodiac. They appeal in favor of Mesopotamia (see below), and Letronne himself consents to admit the Mesopotamians had their own independent duodecimal zodiac. However, it had different signs and names this out respect for the text in Diodorus (Letronne, *Sur l’origine du Zodiaque grec et Uranographie des Chaldaeeans*, *ibid.*, pp. 458-530). There are two zodiacs at Denderah, one inside (the only circular one found until now in Egypt), dating probably to Cleopatra’s time, the other rectangular (now in the Bibliotheque nationale), part of the pronaos dedicated under Tiberias, between 32 and 37 CE (Lepsius, pp. 102-103). [See now Otto Neugebauer’s, and Richard A. Parker’s, *Egyptian Astronomical Texts III. Decans, Planets, Constellations and Zodiacs*, Brown Egyptological Studies VI (Providence, RI Brown University Press; London Lund Humphries, 1969). On the Esneh Zodiac, see Alexandra von Lieven, *Eine Fallstudie zur Religiösen Astronomie in Ägypten am Beispiel der kosmologischen Decken- und Architravinschriften im Tempel von Esna*, Ägyptologische Abhandlungen 64 (Weisbaden Harrassowitz Verlag, 2000) (I owe this title to Sheri Crocket, personal communication.) For the history of the Indian zodiac, see David Pingree, “The Indian Iconography of the Decans and Horās,” *Journal of the Warburg and Courtauld Institutes* 26 (1963) 223-54 and David Pingree, *The Yavanajataka of Sphudjdhvaja*, 2 Vols., ed., tr., and comm. by David Pingree (Cambridge, MA and London Harvard University Press, 1978), showing India’s astrology came from Alexandria. China’s situation is more complicated. See Edward H. Schafer, *Pacing the Void T’ang Dynasty Approaches to the Stars* (Berkeley University of California Press, 1977) for the small impact foreign astrology made on the native tradition. Perhaps the best description of the native Chinese astronomical tradition in English is Sun Xiaochun, “Crossing the Boundaries Between Heaven and Man Astronomy in Ancient China,” in H. Selin, ed., Sun Xiaochun, adv. ed., *Astronomy Across Cultures The History of Non-Western Astronomy* (Dordrecht, Boston, London Kluwer Academic Publishers, 2000), pp. 423-454. Ho Peng Yoke has written extensively on the use of the stars for predicting the future in ancient times, especially in *Chinese Mathematical Astrology Reaching out to the Stars* (London RoutledgeCurzon, 2003).LJN].

106 Macrobius, *Somn. Scip.*, I, 21, 9-23. [Cf. Otto Neugebauer, "Studies in Ancient Astronomy" VIII. The Water Clock in Babylonian Astronomy," *Isis* 37 (1947) pp. 37-43. LJN]. He adds ingenuously that these Egyptians had called this circle Zodiac, *quia signa Graeco nomine ζῳδία nuncupantur*. We must say, in his defense, that at least he did not apply to the Egyptians what Sextus Empiricus (*Adv. Astrol.*, 24-26, p. 342) said of the Mesopotamians. Note that the same procedure, tainted with the same error, is found in the *Didascalía* of Leptinus (*Notices et Extraits des mss.*, XVIII, 2, p. 65) and that Hipparchus accused Aratus and Attalus of the same ignorance (*Comm. in Arat. Phaen.*, II, 1, 4 sqq.). See below, Chapter 9.

107 *Aegyptii duodecim esse asserunt signs Chaldaei vero undecim. Nam Scorpionum et Libram unum signum accipiunt... idem Chaldaei nunt aequales esse partes in omnibus signis, sed pro qualitate sui, aliud signum XX, alium XL habere; cum Aegyptii tricenae esse partes in omnibus velint* (Serv., *Georg.*, 1, 33). There is one exact fact it is the Mesopotamians – and the Egyptians, whatever Servius may say – kept the natural dimensions of the constellations. This made them, in consequence, unequal. [Cf. the discussion of the Mesopotamian zodiac and its origins in Ness, 2000, p. 57, as well as the sources there. The oldest documents related to the zodiac, dating from 1100 BCE, are the so-called "astrolabes," circular tablets with correlate dates in the lunisolar calendar with the heliacal risings of certain stars. A further development is the MUL.APIN texts, dating to c. 700 BCE, which includes information on the risings of 18 constellations. The most recent edition is H. Hunger, ed., *MUL.APIN. An Astronomical Compendium in Cuneiform* (Vienna 1989). See also D. Brown, 1999. The true zodiac perhaps dates to the seventh century BCE. LJN].

108 See the conclusions of Lepsius (*Einleitung*, pp. 121-125). He holds for the Mesopotamian zodiac, which (upon the good faith of our scholiast) had been divided into regular twelfths by the Egyptians. He admits that the Egyptians had accepted the complete Greek zodiac and modified it to suit their own purposes. That is an obscure enough compromise. Brugsch (op. cit., pp. 9 and 81) cites, as proof that the Egyptians imagined sculpted figures for the constellations, *Sah* or *Sahu*, the "returnee," that is, Orion, shown as a king walking with his head turned to look behind him. Orion is crossed by the equator. What interested the ancient Egyptians was not the place where the Sun stopped when it turned with the sky, but the horizontal course which it supposedly followed during the nights. It was around the horizon that they placed the solar houses, with divinities known later under the names of decans. Cf. the opinion of Anaximenes οὐχ ὑπὸ γῆν, περὶ αὐτὴν δὲ στρέφεται τοὺς ἀστέρας (Plut., *Plac. Phil.*, II, 16; Stob. *Ecl.*, I, 24).

109 The *sidereal* revolution, which measures the time between the successive conjunctions of the Moon and a star, is 27 days, 7 hours, 43 minutes, 11.5 seconds - more than 27 days. Thus there is a hesitation in the number of pigeon holes. The 28 days Nokhyttros (sic) of the Hindu lunar zodiac, had been reduced to 27 (*juxta cubicum numerum*. Chalcid., *In Tim.*, 113) by the fourth century of our era, according to Guérin, op. cit., p. 50. The Arabs, Persians, Chinese, and the Copts have kept the number 28. Cf., in Egypt, the 28 years of the reign of Osiris, symbol of the lunar revolution (Plut., *De Isid. et Osir.*, 420) See also the 28 days during which the scarab beetle was encased in its ball of dung, part of the process of spontaneous generation (Horapoll., *Hieroglyphica*, I, 10). On the questions tackled below, I have consulted, in order to replace, as far as possible, incompetence with diligence, the works or articles of Jensen, *Kosmologie* (See above, p. 6, 2; Epping, *Astronomisches* (See above, p. 4) and in this work, (p. 150), the table *Babylonische Thierkreise*, more the "Neue babylonische Planeten-Tafeln" (Z. f. Assyr., V [1890], pp. 341-366, VI [1891], pp. 89-102; Hommel (articles cited above, p. 11, note); the numerous articles – too numerous to be cited here – in which R. Brown studies Babylonian uranography, especially the steles or milestones of the 10th century (?), notably "Remarks on the astronomical names of the Signs of the Zodiac" (*Proc. of the Soc. of Bibl. Arch.*, XIII [1894], pp. 246-271 and a series *Euphratean stellar researches*, among them no. 5 *The Archaic lunar Zodiac* (*ibid.*, XVII [1895], pp. 284-303), where we read "Since 1883 a lunar zodiac has been found in the cuneiform inscriptions, and therefore the *argumentum a taciturnitate*, unsatisfactory, at all times, vanishes" (p. 285). [The "steles or milestones" are probably *kudurrus*, steles inscribed with the terms upon which land was held and carved with the astral symbols of the gods. Cf. William J. Hinke, *A New Boundary Stone of Nebuchadnezzar I from Nippur with a Concordance of Proper Names and a Glossary of the Kudurru inscriptions Published thus Far* (Philadelphia University of Pennsylvania Press, 1907), and Ursula Seidl, "Die babylonischen Kudurru-reliefs," *Deutsche Archaeologisches Institut Abteilung Baghdad, Baghdader Mitteilungen* 4 (1968) 7-220; Pls. 1-32. LJN].

110 See Epping, *Astronomisches aus Babylon*, Chapter 4 "Chaldaische Planeten-Ephemeriden," pp. 109-175. The 28 normal stars are I, η ♉; – II, β ♏; – III, α ♏; – IV, η Pleiades ♉ – VI, β ♉; – VII, ζ ♉; – VIII, η ♉; – IX, μ ♉; – X, γ ♉; – XI, α ♉; – XII, β ♉; – XIII, δ D – XIV, ε ♏; – XV, α ♏; – XVI, ρ ♏; – XVII, β ♏; – XVIII, β ♏; – XIX, γ ♏; – XX, α ♏; – XXI, α ♏; – XXII, β ♏; – XXIII, δ ♏; – XXIV, α ♏; – XXV, θ Ophiuchus; – XXVI, α ♏; – XXVII, γ ♏; – δ ♏. The division is absolutely irregular and even goes outside the zodiac, Ophiuchus taking the place of Sagittarius. We may wonder if it is only chance, a solitary fact, that the number stops at 28. [Cf. A. Sachs, "A Classification of Babylonian Astronomical Tablets of the Seleucid Period," *Journal of Cuneiform*

Studies 2 (1950) 271-90. Normal stars were used as references of direct observations, while the zodiac was used for calculations. LJJN].

111 See Epping, *Astronomisches*, pp. 148-149. There was a certain effort at accommodation. "It seems as if one had given to all the groups about 30° of space, a few degrees more or less, so as to accentuate a concordance with the actual signs of the ecliptic" (p. 149). The Mesopotamian zodiac as thus constituted included the twelve following signs, according to Epping Ku = ♀; Te-te = ♂; Mas-masu = ♀; Nangaru = ♀; A = ♀; Ki = ♀; Nûru = ♀; Aqrabu = ♀; Pa = ♀; Sakhu = ♀; Gu = ♀; Zib = ♀. For the interpretation of some of these names (or other substitutions) and the figures of the aforementioned signs, see the conjectures of R. Brown (*Proceedings*, XIII, pp. 246-271). Epping proposes *ku* = dog; *mas-masu* = Twins; *aqrabu* = Scorpion; *pa* = Scepter; *sakhû* = Capricorn; *zib* = the Fish.

112 This explains the mutilation of the Bull, which is deprived of its hindquarters in the Greek zodiac.

113 With arbitrary recourse to two opposed systems, heliacal rising and anti-heliacal rising, one may fit all the facts to a preconceived plan. A. Krichenbauer (*Theogonie und Astronomie*, Wien, 1881) found no trouble in constructing his supposed Egyptian zodiac of the twenty-fourth century BCE, when, thanks to anti-heliacal rising, the summer signs became those of winter and vice versa (pp. 23 ff.). It was this zodiac which the Mesopotamians reversed with heliacal rising (!).

114 They are borrowed from the book already cited by P. Jensen, *Die Kosmologie der Babylonier*. Cf. Lenormant (op. cit., App. IV, pp. 595-598).

115 The first explanation was known, as we will see later, to the Greek astrologers, who called the signs in front of the "tropical signs" "biciporeal" (δίσωμα – *biformia*). This is according to the "Mesopotamians," the author of the *Philosophoumena* (IV, 13) says.

116 See A. Quentin, "L'épopée d'Izdubar," (*Rev. de l'Hist. des Relig.*, XXXI [1895] pp. 162-177). In general, he holds to a preconceived idea, that the ancient Mesopotamians must have had a solar zodiac, with twelve compartments, equal or not. However, the first postulate could not be less certain. There are many other ways to divide the route of the planets. For example, one might attribute to each of them the property of groups of stars encountered along the route, the astrological system of the οἶκοι (see later, chapter 7). According to the Babylonian cosmogony, the demiurge, after making the five (?) great gods or the brightest stars, he added the seven *masi* or herds placed under the eyes of the planet gods. We do not know what the *masi* are, but they are probably groups of stars (τῶν βαβυλωνίων οἱ δοκιμώτατοι ἀγέλας καλοῦσι κυρίως τὰς ἀστρικός σφαίρας, *Orac. Chald.*, No. 142 Cory), groups placed along the ecliptic. Cf. above, (p. 54, 2) the *signa undecim* attributed to the Mesopotamians.

117 The exegesis which changed the epics into astronomical allegories or cosmogonies was a Stoic invention (see above, chapter 1, p. 30), which has gone on to a great fortune and deserves to be robed in its triumph. The absurdity is not admitting this or that hero or god personifies a force of nature. It is pretending that this being, once conceived as a living individual, remains a symbol and does not do only symbolic actions, explicable only by the qualities of the element which they represent. Certain exegetes explain "the battle of the gods" in the 20th canto of the *Iliad* as a conjunction of the seven planets (Heracl., *Alleg Hom.*, 52; cf. above, p. 30). One modern scholar, A. Krichenbauer (see above, p. 58, 1), reads the *Iliad* as an allegorical history of a reform of the calendar required about 2110 BCE by the precession of the equinoxes. The Winter Solstice moved from Aquarius to Capricorn (Ἀιγαί, *Iliad*, VIII, 203), Poseidon entering very heated (*Iliad*, XIII, 1-38), heat shared with the feminine sign Taurus (Ἥρα Βοώπις), which saw the equinox pass to Aries (Thetis). In 2400, Hera was the single spouse of Zeus. From 2400 to 2100, she was restless and jealous. In 2100, she was dispossessed! Also, while Zeus was asleep, Hera and Poseidon moved the equinoxes and solstices backwards, to the East, which angered Zeus, who moved things back to their former places. There were combats of Sagittarius and Apollo, of the Lion and Ares, of Virgo and Athena, of the Crab or Cancer and Aphrodite. How do we know, before Krichenbauer, that the Battle of the Giants had for its cause, in 2400 BCE, the division of the zodiac into quadrants? Or that, even earlier, about 3200 BCE, the Battle with the Titans was a battle in which the zodiac itself was at stake? The cool extravagance of this large book is a good example for those tempted to intoxicate themselves with the ecstasies of allegory.

118 They had re-used nearly all the constellations, save for Pisces (see above, p. 57 and later, chapter 5) and for the Ἐνγόνασιν (*Ingeniculatus* – *Ingenibus*), the "kneeling man," who stayed anonymous for a long time and ended being attributed to Hercules. These are the traces of borrowings. However, it is not necessary to find borrowing everywhere. We are told explicitly that the stellar figures are different among different peoples, an assertion still verifiable today διὸ καὶ ἐν διαφόροις ἔθνεσι διάφορα καὶ τὰ ὀνόματι τῶν ἀστερῶν ἐστὶν εὖρεῖν Ἐν γοῦν τῇ τῶν Αἰγυπτίων σφαίρᾳ οὔτε ὁ Δράκων ἐστὶ νομιζόμενος ἢ ονομζόμενος οὔτε Ἄδκτοι, οὐ Κηφεύς ἀλλ' ἕτερα σχήματα εἰδωλῶν καὶ ὀνόματα τεθειμένα. Οὔτε δὲ καὶ ἐν τῇ τῶν Χαλδαίων. (Ach. Tat., *Isag.*, s. fin.)

119 This might seem a paradox to those who think that the duodecimal division of the zodiac into twelve compartments and 360° is necessarily Mesopotamian. The division of the year into twelfths is nearly universal, and the Greek zodiac has long been subdivided in other ways. The division into 360° was not known to Eudoxus and did not appear (according to Hypsicles) until a little before Hipparchus, who popularized it. Posidonius still divided the zodiac and the meridian into forty-eight parts, that is, by half-hours (Cleomed., *Cycl. Theor.*, I, 10). We also find divisions into sixty parts (Strabo, II, p. 136, etc.) and into 144 parts (S. Empir., *op. cit.*, 9, p. 339) or into thirty-six, after the decans all duodecimal subdivisions, no doubt, but derived from twelve without direct borrowing from Mesopotamia. Whether degrees (μοῖραι), minutes (λεπτά), seconds (δεύτερα λεπτά) were used in Mesopotamia itself is a question which exceeds my competence.

120 For the astronomical myths and their affiliations, see the collection of texts and learned essays of C. Robert, *Eratosthenis Catasterismorum reliquiae*. Berlin, 1878, 254 pp. in quarto. One will find here the texts of Eratosthenes, the scholiasts on Aratus and Germanicus, the text of Hyginus and references to others in the notes or the *Epimetra*.

121 *Obliquitatem (signiferi) intellexisse, hoc est rerum fores aperuisse, Anaximader Milesius traditur primus Ol. LVIII, signa deinde in eo Cleostratus, et prima Arietis ac Sagittarii, sphaeram ipsam ante multo Atlas* (Plin., II, 31). C. Robert (pp. 244-245) proposes to correct *prima Arietis* to *primus*, seeing that Scorpio was known in the time of Homer (as part of the legend of Orion) and that the παρθένος Δίκη of Hesiod (*Opp. et dies*, 256) seems to have been Virgo. Cleostratus, author of a verse Ἀστρολογία (cf. C. Robert, p. 224), was also credited with introducing the Kids (Hygin., 13, 13-21), which presupposed the earlier existence of the Goat.

122 The ancient Mesopotamians had no more, so far as I know. We must abandon the legend of observations precise to the degree and minute. It was even left to the Greeks, we are told (see Pliny, *l. c.*), to discover a fact as elementary and as consequential as the obliquity of the Ecliptic.

123 Cicero assures us that Aratus knew and disdained astrology *Ad Chaldaeorum monstra veniamus, de quibus Eudoxus, Platonis auditor, in astrologia (=astronomia) iudicio doctissimorum hominum facile princeps, sic opinatur, id quod scriptum reliquit, Chaldaeis in praedictione et in notatione cujusque vitae ex natali die minime esse credendum* (Cic., *Divin.*, II, 42). This claim inspires doubts, perhaps a work of Eudoxus was interpolated or invented by an adversary of astrology. However, Eudoxus knew from Herodotus (II, 82) the pretensions of Egyptian priests to predict τῇ ἑκατοστήμερῃ γενόμενος ὁστέοισι ἐγκυρήσει καὶ ὅκως τελευτήσει καὶ ὁκοῖός τις ἴσται, and it is to this that Cicero alludes. To him “*Chaldaei*” simply means “astrologers” (except in *Divin.*, I, 1 and 41). We may not conclude, then, that Mesopotamian astrology was known in 4th century BCE Greece or even that the predictions of the Egyptians were astrological (see below, Chapter 13). I believe it is established that the “Chaldaeans,” who, according to Cicero (*Divin.*, II, 42), who taught *vim quamdam esse signifero in orbe, qui graece ζωδιακός dicitur*, were Greeks.

124 Sen., *Q. Nat.*, VII, 3. Text cited above, p. 14, 2.

125 See above, p. 52, in the note. Aristotle also (*Meteor.*, I, 6) cites the Αἰγύπτιοι on occultations of the stars by the planets.

126 Still an insoluble problem, and always because of the inevitable Egyptians, whom the scholiasts and commentators made the teachers of all the Greeks who concerned themselves with “mathematics,” beginning with Thales, Pythagoras and others. Plato was also a student of the Egyptians. Porphyry (ap. Stob., *Ecl.*, II, 7, 42, p. 386) was persuaded that Plato had taken astrology, with ascendant, aspects and all which follows from them, from the “wise Egyptians” (τῶν παρ’ Αἰγυπτίους σοφῶν). We are not able to extricate ourselves from this jumble of legends, if we consent to enter it. It is necessary to begin with a *tabula rasa*, and to remember that the astrologers had a major interest in claiming an ancient tradition and none in admitting that they had made it up themselves.

127 See Brugsch, *Thesaurus*, I, pp. 64-79. In four tables of the planets from the Nineteenth and Twentieth dynasties (A, B, C, D), we find the series ♀, ♂, ♀, ♀; in a fifth (D²), the series ♀, ♀, ♀, ♀, ♂. In the Greco-roman period, complete disorder at Edfu (E) ♀, ♀, ♀, ♂, ♀, at Denderah (Π, Ω) ♀, ♀, ♀, ♂, ♀; at Denderah, again, (II, the circular zodiac) ♀, ♀, ♀, ♂, ♀; on a sarcophagus (I) and a papyrus (K), the old order ♀, ♀, ♂, ♀, ♀. If we maintain that the priests let the scribes and artists make the texts, but kept the secret systems to themselves, to transmit to the Greeks, how can we take seriously the classical texts, which here are more confused, more contradictory than ever? We resign ourselves to submit one more time to the evidence of the carelessness and ignorance of our authors. Let us look at the system which became usual after the time of Hipparchus, that is, the order.♂, ♀, ♀, ♂, ♀, ♀. Theon of Smyrna, who found the Pythagorean faith set forth in the astronomical poem of Alexander of Aetolia, a contemporary of Aratus (Theo. Smyrn., pp. 138-140 Hiller). Macrobius (*Somn.*

Scip., I, 19, 2), who said it had been adopted by Cicero and Archimedes, remarks that this is the system of the *Mesopotamians* and that it differed from that of the *Egyptians* adopted by Plato (☿, ☽, ♀, ♄, ♂, ♃, ♅). Proclus is of the same opinion. The system which puts the sun in the middle of the planets is a hypothesis of the *μαθηματικοί* (In *Tim.*, p. 257F) or a revelation of the *Chaldaean* theurgists (Procl. in *Anal. Sacra.*, Pitra, V, 2, p. 69). Ptolemy (*Almagest*, IX, 1), who attributes it to τοῖς παλαιότεροις, and never contradicts them, and the Assyriologists who think they have found the said series of Borsippa (see above, p. 41, 1), take the fact as verified. This did hinder the come-back of the “Egyptians,” led in the charge by their compatriot, the Alexandrian, Achilles Tatius. He speaks like a well-informed man, saying that there was a great controversy over the position of the planets and distinguishes carefully between the Greeks and the Egyptians. Now, following him, beginning with the order given above τέταρτος ὁ ἥλιος κατ’ Αἰγυπτίους, ἕκτος δὲ καθ’ Ἑλλήνας (*Isagog.*, 17). There is no longer any question of the Mesopotamians. Thus, the system said all along to be Mesopotamian is really Egyptian, while the Platonic system, called Egyptian, is really Hellenic (καθ’ Ἑλλήνας). We believe that leads to a point of the first importance, that this system called at will Pythagorean, Mesopotamian, Egyptian, or Hellenic, is the basis of the astrological (the so-called Babylonian) system of the οἰκοί (see below, Chapter 7). It is also the regulator of the system of the Chronocrators (called Egyptian), which engendered the order of the days of the week (said to be Mesopotamian)! The need for a blank slate is more and more obvious. A curious index, which perhaps gives the key to the Mesopotamian and Egyptian orders, is furnished by the cosmographical description in Book Ten of Plato's *Republic*, where we find two different orders mixed together. One is based on the *width* of the circles, that is, upon the *thickness* of the planets, the other upon their *distances*. The decreasing order of the (supposed) size is ☽, ☿, ♀, ♂, ♃, ♅, ♄. Proclus says that it is the oldest Διτὴ δ’ ἐστὶν ἡ γραφὴ τῆς τῆς ταῦτα τὰ βάθη διοριζούσης λέξεως καὶ ἡ μὲν προτέρα καὶ ἀρχαιότερα τοῖς μγέθεισιν ἀκολουθεῖ τῶν καθ’ ἐκάστην σφαιραν ἀστέρων (ap. Pitra, *Anal. sacr.*, V, 2, p. 68). On the correction which substitutes the order of the distances for the width of the circles, see below, Chapter 4. The order of Edfu, mentioned above, conforms to the decreasing order of the real sizes.

128 There is no question here of popular reasoning, for it is just complacency, and never opposes desire, especially to the desire to know the future. Ordinary people posed no objections. “Some people, Hyginus says, think that, when one says that the Sun is in Aries or some other sign, the Sun shines through the actual stars of the Ram” (Ach. Tat., *Isag.*, 18). Such people may be as common today as in any other age. But astrology is not a superstition for plain people its dogmas were forged, in Greece as in Mesopotamia, by an intellectual elite, who defended it, over a period of centuries, against the assaults of dialecticians. What is hard to believe is that a rationalist, such as Ptolemy, a man who knew the structure of the universe very well, could write *Tetrabiblos* after writing *Almagest*. [For an account of Ptolemy's philosophy of science, including astrology, see now L. C. Taub, *Ptolemy's Universe; The Natural Philosophical and Ethical Foundations of Ptolemy's Astronomy* (Chicago and LaSalle, Illinois Open Court Press, 1993). LJN].

129 We see here, once again, the ostentatious debate between the Egyptians and the Mesopotamians. Firmicus, speaking of the planets, writes *Sed has stellas non eodem nomine quo nos aut quo Graeci, Aegyptii nominant; nam qui a nobis Saturnus dicitur ab Aegyptiis Φαίνων vocatur; quem nos Jovem vocamus, Aegyptii Φαέθοντα vocant; qui a nobis Mars, ab illis Πυρόεις dicitur, quae a nobis Venus, ab illis Φωσφόρος vocatur; quem nos Mercurius dicimus, illi Στίνοντι vocant* (Firmic., II, 2, 2 Sittl). Likewise John Lydus (*Mens.*, II, 8 Στίλβοντι... Κατ’ Αἰγυπτίους οὕτω καλουμένῳ ἔρμου δὲ τοῦτον Ἕλληνας εἶναι βούλονται). First, this statement is quite false. Greek astronomers and astrologers commonly used the epithets here called “Egyptian.” When they used divine names, they did not say Κρόνος, Ζεὺς but ὁ τοῦ Κρόνου, τοῦ Διὸς (ἀστήρ); and the Latins said *Saturni*, *Jovis stella*. It was literary men who shortened the phrase and said Saturn, Jupiter, etc. Then, who could not admire these Egyptians using Greek names? It is not likely that Firmicus meant Egyptian names which these Greek names translate. “Egyptians” meant “astrologers” for him, just as “Chaldaean” did for others. These are the Egyptians who called the climacteric of the 63rd year ἀνδροκλῆς (see below, Chapter 15). Martianus Capella (VII, 858), another subgenius, is of the opinion that the epithet names were added after the divine names. But the divine names were sometimes contested (for Mars, Venus, Mercury, see below, p. 68, 2) while the epithet-names were universally accepted. Some may have believed that the epithet-names were given by the astronomers, and that the others were invented while seeking the equivalents of the Mesopotamian gods. On the Mesopotamian side, the same thing the names are Mesopotamian, all translated into Greek. Diodorus (II, 30) says that, save for Saturn, the Mesopotamians τοὺς ἄλλους τεττάρους ὁμοίως τοῖς παρ’ ἡμῖν ἀστρολόγοις ὀνομάζουσιν, Ἄρεος, Ἀφροδίτης, Ἐρμού, Διός. Fine! This may be explained once again there are analogues between gods on either side. But the texts which call the epithet names Mesopotamian, also call the divine names Egyptian. As for Saturn, ἐνθεν καὶ Βαβυλωνιοὶ Φαίνωντα αὐτὸν προσσηγόρευσαν (Valens, ap. Salmas., p. 596). Another assures us gravely that “the Chaldaean and Egyptians, following Zoroaster and Hystaspes” are the authors of the week and the names of the planets which are different from the names of the Greek gods (Io. Lyd., *Mens.*, II, 3). We have seen above that the identifications of the planets are very controversial among Assyriologists [See now the appendix of star names in Ulla Koch-Westenholz and

the chapter on star names in Brown, 2000. LNJ]. I do not know if there are names which may be translated exactly by the Greek term, in the rich nomenclature of their names. As for Egyptian names, we seek analogues in vain, whether in Pharaonic times or in the Greco-Roman period (see Brugsch, *Thesaurus*, I, pp. 65-78). In the days of the Pharaohs, Jupiter was called “Horus who opens the secret” (*Hur-up-Seta*); Saturn, “Horus, bull of the sky” (*Hur-ka-pet*); Mars, “Horus of the Horizon” (*Hur-xuti*); Mercury, *Sebgu* = σοῦχος, the “crocodile” god; Venus, *Usiri* or *Bennu* (Osiris, star of the evening, fast as the Bennu bird; later, *nutar dua*, god or star of the evening). The variants of the Roman era are insignificant and carry, as attributes of the planets divinities, (Osiris – Nemesis – Heracles – Apollo – Isis) which do not correspond to the Greek planet-gods. The result of this is clear enough, which is that the *Graeculi* of the late era, ignorant or indebted to the apocryphal books, speaking wrongly everywhere about what they did not know, lavishly about the Egyptians whenever they meet them and about the Mesopotamians on occasion, mix into their texts things which are not in any authentic document.

130 Hom., *Iliad.*, XXIII, 226. Plat., *Tim.*, p. 38 D.

131 In Mesopotamia, too, the planets remaining distinct, in their names, from the deities who animated them and who were conceived as, sometimes distinct from, sometimes associated with, the planets themselves.

132 In fact, the Greek astrologers practiced the identification. As we will see, the influences of the planets conforms absolutely with the characters of the deities whom they sheltered. They did not make the Platonic distinction between the divine soul and the fiery body, an idea which appears even in Stoic thought. See also Juvenal (X, 33) attributing the adultery of the Homeric Mars *astro Martis*. St. Augustine amuses himself with the number of gods catasterized, in asking why Jupiter is less brilliant than Venus or lower than Saturn. Nevertheless, even in this passage, the author of *City of God* (VII, 15) more often uses the expressions *stella Jovis*, *Veneris*, than *Jupiter*, *Venus*. He says *quare Janus non accepit aliquam stellam?* which indicates the distinction well. Cf. the perfectly correct language of Cicero *ea quae Saturni stella dicitur Φαίνων quae a Graecis nominatur*, etc. (Cic., *Nat. Deor.*, II, 20). Likewise, a few centuries later, Probus (*Georg.*, I, 336).

133 The list, incomplete in the time of Plato, is complete in Aristotle, who knew the “stars” τοῦ Κρόνου (*Metaph.*, XI, 8, 7), τοῦ Διός (*ibid.*, *Meteor.*, Ch. 6), τοῦ Ἀρεως (*De Caelo*, II, 12) – assuming, however, these passages were not touched up by the ancient editors. Concurrent assimilations in ps.-Aristotle (*De Mundo*, 25-27) Mars = Ares or Heracles; Venus = Aphrodite or Hera; Mercury = Hermes or Apollo; the superabundance is due to Stoic hypotheses (see below, chapter 4).

134 Nevertheless, the Greek Saturn “rejoiced” in the East (see below, chapter 4).

135 The true reason for the assimilation of Nabu-Hermes is perhaps that Nabu or Nebo was the “interpreter” (ἑρμηνεύς) par excellence in the Mesopotamian era (cf. [above p. 40](#)) the translated title gives the name. It goes without saying that the adapters did not commit the imprudence of contradicting current ideas about the “luminaries.” They did not try to remove the sex of Selene - Hecate - Artemis in order to assimilate her to Sin or to give her precedence over the Sun.

136 This is the idea which the author of Genesis (11, 4) ascribed to the builders of the Babylonian observatory (*Et dixerunt venite, faciamus nobis civitatem, et turrim cujus culmen, pertingat ad caelum* – Vulgate; [And they said Come, let us make a city and a tower, the top whereof may reach to heaven; and let us make our name famous before we be scattered abroad into all lands. – Rheims-Douay Version. I use this translation because it follows the readings of the Vulgate, Bouché-Leclercq’s favored Bible translation. LNJ]). Yahweh seems to have been afraid that they would not fail. [Koch-Westenholz, in her works, remarks upon the hesitation between determinism and theism in Mesopotamian diviners’ assumptions. Certainly a desire to regulate the calendar was one of the reasons for Mesopotamian astronomy. LNJ].

137 See below, Chapter 16.

138 Aristotle attributed the phenomenon of the tides to the pressure of winds excited by the Sun. Pytheas of Massilia thought that the waxing Moon provoked the increasing tides and the waning Moon caused the decreasing tides. Seleucus “the Chaldaean,” partisan of the rotation of the earth, invoked the compression of the atmosphere, caused by the opposing movements of the sun and the moon. Posidonius took up once more Aristotle’s explanation, substituting the moon for the Sun (cf. Diels, *Doxographici graeci*, pp. 382-383).

139 These ideas existed, in a latent state, in Mesopotamian mythology, where the planet gods were mostly older sun-gods, fallen and diminished (cf. below, Chapter 4, the affinities between the Sun and Saturn).

140 Geminus (*Isagog.*, 14) devoted a whole chapter to refuting the idea that the constellations noted on the calendars influenced the earth that the Dog, for example, might cause the heat of the “Dog Days.” Whatever the nature of the stars might be, he said, fiery or of ether, οὐδεμίαν συμπάθειαν ἔχει πρὸς τὰ ἐπὶ τῆς γῆς γινόμενα. Ἡ γὰρ σύμπασα γῆ κέντρου λόγον ἔχει πρὸς τὴν τῶν ἀπλανῶν σφαῖραν, καὶ οὐδεμία ἀποφορὰ οὐδὲ

ἀπόρροια διακινείται ἀπὸ τῶν ἀπλανῶν ἀστέρων ἐπὶ τὴν γῆν. However, he himself admits, if very weakly, the ἀπόρροια of the planets, ἀφ' ὧν καὶ δυνάμεις ἐπὶ τὴν γῆν πίπτουσι. From this, we can easily see the strength of the opinion which he combated.

141 See later, (Chapter 11), comets, *prognostica*, *Διοσμεῖα*, etc.

142 This was a general opinion among the “physicists,” based upon the fact that the Sun dries up water. It was a response to the common-sense question, how can the stars burn without burning up? (Cic., *Nat. Deor.*, II, 15, 40. Cf. Agni nourished by the Hindu *Sōma*). The doctrine of Thales and other Ionians and Eleatics τρέφεσθαι τοὺς ἀστέρας ἐκ τῆς ἀπὸ γῆς ἀναθυμιάσεως (Stob., *Ecl.*, I, 10, 24. Plut., *Plac. phil.*, I, 3; II, 17). *Pasci aquis marinis sidera, i.e., ignes caelestes, physici docent* (Serv., *Aen.*, I, 608). One might even say that the Earth gave birth to the stars, being the mother of the Sky (Ouranos). Chrysippus used diet to make the division fresh water for the Moon, sea water for the Sun (Stob., *Ecl.*, I, 25-26) – *ali autem solem, lunam, reliqua astra aquis, alia dulcibus, alia marinis. Eamque causam Cleanthes affert cur se sol referat nec longius progrediatur solstitiali orbe itemque brumali, ne longius discedat a cibo* (Cic., *Nat. Deor.*, III, 16, 37). This explains the superior intelligence of the stars. *Quin etiam qui cibo utare, interesse aliquid ad mentis aciem putant. Probabile est igitur praestantem intellegentiam in sideribus esse, quae et aetheriam partem mundi incolant et marinis terrenisque umoribus longo intervallo extenuatis alantur* (Cic., *Nat. Deor.*, II, 16, 43). For this reason, the fixed stars are more intelligent than the planets (which was also the view of the Platonists), Saturn more intelligent than Jupiter, and so on. The dry denial of Aristotle, saying μὴ δεῖσθαι τὰ οὐράνια τροφῆς, οὐ γὰρ φθαρτὰ ἀλλ' αἰδία (Plut., *Plac. phil.*, II, 16) and his sarcasm (*Meteor.*, II, 2, 6) did not prevent adherence to this physico-stoic doctrine. *Hinc profertur quo sustineantur tot sidera*, etc. (Sen., *Q. Nat.*, II, 5). – *Necnon Oceano pasci Phoebumque polumque | Credimus* (Lucan., *Phars.*, X, 258. Cf. I, 414). Pliny believed that shooting stars are the belches of stars who have eaten too much (Plin., II, 29). The doctrine was widespread that the stars were gods, spirits, human souls, who τροφῇ τε χρῶνται οἰκεία τῇ ἀπὸ γῆς ἀναθυμιάσει, ὥς καὶ τὰ λοιπὰ ἄστρα (S. Empir., *Adv. Phys.*, IX, 73, p. 568). Even when it was asserted that Earth was no more than a geometric point (κέντρον – σιγμή) compared to the whole universe, Posidonius maintained that the Earth, in a small volume, contained more matter than all the stars put together ἢ γῆ στιγμιαία οὖσα πρὸς τὸ μέγεθος τοῦ κόσμου ἀναπρέμνη τροφήν τῷ ἀναπρέμνῃ τροφῇ τῷ τε οὐρανῷ καὶ τοῖς ἐμπεριεχομένοις ἐν αὐτῷ ἄστροις, τοσοῦτοις καὶ τὸ πλῆθος καὶ τὸ μέγεθος οὖσι (ap. Cleomed., *Cycl. theor.*, I, 11). He had guessed a true principle of celestial mechanics, in applying a false one.

143 The principle applies to everything, even to the Earth, whose zones correspond to the celestial zones, and its regions. Thus, one might say that the Nile has seven mouths because there are seven planets (Manil., II, 273), – or that the Delta is a copy of the constellation of the Triangle or Deltoton – φασὶ δὲ καὶ τὴν τῆς Αἰγύπτου θέσιν εἶναι κατὰ τὸ σχῆμα τοῦ ἐν τοῖς ἄστροις τριγώνου (*Schol. Arat.*, ad. v. 233). However, the Stoics, anxious not to harm the tradition that the Earth is a mother, thought that the round form of the Earth is not the copy, but the model, of the celestial spheres: ὥσπερ ἀπὸ κέντρου κύκλος γίνεται, οὕτω καὶ ἀπὸ τῆς γῆς εἰκὸς ἕξω περιφέρειαν γεγενέσθαι (Ach. Tat., *Isag.*, 7).

144 These may be countersigned by the beautiful apostrophe of Manilius (IV, 893) *Quid mirum noscere mundum | Si possint homines, quibus est mundus in ipsis | Exemplumque dei quisque est in imagine parva?* It was the Neo-Pythagoreans, Orphics, the Neo-Platonists, Hermeticists, even the Christian Platonists, who most insisted on Man as microcosm. Before Philo, perhaps, Pseudo-Petosiris and Nechepso *ostendunt hominem ad naturam mundi similitudinemque formatum iisdem principiis quibus ipse mundus regitur et continetur, perenniter perpetuitatis sustentari fomitibus* (Firm., III, Prooem., 4). For Philo (see his treatise *De opificio mundi*, 48-51), Man, whose body is made from the same elements as the universe, communicates, by sight, with the stars, his congeners: διὰ τῆς ἡγεμονικοτάτης τῶν αἰσθησέων ὀψεως ἡλίῳ καὶ σελήνῃ καὶ ἐκάστῳ τῶν ἄλλων ἀστέρων πλανήτων καὶ ἀπλανῶν συνεγγίζων (ib., 51). In the *Poemander*, Hermes Trismegistus explains that everything is alive, composed of matter and spirit: Καὶ ὁ μὲν κόσμος πρῶτον, ὁ δὲ ἄνθρωπος δεύτερον ζῶον μετὰ τὸν κόσμον (11-12, pp. 74-75 Parthey). Others say (*Iatrom.*, ap. Ideler, I, p. 387) τὸν ἄνθρωπον, ὃν Ἄμμον, κόσμον φασὶν οἱ σοφοί. This small universe or microcosm is an abridgement of the larger. The stars have the same nature as we do, and are in us ἔστι δ' ἐν ἡμῖν Μῆνη Ζεὺς Ἄρης κ.τ.λ. (ap. Stob., *Ecl.*, I, 5, 14). The author of the *Book of Enoch* also finds seven substances in humanity, as many as the planetary spheres. A biographer of Pythagoras (V. *Pyth.*, p. 114 Kiessl.) ὁ ἄνθρωπος μικρὸς κόσμος λέγεται... ὅτι πάσας ἔχει τὰς τοῦ κόσμου δυνάμεις. Cf. Firmicus (*loc. cit.*, 3) *hominem quasi minorem quemdam mundum stellae quinque sol etiam et luna ... sustentant*. Proclus put his dialectic at the service of the theories of the microcosm and of cosmic sympathy. The universe is a living being, whose life is the source of, and contains the sum of, all individual lives or souls. From this, Proclus concludes φοραὶ καὶ ἀφορίαι ζώων θεντῶν ἀπὸ τῶν οὐρανίων περιόδων ἀθανάτων οὐσῶν ἐπιτελοῦνται, καὶ φθοραὶ καὶ γενέσεις καὶ βίοι τῶν τῇδε ζώων... καὶ κατὰ σώματα καὶ κατὰ ψυχὰς διαθέσεις χεῖρους καὶ βελτίους (Procl., in *Anal. Sacr.*, Pitra, V, 2, p. 89). The communications took place via the roads and venues of souls συνάπτει καὶ τὰ ἄνω τοῖς κάτω διὰ τῶν ψυχικῶν καθόδων, καὶ τὰ κάτω τοῖς ἄνω διὰ τῶν ἀνόδων

(*ibid.*, p. 142). Humanity is a miniature universe δεῖ δὲ τὸν ὅλον κόσμον, οὕτω καὶ τὸν ἄνθρωπον ἐπισκῆψασθαι τελείως, διότι μικρός ἐστι καὶ οὗτος κόσμος (Procl., in *Tim.*, p. 348A). The Christian author of the *Hermippus* thought it very reasonable to spread the influences of the planets throughout the human body, seeing that thus σώζεται ὁ λόγος ὃ μικρὸν εἶναι φάσκων ἐπὶ γῆς κόσμον τὸν ἄνθρωπον (*Hermipp.*, I, 16, 81). He believed readily that the soul (ψυχὴ) turned around from mind (νοῦς), etc. (*ibid.*, 145). It goes without saying that, if one finds the mark of the stars upon our bodies, one also attributes the mark to the world of our senses. One demonstrates, for example, that the Sun was the heart of the universe, being in the middle of the planets, just as the human heart is in the midst of the viscera (*Hermipp.*, 78). One might have erected *etiam mundi genituram* (Firmic., I. c.), like those of individuals or cities. See, on these questions, the curious chapter of Lobeck, *Aglaophamus* (Chapter IX, *De Macrocosmo et Microcosmo*, pp. 908-947), and, below, the astrological melothesia, chapter 10. By a logical consequence, divided already by primitive peoples, Man imitates the universe in its acts. He must, in certain rites, turn himself from left to right (*dextratio*), or attach his prayers and incantations to a turning wheel, like the daily movement of the sky (cf. Goblet d'Alvilla, "Moulins à prières roues magiques et circumabulations," in *Rev. de l'Univ. de Bruxelles*, 1897). ["1 Enoch (Ethiopic Apocalypse of)," tr. by E. Isaac, in *The Old Testament Pseudepigrapha*, ed. by James H. Charlesworth. (Garden City, NY Doubleday, 1983) is a convenient English translation. Michael A. Knibb, *The Ethiopic Book of Enoch A New Edition in the Light of the Aramaic Dead Sea Fragments* (Oxford Clarendon Press; NY Oxford University Press, 1978) is a recent edition of the Ethiopic text along with what remains of the original Aramaic text. LJN].

145 One may cite, as an example of the effluvia, the attraction of amber for straw; the glance of the basilisk, which kills; and the glance of the wolf, which renders one speechless. The most difficult example to accept would be the effluvia of purely imaginary figures, such as those of the constellations. However, we are assured that dogs are driven mad by Sirius, and that this is one proof that the Dog rules dogs: τινὲς δὲ φασὶ καὶ τὸν Κύνα τὸν ἄστρον συμβάλλεσθαι κατὰ τινα ἀπόρροϊαν τούτοις πρὸς λύσσαν (Alex. Aphrod., *Probl.*, I, 76). With the proofs of this force, added to the centuries-long experience of the "Egyptians and Chaldaeans," we arrive having formulated astrological aphorisms based upon the principle *similia similibus* without recoiling before the animals of the zodiac: Καρκῖνοι δὲ καὶ ταῦροι, καὶ λέοντες καὶ κριοὶ καὶ αἶγες καὶ ἔριφοι καὶ ὅσα ἄλλα θῆρια διὰ τῶν ἄστρον ὀνομάζεται κατὰ τὸν οὐρανόν, εἰκόνες δὲ, φησὶν, εἰσὶ καὶ παραδείγματα ἀφ' ὧν ἡ μεταβλητὴ κτίσις λαμβάνουσα τὰς ἰδέας τοιοῦτων ζώων γίνεται πλήρης (*Philosophoum.*, IV, 6, p. 130 Cruice). Manilius is skeptical and believes in several lines of distance. He knows that the poets had invented the catastersisms: *Quorum carminibus nihil est nisi fabula caelum | Terrave composuit caelum, quae pendet ab illo* (II, 37-39), and he adds gravely *Hic igitur Deus et ratio quae cuncta gubernat | Ducit ab aeternis terrena animalis signis* (II, 82-82). Lucretius did not have these distractions. Latent "totemism" was revived by the belief in human generation derived from the celestial animals, above all the πολύσπερμα (Cancer, Pisces, Scorpio, etc.)

146 This is what Ptolemy does (or rather, pretends to do) when he abandons, for this reason, the theory of houses or places (see below, Chapter 9) but he remains nearly alone in his view.

147 The aspects are named here in anticipation. The subject will be treated in Chapter 6. [I know of no such division of the lunar cycle in Mesopotamian astronomy. LJN].

148 After a brief exposition, very difficult to understand, the scholiast says (δυσκατανόητα, *Anon.*, p. 30), Ptolemy concludes δι' ἣν δὲ τὸν αὐτὰι μόναι τῶν διαστάσεων παρελήφθησαν, ἐκ τούτων ἂν μάθοιμεν (*Tetrab.*, I, 14). This was too much mathematics for Porphyry and his contemporaries.

149 Τὰ γὰρ ἄσπετ' ἀπείρετ' ἀπείριτά τ' ἐστὶ κατ' αἶθρην | Σχεματ' ἀμειβόντων ἄστρον πολὺπλαγκτα κέλευθα | Ὅσσα δεπιλέξωσι θεοὶ τάδ' ἐγὼ σάφα λέξω (*Maneth.*, III, 231-233).

150 Ἐπτα γὰρ ἀκτῖνας ἕκαστος τῶν ἀστέρων ἀφίησι, τρεῖς μὲν εἰς τὸ ἄνω, τρεῖς δὲ εἰς τὸ κάτω, μίαν δὲ ἐπὶ τὸ διάμετρον ὧν δεξιά μὲν αἱ ἐπὶ τὸ ἄνω, εὐώνυμοι δὲ αἱ ἐπὶ τὸ κάτω (Porphyry., *Isag.*, p. 187). If the end of the phrase is not an inept gloss, it means that the star is supposed to be in the East (see the bundle of rays below, Chapter 6, figure 22). We find the theory of seven rays in an epithet given to Serapis by the "theologians" ὁ ἀναγωγεὺς καὶ ὁ ἐπτάκτις κατὰ τοὺς ὁ ἀναγωγεὺς καὶ ὁ ἐπτάκτις κατὰ τοὺς θεολόγους (Procl., in *Tim.*, I, p. 11E). – [μυσταγωγία] ἦν ὁ Χαλδαῖος περὶ τὸν ἐπτάκτινα θεὸν ἐβάκχευσεν (Julian, *Orat.*, V, p. 172D). The Sun fastened around ἐπταπόρους ἀκτῖνας the head of Phaethon (Nonnus, *Dionysiac.*, XXXVIII, 269). It was the star of the seven branches of the week (below, Chapter 13). These theologians or theurgists are the fabricators of "Chaldaean" Oracles of the second century AD. Cf. Lobeck, *Aglaoph.*, p. 101, and below, Chapter 16. Perhaps it is this theory of seven rays which we find in the vague phraseology of Tacitus saying, about the Jewish Sabbath *seu quod – pleraque caelestium vim suam et cursus septenos per numeros compleant* (Tac., *Hist.*, IV, 4). Vitruvius, a great admirer of the Mesopotamians, gives a reason, which, if it works for one ray (triangle or trine), works as well for the others *si radii (Solis) per omnem mundum fusi circinationibus vagarentur, neque extentionibus porrecti ad trigoni formam linearentur, propiora flagrarent* (IX, 1 [4]. Cf. below, Chapter 6). More than one questioner doubtless took this as satisfying a similar reason.

151 Ptolemy was one of these, to be sure. There are speculations on the theory of knowledge (Περὶ κριτηρίου καὶ ἡγεμονικοῦ), which led to studying the rapport of Man and Universe, and to the wild speculations of a rather eclectic philosophy of harmony (Ἀρμονικά) which was applied to astrology. See Fr. Böll, *Studien über Cl. Ptolemaeus* (see above, p. 27, 3). The basis of this reasoning was intelligible even to ordinary people and did not seem absurd. We may summarize it thus in music, the ear accepts certain intervals between tones and certain chords, rejecting others as inharmonious noise, without effect on the soul. In the same way, only certain angular proportions are in harmony with the universe, and only they have an effect. The spectacle of geometry and arithmetic, of ciphers and chords, succeeding in dazzling the neophyte. Moreover, the belief in the effectiveness of the square (90°) aspect is still intact among those who attribute a specific influence – although simply meteorological – to the four phases of the Moon. They do not lack for physical reasons to invoke, the maxima and minima of attraction, etc. But would it be much more to admit a continual action by our satellite, and not just varieties of weather changing from phase to phase?

152 See below, Chapter 8.

153 It was especially the system of the καταρχαί (elections) (below, Chapters 13-14) which passed – and not without reason, this time – as “Egyptian.” It could be done without the aid of astrology, and Herodotus (II, 82, see above, p. 63, 3) assures us that it was practiced in his time, even for births, by the Egyptian priests. In Greece, genethliology, what modern people call reading horoscopes, was known before elections, for it is of this which Theophrastus speaks (see above, p. 27, 2). It was, moreover, the only method which interested the philosophers. The others did not gain value in their eyes, save by combination with genethliology. [For examples of Mesopotamian horoscopes, cf. A. Sachs, 1952 and Rochberg, 1998. LNJ].

154 We will see further on that, for the Neo-Platonists, the κλήρος or lot, is, in effect, a birth chart shown by the God to the souls and chosen by them, a copy anticipating the future disposition of the stars at the horoscopic moment.

155 We have done a little exegesis here. Ptolemy is not so clear. Since he wants to give a certain role to elections after birth, he uses vague, prolix, formulas. Each person, he says, has both one and several beginnings μίαν μὲν τὴν αὐτοῦ τοῦ συγκρίματος ἀρχήν, ταύτην γὰρ ἔχομεν πολλὰς δὲ τὰς κατὰ τὸ ἐξῆς τῶν περιεχόντων πρὸς τὴν πρώτην ἀρχὴν ἐπισημασίας συμβαινούσας, προηγουμένης μέντοι τῆς μίας ἐνθάδε εἰκότως, ἐπειδὴ περ αὐτὴ καὶ τὰς ἄλλας ὥς τὸ ὑποκείμενον ἰδικῶς ἀποτελεῖ (*Tetrab.*, III, Prooem.). He meant to analyze the elements constituting destiny and not follow the multiple effects of the synthesis, ὥσπερ ἀφέσεις βελῶν κατὰ τὸ ὀλοσχερέστερον ἐφαρμοζόντες· τὸ δὲ τῆς συγκράσεως τῆς ἐκ πλειόνων φύσεων περὶ τὸ ὑποκείμενον εἶδος συναγόμενον ἀποτελέσμα καταλίποντες, ὥσπερ εὐστοχῶ τοξότη τῷ τοῦ διασκεπτομένου, λογισμῷ. (*Tetrab.* III, 1).

156 Καθάπερ ἐν ἐκμαγείῳ σφαγίδος τῷ ἐντεθέντι κερῷ τὸ κατὰ τὴν γλαυφὴν εἶδος περιτυποῦται, οὗτος καὶ τοῦ ἀνθρώπου τὸν βίον ὃ ἂν συνενεχθῇ μορίῳ τῆς ἀπορρέουσας δυνάμεως ἐκ τῆς τῶν ἀστρῶν κινήσεως, κατὰ τὴν ἐκείνου τοῦ μέρους ἰδιότητα τυποῦσθαι, κακεῖνο γίνεσθαι ὅπερ εἶχεν ἐν ἑαυτῇ τῆς ἀπορροίας ἢ μοῖρα ἢ ἐσπασεν εὐθύς του βίου ἀρχομένου κ.τ.λ. Greg. Nyss., *De fato*, Opp., t. II, p. 154 Migne. Gregory of Nyssa did not refute the argument which he exposes; he only took the δύναμις ποιητική from the rising stars to give it to God, to whom they are here attributed. The stars, he says, produce their effects only by their movement. (This is an Aristotelian thesis unimportant to the astrologers). Thus, if they are immobile, there is no predestination (οὐκ ἐν ἡ εἰμαρμένη συσταίη). Now, they did not move themselves (a postulate which the hylozoists and the partisans of living stars, gods, etc., vied in denying). Therefore, predestination is not done by the stars, but by God who moves them. This appeal is full of the thought of its opponents; for, in the divine thought, there is no chain of cause and effect. All is willed at the same time and this effect, to an eternal being, is as instantaneous as any other.

157 Mythology furnished an admirable argument for disqualifying the fixed stars, perceived by Varro: *Quod Caelum patrem Saturnus castrasse in fabulis dicitur, hoc significat penes Saturnum, non penes Caelum semen esse divinum* (August., *Civ. Dei.*, VII, 19). Once the cosmogonic epoch was over, *finis factus est procedendi de caelo semina* (Macr., *Sat.*, I, 8, 8).

158 An incomplete elimination see below, p. 125.

159 The planets (πλανήται or ἀλήται [ἀστέρες], *erraticae* or *errones* [*stellae*] or simply ἀστέρες – *stellae*, as opposed to ἄσπρα – *astrae*, *sidera* = constellations, this last distinction often affirmed, often neglected, by the authors (cf. Diels, *Doxogr.*, p. 466. Macrob., *S. Scip.*, I, 14, 21, etc.), the planets, we say, were properly the stars which walk irregularly, that is, which go forward and backward (Hygin., *P. A.*, IV, 14). Cicero objects that the irregularities are regular (*stellae quae falso vocantur errantes*, Cic., *N. D.*, II, 20). Ptolemy only speaks of five planets, save in the last chapter of *Tetrabiblos*, which he may not have written. The same is true for

Manetho. The Sun and the Moon are the φῶτα (cf. Virg., *Georg.*, I, 5, where φῶτα is translated by *clarissima mundi* | *Lumina*). However, this scruple did not prevail over the traditional number seven.

160 See, among other texts, the definition of the Sun in the Platonist and Christian author of the *Hermippus* (I, 16, pp. 24-25 Kroll). The Sun is ἡγεμὼν τοῦ σύμπαντος κόσμου καὶ πάντων γεννητικός – ἡνίοχος τοῦ κόσμου – τροφὸς παντὸς γένους, etc. The author puts it alone, separate from the “six surrounding planets” (I, 17). Others generally associate King Sun with Queen Moon (cf. Porphyr., *Isag.*, pp. 181-182). The Sun, universal generator διὰ σήψεως (Steph. Alex., p. 19 Usener), that is, with the aid of the Moon, which causes decay.

161 Scruples of this sort were what St. Augustine sought to awaken (see above, p. 68, 1) by asking why Jupiter was not in the first rank, why Saturn was above him, etc. When the Stoics identified Apollo with the Sun, Apollo became higher than the planet Jupiter. The authors of the astrological poems used all the synonyms which aided versification, such as *Titan*, *Hyperion*, *Phoebus*, etc. They even used the epithet *φάεθων* which caused much confusion, since it was also the name of the planet Jupiter. The Stoics practiced syncretism on a large scale *Stoici – eundem Solem, eundem Liberum, eundem Apollinem vocant. Item Lunam eandem Dianam, eandem Cererem* (?), *eandem Proserpinam dicunt* (Serv., *Georg.*, I, 5). They were thus able to find a place for all the gods, without even using the constellations. Otherwise, the κόσμος lent itself to everything. Nothing was easier, when adding the four elements to the eight spheres (above the sublunar world), than to make a κόσμος of twelve spheres, as many as the domains of the major gods (cf. Proclus in *Anal.*, V, 2, p. 169 Pitra). As for the question whether the planets (and even the stars) had their own light, or received that of the Sun (cf. H. Diels, *Doxogr. graeci*, p. 346), it was never completely resolved, save for the Moon, a simple mirror or body impregnated by the light of the Sun. For the planets, the authority of Ptolemy, based upon that of Aristotle, was not enough to settle opinion. Later, we still encounter the two contrary affirmations, *omnibus stellis Sol dat lumen et calorem* (Prob. ad Virg., *Georg.*, I, 336), and *Et proprium cunctis jubar est nec sole rubescunt* (Sisebut. in *Poet. min.*, V, p. 360 Baehrens), the Moon excepted.

162 Ὁ ἥλιος κατείληπται τὸ ποιητικὸν ἔχων τὴν οὐσίας ἐν τῷ θερμαίνειν καὶ ἡμέρα ξηραίνειν. Ptolemy contented himself with appealing to experience and common sense as proof. (*Tetrab.*, I, 4). Ταῦτα δὲ μάλιστα τῶν ἄλλων ἡμῖν εὐαισθητότερα γίνεται διὰ τε τὸ μέγεθος αὐτοῦ, καὶ τὸ τῶν κατὰ τὰς ὥρας μεταβολῶν ἐναργές. In physics, Ptolemy applied the theories of Aristotle (see above, pp. 25 and 27, 1, with a rather marked tendency to consider *cold* and *dry*, not just as the antitheses of *hot* and *wet*, but as their negations).

163 All people, says the anonymous scholiast, know the action of the Sun and the Moon. That of the planets is noticeable only to the learned – οἱ τεχνῖται μόνον συνῖασι καὶ ἐπιστήμονες.

164 Pliny, XXXI, 78. Cf. συμφθίνοντες καὶ συναυξοῦντες λίθοι τινές (Anon., in *Tetrab.*, pp. 2-3), a very widespread superstition, also the stone called *glossopetra*, *selenomantiae necessaria*, which falls from the sky during the lunar eclipses (Pliny, XXXVII, 164).

165 An index of Pliny to the word *Luna* would furnish an over-view of the subject. The small treatise of Plutarch, *De facie in orbe lunae* [<http://www.sacred-texts.com/cla/plu/pte/pte08.htm>] summarizes the opinions of the philosophers, summed up and completed with the aid of the Index of Diels, *Doxogr. graeci*, to the word Σελήνη. From the astrological point of view, cf. Ptolemy, *Tetrab.*, I, 3; Firmicus, IV, 1 to 16; Anon., *Hermipp.*, I, 8-10, etc. Pascal speaks of “the common error throughout the world, that the Moon causes all things” (*Pensées*, VI, 17 and 17 bis Havet). There could be a chapter consecrated to popular and poetic eclipses, attributed to the spells of magicians, who brought the Moon down from the sky to the ground, where the magicians exploited it and changed it in all sorts of ways (πολλοὶ μὲν λέγουσι τὴν σελήνην κατέρχασθαι καὶ εἰς ζῶον μεταβάλλεσθαι. Euseb. Alex., p. 19 Thilo). Astrology seems almost reasonable alongside these extravagances.

166 *Etenim cum, ut ipsi dicunt, ortus nascentium luna moderetur, eaque animadvertant et notent sidera natalicia Chaldaei quaecumque lunae juncta videantur*, etc. (Cic., *Divin.*, II, 43, 91. Cf. *Nat. Deor.*, II, 46, 119). The symbolists especially invoked the “sympathy” between living beings on the earth and the Moon. It got sick and languished with them, while waning or eclipsed (Anon., *Hermipp.*, II, 10). Cf. Pliny, II, 55. The Moon is like woman “the eternal invalid” of Michelet.

167 There was but one dissenting voice, that of Parmenides. He fastened upon menstruation to conclude that women, having more blood, had more heat than men. He also supposed that, in the beginning, the masculine sex formed itself in the North, the feminine, in the South (Aristot., *Part. anim.*, II, 2. Plut., *Plac. Phil.*, V, 7, 2, etc.). The masculine character of fire, the assimilation of sperm to sparks (cf. the conception Caeculus by a *disiliens scintilla* [Serv., *Aen.*, VII, 678]), of life to a flame, etc., are common place in literature and philosophy as much as of astrology. In astrology, the two “luminaries” are the universal Father and Mother.

168 Ptol., *Tetrab.*, I, 4 (τὰ σώματα πεπαίνουσα καὶ διασύπουσα τὰ πλεῖστα). Cf. Macrobi., *Sat.*, VII, 16, 15-34. The astrologers held the opposite of the modern opinion, which is that the Moon is a body deprived of water.

169 See above, p. 25, 2. The Pythagorizing musician Aristides Quintilianus actually found that the “voice” of the Moon was a “little masculinized” (θῆλυον – ἐπὶ μικρὸν ἡρῶενωμένον, p. 147 Meibom.). – Δήμητηρ – τὸ μητρὸς καὶ γῆς ὄνομα συνθεῖσι· οὐ γὰρ γῆ γυναῖκα, ὡς εἶπε Πλάτων, ἀλλὰ γυνὴ γῆν μεμίμηται (Philo, *De opif. mundi*, 45).

170 Ptol., *Tetrab.*, I, 4. The astrologers refined this even farther, saying that the four phases of the Moon corresponded exactly to the four solar phases or seasons and caused in turn, humidity, (Spring), heat (Summer), dryness (Fall), and cold (Winter) predominate. One may distinguish eight phases as well, that is, six beyond the syzygies (Porph., *Isag.*, pp. 181-182; Proclus in *Anal.*, V, 2, p. 168 Pitra. Cf. Macr., *S. Scip.*, I, 6, 55.) As for the fertilizing action of the Moon, which spread the seeds of the Sun over the earth (cf. Plut., *De Isid. et Osirid.*, 43), the astrologers had an embarrassment of choices among philosophical theories. We find even the most extreme syncretists, who *Venerem esse etiam Lunam volunt*, (August., *Civ. dei.*, VII, 15. Cf. Macro., II, 8, 3).

171 Ὁ δὲ τοῦ Κρόνου ἀστήρ πλέον ἔχει τῆς ποιότητος ἐν τῷ ψύχειν καὶ ἡμέρα ξηραίνειν, διὰ τὸ πλεῖστον, ὡς ἔοικεν, ἅμα τῆς τε τοῦ ἡλίου θερμασίας καὶ τῆς τῶν περὶ τὴν γῆν ὑγρῶν ἀναθυμιάσεως ἀφεστάναι (*Tetrab.*, I, 4. Anon., p. 143). John Lydus, *Mens.*, II, 11, says the same ψύχοντι ἄκρως καὶ προσεχῶς ξηραίνονται.

172 There is a question posed by the text of Diodorus saying that the names of the other planets are the same in Mesopotamia as in Greece, save that of Saturn, who is called Helios by the Mesopotamians ἰδίᾳ δὲ τὸν ὑπὸ τῶν Ἑλλήνων Κρόνον ὀνομαζόμενον, ἐπιφανέστατον δὲ καὶ πλεῖστα καὶ μέγιστα προσσημαίνοντα, καλοῦσιν ἡλίου (Diodorus, II, 30, 3). R. Brown, (*Proc.*, XIII, p. 248) assures us that, in effect, the Mesopotamians called Saturn “the old Ram of ancient times,” that is the old Sun. The expression ἡλίου ἀστήρ – *stella Solis* is applied to Saturn by the Didascalia of Leptinus (*Notices et Extraits*, XVIII, 2, p. 54), the *Epitome* of Eratosthenes, Hyginus and the Scholiast of Germanicus (C. Robert, *op. cit.*, pp. 194-195). These three authors confused Saturn with Jupiter, it is true, but their oversight is a stronger guarantee. It is also confirmed, finally, by Simplicius (ὄν Ἥλιον ἀστέρα οἱ παλαιοὶ προσηγόρευον, ad Aristot., *De caelo*, p. 499). It is possible that Saturn had, in the eyes of the Mesopotamians, affinities with the Sun [Ninurta, the Mesopotamian Saturn, was the deadly noon day Sun. Cf. Ness, 2000, p. 41. LJN]. However, it may have been a simple misunderstanding, as supposed by Wesseling, the Greeks translating Ἥλιος, the Phoenician El (the Mesopotamian Marduk), assimilated with Saturn, as Ἥλιον, τὸν καὶ Κρόνον (Euseb., *Praep. Ev.*, I, 10, 16). *Apud Assyrios Bel dicitur quadam ratione et Saturnus et Sol* (Serv., *Aen.*, I, 729) – ὅτι Φοίνικες καὶ Σύροι τὸν Κρόνον Ἥλ καὶ βῆλ καὶ βωλαθὴν ὀνομάζουσι (Damasc. ap. Phot., cod. 242) – Κρόνος δὲ οἱ Φοίνικες Ἥλ προσαγορεύει (Sanchon. ap. *Fr. H. Gr.*, III, p. 570); – Kronos, an Arab name of the Sun, Ἄραψ Κρόνος, after Nonnus (XL, 393). The name Τιτάν, which was common for the Sun, contributed also to maintaining the association of ideas. Cf. *Κρονάμμων*, the name given by the astrologer Paul of Alexandria to his son, a symbolic equation where Ammon (the solar ram) replaced El. Letronne (*op. cit.*, pp. 495-497) rejects the opinion of Wesseling because he is convinced that Diodorus' information came from ancient Mesopotamia. [David Brown's catalog of star names (Brown, 1999) shows that the Sun and Saturn were called by the same Sumerian name, *Utu*. Also, “El” (= Ἥλ) is the generic word for “god” or “deity” in most Semitic languages, and particularly Hebrew and Phoenician. LJN].

173 Chrysippus, a virtuoso etymologist, considered Κρόνος as ἐκκριτικὸν τοῦ ρεύματος ῥόον (Phaedr. *Epic.*, p. 17 Petersen). Κρόνος = Χρόνος (Varr. ap. Tert., *Ad. Nat.*, II, 12. Aug. *C. Dei.*, VI, 8. Macr., *Sat.*, I, 8, 6-7. Cf. Lobeck, *Aglaoph.*, p. 470). There is a similar idea in the Alexandrian assimilation of Saturn to Nemesis παρὰ δὲ Αἰγυπτίοις Νεμέσεως ἀστήρ (Ach. Tat., *Isag.*, 17). Nemesis is the law of nature, the sharing (νέμω) which gives to each person what they deserve, the destruction which comes necessarily – and justly – to all human works. How was it that Nemesis as Saturn is, in astrology, the author of violent deaths (Ptolemy, *Tetrab.*, IV, 8), precisely those which are not the work of time? Nemesis was a solar symbol according to Macrobius (*Sat.*, I, 22, 1), which supported the solar character attributed to Saturn (cf. above). We would waste our time discussing these identifications if all the mythographers were as convincing as those which make Saturn the son of Pollux, a *pollendo* (Fulgent., *Myth.*, I, 2; cf. *Pollucis proles* in *Poet. lat. min.*, V, p. 350 Baehrens), or of ἄκμων, ἀπὸ τοῦ οὐράνου ἄκαμάτου. (Eustath. ad Homer, p. 1205 ed. Basil.). These etymologies are from the insipid exegesis of the Stoics (Ἄκμων = Οὐρανός) in Cornutus, Ch. I).

174 Cf. Diodorus, II, 30, 3 (see above, p. 93, 2 *Epigeni* – *videtur plurium habere, ad omnes sublimium motus, stella Saturni* (Sen., *Q. Nat.*, VII, 4) – *seu quod de septem sideribus quis res mortales reguntur, altissimo orbe et praecipua potentia stella Saturni feratur* (Tac., *Hist.*, V, 4). Πρῶτα μὲν οὖν Τιτὰν πάντος Κρόνος αἵθερος ἄρχει | Ἀστήρ δὲ Φαίνοντα θεοὶ μέροπές τε καλοῦσιν (Maneth., IV, 14-15). Saturn is the Πρέσβυς (Maneth., V, 249) – διὰ τὸ πρῶτεσθάναι πάντων καὶ τὸ πρεσβύτερον (Anon., p. 98). For those sympathetic to Pythagoras, his primacy came from the quality of being “seventh,” his rank in the sky and in the week (Io. Lyd., *Mens.*, II, 11).

175 Cf. *Hermipp.*, I, 13, 86-90, and below (Chapter 10), the planetary “melothesia.”

176 The oldest text on the physical temperament of the planets (after the Stoics) is in Cicero (Cic., *Nat. Deor.*, II, 46). Vitruvius (IX, 1 [4]) explains how, since fire always rises, Mars was burned by the rays of the Sun. Saturn is very cold, because *tangit congelatus caeli regiones*. Jupiter, between the two, is temperate. We see that these explanations were not invented by Ptolemy. They had been systematized by Posidonius. Cf. *Frigida Saturni sese quo stella receptet* (Virg., *Georg.*, I, 336). – *Summa si frigida caelo | Stella nocens nigros Saturni accenderet ignes* (Lucan., *Phars.*, I, 645). – *Summa est Saturni, quae quia propior est crystallo, h. e. caelo, in ea deficit calor solis*. – *Satis cognitum est Saturni stellam frigidam esse, et ideo apud Iudaeos Saturni die frigidos cibos esse* (Schol. Virg., *ibid.*). Saturn is, for the physicists, the lightest of the planets *levitatis argumentum habet, quod super ceteras est* (Sen., *Q. Nat.*, VII, 29), *plumbeus* for the astrologers.

177 See below, Chapter 7. One might imagine that these signs are rainy, not because the Sun is there in winter, but because of Saturn, and when Saturn is in them. Just as the Sun, Pliny says, has its stages of different temperature throughout the year, so do the planets. *Igitur (sidera) in suo quaeque motu naturam suam exercent, quod manifestum Saturni maxime transitus imbribus faciunt* (Plin., II, 106). *Summo si frigida coelo | Stella nocens nigros Saturni accenderet ignes, | Deucalioneos fudisset Aquarius imbres* etc. (Lucan., *Phars.*, I, 645 sqq.). – *Quod Saturnus humoris totius et frigoris deus sit* (Serv., *Georg.*, I, 12). – *Saturnus deus pluviarum est, unde etiam senex fingitur; nam senes semper movimus esse gelidos. Hic autem in Capricorno facit gravissimas pluvias, praecipue in Italia*. – *Ut in Scorpione grandines item in alio fulmina, in alio ventos* (Serv., *Georg.*, I, 336). Ptolemy forgets himself long enough to say that the stars in the stream of water falling from Aquarius' urn have the same temperament as Saturn (*Tetrab.*, I, 9). It is true that there is a way to associate dry and wet, in frost *torpere videntur | Omnia Saturno; raros ille exprimit ignes | Et siccas hiemes adstrictis perficit undis* (German., *Arat. Prognost.*, fr. III, 24 sqq.). Cf. Pliny, II, 34 (*Saturni autem sidus gelidae ac regentis esse naturae*). Saturn's urn of lead, *plena undosa hiemis atque algidi frigoris necnon etiam pruinarum* (Martian. Cap., I, 17). In a word, Saturn corresponds to our “Father Winter.”

178 The lower culmination (*IMC = Imum Medium Caeli* [lower mid-heaven. LJN]) [usually now just IC. KM] is sometimes καὶ πολλῶν καὶ ὑδατικῶν τόπων περιστητικός (Paul. Alex. fol. M 4v.); Saturn in a horoscope (?) *quibusdam circa aquam dabit actus* (Firmic., III, 2, 3 Kroll). We see once again in Saturn, the patron of gardeners, an ancient agricultural and chthonic deity.

179 Paul. Alex., fol. N 2v. Maneth., I, 83 sqq.

180 See below, chapter 12.

181 Manetho, I, 153 sqq. Firmic., IV, 15, 2 Kroll.

182 This was the opinion of the Peratites, astrologers disguised as Christians Τὸ δὲ ὕδωρ ἐστὶ ... ὁ Κρόνος. – Πάση γὰρ γενέσκει πρὸς τὸ ὑποπεσεῖν τῇ φθορᾷ αἴτιος ἐφέστηκεν ὁ Κρόνος, καὶ οὐκ ἂν γένοιτο γένεσις ἐν ᾧ Κρόνος οὐκ ἐμπόδιζει. It had already been said by Heraclitus, λέγων· “ψυχῇσι γὰρ θάνατον ὕδωρ γένεσθαι” (*Philosophum.*, V, 2, 16). This did not impede water from nourishing fire in evaporating, as fire killed and balanced water.

183 It is in the temperament of individuals born under the special influence of a planet that we see the character of the planet in detail. I do not want to give these portraits here, in order not to anticipate a later chapter, and also because the school of Ptolemy did not create them *en bloc* but studied physical temperament, psychic faculties, aptitudes and professions, etc., separately (below, Chapter 12).

184 Firmicus, II, 13, 6 Kroll. It was also a solar deity in Egypt Ὁσίριδος ἀστήρ (Ach. Tat., *Isag.*, 17). The astrologers gave it Cancer for ὑψωμα (exaltation) and Capricorn for ταπείνωμα (dejection), [fall] which are exactly the same as Sun's (see Chapter 7). [Dorotheus, Ptolemy and Valens give the exaltation of the Sun as Aries and its fall in Libra KM].

185 Διὰ δὲ τὸ μᾶλλον εἶναι θερμαντικός, γονίμων πνευμάτων γίνεται ποιητικός (Ptol., *Tetrab.*, I, 4). The heat was supposed to provoke, in reaction, the north winds, the Etesian winds, which rose after Sirius and the Dog Days. At the time when he wrote his *Phaseis* (ap. Wachsmuth, pp. 199-276, ed. 2^a), when he was not yet an astrologer, Ptolemy assigned heat to Venus, moisture to Jupiter, humid winds to Mercury (*ibid.*, p. 209). He had modified his labels.

186 Jensen, *Kosmologie*, pp. 283 and 295.

187 The astrological Jupiter is γλυκῶν ὑδάτων χορηγός (Anon., *In Tetrabl.*, p. 70) and dwells in Pisces.

188 Boreas impregnating mares (Homer, *Iliad.*, XX, 223 sqq.); Zephyrus fertilizing Lusitanian mares, reported as *res incredibilis, sed verra* by Varro (*R. rust.*, II, 1, 19), Pliny and Columella; one saying that there

was no need for male vultures, the females being fertilized ἐκ τοῦ πνεύματος (Euseb., *Pr. Ev.*, III, 12, 3). All these facts are said to be established, a point which Lactantius, with an evident lack of taste, uses in explaining the Incarnation of Jesus Christ *Quodsi animalia quaedam vento et aura concipere solere omnibus notum est, cur quisquam mirum putet cum Spiritu Dei, cui facile est quidquid velit, gravatam esse virginem dicimus?* (Lactant., *Inst. Div.*, IV, 12). According to Proclus, Boreas produces males, Notus, females (in *Anal. Sacr.*, V, 2, p. 176 Pitra). See below (Chapter 7) on the “fertile” winds of Jupiter used to place his ὑψωμα (exaltation) in Cancer.

189 This is the traditional refrain *Sub Jove temperies et numquam turbidus aer* (Lucan., *Phars.*, X, 207). The meteorological influence of Jupiter tempered the cold of winter and the heat of summer – *rabidos et temperat aestus* (German., *Arat. Proan.*, IV, 14). Pliny said before Ptolemy that Jupiter, between Mars and Saturn, *interjectum ambobus ex utroque temperari Jovem salutaremque fieri* (Pliny, II, 34) and Pliny copied Cicero (see above, p. 95, 2). All of this has a reasonable air, and no one demanded other proofs.

190 Ὁ τοῦ Ἄρεως παρὰ μὲν τοῖς Ἕλλησι Πυρόεις, παρὰ δὲ Αἰγυπτίους, Ἡρακλέους (Ach. Tat., *Isag.*, 17. Cf. Aristot., *De Mundo*, II, 7). The Egyptian *Hur-dos* (Ἑρτωσί), translated here by Hercules, was fertile enough, the antithesis of Mars (Valens ap. Salmas., p. 596; Cedren., I, p. 295 Bonn.; Lepsius, *Einleit.*, p. 90). Inscribed on the lion of Commagene (see below, Chapter 12) we read *Πυρόεις Ἡρακλέους. Stella Martis, quam alii Herculis dixerunt* (Hyginus, II, 42). *Tertium Martis [sidus], quod quidam Herculis vocant* (Plin., II, 34). *Pyrois, quem multi Herculis, plures Martis stellam vocant quam reliqui omnes Martis apellant* (Macr., *Sat.*, III, 12, 6). The eclectics housed Mars and Hercules here *nam et stellam [Chaldaeis dicentibus] unam habere dicuntur* (Serv., *Aen.*, VIII, 275).

191 See the tirade which begins with Ἄρες, Ἄρες, Κακοεργέ καὶ ἀνδράσι καὶ μακάρεσσιν κ.τ.λ. (Manetho, I, 139-152). The Stoics derived Ἄρης from ἀναιρεῖν **from** (cf. below, Chapter 12).

192 Here, too, the pessimistic tradition has prevailed over a tradition, said also to be Egyptian, which assigned the planet to Isis, replaced in Greece by Juno or the Mother of the Gods; *alii Junonis, alii Isidis, alii Matris deum appellavere* (Plin., II, 37). – *Stella Veneris, Lucifer nomine, quam nonnulli Junonis esse dixerunt* (Hygin., II, 42). *Phosphorus Junonia, immo Veneris stella censetur* (Apul., *De mundo*, 2). Augustine says that Venus won it from Juno at the time of the Judgement of Paris (*Civ. Dei.*, VII, 15). Aristophanes did not dream of the planet, but of the torches of Eleusis, which he called Iacchos νυκτέρου τελετῆς φωσφόρος ἀστήρ (*Ran.*, 343).

193 *Hujus natura cuncta generantur in terris. Namque in alterutro exortu genitali rore conspergens non terrae modo conceptus implet, verum animantium quoque omnium stimulat* (Plin., II, 38).

194 Venus was supposed to be the largest of the planets (Hygin., II, 42; IV, 15; Plin., II, 36; Schol. Arat., II, p. 402 Buhle; Schol. German., p. 422 Eyssenh.), larger than the earth (Proclus in *Anal. Sacr.*, V, 2, p. 68 Pitra). On Venus' brightness, one may prefer to him *Jovis et sidus super omnia sidera lucens* (Auson., *Eclog.*, p. 548 Toll.).

195 Ptol., *Tetrabl.*, I, 4.

196 Πρῶτος δὲ Ἰβυκος εἰς ἓνα συνέστειλε τὰς προσηγορίας (Ach. Tat., *Isag.*, 17).

197 *Qui rotundiores oculos splendidosque gerunt, Graeci στίλβωντας dicunt* (Anonym., *De physiognom.*, [II, 2, p. 113 Foester]). In our land of foggy horizons Mercury is hardly known save to astronomers.

198 Once again, the “Egyptian” tradition παρὰ δὲ Αἰγυπτίους Ἀπόλλωνος ἀστήρ (Ach. Tat., *ibid.*), an arbitrary adaptation, for the planet *Sebgu* was, in the Pharaonic era, the star of Set or Typhon. Known to Aristotle (*De Mundo*, II, 7), this tradition is found upon the lion of Commagene, where we read *Στίλβων Ἀπόλλωνος*, and it persisted to the time of Apuleius *Mercuri sidus, a quibusdam apellatum Apollinis* (Plin., II, 39). – *[Stellam Martis] sequitur Stilbon, cui quidam Apollinis, ceteri Mercurii nomen dederunt* (Apul., *De Mundo*, 2). The Stoics, who saw Apollo in the Sun, made the older tradition prevail, the one adopted by Plato.

199 Ptol., *Tetrabl.*, I, 4.

200 Ptolem., *Tetrabl.*, I, 5-7.

201 Ἐπειδὴ τῶν τεσσάρων χυμάτων δύο μὲν εἰσι τὰ γόνιμα καὶ ποιητικά, τό τε τοῦ θερμοῦ καὶ τοῦ ὑγροῦ, διὰ τούτων γὰρ πάντα συγκρίνεται καὶ αὔξεται, δύο δὲ τὰ φθαρτικά καὶ παθητικά, τοῦ ξηροῦ καὶ ψυχροῦ, δι' ὧν πάντα πάλιν διακρίνεται καὶ διαφθείρεται. (I, 5). Ptolemy made a scientific theory of a classification into ἀγαθοποιοί and κακοποιοί (ἀστερες), which is not his, but from “the ancients” (οἱ παλαιοί), a vague recourse to so-called Egyptian or Mesopotamian antiquity which the believers needed.

202 Ptolem., *Tetrabib.*, I, 5. Paul. Alex., fol. D 2 v. Serv., *Georg.*, I, 335, etc. See above (p. 109, 3) for another explanation, based upon harmonic relationships (Macr., *S. Scip.*, I, 19, 20-27). There were no planets which were always favorable or harmful. Even the malefic planets had happy effects when they “rejoiced.”

203 There will be place farther on to insist on how the planetary phases are based upon the theory of the retrogradations and were introduced to astrology by the scientists. This was very confusing to the average astrologers, who were unable to understand these fine points. Ptolemy contented himself, in a special chapter (*Tetrab.*, I, 8 *Περὶ τῆς δυνάμεως τῶν πρὸς τὸν ἥλιον σχηματισμῶν*) with saying that this assertion is justified by analogy with the lunar phases. The Moon, engorged with moisture after syzygy, warmed itself and dried itself at the same time. In the same way, it is moist when it sets after the Sun and dry when it sets before the Sun. He assumed the Moon’s alternations of moist and dry to be already demonstrated. Cf. the Anonymous scholiast (*In Tetrab.*, p. 24) and below, p. 112.

204 Reasonable and poetic. Manetho (II, 403 sqq.) tells us that the planets rise full of energy, and set, tired and sad.

205 The scholiast demands why Ptolemy did not divide the sphere into two parts, one Eastern, the other Western, along the plane of the meridian. He is shocked to see a quadrant called “Eastern” and “masculinizing” not only because it is in the East, above the horizon, but when a quadrant (?) is opposite, that is, in the West. This is a general rule (see Chapter 6 and 11), by virtue of which the opposite quadrants communicate their proper powers (ἀλλ’ ὥς ἔοικε τὰ κατὰ διάμετρον ἔλαβε τεταρτημόρια, ὥς καὶ μεταδίδοναι ἀλλήλοις τῆς ἰδίας δυνάμεως Anon., p. 21).

206 Anon., p. 101.

207 The word *αἴρεσις* is technical in this sense. There is moreover, an exception, remarked upon by the scholiast, in a certain passage where Ptolemy says *αἴρεσεις λέγει οὐ τὰς νυκτερινὰς καὶ ἡμερινὰς, ἀλλὰ τὰς τῶν δυτικῶν ἀστέρων καὶ ἀφαιρετικῶν* (*ibid.*, p. 157). The Arabs made *αἴρεσιν* into *haiz* or *alahiz*.

208 *Explicare debemus quae stellae per diem gaudeant et cujus conditionem sequantur* (Firmicus, II, 7 Kroll). He explains farther on (II, 20, 11 sqq.) the affinities between the day and night planets and the genitures of the same name. We may remark on the violence done to common sense by the desire for symmetry. There is no plausible reason for dreaming the day planets, because they are invisible during the day and do not shine at night. Their “joy” here is that of abnegation. The same is true of the night planets. As Philo says, God, having made the day and the night, τῆς μὲν ἡμέρας τὸ κράτος ἀνεδίδου τῷ ἡλίῳ, οἷα μεγάλῳ βασιλεῖ, τῆς δὲ νυκτὸς σελήνῃ καὶ τῷ πλῑ τῶν ἄλλων ἀστέρων (*De opif. mundi*, 19).

209 Ptolem., *Tetrab.*, I, 7. Cf. I, 23 and the chapter in Paul of Alexandria *Περὶ τῆς τῶν δύο φωστήρων αἰρέσεως* (fol. D 2 v). Mercury is diurnal and masculine when it rises before the Sun and nocturnal and feminine when it sets after the Sun sets.

210 See below (p. 109, 3) for a harmonic reason for assigning Mars to the lunar clan. There was yet another, which is that Mars, the astrological devil, is one of those who does the “works of darkness.” It is doubtless because of this classification that Mars was considered as a Western star (the West is lunar), which it was already, it seems, among the Egyptians (Brugsch, *Thesaurus*, I, pp. 69-79), while Saturn is “Oriental.” Greek astrology does not seem to have taken farther the study of sympathies and antipathies – of temperament, not of position – between planets. It was the Arabs, who, perhaps using a legacy of Mesopotamian tradition, imagined a whole series of leagues and counter-leagues, capricious but explicable depending on the mythological character of the planets or on the position of their fiefs (οἶκοι – ὑψώματα) in the zodiac. Cf. Junctinus, *Speculum astrologiae*, I, p. 38, and the zodiacal alliances of Manilius (below, Chapter 6).

211 One might think that observation would lead solely to scientific theories. However, Anaximander taught, we are told, that the fixed stars were below the Sun and the Moon. The Platonist Xenocrates rejected all theories of distances, even those of his master. He thought “that the stars move themselves upon the same surface” (Plut., *Plac. Phil.*, II, 15; Stob., *Ecl.*, I, 24). Is it certain that the Mesopotamians were more learned? We must admit that the observation of the occultations of the planets by the Moon would necessarily lead to the conclusion that the Moon was below them. Aristotle cites the occultation of Mars as an example, and he adds Ὅμοίως δὲ καὶ περὶ τοὺς ἄλλους ἀστέρας λέγουσιν οἱ πάλοι τετηρηκότες ἐκ πλείστων ἐτῶν Αἰγύπτιοι καὶ Βαβυλώνιοι παρ’ ὧν πόλλας πίστεις ἔχομεν περὶ ἐκάστον τῶν ἀστρῶν (Arist., *De Caelo*, II, 12). However, occultations of planets by other planets are rare phenomena, and even the “Egyptians and Babylonians” would not have enough documentary evidence. Theon of Smyrna (p. 177 Hiller) assures us that *βαβυλώνιοι καὶ Χαλδαῖοι καὶ Αἰγύπτιοι* had speculated a great deal, although without knowledge of physics (ἄνευ φυσιολογίας), upon planetary movements, the Mesopotamians using “certain arithmetic methods,” the Egyptians, “drawings”

(γραμμακός). Ptolemy did not know of the passages of Venus and Mercury in front of the Sun, phenomena which cannot be observed with the naked eye (below, p. 110, 1).

212 *Constat enim nullam inter eas [Stellas] celerimus ceteris tardiusve procedere sed cum sit omnibus idem modus meandi, tantum eis diversitem temporis sola spatiorum diversitas facit* (Macrob., *Somn. Scip.*, I, 21, 6). This is also the view of Vitruvius, who evidently reproduces current opinion. The postulate, which the Platonists did not accept (Plat., *Tim.*, p. 39A), is far from being exact. The laws of gravity make the planets move more quickly (speaking absolutely) the closer they are to their center, the Sun. Mercury travels three times as fast as Saturn. [B-L does say three but Mercury completes its orbit in approximately one year to Saturn's thirty. Despite the limits of ancient knowledge the speed both planets moved across the sky was observed, I suspect there may be an error in the number. KM].

213 See above, p. 14. We are assured that this was the opinion of Anaximander, maintained by Metrodorus of Chios and Crates (doubtless the Cynic). Plut., *Plac. phil.*, II 15.

214 The fact is attested by Proclus (in *Anal. sacra et classica*, V, 2, p. 68 Pitra. See above, p. 65, in note) Διττὴ δ' ἐστὶν ἡ γραφὴ τῆς ταῦτα τὰ βάθη διοριζούσης λέξεως καὶ ἡ μὲν προτέρα καὶ ἀρχαιότερα τοῖς μεγέθεσιν ἀκολουθεῖ τῶν καθ' ἐκάστην σφαῖραν ἀστέρων. The new recension (Ἡ δὲ δευτέρα καὶ νεωτέρα, κρατοῦσα δὲ ἐν τοῖς κεκλασμένοις ἀντιγράφοις) puts in the *sixth* rank the spindle which is second in size, and gives the actual passage in question (*Rep.*, X, p. 616 E). One assumes, to justify the first classification, that Mars at perigee seems bigger than Jupiter.

215 Ἀλλ' Ἀναξαγόρας τοῦτο πρῶτος ὑπέλαβεν, ὥς ἐστόρησεν Εὐδήμος (Procl., *In Tim.*, p. 258 C). See the subject spoken above, p. 64, 1.

216 On the astronomical inscription of Kesinkto from the Island of Rhodes, which contains a theory of the planets earlier than Hipparchus', see P. Tannery in *Revue des Études grecques*, VIII (1895), pp. 49-58. The text is reproduced in *Inscr. graec. Insul. maris Aegaei*, I, no. 913. The "Didascalia of Leptinus" (*Notices et Extraits*, XVIII, 2, pp. 46-75) has been translated by P. Tannery in an appendix to his *Recherches* (p. 283-294).

217 Tannery, *Recherches*, p. 126. In the geocentric hypothesis of the ancients, there was no reason to put one of these planets above or below the other, relative to the earth but Heraclides had reason to put Mercury closer to the Sun. He supposedly discovered that Mercury and Venus move around the Sun (Chalcid., *In Tim.*, 109), a discovery attributed, as always, to the *sollertia Aegyptiorum* (Macr., *S. Scip.*, I, 19, 5) which was the basis of Pythagorean wisdom.

218 The "Pythagorean" order is attributed to Plato (Stob., *Ecl.*, I, 21, p. 512; Plut., *Plac. phil.*, II, 15; Macr., *Somn. Scip.*, I, 19, 2). Cf. Diels, *Doxogr.*, pp. 344-345. The order of the planets meant little to the Pythagoreans. They took great care to establish the distances between the planets, rather like a celestial lyre following the laws of harmony. They fixed the intervals to get the best places for tones, half-tones, tones-and-a-half, all a priori. [On the various orders for the planets, see Roger Beck, *Planetary Gods and Planetary Orders in the Mysteries of Mithras* (Leiden E. J. Brill, 1988). LNJ].

219 One finds the Platonic order (the one in *Timaeus*) in Apuleius (*De mundo*, 2) and in Achilles Tatius (*Isag.*, 16) which he prefers above all others.

220 P. Tannery, *Rech.*, p. 261. For Archimedes, P. T. does not accept the assertion of Macrobius *Ciceroni Archimedes et Chaldaeorum ratio consentit* (Macr., *S. Scip.*, I, 19, 2), because he believes the system was later than Archimedes. But Alexander of Aetolia preceded Archimedes by a generation.

221 Ptolemy could not find any decisive reason for or against putting the Sun in the middle of the planets, for he did not know of Venus and Mercury passing in front of the Sun παρὰ μὲν τοῖς παλαιότεροις ὑποκάτω τιθεμένας τῆς ἡλιακῆς. However, he opted for the "more ancient" system, which put Venus and Mercury below the Sun (*Almagest.*, II, 9). He evidently meant by *παλαιότεροι* people older than Plato, doubtless the Mesopotamians. By his time, and for long before, there was no choice between Egypt and Mesopotamia.

222 This is still the opinion of P. Tannery. He believes that the attribution to Pythagoras was made by "Alexandrian falsifiers" (*Rech.*, p. 126, 1), which is perfectly reasonable. However, he is not suspicious of the supposed Mesopotamians. "The antiquity of the order which we attribute to the Mesopotamians," he says, (*ibid.*, p. 261, 4) "is attested by the succession of the days of the week, which it pre-supposes." F. Hultsch (art. "Astronomie," in Pauly-Wissowa, *R.E.*, II, p. 1833) says much the same, following Tannery. If this "succession" is not Mesopotamian, as we hope to show (see Chapter 13), this reasoning becomes a vicious circle.

223 Proclus, *In Tim.*, pp. 258C, 280B; Id., in *Anal. sacra*, V, 2, p. 69 Pitra (τῶν παρὰ Χαλδαίοις θεωρουγῶν ἀκούσας, ὥς ἄρας θεὸς ἐμμεμβόλησεν ἥλιον ἐν τοῖς ἐπτά καὶ ἀνεκρέμασεν ἀπ' αὐτοῦ τὰς ἐξ ἄλλας ζώνας). Concerning the οἰκοί, see below, the burlesque legend credited to these pretended Chaldaeans.

224 Proclus says this in the proper terms. Speaking of Plato's system ἀλλ' οὖν ἡ τῶν παλαιῶν φήμη ταύτην ἐδίδου τῷ ἡλίῳ τὴν τάξιν· καὶ γὰρ Ἀριστοτέλης οὕτως καὶ οἱ ἀμφὶ τὸν Εὐδόξον (*In Tim.*, p. 257 F). The Mesopotamian system emanated from τινες ταῖς τῶν μαθηματικῶν ὑποθέσει χαίροντες, i.e., from the Pythagoreans, although the system of Plato passed for Pythagorean. Proclus would have rejected it willingly, in honor of Plato, if it were not confirmed by "The Theurgist," ὃ μὴ θέμις ἀπιστεῖν (*ibid.*, p. 258C).

225 *Ergo Veneria et Jovialis stella per hos numeros lumini utriusque sociantur, sed Jovialis Soli per omnes, Lunae vero per plures et Veneria Lunae per omnes, Soli per plures numeros aggregatur. – Saturni autem Martisque stellae ita non habent cum luminibus competentiam, ut tamen aliqua vel extrema numerorum linea Saturnus ad Solem, Mars aspiciat ad Lunam* (Macrobius, *Somn. Scip.*, I, 19, 30-27). This theory, which Macrobius had not encountered, he says, in any other author (*rationem apud unum omnino quod sciam lectam*), is one Ptolemy leaves out of his *Tetrabiblos*.

226 The "mathematicians" placed, in the middle of the planets, τὸν ἥλιον, συνάγοντα καὶ συνδέοντα τὰς ἐφ' ἐκάτερα αὐτοῦ τριάδας (Proclus, *In Tim.*, p. 257 F). The theory assumes the following order ☿, ♀, ☿, ☉, ♂, ♀, ♄. It is the one Cicero adopts in *De nat. deor.*, II, 20. The usual order, known to, and even preferred by, Cicero (*Rep.*, VI; *Divin.*, II, 43), put Mercury below Venus ☿, ☿, ♀, ☉, ♂, ♀, ♄. The author of the *Hermippus* (I, 4, 24-37 Kroll), not understanding that this modification disarranged the symmetry of the triads, built a counterfeit, even more inept, theory whose symmetry was its reason for being. According to him, from the Sun on up, the pure elements are arranged, in the order indicated by Proclus. Below, the elements are mixed, and there is only an order of vaguely motivated convenience. Ptolemy, who introduced the mixture into all the stars, had nothing to do with these wild imaginings. Moreover, Ptolemy, as astronomer, would not accept without reservations the order which he speculated on later as astrologer (cf. above, p. 108, 2). He remarks that, in the Chaldaean system, Mercury and Venus should pass in front of the Sun, and that this event had not been observed (an objection disproven by modern observations).

227 It is obvious, *a priori*, that the Mesopotamians must have observed the stations and retrogradations of the planets and attached an astrological meaning to them. However, the practitioners, in Greece, sought to get rid of this unwieldy element in calculation. One sees this well in Firmicus, who never says a word about it, and it was the authority of Ptolemy which forced the astrologers to leave the routine which Firmicus followed.

228 *Tetrab.*, I, 23.

229 *Tetrab.*, I, 8. Ptolemy moves the symbolism attached to the quadrants of the zodiac (below, Fig. 15) and the lunar orbit (above, p. 92, 4 and p. 102, 1) to his epicycle. Since he uses the everyday terms, ἀνατολή and δύσις, which properly mean daily rising and setting, in place of ἡλιοτολή and κρύψις (heliacal rising and setting), his text has an equivocal meaning. This is an abuse often remarked upon by the purists (Gemin., *Isagog.*, 11; Theo. Smyrn., p. 136 Hiller). At the time of Ptolemy, after his Φάσεις ἀπλανῶν ἀστέρων (ap. Wachsmuth. *Lyd.*, ed, 2^a, pp. 199 sqq.), the ἡλιοτολή was called the ἑῷα ἀνατολή, and the κρύψις, ἑσπερία δύσις. The other spheres are ἀκρόνυχος [ἀνατολή] for ♄, ♀, ♂, ἑσπερία ἀνατολή and ἑῷα δύσις for ♀ and ☿. The astronomers and astrologers do not agree at all on the distance the planets must emerge from the Sun's rays in order to first be visible at "heliacal rising." The oldest doctrine probably fixed the distance at 15° (cf. Schol. Arat., v. 152; Paul. Alex., fol. Fv). Pliny admits 11° for the three upper planets – *exoriuntur matutino discedentes partibus numquam amplius undenis* (II, 50); Martianus Capella, 12° *intra duodecim partes, non ultim partes duodecim* (VIII, 886-887). Since the visibility depended on the brightness of the planets relative to that of the Sun, some people admit variable distances, 15° for Saturn, 12° for Jupiter, 8° (?) for Mars, 8° for Venus, and 18° for Mercury (Firmic., II, 9 Kroll). These figures are used, in unpredictable ways, in calculating the length of a life (below, Chapter 13) and seem to come from mystical considerations and not observation.

230 I did not find in our texts the distinctions made by the Arabs (?) between the "heart" of the Sun (exact conjunction), the "combustion" (beyond sixteen minutes) and the "eye" or "ray" of the Sun (as far as 15°).

231 We will see farther on (p.117) that one cannot always be sure of what is meant by "advancing" or "retrograde movement." We do not understand the astrological effects of the phases any better. On a ὑπαυγος planet, there is near-unanimity. Unless it becomes λαμπρήνη (below, Chapter 8) it is annihilated, powerless, happy to work with Mars (Maneth., I, 96-99. Firmic., II, 8 Kroll). Still, there is an exception for the Moon, which is exasperated and fatal in συνδεμός. On the other hand, one would not want more than the opposition of the Sun (ἀκρόνυχος) for the maximum of energy, especially for the day planets, although Ptolemy had placed the maximum heat there. It was, moreover, a position which did not affect Mercury or Venus. Is it less known that all the planets are powerful and favorable as ἑῷοι (or ἀνατολικοί) and when moving forward (προσθετικοί – προποδίζοντες)? feeble and unfavorable as ἑσπεριοί (or δυτικοί) and when moving retrograde (ἀφαιρετικοί – ἀναποδίζοντες)? One would have scruples on this, for this rule suppresses the difference between the diurnal

and the nocturnal planets, or masculine and feminine ones. So Demophilus wrote *οἱ ἀρσενικοί πλανῆται χαίρουσιν ὅταν ὦσιν ἀνατολικοί καὶ οἱ θηλικοί ὅταν ὦσιν ἐσπέριοι* (ap. Porphy., p. 204). At first, he substitutes sex for αἵρεσις; after that, I do not know if he takes ἀνατολικοί as a synonym for ἑωοί (heliacal rising), natural counterpart of the ἐσπέριοι, or if, on the contrary, he uses ἀνατολικοί in its proper sense (cosmical rising) and gives to ἐσπέριοι the sense of δυτικοί. Finally, on the effect of the stations (στηριγμοί), there is an anarchy of opinions. In general, the slowing-down and stopping of the planet passes for a period of lesser power or inertia, especially the second station, ending a period of retrogradation and of “dryness.” However, Ptolemy himself taught that, at the time of an eclipse, the planets add to omens ὅταν *στερίζοντες* (*Tetrab.*, II, 4) and elsewhere (III, 11, p. 345 Juntinus; see below, Chapter 12) he says that, if the planets at the second station enfeebled the body, the planets at the first station made the body *ἰχυρὰ καὶ εὐτονα*. Hephaestion crowns the disarray in maintaining that the planets have a significative value in the stations, especially the second ἕκαστος δὲ [τῶν ἀστέρων] ἐν τοῖς στερηγμοῖς σημαίνει, καὶ μᾶλλον ἐν τῷ δευτέρῳ στηριγμῷ (p. 93 Engelbr.). The fact is that the Egyptian astrologers, wishing doubtless to give the maximum effect to the planets in the charts which we possess, noted them as being ἐν τῷ β' στηριγμῷ (Papyr. Brit. Mus., CX, I. 10, 13, 17), τὸ δεύτερον στηρίζων (Pap. CXXX, I. 119) or ἕως ἀνατολικός (Pap. CX, I. 21. CXXX, I. 103, 147), ἕως ἄγαν (CXXX, I. 137), or still περιγίγιος (CXXX, I. 160). Mars, so redoubtable in the retrograde state, is called προσίθω (?) τοῖς ἀριθμοῖς (XCVIII, I. 25) in direct movement. [See now Otto Neugebauer and H. B. van Hoesen, *Greek Horoscopes*, Memoirs of the American Philosophical Society Held in Philadelphia for the Promoting of Useful Knowledge, V. 48 (Philadelphia American Philosophical Society, 1959), supplemented by, Donata Baccani, *Oroscopi greci documentazione papirologica*, Ricerca papirologica 1 (Messina Sicania, 1992) and Alexander Jones, *Astronomical Papyri from Oxyrhynchus*, 2vols. (American Philosophical Society, 1999) for useful collections of Greek horoscopes. I wish to thank Josiah Bacon for referring me to Baccani's collection as well R. H. van Gent for referring me to Jones' work. LJJ].

232 Final causes are always easy to find. One may say also that the movement backwards of the planets has as its goal moderating, as a sort of brake, the movement of the sphere of the fixed stars *nec rota per gyrum, quam trudit machina Olympi | Currere sic possit, ni septem sidera tricent* (Incert. ap. *Poet. lat. min.*, V, p. 334 Baehrens). Finally, there always remains, on the agreeable side, the music of the spheres, *quae maxima divis Laetitiast* (Varr. *Atac.*, in *Poet. lat. min.*, VI, p. 334 Baehrens).

233 As Plato takes pains to mingle pro and con in his reasoning, he introduces a mechanical impulsio called Ἀνάγκη into the conscious movement of the stars. All the “torches” turn “upon the knees of Necessity.” The Stoics generally called the proper motion of the planets προαιρεκτὴ [κίνησις], that is, “preferred” or “chosen.” In Mazdaean theology, the planets are malevolent beings, within the jurisdiction of the Evil power, including, in the eyes of the sect of the Zendiks, the Sun and the Moon. These Zendiks [Zen'dik n.1. An atheist or unbeliever; - name given in the East to those charged with disbelief of any revealed religion, or accused of magical heresies. Webster's Revised Unabridged Dictionary, published 1913 by C. & G. Merriam Co. (<http://www.thefreedictionary.com/Zendik>) LJJ] believed them animated by the seven worst demons (*Divs*), where the celestial Spirits in the service of Ormazd had been imprisoned (Blochet, “L'Oulama-i-Islam” in *Rev. Hist. Rel.*, XXXVII [1898], pp. 29 and 43). This is evidently the mythic explanation of the retrograde motion of the planets.

234 Cf. above, (p. 24, 1.) The theory of epicycles is καλὴ μὲν ἐπίνοια καὶ ψυχᾷς ἐμπρέπουσα λογικαῖς, τῆς δὲ τῶν ὁλῶν ἀστοχος φύσεως, ἥς μόνος ἀντελάβετο Πλάτων (*In Tim.*, p. 272 B). These movements are not the effect of slowing down nor of a mechanical force, ἀλλὰ πανταχοῖ φερομένων τῶν ἐκεῖ σωμάτων διὰ τὴν τῶν ψυχῶν τῶν κινουσῶν πρὸς ἄλλα καὶ ἄλλα νόησιν (Procl., in *Anal.*, V, 2, p. 75 Pitra). The precession of the equinoxes, especially, which supposes a movement opposite to the sphere of the fixed stars itself, is a heresy which Proclus fought with all his forces, invoking, after Plato, the Mesopotamians, the Egyptians, and the forces, the very word of the gods “who know their own business very well” αἱ τῶν θεῶν φεναὶ σαφῶς τὰ αὐτῶν εἰδόντων, *ibid.*, p. 77). One need not wonder why we class Proclus among the theologians (below, Chapter 16).

235 *Ibid.*, pp. 75-6. The author of the *Hermippus* knew that the irregularity of the planetary movements, was produced by the conflict between Intelligence and Matter, with the goal of varying the combinations on earth, ὅπως ποικίλως τοῖς ἐπὶ γῆς προσφέροιντο (I, 4, 31). He thought also that the planets distanced themselves from the earth and approached the sky, ὅπως ἔλκωσιν ἐκείθεν τι θειότερον, κατιέναι δ' ἐφ' ᾧ μεταδοῖεν τοῖς γῆς (II, 14, 127). All this is very naive and very Platonic.

236 Doctrine ὑπὸ πολλῶν φιλοσόφων εἰρμένη (Geminus, *Isag.*, 10) – ἀπὸ τῶν πρεσβυτέρων ἀποδιδομένη (Dercyllid. ap. Theon Smyrn., p. 200 Hiller), attributed Anaxagoras, Democritus, Cleanthes (Plut., *Plac. phil.*, II, 16. Stob., *Ecl.*, I, 24, 1. Cf. Diels, p. 345). – *Peripeticorum dogma* (Mart. Cap., VIII, 853). Hermes Trismegistus (ap. Stob., *Ecl. phys.*, 21, 9, p. 472) also believed in the ὑπόλειψις. He explains that the planets wanted to go against the universal movement διὰ τὸ βραδυτέραν κίνησιν κινεῖσθαι τοῦ παντὸς κύκλου.

237 Geminus alleges three reasons, of which one, at least, is capital. If the planets are simply slowed down, they would stay in the same parallels, and not move up and down obliquely in latitude.

238 Adrastus ap. Theon. Smyrn. pp. 147-198 Hiller.

239 This error – and doubtless the system of which it is part – is found already in Pliny, for whom the planets *minimae cernuntur* and *altissime absunt in vespertino exortu* (below, p. 119, 1).

240 It remained for Seneca to call Saturn *velocissimum sidus* (Sen., *Q. Nat.*, I, Prooem., 11). He later says *stella Saturni, quae ex omnibus iter suum lentissime efficit* (ib., VII, 29), as equivocally as possible, even without the Peripatetic dogma, in considering the daily motion. As for the reversal in meaning of the terms *προποδίζειν*, and *ἀναποδίζειν*, there is a curious example in the *Isagoge* of Porphyry (pp. 183-187). In the current language, forward motion (*προποδίζειν* – τοῖς ἀριθμοῖς προστιθένται), for the planets, meant moving in a direction opposite to the daily motion, following the order of the signs of the zodiac (εἰς τὰ ἐπόμενα); backward or retrograde motion (*ἀναποδίζειν* – ὑποποδίζειν – ἀφαιρεῖν) is to move in the same direction as the daily motion (εἰς τὰ ἡγούμενα or *προποδίζοντες*). Now, on page 184, the scholiast speaks like a Peripatetic in saying ἐπὶ τὰ ἡγούμενα *προποδίζοντες*. Several lines further on (p. 185), he explains that the planets march to their “first station,” that is, toward the East, *προποδίζειν* ἄρχονται. He speaks as Ptolemy does, and states *προποδίζειν* λέγει ὁ φιλόσοφος τὸ εἰς τὰ ἐπόμενα κίνεσιν ποιεῖσθαι ὑποποδίζειν δὲ εἰς τὰ προηγούμενα. For fear of being equivocal, following a definition, he or another adds ὑποποδισμὸς ἢ ἀφαίρεσις κατὰ μῆκος. However, this definition is at once reversed by the pen of a Peripatetic, who writes the following ὅπερ *προήγησις* καλεῖται! These interpolations are due to an obsession of Peripatetic dogma, to oppose the common habit of not considering the daily movement, which made all the stars “advance” from East to West in “precession.” Another ambiguous usage is to qualify the two stations (*στηριγμοί*) after the movement *which they follow*, calling the first station ἀφαιρετικός – ὁ ἐπὶ ἀφαιρέσιν, and the second *προσθετικός* – ἐπὶ πρόσθεσιν (Porphyry., *Isag.*, p. 184. Anon., p. 135. Paul. Alex., fol. G v).

241 That is, in our heliocentric system, with the movement of the Earth, the unique cause of the apparent retrogradations of the planets, which are an effect of perspective.

242 Heraclides of Pontus also stopped himself. He made Venus and Mercury move around the Sun (Chalcid., *In Tim.*, c. 109), the two planets *quae Soli oboediant* (Cic., *Nat. Deor.*, II, 46), but not the “upper” planets. Cf. above, p. 107, 3.

243 Under its general form, this idea is found everywhere. *Cum caeli conversiones commutationesque tantae fiant accessu stellarum et recessu, cumque ea vi solis efficiantur*, etc. (Cic., *Divin.*, II, 42). This is the reason that the Sun is in the middle of the planets, καθάπερ ἡνίοχος ἀγαθὸς τὸ τοῦ κόσμου ἄρμα ἀσφαλῶς ἐλαύνων. (Hermippus, II, 16, 116). *Chaldaei – ante omnia igitur dicunt actum vitamque nostram stellis esse subjectam, sed ipsarum motus schemataque et effectus a sole crebro immutari*, etc. (Censorin., 8). A planet in station *in eodem manet signo, donec ab eodem sole moveatur* (Censorin., *Fr.*, p. 59, Hultsch). Even the poets know it *Sol – Mutat nocte diem, radiisque potentibus astra Ire velat cursusque vagos statione moratur* (Lucan., *Phars.*, X, 201). The theory exposed below is made for the three upper planets. The others “obey the Sun” without doubt, but without care for any of the astrological aspects πρὸς μὲν τὸν ἥλιον οὔτε τρίγωνον ποιοῦσιν, οὔτε ἐξάγωνον, οὔτε τινα σχηματισμόν (Schol. Paul. Alex., F4v).

244 *Errantium autem tres, qua supra Solem diximus stare – radiorum ejus contactu reguntur, et in triquetra a partibus CXX stationes matutinas faciunt, quae et primae vocantur mox in adverso a partibus CLXXX exortus vespertinos, iterumque in CXX ab alio latere adpropinquantes stationes verspertinas, quas et secundas vocant, donec adsectus in partibus duodenis occultet illas, qui vespertini occasus vocantur. Martis stella ut proprior etiam ex quadrato sentit radios, a XC partibus, unde et nomen accepit motus primus et secundus nonagenarius dictus ab utroque exortu* (Plin., II, 59-60). Martianus Capella (VIII, 887) reproduces the assertion of Pliny nearly word for word. Farther on, Pliny exposes the physical reason for the phenomenon *Percussae in qua diximus parte et triangulo solis radio inhihentur rectum agere cursum, et ignea vi levantur in sublime. Hoc non protinus intellegi potest visu nostro, ideoque existimantur stare, unde et nomen accepit statio. Progreditur deinde ejusdem radii violentia et retroire coget vapore percussas. Multo id magis in vespertino earum exortu, toto Sole adverso, cum in summas apsidas expelluntur minimaeque cernuntur, quoniam altissime absunt*, etc. (Plin., II, 69-70). Pliny boasts of being the first to present this theory (71). His bit of originality consisted perhaps of combining two theories, each of which sufficed by itself, the system of eccentrics or epicycles and that of the Mesopotamians. He did not recognize the near identity of his theory with that of Vitruvius (IX, 1), a theory rather close to modern ideas, in the sense that repulsion is replaced by attraction. Vitruvius rejects, in the name of good sense, the inept explanation which pretends that planets stop when the Sun is too far away, because they no longer go their way. He thought that, just as the heat of the Sun attracted plants and lifted vapors, so the Sun attracted the planets, pulling them along when it was ahead and slowing them down when it was behind.

Why the triangle, however? Vitruvius, embarrassed, assured his reader that solar rays worked no matter what the angle, *propiora flagrant* (above, p. 81, 3) and he cites Euripides in support. In short, the astrological dogma imposed itself upon him. He thought the Sun had no effect when at the point of a triangle, when *nec plus nec minus est ad quintum ab eo signo*. As for Pliny, his theorem is sullied more by an error. He taught, as a recognized thing (*convenit – confessum est*, doubtless the Peripatetics, cf. above, p. 116), that the planets are at perigee and in increasing motion *in occassu vespertino*, at apogee and slowing *in vespertino exortu*; which is, if I am not mistaken (see figures 1 and 2), the opposite of truth. Next, the *motus nonagenarius* of Mars is an improvised hypothesis. Astronomers and astrologers had remarked on the capricious movement of the planet, its great inequalities of apparent speed. However, I cannot see, to support the saying of Pliny, that Porphyry, who places the “anomalies” (stations) of Mars at 82° or 86° from the Sun (p. 184) and Paul of Alexandria (G v and G 3 v) οὐδὲ γὰρ ἐν ταῖς ρκ’ (Greek numerals for 120°) μοίρας οὗτος (Mars) στηρίζει ἀλλ’ ἐν πβ’ ἢ πδ’ (Greek numerals for 82° or 84°). Still, it is possible someone has retouched the figures. I suppose, following figure 2 below, that Pliny poorly understood his authors and what the *motus nonagenarius* signifies, not that the Sun is in square aspect with the planet when it imparts the retrograde movement to it, but that it began to effect it after being itself displaced about 90° (78° in the figure). Pliny gathered once again (on this subject of the *secreta naturae* that which we would let count for it (77-78).

245 To obtain a projection of the celestial sphere conforming to real appearances, the center of movement of the planet was put upon the Sun, which, itself, is supposed to turn around the Earth. This is the compromise imagined by Tycho Brahe. The explanation given for Jupiter works also for Saturn, whose orbit, given the obligation of observing the proportional distances, will not fit into the figure. If the point of departure is conjunction (σύνοδος) the Earth (☉), the Sun (☉) and Jupiter (♃) were on the same line. Jupiter is ὑπαυγος – *combustus*. When S₁ is newly arrived at about 120° (the trine aspect) from the point where ♃₁ is at (which moves about twelve times [11.86] slower), the first station produces itself ἐὼι μὲν ὄντες (to the right of the Sun and rising before it) ἀποστάντες δὲ περὶ μοίρας ρκ’ [πλέον ἢ ἔλασσον, Paul. Alex., Gv], τὸν πρῶτον στηριγμὸν ποιοῦνται (Porph., p. 183). Next, the retrogradation begins. When ♃₂ is at perigee and in line with T and S₂, it rises at the moment the Sun sets (ἄκρόνυχος): ὑποποδίζοντες ἐπ’ ἀκρόνυχον φέρον[ται] καὶ κατὰ διάμετρον τῷ ἡλίῳ σχηματιζόμενοι καὶ ἅμα τῇ δύσει αὐτοῦ καταρχὰς τῆς νυκτὸς ἀνατέλλοντες (*ibid.*). The retrogradation continues until the movement when the Sun S₃ finds itself at about 120° (trine aspect on the right) from the planet ♃₃, which stops itself at the second station ἀπὸ τῆς ἀκρονύκτου δ’ ὡσαύτως τοῖς ἀριθμοῖς ἀφαιροῦντες, καὶ ἐπὶ τὸ ἐπόμενον τρίγωνον τοῦ ἡλίου ἐληλυθότες, τὸν δεῦτερον ποιοῦνται στηριγμὸν (Porph., *ibid.*). At once, the planet regains its earlier impetus with an accelerated motion. The Sun, however, adds speed and rejoins it in a new conjunction αὖθις τοῖς ἀριθμοῖς προστιθέντες [ἀρξάμενοι προποδίζειν ἐπὶ τούτου τοῦ σχήματος σχήματος ταχύματος ταχύτεραν τὴν κίνησιν ποιοῦνται, προσθετικοὶ τοῖς ἀριθμοῖς ἐπὶ τοῦ Ζωδιακοῦ γινόμενοι, Paul. Alex., *ibid.*] καὶ καταστήσαντες εἰς τὴν ἐπαναφορὰν τοῦ ἡλίου καὶ τὴν ἐσπερίαν ποιησάμενοι δύσιν ἐπὶ σύνοδον ἀφινούνται (Porph., pp. 183-184).

246 The figure shows the great inequality of the apparent movement of the planet, which, in a revolution of about 687 days, uses nearly four months to go around its small loop. The respective positions of Mars and of the Sun at the moment of the stations (first, ☉₄ and ♂₄; second, ☉₆ and ♂₆) are neither at trine (120°) nor at square (90°). See above, pp. 118-119.???

247 *Fortasse et Anabibazon obstatat, aut aliqua malefica stella, Saturnus quadratus aut Mars trigonus* (Tert., *In Marcion.*, I, 18). The ἀναβιβάζων and the καταβιβάζων figure in the charts of the astrologer Palchos [Note that some Palchos is now thought to be al-Balkhi, that is, Albumasar under another name, and his writings date to the eighth and ninth centuries CE, not the fifth, as Bouché-Leclercq thought. See Wolfgang Hübner, *Raum, Zeit, soziales Rollenspiegel* (München Saur, 2003), pp. 30, n. 86). L.J.N]. In the compilations made in the 16th century, after the Arabs, the *Caput* and *Cauda Draconis* are treated absolutely like the planets, the one masculine (*Caput*), the other feminine (*Cauda*). In the papyrus CXXX of the *Brit. Mus.*, (81 p. Chr.), we see the Moon noted ἐπὶ τῆς ῥάχεως ἀναβιβαζοῦσα τοῦ ταύρου, Saturn, ἐπὶ τοῦ χειλιδονιαίου ἰχθύος καταβιβάζων. The words “ascending” and “descending” mean being either North or South of the equator. It was later, doubtless, that the astrologers, setting limits to the Moon and studying it more clearly, had the idea of taking account of the mobile nodes of the lunar orbit and to consider the Moon as ascending and descending, not only in relation to the Equator, but also in relation to the ecliptic.

248 Τετάρχθαι γὰρ νομίζουσι κατὰ τὸν ἀρκτικὸν πόλον τὸν Δράκοντα, τὸν ὄφιν, ἀπὸ τοῦ ὑψηλοτάτου πόλου πάντα ἐπίβλεποντα καὶ ἐροφῶντα κ.τ.λ. – Κατὰ γὰρ τὴν δύσιν καὶ ἀνατολὴν τῶν δύο ἡμισφαιρίων καίται τὸ κεφάλαιον τοῦ Δράκοντος (IV, 6, 3). [Bouché-Leclercq is wrong that the Mesopotamians used the pole of the ecliptic. The Mesopotamian astronomers ignored the ecliptic and watched primarily the heliacal risings and settings of the planets. Cf. Koch-Westenholz's discussion. L.J.N].

249 In the *Chaldaica* (Pitra, *Anal.*, V, 2, p. 300) "Ἐπλασεν ὁ Πάνσοφος μὲν δράκοντα πάνυ μέγαν κατὰ μήκος καὶ πλάτος καὶ βάθος, ζοφοειδῆ ἔχοντα κεφαλὴν, τὸν λεγόμενον ἀναβιβάζοντα εἰς ἀνατολήν, καὶ τὴν οὐρὰν αὐτοῦ τὸν λεγόμενον καταβιβάζοντα εἰς δύσιν. These two pseudo-planetary entities had been added to the seven planets by the partisans of the *nine-fold* cycles, who thus escaped the tyranny of the *seven-fold* cycles.

250 Each of the planets has an ascending node and a descending node. The astrologers, however, have only counted those of the lunar orbit. We find in the Middle Ages that the *caput* lodged in the Ram and the *cauda* in the Balance, that is, in the nodes of the solar orbit or the ecliptic (cf. P. Meyer in *Romania* XXVI [1897], p. 260).

251 At the time of the Empire, the Romans would still make a din to help the eclipsed Moon. *Jam nemo tubas, nemo aera fatigat: | Una laboranti poterit succurrere Lunae* (Juven., VI, 442), a practice attested by Livy, XXVI, 5; Pliny, II, 54; Plut., *Paul. Aemil.*, 17; *De fac. in orbe lun.*, p. 944; Tac., *Ann.*, I, 28. The noise was supposed to frighten the dragon or disrupt the malice of the sorcerers which took the Moon from the sky.

252 The cycle of the nodes, which serves to preview the return of eclipses, is 6,793 days or eighteen and 2/3 years. The Mesopotamians (?) had estimated the period at 223 tropical lunations or 6,585 1/3 days.

253 *Zodiacum hunc Graeci vocitant, nostrique Latini | Orbem signiferum perhibebunt nomine vero* (Cic., *Arat*). – *Distinet aequato caelum discrimine metas | Propter signiferi posituram totius orbis* (Lucret., V, 689). – *Nitet ingenti stellatus balteus orbe* (Manil., I, 679). -- καθάπερ τυμπάνου κύκλος, ἐφ' οὗ καὶ εἰδωλοποιεῖται τὰ ζώδια (Theo. Smyrn., p. 133 Hiller). The ancients contented themselves with a breadth of 12° *bis sex latescit fascia partes* (Manil., I, 682), not enough to hold the orbit of Mercury in the heliocentric system. (Its orbit inclines at 7°, 0', 8" to the ecliptic). We know that the inclination of the ecliptic to the equator is itself variable. It is presently [1899 LJJ] 23°, 27', 9" and diminishes about 0.46" each year.

254 This is moderately true, but in need of some correction. The exclusion of the constellations outside the zodiac is artificial to the extent that it was not maintained without exception, even by Ptolemy. He introduces into certain prognostics the influence of certain extra-zodiacal constellations which rise at the same time as the signs (παρὰνατέλλοντα). Likewise, he uses their effects, like those of the zodiacal stars, in accounting for the effects of the planets (*Tetrab.*, I, 9). The same, later and after Ptolemy, goes for Hephestion of Thebes (I, 3-5, pp. 69-71 Engelbrecht). The tradition which forced his hand sprawls throughout the fifth book of Manilius, in the work of Firmicus (VIII, 5-17), and imposed itself even on Demophilus commenting upon Ptolemy. This scholiast (ap. Porphyry., *Isag.*, p. 200) reintegrates the first and second magnitude stars into birth charts or horoscopes. According to him, these stars are thirty in number and have a psychic influence (see above, p. 44 in note). This tradition, conforming to Egyptian habits, may have been introduced into Greek astrology by the Alexandrians, probably by the authors of the books of "Nechepso and Petosiris." The "barbaric" sphere was thus the Egyptian constellations. Firmicus said of it *Graecis multis et omnibus ferme Romanis incognitam* (VIII, 5), but he adds – if the text has not been altered – that Nechepso and Petosiris themselves did not know it. Before Manilius, Nigidius Figulus had treated the *sphaera barbarica*, as opposed to the *graecanica* (cf. Scaliger, *Not. in Manil.*, pp. 333-334). However, it may be that the polymath meant by this simply two descriptions of the sky at different latitudes.

255 Ptolemy expressed it very nicely above. Approaching genethliology, he declares that he will leave to one side, as impractical, the ancient method, which pretended to take into account all or nearly all the stars τὸν μὲν ἀρχαῖον τῶν προρρήσεων τρόπον, τὸν κατὰ τὸ συγκριτικὸν εἶδος τῶν ἀστέρων, πάντων ἢ πλείστων, πολύχουντε ὄντα καὶ σκέδον ἄπειρον εἴ τις αὐτὸν ἀκριβοῦν ἐθέλει κατὰ τὴν διέξοδον, καὶ μάλλον ἐν ταῖς κατὰ μέρος ἐπιβολαῖς τῶν φυσικῶς ἐπισκεπτομένων ἢ ἐν ταῖς παραδόσεσι θεωρεῖσθαι, παραιτησόμεθα, διὰ τε τὸ δύσχηρεστον καὶ τὸ δυσδιέξοδον (*Tetrab.*, III, Prooem.). He goes on to say "what embraces too much is badly held." However, this never worked in practice. In theory, Ptolemy had not only "ancient practice" but the logic of universal sympathy against him. Moreover, how to eliminate the influence of Sirius, the Dog, if one believed it caused rabies in dogs (above, p. 79, 10 and Serv., *Aen.*, X, 273)? Or that of Ophiuchus, when – because of the snake he carries – he was assimilated to Asclepius? All of stellar mythology cried out against the privileges of the zodiac. One might defend it with etymology, in need διὰ δύο αἰτίας, ζωδιακὸς καλεῖται, διὰ τὰ περιεχόμενα ἐν αὐτῷ ζώδια, ἢ διὰ τὸ τὴν ζωὴν τῶν ἐνταῦθα σημαίνειν ἢ ποιεῖν, the "life-giving" virtue of the zodiac was imprinted by the Sun (Schol. *Arat.*, I, p. 32 Buhle). This is the reasoning of a scientist.

256 The Egyptians reclaimed Oenopides of Chios as their disciple, who had later included in τοῖς ἱερῶσι καὶ ἀστρολόγοις, among other things, the knowledge of the obliquity of the ecliptic (Diod., I, 98). Oenopides interpreted the epithet of λοξίας given to Apollo (ap. Macrobi., *Sat.*, I, 17, 31) in this way. Cf., in Nonnus (XLVIII, 334), Λοξώ, servant of Artemis.

257 Plin., II, 36, text cited above.

258 Plut., *Plac. phil.*, II, 12; Stob., *Ecl.*, I, 23.

259 Leucippus and Democritus, according to Plutarch, *ibid.*, III, 12. These philosophers placed the pole near the zenith. However, then the Sun would revolve horizontally, and we cannot see how it would heat the South more than the rest of the world. Following another tradition (Plut., II, 8. Euseb., *Pr. Ev.*, XV, 39), it was (according to Empedocles, Diogenes of Apollonia, and Anaxagoras) the “world,” that is, the sky, which (inclined to the South) was mounted on the pole above the horizon. In this system, the axis of the universe had first been horizontal, and later inclined itself spontaneously, or by a Providence which had not thought of everything and revised it.

260 Plut., *Plac. phil.*, II, 23; Stob., *Ecl.*, I, 25. Cf. Letronne, “Opinions populaires et scientifiques des Grecs sur la route oblique du Soleil,” (*Journ. des Savants*, 1839, pp. 129-146 = *Oeuvres choisie*, II, 1, pp. 337-359).

261 Herodotus knew that the Sun pumped (ἔλκει) terrestrial vapors, and that it was pushed back by cold winds. (ὑπὸ τῶν χειμόνων, II, 24; – ὑπὸ τοῦ χειμῶνος καὶ τοῦ βορέω, II, 26). This opinion was a learned one in his time, not popular. However, neither he nor others knew what drew the Sun to the North. If Boreas traded places with Notus, Herodotus says (II, 26), the Sun would go just as far to the North of Europe.

262 The proof, in the opinion of the physicists (Arist., *Meteor.*, II, 2), was adopted by the Stoics (above, p. 75, 1. The Sun is (it goes without saying) an intelligent god, αὐτοκίνητας, and if he is “the oblique Apollo” (Λοξίας), that is what he wants to be.

263 The author of the *Hermippus* thought that God had inclined the ecliptic to enlarge the habitable band of the earth on the side of the terrestrial Paradise, which is on the equator.

264 *Quae cunct sidera licet in ortum pergere videantur, non tamen adversum mundum rigido motu sed obliquo per zodiaci defixa moluntur: alioquin ex contrario partium suarum motu mundus stare non posset* (Marc. Cap., VIII, 853). The author does not say where he got the idea, but no one suspects that he invented it himself. See above (p. 114, 1) for the idea of the planets acting as a brake.

265 Herod., II, 142.

266 A legend related by Plato (*Politic.*, p. 269 A), reassessed by the poets, was adapted by Milton to Christian narrative, the Fall of Adam replacing the Feast of Thyestes. Serious people, *mathematici nobiles*, supposed that Venus had caused the Flood of Ogyges (Varr. ap. Augustine, *Civ. Dei*, XXI, 8). St. Augustine seized on this fact as proof that the miracles of Joshua and Hezekiah were not completely impossible.

267 See the opinions about the Milky Way in Plut., *Plac. phil.*, III, 1; Macrobi., *Somn. Scip.*, I, 15; Stob., *Ecl.*, I, 27, etc. Cf. Diels, pp. 335, 349, 364, 562, and above, p. 22, 2. Oenopides of Chios connected the fact to the legend of the Thyestian feast, the Θυέστεια δεῖπνα (Ach. Tat., *Isag.*, 25). Manilius completely rejected the idea of the change – *Nunquam transversas Solem decurrere ad Arctos, | Nec mutare vias et in ortum vertere cursus*, etc. (I, 521, sqq.).

268 The Egyptian year began with the heliacal rising of Sirius (Sothis), next to Cancer, and it is Cancer which is first in the Denderah Zodiac (Lepsius, *Einleit.*, p. 73). In the “*thema mundi*”, the birth chart of the universe, said to be “Egyptian” (see below, Fig. 23), Cancer is the horoscope, the ascendant. Nevertheless, some affirm that οἱ Αἰγύπτου ἀπὸ τοῦ κριοῦ ποιοῦνται τὴν ἀρχὴν (Schol. Arat. ad v. 544). These Egyptians are the astrologers Nechepso and Petosiris. The Greeks did not have a uniform system. The *paraepagma* of Eudoxus began with Leo, those of Aratus, of Callipus, and of Diocles, with Cancer or Capricorn (cf. Halma, *Almag.*, I, p. 148 sqq.). [A *paraepagma* was the equivalent of an almanac, linking astronomical events with seasonal weather changes. Cf. Daryn Lehoux, *Astronomy, Weather, and Calendars in the Ancient World Paraepgmata and Related Texts in Classical and Near-Eastern Societies* (Cambridge CUP, 2007), which largely replaces Albert Rehm, *Paraepgmastudien, mit einem Anhang, Euktemon und das buch de Signis* (Munich Beck, 1941). L.JN]. After Posidonius, Aries definitively occupied the first place, but the system was still called Egyptian. Probably it was because of Ammon and the horns of the ram, and also under the pretext that, Cancer being the ascendant, Aries was in the first “place”. (Firmic. III, 1, 18 Kroll). It is κεφαλὴ τοῦ κόσμου κεφαλὴ – του = ko/smou (Macrobi., *Somn. Scip.*, I, 21, 23; Hephest. Theb. I, 1) – (δοκεῖ γὰρ τὸ μεσουράνημα ἀναλογεῖν τῇ κεφαλῇ, Anon., p. 110). [Coffins from Greco-Roman Egypt have the goddess Nut painted inside the lid, with the zodiac upon her body. Aries is always at the head, Pisces at the feet. (Mesopotamians called the first sign of the zodiac “The Hired Man” See Francesca Rochberg, *The Heavenly Writings*, Cambridge, 2004, p. xxv.). L.JN.] The Mesopotamian year and the old Roman year began in the Spring. Once the Spring Equinox was preferred, there remained a litigious question, the position of the *cardines* relative to the signs. Eudoxus placed them at the end of the signs, Hipparchus in the beginning. Others sought to replace these conventional positions with the real ones which – as they knew after Hipparchus – shifted fifty seconds each year. Manilius, Manetho and other unimaginative astrologers adopted the eighth degree of Aries – Cancer –

Libra – Capricorn (cf. Vitruvius, IX, 2 [5]). Ptolemy (who knew that the precession of the equinoxes ceaselessly modified the position of the cardinal points (the equinoxes and solstices) relative to the signs, and who supposedly derived the “natural” virtue of the signs from their relationships with these points), Ptolemy, I say, detached the real zodiac, represented by the constellations, from the fictional zodiac, which displaced itself along with the vernal point. The last is the one still used by modern astronomers. This fictional zodiac confusingly kept the names of the “signs” (ζώδια) to which they formerly corresponded for its “twelfths” (δωδεκατημόρια). The result is that his sign of Aries is now nearly completely in the constellation of Pisces. Ptolemy was very careful in announcing this rupture with tradition to those who might be angered, ruining the basic association of ideas which were the foundation of zodiacal astrology. He contented himself with saying that those who did not put the equinoxes and solstices at the beginning of the signs deluded themselves about the signs’ “nature,” which depended on their distances from the cardinal points: ἄλλων μὲν γὰρ ἀρχῶν ὑποτιθεμένων, ἢ μηκέτι συγχρῆσθαι ταῖς φύσεσιν αὐτῶν εἰς τὰς προτελέσεις ἡναγκασθησόμεθα, ἢ συγχρῶμενοι διαπίπτειν παραβάντων καὶ ἀλλωτριοθέντων τῶν τὰς δυνάμεις αὐτοῖς ἐμπεποισάντων τοῦ ζωδιακοῦ διαστημάτων (*Tetrab.*, I, 21). The Aristotelians of the Middle Ages called the zodiac the eighth sphere. It was supposed to be slowly moving retrograde relative to the sphere of the prime mover, the ninth sphere. This carries the “twelfths”, the signs used in astrology.

269 For the mythology and iconography of the zodiac, see the descriptions in *Arati Solensis Phaenomena et Diosema*, gr. et lat. cur. Io. Th. Buhle, Lips. I and II (1793-1801) with the scholia [modern editions include *Aratus Phaenomena*, ed., D. Kidd, Cambridge Classical Texts and Commentaries (Cambridge 1997), with notes and a facing page English translation and *Aratos*, I-II, ed., J. Martin, Collection des universités de France (Paris: Les Belles Lettres, 1998), with text, French translation and commentary. LNJ]. – *Eratosthenis Catasterismorum reliquiae*, rec. C. Robert, Berolin., 1878. [[Eratosthenes], *Catasterismi*. ed., A. Olivieri (Teubner, Leipzig 1897); *Star Myths of the Greeks and Romans A Sourcebook Containing the Constellations of Pseudo-Eratosthenes and the Poetic Astronomy of Hyginus*, translation and commentary by Theony Condos (Grand Rapids, Mich., USA: Phanes Press, 1997). LNJ] – *Hipparchi in Arati et Eudoxi Phaenomena Commentariorum lib. III*, ed. C. Manitius, Lips., 1894. [See *Die Fragmente des Eudoxos von Knidos*, ed., F. Lassere (Berlin 1966) LNJ]. See also the *Aratea* of Cicero and of Germanicus (ed. Buhle, op. cit. or *Poet. lat. min.*, ed. Baehrens, I, Lips., 1879) [and now *Cicéron, Aratea; fragments poétiques*, ed., J. Soubiran, Collections des universités de France (Paris Les Belles Lettres) as well as *Cicéron, Les Aratea*, ed., V. Buescu (Paris-Bukarest 1941, repr. 1966); *The Aratus Ascribed to Germanicus Caesar*, D. B. Gain (London 1976); *Aratus, Germanicus, Les Phénomènes d'Aratus*, ed. A. Le Boeuffe (Budé, Paris 1975) LNJ], and the *Scholia in Caesaris Germanici Aratea* (ed. Buhle, op. cit., or ed. Eyssenhardt, ad calc. Mart. Cap., pp. 378-422, Lips., 1866) [supplemented by *Scholia in Germanici Caesaris Aratea*, ed. A. Breysig (Berlin 1867; repr. Hildesheim Olms, 1967) LNJ]. *Hygini Astronomica*, ed., R. Bunte, Lips., 1875 [cf. Condos, 1997, above. LNJ]. The *Dionysiaca* of Nonnus (ed. Koechly, Lips., 1857) offers an ample collection of descriptions and epithets, for the signs and planets. [Nonnus of Panopolis, *Dionysiaca*, 3 vols., with an English translation by W. H. D. Rouse (London W. Heinemann, 1940-42) LNJ]. For the signs of the zodiac considered as solar symbols, see Macrobius, *Sat.*, I, 21, 16-27. [See also Macrobius, *The Saturnalia*, trans., with an intro. and notes by Percival Vaughn Davies (NY and London Columbia U. Press, 1969) LNJ]. As for the figures themselves, they were portrayed by engravers on medals, by sculptors, painters of the Middle Ages and the Renaissance – sometimes with strange fantasies (cf. *Hyginus*, ed. Basil., 1549) – following the descriptions, which followed variants. I have just seen, while Chapter 5 was being printed, a very recent iconographical study which I recommend to the reader, by G. Thiele, *Antike Himmelsbilder*, Berlin, 1898, 184 pp., in quarto, 7 Pl. and 72 Fig. in the text. [See also Hans Georg Gundel, “Zodiakos. Der Tierkreis in der Antike,” *Pauly-Wissowas Realencyklopädie der classischen Altertums Wissenschaft* (Stuttgart: J. B. Metzler, 1972), Vol. X A, columns 597-705. It is a very thorough article listing all known examples of zodiac in art, also reprinted separately as *Zodiakos. Der Tierkreis in der Antike; Mit einem Beitrag über den Tierkreis im Alten Orient* (Munich: Alfred Druckenmüller Verlag, 1972). See also, *ibid.*, “Imagines Zodiaci zu neueren Funden und Forschungen,” in *Hommages à Martin J. Vermaseren*, Edited by B. M. de Boer and T. A. Ettridge (Leiden: E. J. Brill, pp. 438-54), a supplement to the Pauly-Wissowa article. For excellent recent illustrations, as well as Gundel's most recent research, see Hans Georg Gundel, *Zodiakos: Tierkreisbilder in Altertumskosmische Bezüge und Jenseitsvorstellungen* (Mainz: am RheinVerlag P. von Zabern, 1992) LNJ]. The figures which I have reproduced here are derived from those of Flamsteed, *Atlas coelestis*, London, 1729. They have no pretensions to mathematical exactitude. I have simply unrolled the zodiacal band, considered as a cylindrical ring, and restored the graduations of the time of Hipparchus. These which place the head of the wheat-stalk in the Virgin's hand at 6° West of the Autumnal Equinoctial point. It was the sky of Hipparchus which the astrologers speculated upon. The actual position of the equator is based upon the observed rate of precession of Hipparchus, in admitting a displacement of fifty and two thirds seconds per year. [Now said to be slightly less at 50.29 seconds. KM.] In 2,037 years, it amounts to 28°, 7'. [I wish to thank John McMahon and Graham Shipley, both of the excellent history of astronomy list, Hastro-I, for help with up-to-date editions of the various Aratea. LNJ].

270 Cf. the list of mnemonics, *Hexasticha de XII signis* (Poet. lat. min., IV, pp. 143-146 Baehrens) where the epithets are lavished *Primus Aries – Signorum princeps – astrorum dux* or *ductor gregis – principium*. Firmicus (II, 10 Kroll) calls it *signum regale*. Cf. βασιλικόν (Anecd. Ludwich., p. 107, 6; Nonnus, κέντρον ὅλου κόσμου μεσόμφαλον ἄστρον Ὀλύμπου (XXXVIII, 268).

271 *Cervice prior flexa quam cornibus ibit* (Manil., IV, 506). The Ram turning its head toward the Bull *Respicit admirans aversam surgere Taurum* (Manil., I, 264). However, the bellicose character attributed to Aries required another attitude, which Manilius visualized rushing with the horns in front ... *sic ipse in cornua fertur | Et ruit ut vincat* (IV, 509-510). Cf. G. Thiele, Fig. 33.

272 The complete portraits still found in some almanacs and popular books of astrology are not found in Ptolemy or in any student of learned astrology, since the sign represents only a small part of all the influences calculated. One finds this among the practitioners only slightly colored by astrology, such as the physiognomists (μετωποσκόποι Cf. *Philosophum.*, IV, 3), palm-readers and others. Manilius was a neophyte, and his naivete makes him a contemporary of astrology's creators. He gives us two series of portraits (IV, 123-291 and 502-584). Later astrologers denatured and complicated the characters of the signs by cutting them into sections and attributing to each star a temperament comparable to that of the planets. For example, after Ptolemy's time, the stars in the head of Aries have the nature of Mars and Saturn; those in the mouth have Mercury's nature; those in the hind feet, Mars'; and those in the tail, Venus' (*Tetrab.*, I, 8). The personality of the sign disappears.

273 The association of ideas brings Aries to wool, wool to Minerva – *Minerva Aries esse dignoscitur* (Serv., *Aen.*, XI, 259) – who is also Pallas and associated with the bellicose Ram. Aries is not a brilliant constellation because *deposito vellere aureo in caelum sit receptus* (Eratosth. *rel.*, p. 124 Robert).

274 Since it is not because of the brilliance of its stars, it must be because of its attacks of fiery temper (?) that Aries becomes a *signum ignitum* (Firmic., II, 10 Kroll), πυρῶδες (Anecd. Ludwich., p. 105) – διάπυρον (*ibid.*, 109).

275 Hygin., II, 21; German. *Arat.*, 536; Nonnus, I, 355 sqq.; Amphel., 2, 2 Σιδώνιος Ταῦρος (Maxim., v. 85, ap. Ludwich., p. 10). From oriental tradition we know that the Mesopotamians often portrayed the gods carried by symbolic animals. [Cf. James Pritchard, ed., *Ancient Near Eastern Texts I* (Princeton, NJ Princeton University Press, 1973) and *ibid.*, *Ancient Near Eastern Texts II* (Princeton, NJ Princeton University Press, 1975). LJN].

276 Cypriote coins of the bull with Aphrodite πασιφάεσσα. Cf. the cow-headed Astarte (Euseb., *Pr. Ev.* I, 10, 31).

277 Hygin., II, 21, etc. Cf. *Eratosth. rel.*, pp. 106-107.

278 Ps. Lucian., *Astrol.*, 7 (Egyptomaniac position). The relation between the bull Apis and the Moon: ταῦρος ἀνακείμενος τῇ θεῷ, οὗ ἡ σόβη συνήϋξανεν αὐτῇ καὶ συνεμειοῦτο (Anon., p. 2). But πῶς τὸν ταῦρον θῆλυ νομίζουσι ζῶον (S. Empir., V, 95). *Vacca sit an taurus, non est cognoscere promptum | Pars prior apparet, posteriora latent* (Ovid., *Fast.*, IV, 717 sqq.).

279 Cf. Σελήνη Βοῶν ἐλάτεια (Nonnus, I, 331 etc.) ταυροφυῆς (XXIII, 309) and the banal epithet, κερδέεσσα, κεραίη, etc. The Moon = Venus (above, p. 92, 4.)

280 There was a time when, the equinox being in Taurus, the rising of the Pleiades opened the year. The Πλειάδες are the doves (πελειάδες) of Aphrodite. The useful etymology (πλέω) was invented after the fact. They were also called *Eoae*, *Atlantides* (Serv., *Georg.*, I, 219, 225), *latine Vergiliae a verni temporis significatione* (Serv., *ibid.*, 138). They were seven in number, whose names we are given (Serv., *Georg.*, I, 138. *Arat.*, *Phaen.*, 255-267 and Schol., *ibid.*, German., *Arat.*, 262-263). Germanicus places them (in longitude) *Poplite sub laevo Tauri*. The diminutive *Suculae* (little sows) translates ὑάδης (from ὕς) well enough, a name which other etymologists translate as “the rainy ones” (from ὕειν). Cf. Plin., *Nat. Hist.*, II, 105. Serv., *Georg.*, I, 138. The “Eye of the Bull” (Aldebaran) is called *Cupido* by Manilius (IV, 151). That is the only thing connected with Venus in the sign. It is agreed that in astrology, a group of small stars, such as the Pleiades, can have a great value εἰδέναι χρὴ ὥς ὅταν σύστημα τι ἀστέρων καὶ ἀφανιστέρων ἧ καὶ μὴ λαμπρῶν, ὥς ἐπὶ τῆς Πλειάδος, τὸ αὐτὸ δύναται τῷ λαμπροτέρῳ (Anon., p. 85). From this it follows – it must be said in passing – that the title of πλειὰς τραγική given to the seven Alexandrian tragedians was, in sum, modest. The Pleiade were the small change of an Aeschylus, a Sophocles, or a Euripides.

281 The Babylonians made Taurus the ὕψωμα, or exaltation of Sin (the Moon), (see above, chapter 7), or Shamash (the equinox, ὕψωμα of the Sun was in Taurus from the sixteenth and twenty-second centuries BCE.). [B-L is confusing here. Firstly ὕψωμα is hypsoma – exaltation, not equinox and appears to be an error. To my

knowledge the Sun (Shamash) was never considered exalted in Taurus. However Taurus was once the place of the vernal equinox. Technically it was said to have passed to Aries by precession some time around 1700 BCE, (which is close enough to be called the sixteenth century BCE given above.) The shift was unlikely to have been noticed until about 700 BCE but was noted by Hipparchus' time and used by astrologers after Posidonius. (See above, note 268). The twenty second century BCE also given above is reasonably near to a figure given by Sayce in 1874. It was apparently 'evidently erroneous' but had been recirculated as accurate by other scholars. A correction was published in 1904, five years after B-L published. Perhaps B-L suspected the error himself or heard the argument in advance of publication (?) He may have chosen to give two dates intending them to bracket the time frame during which the equinox changed from Taurus to Aries to take account of two opinions (?) (See Maunder E.W and Maunder A.S.D. Monthly notices of the Royal Astronomical Society. Vol 64, p 488. <http://adsabs.harvard.edu/full/1904MNRAS..64.488M>) KM].

282 *Adversum Taurum* (Manil., I, 264; Cf., II, 153; IV, 521). Also *naturae pudet* (V, 154), and Taurus reappears often in the *cinaedorum impurorum steriliūque geniturae* (Firmic., VII, 16 Pruckner). However, the Egyptian tradition, assimilating Taurus to Apis, did not admit the mutilation. The Bull of the *Sphaera Barbarica* had his *natura*, his hind feet and his tail (Firmic., VIII, 3; Cf. Hygin., II, 21; Anon., p. 5; Schol., *Iliad.*, XVIII, 486). Firmicus even took his characteristic posture from Taurus in making him rise by his horns (Firmic., VIII, 3). As Servius points out, Virgil seems to put the equinox in Taurus and turn it around toward the following sign, in saying *Candidus auratis aperit cum cornibus annum | Taurus* (Virg., *Georg.*, I, 217; Serv., *ad loc.*). Ovid is mistaken, too, when he makes the Sun say to Phaethon *Per tamen adversi gradieris cornua Tauri* (Ovid., *Met.*, II, 80). The Sun, moving contrary to the daily motion of the sky, does not approach the Bull by the horns. It would be better to correct and place here the usual epithet *aversi*. Pictorial details *genu flexo Taurus* (Cic., *Arat.*, 290), ἡμιβαφής, with his right foot aimed at Orion, etc. (Nonnus, *Dionys.*, I, 355-361); predictions lodged in the κυρτὸν τοῦ Ταύρου or in the δῖπλωσις τοῦ ὀλισθήσαντος ποδός (Ludwich., *Anecdota*, p. 111.)

283 Nude young men, according to Manilius, due to the proximity of Cancer *Nudus uterque tamen, sentit quia uterque calorem* (II, 184).

284 Euripid. ap. Schol. Lycophron., 510; Ovid., *Fasti*, V, 693-720; Hygin., II, 22; German., *Arat.*, 542, etc. Cf. *Eratosthenis reliq.*, pp. 86-87 Robert.

285 Apollo is nearest Taurus, Hercules, nearest Cancer, his crab (Ptol., *Tetrab.*, I, 9; Hephaest. Theb., I, 3, p. 68 Engelbr.). However, the partisans of the mythical equation Apollo = Sun asked why Gemini was not the house of the Sun, (Chapter 7) rather than Leo (Anon., p. 36).

286 This is not a trivial detail. Manilius explains the sloth of the Twins in this way, i.e., the slowing of the Sun's march as it approaches the Summer solstice.

287 Manil., IV, 152-161.

288 See the texts in C. Robert, *Eratosth. rel.*, pp. 85-95. The majority deal with the scabrous legend of the Anes or Asses, conquered and killed by Priapus (cf. Lactant., *Inst. Div.*, I, 21), or, following another version, auxiliaries of the gods against the giants, whom they terrified with their braying. Between the two asses (ὄνος Βόρειος – νότιος) we find a nebulous figure, called ἡ φάνη or τὸ φάνιον (the Manger), which plays a large role in predictions by causing vision problems, even blindness. (See below, Chapter 12). As the Tropic of Cancer is an intersection of a "colure" with the tropic circle, Cancer may have been also called Colure, for it carries the name *Kouliro* in the Greco-Hindu zodiac (J.-M.-F. Guerin, *Astronomie indienne*, p. 69). Cancer is seen from below, giving a view of its belly, *patulam distentus in alvum* (Manil., II, 253).

289 Macrobius, *Sat.*, I, 17, 63. Cancer, like Taurus, is pulled along backwards by the daily motion (Manil., II, 199. Cf. Ovid., II, 82). This, for Manilius, explains the slowing of the Sun's annual movement. It is easy, and therefore useless, to try explanations like this one: Hercules represents the Sun (cf. ἀποχίτων Ἡρακλῆς, Ἡέλιε, Nonn., XL, 369), who, arriving at the apogee, is bitten, i.e., forced to move backward by Cancer; or that Cancer is said to be humid, because the constellation is without brilliance, a black hole in the zodiac. The idea of Sarapion, worth as little, (Plut., *De Pyth. Orac.*, 12) is that an aquatic being attracts the element which nourishes the Sun. [The Crab is a Mesopotamian constellation. Cf. the "Great Star List," Koch-Westenholz, 1995, App. B., pp. 187-207. LNJ].

290 The Egyptian began their year under this sign, the scholiast says, τότε γὰρ ὁ Νεῖλος ὁ πάντων αὐτοῖς τῶν ἀγαθῶν αἴτιος πληθύνει (Anon. p. 77). In the zodiac in the pronaos of Denderah we see, alongside Sothis (Sirius) and Cancer, a goddess who pours water from a jug, symbol of the flood. [This motif is found on Mesopotamian *kudurrus* at a rather earlier date. See Ernst F. Weidner, "Gestirn Darstellungen auf babylonischen Thontafeln," *Österreichischen Akademie des Wissenschaft, Philosophisch-Historische Klasse, Sitzungsberichte* 254, Bd. 2, *Abhandlungen* (Vienna 1967), pp. 1-55, especially the excellent illustrations. LNJ].

On the tombs of the pharaohs, we see two tortoises between Sirius and Sothis. We also find these tortoises, in the Greco-Roman era, sometimes in front of a lion with the head of a crocodile (Brugsch, *Thesaurus Inscr. Aegypt.*, I, pp. 10 and 113). Perhaps the decan *Knem* (tortoise) attributed to Cancer (below, Chapter 7) is itself the prototype of Cancer. In any case, Greeks and Romans spoke only of the burning Crab, the torrid Dog, etc., – the Dog which loves the cold, the scholiast on Aratus rewords it, ὅτι φιλοψύχρος ὢν ὁ κύων, καὶ χαίρων ἐπὶ τῷ ἐσομένῳ χειμῶνι (Schol., v. 403) – and one ought not look to them to explain why it is an aquatic sign. The Egyptian tortoise is a plausible origin. [Cancer provides omens of the annual floods of the Tigris and Euphrates in the Great Star List. Cf. Koch-Westenholz, 1995. LJN].

291 Cancer is a sea crab for Manilius (*Nestundo debere genus*, II, 223) and for Ptolemy (θαλάπτιον, *Tetrab.*, II 7), a river crab (ποτάμιον) for the scholiast (*In Tetrab.*, p. 67). There was a similar disagreement over Pisces.

292 Manil., IV, 162-175.

293 See *Eratosth. reliq.*, pp. 96-99 Robert. In the pictorial remains (see Alexandrian coins of Antoninus ap. Eckhel., IV, p. 70 sqq.), the Lion sometimes faces right, sometimes left – left in the *Cod. Vossianus* of Germanicus (G. Thiele, f. 26). It is doubtless the lion strangled by Hercules which Manetho calls ἀσθματικός (Maneth., IV, 274). Inspection of figure 6 justifies Lucan's expression *Cancri sidera mixta Leoni*, which Scaliger (*Prolegg.*, p. 12) declared unintelligible. One could say much the same of Capricorn and Aquarius.

294 Ὁ Λέων ἔχει ἐπὶ τῆς καρδίας ἀστέρα βασιλσκον λεγόμενον, ὃν οἱ Χαλδαῖοι νομίζουσιν ἄχειν τῶν οὐρανίων (Schol. Arat., v. 148, I, p. 43 Buhle) ὅτι δοκοῦσιν οἱ περὶ τὸς τόπον τοῦτον γεννῶμενοι βασιλίσκον ἔχειν τὸ γενέθλιον – (Gemin., *Isag.*, 2). On royal birth charts and Leo, see below, Chapter 12.

295 Manil., IV, 176-188.

296 Οὐρανίου δὲ λέοντος ὀπισθιδιῶ παρὰ ταρσῶ (Nonnus, XXXVIII, 360). [In fact, Mesopotamian images comparable to the Greek Virgo are found in drawings of constellations on cuneiform tablets. See Weidner, 1967, pp. 1-55. LJN].

297 See *Eratosthen. reliq.*, pp. 12-85. According to C. Robert (*ibid.*, 247) the winged female figure, dressed in a red robe, holding stalks of grain in her left hand and climbing a rock (Parthenion) with the infant Telephus, which we see in a painting at Pompeii, is the celestial Virgo. Cf. the description of Virgo in Egyptian dress, an Isis in Martianus Capella (II, 174-177). The astrologers themselves were confused by the profusion of legends. Thus, Virgo is sterile (Manil., II 238). However, as Demeter, she is fertile, and Manilius wrote – if we take the reading of Scaliger *Hinc foecundus erit, quod miram in virgine partus* (IV, 202). According to a naturalist explanation, Virgo is in this place, *propter quod his diebus terra exusta nihil pariat* (Isid., *Orig.*, III, 70). But the stalk of grain? And Ptolemy, who ranks Virgo among the “humid” signs? (*Tetrab.*, IV, 8). The astrologers also have the word for laugh. Those who assimilate Virgo with Fortune do not content themselves with putting a blindfold over her eyes. They take off the entire head (διὸ καὶ ἀκέφαλον αὐτὴν σχηματίζουσιν, *Eratosth.*, p. 84, Robert). The stalk of grain merits a place of honor in the history of astronomy. It was by observing it – it lies nearly on the equator – that Hipparchus discovered the precession of the equinoxes.

298 This star, of medium brightness, had served, like the Pleiades, as a reference point for the seasons. Ptolemy (*Φάσεις*, 9, ap. Wachsmuth, p. 209) makes excuses for not using these markers.

299 P. Tannery, *Recherches*, p. 279, believed that the constellation of the Scales was invented by Hipparchus and actually symbolized the equinoxes – *Librantes noctem Chelae cum tempore lucis* (Manil., IV, 203. Cf. Lucan., *Phars.*, X, 227). The name *Chelae*, Claws, always remained in use; but even with this traditional name, the symbolism was modified.

300 Manetho is of the opinion that the Ζυγός was so-named, ἐπεὶ τ'έάνυσσ'έκάτερθεν, Οἶαι περ πλάστιγγες, Οἶαι περ πλάστιγγες ἐπὶ ζυγοῦ ἐλκομένοιο (Maneth., II 136, sqq.). Firmicus describes the Scales, a masculine sign, as a man holding a scales (VIII, 3). He was, we are told, the inventor of the scales, perhaps said Palamedes, raised to the heavens for this fact (Amphel., *Lib. mem.*, 2, 7). The Scales are a female sign, as the domicile of Venus, upon the altar of Gabies (Clarac., II, p. 130, 151).

301 Manil., IV, 203-216. Among the authors of the late epoch, Ζυγός became over-all the Yoke, which presses down upon beasts of burden and slaves, an idea which fits with that of domination, of law, contained in the Scales. On the Farnese Globe, held by Hercules or Atlas, the artist combined the χηλαί and the Ζυγός, the Scorpion carrying on its pinchers the pans of the Scales (Letronne, *Oeuvres choisies*, IIe serie, I, pp. 239 and 484. G. Thiele, *op. cit.*, pp. 19-42 and pl. II-VI). Our figure 10 *Scorpius and Chelae* is meant to illustrate the artistic equivalence of the χηλαί and the Ζυγός. Ptolemy calls χηλαί the constellation (ἀστερισμός) and ζυγός the sign (ζώδιον).

302 Orion and Scorpio are two bright constellations, which always drew attention to themselves (*lucens vis magna Nepa lucibus effert – cum magnis sese Nepa lucibus effert*. Cic., *Arat.*, 324 and 434), in opposition to *obscurum corpore Chelae* (v. 393). For Gilgamesh, cf. Sayce, *Gilgamesh Cycle*, tab. IX. On the Greek legends, *Eratosth. reliq.*, pp. 72-75 Robert. *Nepa* also designates, even in Cicero (*Arat.*, 216) Cancer. *Nepa Afrorum lingua sidus quod Cancer appellatur, vel, at quidam volunt, Scorpium* (Paul. et Fest., p. 164 and 165 Müller). [There has been a great amount of research done on the Gilgamesh Epic since the 1890s. The standard Akkadian text, with lexicon and index, is *The Standard Babylonian Epic of Gilgamesh*, State Archives of Assyria Literary Texts, Simo Parpola, ed. (Winona Lake, Ind. Eisenbrauns, 1997); Up-to-date translations include *Gilgamesh*, tr. Jean Bottero, the preferred French translation; *The Epic of Gilgamesh The Babylonian Epic Poem and Other Texts in Akkadian and Sumerian*, tr. George Andrew (Penguin 2000), the preferred English translation; *Gilgamesh*, tr. J. Klein and Shin Shifra, into Hebrew; and *Gilgamesh* (2001), Padova Saporetti, tr., a very recent Italian translation. J. Tigay, *The Evolution of the Gilgamesh Epic* (Bolchazy-Carducci 2002; University of Pennsylvania, 1982) tells the history of the text and its sources. LNJ].

303 Isid., *Orig.*, III, 70. We find this explanation already in Germanicus *Scorpios in pluvias rarus, sed nubibus atris | Creber agit nimbos et saeva tonitrua portat, | Clara sagittiferi tetigit cum lumina signi* (p. 199 Baehrens). The sting of the Scorpion is considered a plow or a seed-drill, because of October planting (Manil., IV, 219 and 556. Proclus, in *Anal. Sacr.*, V, 2, p. 176 Pitra).

304 Manil., IV, 217-229. Scorpio is the domicile of Mars, and contains Antares, Mars' double, τῷ Ἄρει τὴν χροάν ὁμοίος (Cleomed., II, 11).

305 Sagittarius may have been, as with the Scorpion and Capricorn, of Oriental origin. Berossus taught that in the beginning there were many monsters (cf. Empedocles), goat-men, *ἵπποπόδας*, etc. (*Fr. Hist. Gr.*, II, p. 497). There is an Assyrian archer-scorpion in Roscher, *Lexicon*, II, p. 1055.

306 See *Eratosth. reliq.*, pp. 150-153. Sign διαδηματοφόρ vin Ludwich. (*Anecd. Astrol.*, p. 109).

307 Manil., IV, 230-242.

308 See *Eratosth. Reliq.*, pp. 148-149, and W. H. Roscher, "Die Elemente des astronomischen Mythos von Aigokeras [Capricornus]," (*Jahrb. f. klass. Phil.*, CLI [1895], pp. 333-342). Cf. the Babylonian cylinder seal shown in Perrot and Chipiez, *Hist. de l'Art*, II, p. 687 fin., and 344-345. The conch-shell (κόχλος – *cochlīs*), with which Pan strikes "panic" among the Tritons united Pan and Triton. One might also, to explain the aquatic character of the sign, say that Pan, fleeing from Typhon, threw himself into the Nile. One could even imagine an affinity between Capricorn and the Western Ocean, where it is on the verge of plunging (*Aegoceros semper properare videtur | Oceano* German., *Arat.*, 286; – *tyrannus Hesperiae Capricornus undae* Hor., *Od.*, II, 17; – *lotus et Hesperiae quid Capricornus aqua*. Propert., V, 1, 86). Periphrastic names include *Corniger aequoris*, *Neptunia Capra*, *aequoris Hircus*, *aequoreus Caper*, *pelagi Capella*, etc. [Goatfish images resembling Capricorn are common on Mesopotamians *kudurrus*. Cf. Ursula Seidl, "Die babylonischen Kudurru-reliefs," *Deutsche Achaologische Institut Abteilung Baghdad, Baghdader Mitteilungen* 4 (1968) 7-220; Pls. 1-32, and Hinke, 1907. LNJ].

309 Manil., IV, 243-245. However, the idea of the sea attached to a fish-shaped sign comes back later, in the second group of portraits *Militiam in ponto dictat, puppisque colendae | Dira ministeria et vitae discrimen inertis* (IV, 568-570).

310 Ptolemy reasons a little like Manilius he thinks that placing the exaltation of Mars in Capricorn would warm it up. **Above from below check all previous notes**

311 Manil., IV, 256-258. There was an affinity between Capricorn and the frigid Saturn (above, p. 96); Saturn had its domicile in Capricorn. On the numerous Roman coins with Capricorn (the horoscope of Augustus, above ch. 12), the figure faces either right or left, indifferently. The artists do not seem to have cared about the doctrine.

312 Sagittarius and Pisces spread across the aquatic part of the sky (*liquida astra – liquidum coelum*. German., *Arat.*, 367. 603). To the north of Capricorn, lies the Dolphin; to the South of Pisces, the Whale and the river Eridanus.

313 *Eratosth. reliq.*, pp. 144-145. Eratosthenes did not know of Ganymede, nor does Manetho (ταμίης νεφελώδεος Οὐλύπιοι. IV, 571). From papyrus CXXX in the *British Museum*, we cite ἀστερά τὸν ἐν τῇ χλαμύδι καλούμενον *Γανυμήδην* ὁμονύμως τῷ ὄλῳ εἰδῶλῳ (II. 132-137). The other traditions, in Hyginus, II, 29; Ampel., 2, 11; Schol. Germ., *Arat.*, 287; Lucan., *Pharsal.*, I, 652. The Aquarius with the jug on the right is in *Cod. Vossianus* (Thiele, p. 115).

314 Manil., IV, 259-272. In the second series of portraits, the clients of Aquarius are models of virtue (IV,
571).

315 Hygin., II, 30; Ampel., 2, 12; Ovid., *Fast.*, II, 458-474. One may replace Venus with Isis or the *dea Syria*, and the Euphrates with the Nile or the fish-pool of Bambyke. Eratosthenes applied the legend to the Southern Fish, of whom Pisces had been the progenitor (*Eratosth. reliq.*, pp. 129 and 180-181). *Piscis magnus cujus nepotes dicuntur Pisces* (Schol. Germ. ad v. 378, II, p. 84 Buhle).

316 Schol. Germ., *Arat.*, 239 (After Nigidius).

317 *Syriae duo numina Pisces* (German., *Arat.*, 557).

318 Manil., IV, 273-291. He holds firm for the fish of the sea *Agnoscitque suos Neptunus in aequore Pisces* (II, 447); also, the urn of Aquarius is *pars maris* (II, 232). Ptolemy and his scholiast are in disagreement, as with Cancer, the sign of the Fish was ποτάμιον for the one (*Tetrabl.*, II, 7), θαλάσσιον for the other (p. 67), who contradicts himself a little further on (p. 70).

319 Manil., IV, 573 sqq. The silent fish, who engender loudmouths, also having power, in the human body, over the feet which they lack! (See above the zodiacal melothesia, in Chapter 10).

320 The Northern Fish was also called the Swallow's Head by the astrologers – τοῦτον τοῖνυν τὸν βορειότερον Ἰχθὺν χελιδόνος ἔχειν τὴν κεφαλὴν φασιν, ὃν Χαλδαῖοι καλοῦσιν Ἰχθὺν Χελιδόνιον (Schol. Arat., v. 242). These “Chaldaean” are probably “Egyptians” used to the ibis-heads and hawk-heads given to their decans. In papyrus CXXX of *Brit. Museum*, Saturn is noted, at 5°, 59' of Pisces, as ἐπὶ τοῦ χελιδοναίου Ἰχθύος καταβιάζων (ll. 103-105); Venus, ἐπὶ τοῦ νοτίου Ἰχθύος (ll. 148-149). There was a danger of confusing the Southern Fish of the zodiac with the Austral Fish, where a first magnitude star (Fomalhaut) shone. Germanicus warns *Est etiam a geminis diversus piscibus unus*, etc. (German., *Arat.*, 378 sqq.). The confusion was made in the Orient, not only with the Whale (κῆτος) which is nearby, for the twelfth sign of the Greco-Hindu zodiac (cf. above, p. 136, 3) is called *Khethong*. Today, due to the precession of the equinoxes, the Southern Fish of Pisces is, like the other, North of the equator.

321 See above, (p. 60, 1), the text of Achilles Tatius, *Isagoge*, 39.

322 An over-view of the texts which would oblige us to give space to all the variants, is superfluous here. The oldest references go back no farther than Manilius, who gives 100 verses (II, 150-264) to detailing signs *mascula et feminea* (150-154), *humana et ferina* (155-158), *gemina* (159-169), *biformia* (169-174), *duplicia* (175-196), *transvorsim orientia et recta* (197-202), *diurna et nocturna* (203-222), *aquatica et terrena* (223-229), *ambigua* (230-233), *fecunda* (234-237), *sterilia* (238-239), *communia* (240-243), *currentia et stantia* (244-248), *sedentia* (249-251), *jacentia* (252-255), *debilia* (256-264). The distinctions multiply with the epithets. There are no less than 113 in the informative compilation *Περὶ ἐνεργείας τῶν ἰβ' ζωδίων* (Ludwich., *Anecdota Astrol.*, pp. 105-110). See, in another table (pp. 110-112), predictions based upon twenty of these epithets. In a table added by some scholiast to the end of the second book of the *Tetrabiblos* of Ptolemy and in Hephaestion of Thebes, each sign is given about a dozen epithets. Ptolemy is guarded, as much as possible, about this foolishness, for which he had little respect. The classification base upon “voice” may come from Egypt, where the “proper voice” had great importance in magical rites. We do not find them in Ptolemy or in his commentators, but in the authors of the late period, Firmicus, Hephaestion, and others, and we do not see them used later, save perhaps among the Arabs. A “Hermeticist” said *Revelatur statim verbum occultum quod quaeritur, quando Luna et planeta cui applicat sunt in signis vocem habentibus* (Herm., *C. Aphorism*, 92, p. 842 Junctin.). Firmicus seems to assimilate the “vocal” signs to the human ones (*in humanis vel vocalibus signis*, IV, 19, 26 Kroll). See the classification of by the *Anecdota* of Ludwich (p. 107) φωνήεντα Ϟ Ϛ Π ΠϚ ϛ; ῥμίφωνα ϟ ♂ ♀; ἀφωνα ϙ Ϡ ϡ ϣ. It seems curious that the Lion's roar does not count as at least semi-voiced! I suppose that we have here some of the debris of mystical speculation. The alphabet was adapted to the zodiac (above, Chapter 10), making certain signs correspond to the vowels (Φωρήεντα γράμματα). This adaptation may itself have been suggested by a Pythagorean tradition, which assimilated the music of the seven planetary spheres to the vowels (ταῦτα μὲν γάρ ἐστι φωνήεντα Procl., in *Anal. sacr.*, V, 2, p. 117 Pitrasee above Chapter 12) and the signs to the consonants σύμφωνα δὲ τὰ τῶν ζωδίων, *ibid.*). From all this, disfigured, transposed, came an over-looked sort of classification. The Scorpion inherited from the Egyptian scarab beetle the title of αὐτογέννητον (Ludwich. 109). Virgo τριπρόσωπος (p. 108) is Hecate.

323 The blindness of Cancer probably came from the geometry of the *antiscia* (below, p. 160, 20. There is also a physical reason, that the days begin to shorten, and one can see less clearly, when the Sun is in Cancer *Longaque jam minuit praeclarus lumina Cancer* (Auson., *Eclog.*, p. 558 Toll). In fact, and it is one more reason, this *praeclarus* is obscure.

324 Manil., II, 256-264. Pliny makes a similar reflection upon eclipses *quis enim cernens [siderum labores] non suae necessitati mortales genitos ignoscat* (Plin., II, 55). The Moon in particular was a suffering star dying each month, usually a natural death, sometimes poisoned by magical *veneficia*. The medical astrologers imputed, by metonymy, diseases to the signs which they caused. They said that this or that sign is pustulent, fistulous, scabby, etc. (above Chapter 12). “Cancer” is a modern example.

325 Manil., II, 245-255. Manilius confuses the *signa recta*, standing around the circle of the zodiac and the *recta* which raise themselves around the horizon. Likewise, he confuses the signs which walk or run, such as Leo or Sagittarius, with the “rapid” signs which rise quickly from the horizon, such as Aries. Aries is not shown running, but lying down. It is nevertheless *siderum celerrimus* (Hygin., *Prooem.*) – *longe maxima currens orbe suo spatia* (German., *Arat.*, 224), as shown on the table of oblique ascensions (ἀναφοραί). Finally, Manilius calls *simplicia* the signs which were *στερεά*. As for the presumed positions of the figures, which allow one to tell *their* right from *their* left, the rule is that we look at the face or the belly, never the back: ἅπαντα γὰρ τὰ ἄστρον ἡστερίσται πρὸς τὴν ἡμετέραν θεωρίαν, καὶ ὡς πρὸς ἡμᾶς ἐστρεμμένα. (Hipparch., *Comment. in Arat.*, Ch. IV, p. 32 Manilius). However, the astronomers themselves were wrong, and Theon of Alexandria took the opposite view from Hipparchus’ rule, habituating people to looking at the constellations from the outside, on an artificial sphere (Scaliger, *Not. in Manil.*, p. 213).

326 Which were really, as Ptolemy knew (above, p. 129, 1), neither equinoctial nor tropical nor solstitial.

327 Ptol., *Tetrab.*, I, 12. Manilius knew these things already, and with the reasons alleged by Ptolemy (cf. II, 175-196, 664-670. The same goes for Sextus Empiricus (p. 339) and the author of the *Philosophoumena* (V, 2, 13) who seems not to have read Ptolemy. The Scholiast (*In Tetrab.*, pp. 28-29) says that Ptolemy added to the ordinary division (τοῖς λοιποῖς παλαιοῖς) the distinction of *τροπικά* and *ἰσημερινά*. The rest are not by him. The explanations of the scholiast explain nothing. He insists that one call the *δίσωμα οὐχ ὅτι ἐκ δύο σωματίων συνέστηκεν, ἀλλ’ ὅτι μεταξύ δύο ὁρῶν ἐστι* (p. 29). Believe that if you like. The influence is calculated from the official sense of these epithets *Signa tropica peregrinis nationibus praesunt et omnino motibus et consiliis subinde variantur atque permutanter. Biformia generatione rerum omnium repetitionem significant et prospera, vel adversa perducunt* (Schol. vett. ad German., II, p. 110 Buhle). Ptolemy inserted, in an incidental proposition, an allusion to the lunar zodiac (taking as its point of departure a node of the lunar orbit) ὥσπερ γὰρ τὴν τῶν τροπικῶν ἄρχην ἀπὸ τοῦ σεληνιακοῦ κύκλου λαμβάνουσιν ἔνιοι διὰ τὸ ταυτὴ τάχιον τῶν ἄλλων τρέσπισθαι οὕτω κ.τ.λ. (*Tetrab.*, I, 13). The allusion is obscure, and the scholiast did not understand it in this fashion. He thought that one took the sign holding the Moon as tropical τὸ γὰρ ζῳδίον ἔνθα ἐστὶν ἡ σεληνὴ τροπικὸν ὑποτιθέμενοι (p. 30). The remainder, not very important, of these systems (Mesopotamian?) were eliminated from Greek astrology.

328 The geometrical rule – which we will discuss again with the square aspect – is that the signs associated by the square aspect are of the same nature *nam quantum quodque locavit | Eiusdem generis signum natura per orbem* (Manilius, II, 654-655) καὶ συναιρετικῶς εἶπεῖν, ὅσα διὰ δ’διέστηκε, ταῦτα τὴν αὐτὴν τῶν ζωδίων φύσιν ἐκδέχεται (Paul. Alex., fol. B 1 v). The reasons alleged by Manilius and Ptolemy may come from Posidonius.

329 The author of the *Philosophoumena* thought that the astrologers had learned the sex of the numbers from the Pythagoreans.

330 There was another reason, drawn from the ἀναφοραί (above, Chapter 9). The *cardines* of the zodiac did not correspond to those of the equator when the equinoctial signs were on the horizon. The condition is realized when Aries is in the ascendant. On the substitution of Aries for Cancer, see above, p. 129.

331 For the signs taken as a whole. As for the degrees, one attributes to them, in the same sign, both sexes, distributed irregularly and without debatable reason (Firmic., IV, 23 Kroll), or attached to the quality of odd and even.

332 Ptolem., *Tetrab.*, I, 13.

333 Ptolem., *ibid.* The scholiast states that this is not the only point upon which there had been differences of opinion and of method: οὐ μόνον γὰρ ἐπὶ τῶν τροπικῶν καὶ ἀρσενικῶν ἐστὶν εὐρεῖν ἄλλους ἄλλην ἐπινοηκότητας προσηγορίαν (p. 30). Cf. in the *Cod. Parisin.*, no. 2419 Omont, fol. 40 v, the chapter περὶ ἀρσενικῶν καὶ θηλυκῶν ζωδίων καὶ ἀρρένουμένων καὶ θηλονυμένων τόπων καὶ ἀστέρων.

334 Ἄριστον ἐνὶ ζώοισι παρεῖναι | Ἄρσεσι μὲν Τιτῆν, ἐν θηλυτέροισι δὲ Μήνην (Maneth., III, 365-366).

335 The same theory in Pythagorean language: *ἡμέρα* μὲν γὰρ καὶ *νύξ* ὥς φησι Ποσειδώνιος, *ἀρτίου* καὶ *περιττοῦ* φήσιν ἔχουσι (Theo. Smyrn., p. 103 Hiller). Only, since night preceded day in the cosmogonies, it was night which came to be number one (odd – περίσσοσ) and, as a consequence, masculine. It may have been

this which confused the astrologers and made them decide to abandon the correspondance between *masculine* and *diurnal*, *feminine* and *nocturnal*. [See Robert Hand. *Night & Day Planetary Sect in Astrology*. ARHAT.1995 for further details.KM].

336 *Sunt quibus esse diurna placet quae mascula surgunt, | Feminea in noctem tutis gaudere tenebris* (Manil., II, 221-222).

337 Manil., II, 211-217. On the literal interpretation of this difficult text, see Scaliger, p. 119; Jacob, p. 54. The two clans, each formed of three couples, was arranged in triangles. However, each couple is made up of neighboring signs and is of a different sex, which is an astrological heresy.

338 *Quin etiam sex continuis dixere diurnas | Esse vices castris, quae sunt a principe signo | Lanigeri; sex a Chelis nocturna videri* (Manil., II, 218-220.) Since the poem of Manilius is incomplete and there is no account of the planets – save for a morsel, V, 1-8 – we cannot know if those who held this system also placed the night domiciles of the planets into the nocturnal hemisphere.???

339 See, in figure 16, 3, Aries on the right, according to the astrological orientation, which, assuming the viewer faces South, puts the West to the right (above, p. 174).

340 See above, pp. 189-192, the theory of planetary domiciles.

341 Like the conclusion of an eloquent tirade (II, 596-607) *Utque sibi coelum, sic tellus dissidet ipsa | Atque hominum gentes inimica sorte feruntur*. There are description of leagues, counter-leagues, antipathies (II, 466-607) and sympathies (II, 607-742). Manilius mixes things which we would keep separate, parallels and polygons.

342 It was not possible to maintain even the simplest rule, posed in this way. *Nam quaecumque nitent humana condita forma | Astra, manent illis inimica et victa ferarum* (II, 537-538). Manilius – in attending to the battle of the triplicities (below, p. 175) mixes sympathies and antipathies haphazardly. One may guess why Aquarius loves the Crab, which loves water (II, 496, 512). One may understand that Virgo repays the love of Sagittarius with ingratitude (II, 500-506), which rests opposite, *natura et lege iubente* (II, 561), the Twins, Libra, and Aquarius. [Opposite here seems to indicate contrary natures, Virgo and Sagittarius are mathematically in square aspect not opposition. The remainder appears to have been faithfully translated from confused French. Triangles of harmonious signs were grouped by the Babylonians. Gemini, Libra and Aquarius form a triangle. I suspect a missing piece relating to the triangle of signs separately from Virgo and Sagittarius (?) KM]. Why, however, do the Twins hate the Ram (II, 546)? Why does Leo cherish Capricorn (II, 498)? Aries loves Taurus, “who sets a trap for him” (*frustratur amando | Taurum, Lanigero qui fraudem nectit*, etc. II, 486-487). Why he is at war with Virgo (II, 541), she whom he had once carried as Helle? These are complete fantasies. [The questions posed by B-L here are a response to Manilius, who does not represent standard Greek practice.KM].

343 Firm., VIII, 2 *Videntium se et audientium stellarum theorica*, with the summary table, which I find the most irrational, and as a consequence, the most “revelatory” to the believers.

344 It is good to announce once for all that the zodiac serves primarily to fix the positions of the planets. All which will be said of the *antiscia* and the *σχήματα* applies also to the planets, which also have a figure of their own, the conjunction (σύνοδος – συνουσία).

345 Ptolemy, *Tetrab.*, I, 16; Hephest., I, 10. The reason is feeble and the scholiast is only a paraphrase: ἡ δὲ προσηγορία ἐξ ἐνὸς μόνου, ἐκ τοῦ διὰ τῶν αὐτῶν τόπων ἀνατέλλειν καὶ δύεσθαι· δοκεῖ γὰρ τὰ ἐκ τοῦ αὐτοῦ τόπου ἀνίσχοντα ὁρᾶν ἑαυτά (Anon., p 34). Antiochus indicates the true reason by objecting that Aries and Libra are not able to see one another, because the earth is in between (Firmic., II, 29 2, Kroll). Demophilus (ap. Porphy., p. 193) applied the epithet ἰσοδυναμοῦντα not only to the signs which see one another, but to those who “according to some” (τινες) understand, but are not able to see, διὰ τὸ τῆς γῆς ἀποσκίασμα. Thus the Earth became a screen. However, our astrologers would have been embarrassed to say why signs which could see one another, could not understand one another as well. Note, too, that the simultaneous use of two senses is admitted but Paul of Alexandria, which identifies (fol. D 4v) the ἀκούοντα καὶ βλέποντα.

346 *Cancer et adverso Capricornus conditus astro | Vertitur in semet oculis, in mutua tendunt | Auribus* (Manil., II, 259). This is evidently the reason which *desunt lumina Cancro* (Manil., II, 259). Geminus, who blames the ancient tradition, says Καρκίνον μὲν ἐξετιθέμενον μηδεμίαν ἔχειν συζυγίαν πρὸς ἄλλο ζῳδίον, ἀλλὰ καὶ ἀνατέλλειν βορεῶτατον καὶ δύειν βορειότατον (Isagog., I, 9). The same is true for Capricorn. See, against Geminus, Petavius, *Doctr. temporum*, II, ch. VII. Cf. the *dii communes, qui ἄζωνοι dicuntur* (Serv., Aen., XII, 118), an astrological qualification diverted from its proper meaning and applied to the gods not classed in the celestial temple of the haruspices (Martian. Cap., I, 61).

347 Manilius sought and found other harmonic motifs. Thus Taurus looks at Virgo, in memory of Europa *Virgine mens capitur, sic quondam vexerat ante | Europam dorso retintem cornua laeva, | Indutusque Jovi est* (Manil., II, 489-490). One finds in Paul of Alexandria (fol. E 3v) a system of *ὁμόζωνα* where Leo is “homozonous” with Cancer, Virgo, with Gemini, and so on. It was a “homozony” of the οἰκοί (above, Fig. 17), a separate system, which figures also in the *Anecdota* of Ludwich (p. 106).

348 *Jam vero nulla est haerentibus addita signis | Gratia*, etc. (II, 385 sqq.). The contiguous signs were of different sex. *Disparibus non ulla datur concordia signis* (*ibid.*). Manilius nevertheless said above, in distraction, *sterilis Virgo est simili conjuncta Leoni* (II, 238). The contiguous signs are *ἀσύνδετον – inconjuncta*. Ptolemy affirmed that they distracted one another (ἀπέστραπται ὥσπερ ἀλλήλων, from which came the term ἀπόστροφα in Paul of Alexandria), and these, for a bizarre reason that they are (or may have been) two in the space or angle for one καὶ δύο αὐτὰ ὄντα ἐνός περιέχει γωνίαν (*Tetrab.*, I, 17). The scholar was ashamed to invoke the differences between the sexes as a reason for hostility. This astrological dogma ended therefore by being mixed up ([below](#), p. 164). It seemed absurd to Geminus, who found that it would have been contrary to natural sympathy and affinity of temperament between neighbors καίτοι εὐλογον ἦν ἐκ τῶν μάλιστα σύνεγγυς συγκειμένων ζωδίων συμπάθειαν γίνεσθαι, ἡ γὰρ ἀποφορὰ καὶ ἀπτόροια ἢ φερομένη ἀπὸ τῆς ἰδίας δυνάμεως ἐκάστου τῶν ἀστέρων ὥφειλε μάλιστα συναναχρωτίζεσθαι καὶ συνανακρινάσθαι τοῖς πλησιάζουσι ζωδίοις (*Gemin.*, *Isagoge*, 9). The ultimate reason for the presumed antipathy must have been that given by Manilius, to wit, that the contiguous signs could neither see nor understand one another. [Cf. Dorotheus Sidonius, *Carmen Astrologicum, Interpretationem Arabicum in lingvam Anglicam versam vna cum Dorothei fragmentis et Graecis et Latinis*, edidit D. Pingree (Leipzig B. G. Teubner, 1976). LNJ].

349 Firmic., II, Praef., 4 Kroll. This unknown Fronto *antiscia Hipparchi secutus est*. The rectified *antiscia* had been approved by Navigius (Nigidius?) and Ptolemy (*ibid.*), under the etiquette of the signs βλέποντα καὶ ἰσοδυναμοῦντα. It is doubtless of this which Firmicus wished to say *nam et Ptolemaeus nullam aliam rationem sequitur nisi antisciorum, et Antiochus, cum dicit quod enim Libra Arietem propter terram quae media est non videat* (II, 29, 2 Kroll).

350 *Et illud scire inter cetera oportet, quod in XXX partem nulla pars mittat, et quod XXX in nullam partem mittat antiscium* (Firmic., I, 29, 4 Kroll). This following Dorotheus of Sidon, book IV (*ibid.*, 29, 2).

351 The radiation of the *antiscia* is always reciprocal *nam pars, a qua exceperit antiscium, ad eam a se rursus mittit antiscium* (Firmic., II, 29, 6). This was the same rule as for the aspects. The word ἀτίσκια led to confusion. In map-making and attempts to measure the earth, it signified points on the same meridian, with the same latitude, but in the opposite hemisphere (north and south of the equator), or shadows projected in opposite directions. Here they are “partners,” whose luminous glances were supposed to be projected also in the opposite directions of the “shadows” of the two correspondents (?), but following a line parallel to the equator.

352 Manilius made this deafness a privilege, showing just how easily one went from *hearing* to *obeying*: *Consilium ipse suum est Aries, ut principe dignum est: | Audit se Libramque videt* (Manil., II, 485). Likewise, *Libra suos sequitur sensus, solumque vivendo | Lanigerum* (II, 501). Certain astrologers had the idea of thus establishing a connection of hearing, that is, of subordination, between the two isolated signs, which were able to see without *hearing*. Libra obeys (ὑπακούει) the Ram, by applying the general rule, ὅτι ὁ μὲν Κριὸς αὔξει τῇν ἡμέραν, ὁ δὲ Ζυγὸς μειοῖ (*Demoph.*, p. 193).

353 Ptolem., *Tetrab.*, I, 15; Anon., p. 33; Hephaest., I, 9; – and also because the northern signs enlarge the eastern quadrant of the zodiac and the others diminish it (above, Chapter 9). [Hephaestion, *Hephaestionis Thebani Apotelesmaticorum libri tres*, 2 Vols., ed. David Pingree (Leipzig B. G. Teubner, 1973-74). LNJ].

354 Ὑπακούει Ἰχθυὺς Ταύρω, ὅτι ὁ μὲν Ταῦρω πλειόνων ἐστὶν ἀναφορῶν, ὁ δὲ Ἰχθυς ἡπτόνων. Ὅμοίως Ὑδροχόος Διδύμοις κ.τ.λ. (*Demoph.*, p. 193).

355 Διὰ τὸ ἐν τοῖς ἴσοις χρόνοις ἀναφέρεσθαι, καὶ ἐπὶ ἴσων παραναλλήλων (*Tetrab.*, I, 15). Demophilus conserved the older rule with the title *ὑπακούοντα* ζῳδία (but in the sense of obedient), and applies to the ἰσάναφορα the etiquette of *ἰσοδυναμοῦντα* ἀλλήλοις λέγεται τὰ ζῳδία *τὰ ἴσην ἔχοντα ἀναφοράν*. The disorder came from the violence to the original system.

356 There would be no profit in the penal labor of commentating upon an extremely obscure text of Paul of Alexandria (fol. E 3-4v), evaluating the sympathies and relative energies of his ὁμόζωνα ([below](#), p.159, 3) and of the ἰσάναφορα. The contiguous signs, although turning their backs (ἀπόστροφα – κατ’ἀπτότροπον συμπαθοῦντα), became cohabitants (ὡς ἐπὶ συνοικουρίας) and they had the same power. (Τὰ κατὰ γειννίασιν ἑαυτῶν ἰσάναφορα ζῳδία) or (τὰ γειννιώντα ἑαυτοῖς κατὰ τὴν ὁμοζωνίαν ζῳδία *τὴν ἴσην ἔχει δυνάμιν*). For the others, there was a preponderance of the right (ἐν τοῖς ἡγουμένοις) over the left (ἐν τοῖς ἐπομένοις). Thus,

among the ὁμόζωνα, Taurus dominated Libra, and Scorpio, Aries. The same, among the ἰσανάφορα. Cancer dominated Gemini [the names being glyphs in the text, easily altered by a copiest's pen, I correct ὁ ὧ πρὸς τὸν Πλ to Πλ πρὸς τὸν ὧ. Schato had inverted farther on *Geminos ad Capricornum*.B-L]. Furthermore, the domination of the contiguous signs is at one level. That of the adjacent pairs, which formed a square between themselves, is twice as strong. The power of the four remaining pairs, the distance between them being nearly a diameter, is yet stronger. The rule is *πλείονα δύναμιν ἔχει τὰ πλείονα διάστασιν ἔχοντα*. If the surroundings are no more than a reason for discord, at least it is weakened.

357 If one cannot join the planets with aspects, it is necessary to see, Firmicus, if they are not related by *antiscia*. If their *antiscia* are not related, one must use aspect: *Cum enim antiscium sic miserint, ut trigonica se per antiscium vel quadrata vel diametra vel hexagona radiatione conjungant, sic decernunt quasi sic sint simplici ordinatione compositae; et sic omnia ista mixturarum ratione complentur* (Firmicus, II, 29, 9 Kroll). In this way, one doubles the number of possible combinations. Firmicus then applied the combined system to the chart of a famous contemporary (Ceionius Rufus Albinus, consul 335).

358 Manetho, concerning the planets – the σχήματα of the zodiac serving to measure those of the planets – uses as synonyms the terms μαρτυρίαί, ἐπιμαρτυρίαί [μάρτυρες – ἐπιμάρτυρες – συμμαρτυρες] and σχήματα (see the *Index Verborum* of the edition of Axt and Rigler). The same *testamonium* or *testamonium radiationis* is in Firmicus (III, 1 Kroll). Τοὺς πρὸς ἀλλήλους τῶν ἀστέρων (it works also for the planets) *σηματισμοὺς καλοῦσιν ἐπιμαρτυρίας* (Porphyr., *Isag.*, p. 186). One cannot even reserve to μαρτυρία the sense of a favorable aspect. This is the ordinary sense (cf. Φίλος καὶ μάρτυρος, Manetho, VI, 626), but one also finds Mars μάρτυς with deplorable effects (I, 335). As for the expression ὁρᾶν, ὁράσθαι (*adspicere*), Manetho uses it continually. (See *Index*). One also encounters expressions such *σηματίζονται ἐπιθεωροῦντες ἀλλήλους ἀστέρες* κ.τ.λ. (*Philosophum.*, V, 2, 13; S. Empiricus, *Adv. Astrol.*, 39, p. 344), and the verbs βλέπειν, ἐμβλέπειν, θεωρεῖν, συμφωρεῖν, etc. (*ibid.*). On the proper sense of *adspectus*, ὄψις see below, chapter VIII. We are not able to know what aspect Horace spoke of in saying *Seu Libra seu me Scorpius adspicit* | *Formidulosus, pars violentior* | *Natalis horae, seu tyrannus* | *Hesperiae Capricornus undae* (Hor., *Od.*, II, 17). He doubtless meant by this other things, the regard or patronage of a zodiacal sign.

359 One may observe that, in the lunar cycle, when one looks at all the harmonies, one finds the hexagonal aspect (as a result of having artificially introduced the indispensable triangle). Besides the two syzygies, there are six lunar phases. They are: μονοειδής (hexagon) – διχότομος (square) – ἀμφίκυρτος (triangle) – ἀμφίκυρτος β' (triangle) – διχότομος β' (square) – μονοειδής β' (hexagon). With the syzygies, there are eight phases, unequally spaced around the circle. Very curiously, mystics did not like the number eight. They wanted seven. They achieved this in various ways. Sometimes they did not count the σύνοδος, the dark of the moon, when it could not be seen (Porphyr., p. 183). Some suppressed the two μονοειδής phases and made two phases at the beginning and end of the σύνοδος, – *et cum nascitur* – *et cum ad nos luminis universitate privatur* (Macr., *S. Scip.*, I, 6, 55). Others rejected the triad and found three phases on either side of the diameter. – τρεῖς ἐκατέρας οὐσας διεστήσατο μηνοειδεῖς, διχotόμους ἀμφικύρτους (Proclus in *Anal. Sacr.*, V, 2, p. 169 Pitra). Others count ten or even eleven phases. (Paul. Alex., G 3 v.).

360 Geminus, a disciple of Posidonius, knows only *three* aspects that work: κατὰ γὰρ τρεῖς τρόπους αἱ συμπάθειαι γίνονται, κατὰ διάμετρον, κατὰ τρίγωνον, κατὰ τετάγωνον· κατὰ ἄλλην δὲ διαστάσιν οὐδεμία συμπαθεία γίνεται. He finds the others arbitrary and inept. He says of the diametrical aspect λαμβάνεται δὲ τὰ κατὰ διάμετρον ὑπὸ τῶν Χαλδαίων καὶ πρὸς τὰς ἐν ταῖς γενέσεσι *συμπαθείας*: δοκοῦσι γὰρ οἱ κατὰ διάμετρον γενόμενοι *συμπάσχειν* ἀλλήλοις, καὶ, ὡς ἂν εἴποιοι τις, ἀντικεῖσθαι ἀλλήλοις. Καὶ τῶν ἀστέρων ἐποχαὶ ἐν τοῖς κατὰ διάμετρον ζωδίοις κατὰ τὸν αὐτὸν καιρὸν καὶ *συνωφελοῦσι* καὶ *συμβλάπτουσι* τὰς γενέσεις, κατὰ τὰς *παραδεδομένας* δυνάμεις τῶν ἀστέρων (Gemin., *Isag.*, I, 9). Cicero (*Divin.*, II, 42) and S. Empiricus (39, p. 244) mention neither the triangle nor the square – *ea triangua illi et quadrata nominant*. Cf. below (p. 202) for the sympathetic planets associated by the diameter.

361 Manil., II, 401-432. He forgot that he had put fire in Capricorn and Cancer in water (above, p. 138, 1 and p. 145), which diminished the opposition. *Vincit natura locum* (II, 416); conclusion *Crebrius adversis odium est* (II, 652). Otherwise, in his system of *tutela* (II, 433-447), he put Juno in Virgo and Jupiter in Leo, probably without meaning to present a bad family (see below, p. 184).

362 Ptolem., *Tetrab.*, II, 14 (Περὶ τῶν συσχηματιζομένων δωδεκατημορίων). The scholiast (Anon., p. 30) remarks εἰδέναι δὲ χρὴ ὡς πολλῆς προσοχῆς δεῖται τὸ προκείμενον χωρίον, καὶ γὰρ τὰ λεγόμενα δυσκατανόητα τυγχάνει. He did his best to make the passage intelligible.

363 Ἀσύμφωνοι δὲ οἱ τετράγωνοι καὶ οἱ κατὰ διάμετρον, διότι κατ'ἀντίθεσιν τῶν ὁμογένων τὴν σύστασιν λαμβάνουσι (*Tetrab.*, II, 14). He goes on to say that, for the diameter, the rectilinear opposition is an "obvious reason" (λόγος φανερός).

364 See above, p. 102, 3 .

365 Τόσσα μὲν Ἡελίῳ μούνῳ ξυνῇ παρεόντες, | 'Ρεζου', ἴσα δὲ τοῖσι καὶ ἀντίον Ἡελίοιο Φαινόμενοι (Maneth., II, 436-438).

366 *A signo ad aliud signum septimum quod fuerit, hoc est diametrum; sed haec semper maligna ac minax radiatio est* (Firmic., II, 22, 2 Kroll).

367 *Saturnus – ideo conditionem Lunae sequitur, quia in feminino signo constitutus Lunae in feminino signo constitutae per diametrum radios excepit – Soli se rursus simili radiatione conjunxit et rursus ad eam quam Sol conditionem componitur; nam in masculino constitutus signo aequabili se testimonio radiationis associat, cum per diametrum Solem simili qua Lunam radiatione respexerit* (Firmic., III, 1, 3 Kroll).

368 This is not the gender, which does not exist according to the author. It was the odd number which created the sympathy: οἱ κατὰ περριτοὺς τῶν ἀστέρων σχηματίσμοι πρὸς ἀλλήλους ἐπιζευγνύμενοι συμπαθεῖς τέ εἰσι καὶ ὠφέλιμοι, καὶ τούτων μᾶλλον ὁ καθ'ἐβδομεδα, ὃς καὶ κατὰ τοὺς ἀρτίους φαῦλοι τε καὶ ἀσύμφωνοι κ.τ.λ. (Hermipp., I, 19, 138). Macrobius also explained it had the virtue of the number seven *Sol quoque ipse, de quo vitam omnia mutantur, septimo signo vices suas variat*, etc. (Macr., Somn. Scip., I, 6, 57 sqq.).

369 *Τρίγωνοι ἐπεὶ τόδε πάμπαν ἄριστον | σχῆμα πέλει φαῦλοις τε καὶ ἐσθλοῖς ἀστράσι πᾶσιν* (Maneth., III, 361-363. Cf. III, 270-292). See below, the planetary triangles. It was also of the planets that S. Empiricus says δοκεῖ κατὰ μὲν τρίγωνον ἀγαθοποιὸς κακοποιὸς συσχηματιζόμενος εὐεργετικὸς εἶναι πολὺ μᾶλλον ἀγαθοποιὸς (S. Empir., 39, p. 344). – Ἐν τοῖς συσχηματισμοῖς αὐτῶν τὸ ἄριστον ἔλαχε τῶν σχημάτων τὸ τρίγωνον (Procl., in Anal., V, 2, p. 168 Pitra). It was an axiom, well-known even to non-professionals.

370 Οἱ μὲν τρίγωνοι καὶ ἐχάγωνοι σύμφωνοι καλοῦνται διὰ τὸ ἐξ ὁμογενῶν συγκεῖσθαι δωδεκατημορίον, ἥτοι ἐκ πάντων θηλυκῶν ἢ ἀρσενικῶνς ἢ ἀρσενικῶν (Tetrab., I, 14).

371 Cf. the Platonic triad of the Fates (Lachesis - Clotho – Atropos), οἷον ἐν ἰσοπλευρῷ τριγώνῳ τεταγμένας (Proclus in Anal., V, 2, p. 84 Pitra). The gates of the sky arranged in a triangle (Serv., Georg., I, 34), a text already cited, p. 23, 1).

372 *Et haec minax est radiatio et malitiosa potestate composita* (Firmic., II, 22, 6 Kroll). The same Firmicus had said earlier (II, 19, 5), in speaking of the “places” *Sed hic locus [quartus] cum horoscopo maxima societate conjungitur, quia de quadrato horoscopus respicit et per quadratum ab horoscopo videtur* a flagrant contradiction. The square is a killer (ἀναιρετικός) in the calculation of the length of life (above Chapter XII). Its influence opposite from that of the triangle κατὰ δὲ τὸ τετράγωνον ἀνάπαλιν (S. Empir., loc. cit.).

373 See above, p. 152, Fig. 15.

374 *Cognata quadratis | Corpora censentur signis, et amica trigonis* (Manil., II, 653). *Sic quaecumque manent quadrato condita templo | Signa parem referunt numeris aut tempore sortem, | Ac veluti cognata manent sub foedere tali* (II, 668-670 Cf. II, 337-341). The squares *adfinis signant* (II, 671). Then, Manilius sought to restrict the affinity of the *cardines*, which are sympathetic, not because of, but *in spite of*, being associated via the square *quae quanquam – Sidera quadrata efficiunt, non lege quadrati | Censetur. Minor est numeri quam cardinis usus* (II, 674-675). He forgot that he had allied the three other *cardines* against Libra (II, 540, 556), Capricorn and Cancer, *Chelis quod utrumque quadratum est* (II, 555). Finally, he stated that *plerumque manent inimica tertia quaeque | Lege, in transversam vultu defixa maligno* (II, 572). Manetho did not have a general doctrine. The square, for him, is sometimes favorable, sometimes unfavorable, depending on the planets which are related. For example, the Sun in square with Mars is bad (I, 341); Jupiter with Saturn is good (I, 346. III, 234). Paul of Alexandria made value of the identity of the signs in square aspect (above, p. 153, 2).

375 *Debilis alternis data sunt commercia signis* (Manil., II, 358 sqq.). *Hexagona hoc idem sunt quod trigona, nisi quod minoris potestatis* (Firmic., II, 22, 7). This fourth aspect may have been invented to perfect the emission of seven rays (Fig. 22), which, according to a theory seen above (p. 81, 3), comes from each celestial hearth. According to Firmicus, the hexagon has greater power when, given three signs connected by sextile aspect (?), the middle sign is tropical or bicorporal *Sed hexagona illa sunt potiora quae habent in medio tropica vel duplicia signa, inefficacia vero quae signis solidis dividuntur* (II, 22, 8 Kroll).

376 The Earth being the center of the circle *quantum a terris atque aequora signa recedunt | Tantum bina patent* (Manil., I, 544-545). The scholiast on Aratus (ad Phaenom., 541, I, p. 124-126 Buhle) also remarked on this property and added Ἐξάγωνόν ἐστι τοῦτο τὸ σχῆμα καὶ φυσικώτατον καὶ γὰρ αἱ μέλισσαι, φύσει ζῶσαι καὶ οὐ λόγῳ, τὰς κατατρήσεις τῶν κηρίων ἐξαγώνους ποιοῦσι. Since the unity of sex was a principle characteristic of the astrological hexagon (cf. Manil., II, 379-384), it was mixed up with ideas which say, like Proclus (in Anal., V, 2, p. 168 Pitra), that it was φύσιν ἀρρενόθηλον. It is masculine and feminine, but not both at the same time.

377 Let us recall that there is not the least allusion to σχήματα in what Diodorus tells us about the Mesopotamians' methods τὰ μὲν γὰρ διὰ τῆς ἀνατολῆς, τὸ δὲ διὰ τῆς δύσεως, τινὰ δὲ διὰ τῆς χροᾶς προσειμαίνην φασὶν αὐτοὺς τοῖς προσέχειν ἀκριβῶς βουλευθεῖσι (Diodor., II, 30, 4).

378 Proclus in *Anal. sacr.*, V, 2, p. 168 Pitra.

379 See Manil., II, 352-378. Thus, for the triangle compared with the square *Illa [linea] magis vicina meat coeloque recedit*, | *Et proprius terras accedit visus eorum*, | *Aeraque infectum nostras demittit ad auras* (II, 355-357) – *ex recto certior ictus* (II, 373). Manilius doubtless poorly understood an explanation which carried the angle of incidence of the radiation going from one star to another. Measured relative to the “norm” or the radius of the circle, the angle under which each sign received the radius of its associates to the right and left is 30° for the triangle, 45° for the square, 60° for the hexagon. One finds an echo of these ideas in the scholia of the Middle Ages (Schol. vet. ad German., *Prognost.*, II, p. 110 Buhle) *Aspiciunt inter se stellae ex tertio [quinto?] signo quod dicitur Trigonum et habent maxime confusionem* [brought even closer?]: *item a quarto signo, quod Tetragonum et Centrum* [because of the κέντρα – cardines] *vocatur, et in alterutrum maxime praestant effectum* [because of the inherent energy of the cardines]. *Item ex contrario, quod ex septimum signum et Diametron vocatur, quae maxime adversum caetera [?] dissident. Vel leviter aspiciunt, ut sextum [tertium?] qui dicitur Hexagonon.* The scholiast constantly confuses the ordinal number, which indicates the distance from one angle to another, with the number which designates the polygon itself.

380 *Sed discrimen erit, dextra, an sint laeva. Sinistra* | *Quae subeunt; quae praecedunt, dextra esse feruntur.* | *Dextra erit Tauro Capricornus, Virgo sinistra* (Manil., II, 284-286). The doctrine is the same, (if in different words) in Firmicus, who, being regulated by the order of the degrees, defines *quod retro fuerit dextrum trigonum, et sinistrum quod est ab ante.* (II, 22, 8). *Scire etiam debemus quod sit dextrum trigonum, quod sinistrum. Dextrum trigonum est quod ab eo signo, a quo incipimus, retro est, sinistrum vero quod ab ante; utputa Arietis dextrum trigonum est Sagittarius, sinistrum vero Leo, et simili modo Leonis dextrum trigonum est Aries, sinistrum est Aries.* And the same for the other figures (II, 22, 4). We cannot remember too often the hierarchy attached to right and left and the problems connected with them (see above, Chapter 8, the ἀκτινοβολία and other relationships modifying the very complex theory of the planetary aspects). As a general rule, the aspect to the right is more favorable than the other in the square, for example, it happens that ἡ κατὰ τὸ δεξιὸν τετράγωνον πλευρὰ ἀβλαβὴς γίνεται, τὸ εὐωνυμον πλευρᾶς κινδυνευοῦσης μᾶλλον κ.τ.λ. (Paul. Alex., R3v).

381 Manilius is inexhaustible on this subject. See II, 466-642. After the individual sympathies and hatreds (466-519), the battle of the triangles *Quim adversa meant et juncta trigona trigonis* | *Alteraque in bellum diverso limite ducit* | *Linea* (520 sqq.), with all the plots and attacks in detail *Sed tamen in proprias secedunt singula mentes* | *Et privata gerunt secretis hostibus arma* (539 sqq.). The enmities of the squares, etc. (572 sqq.). Nothing is more rare than friendship *Unus erat Pylades, unus qui mallet Orestes* | *Ipse mori* (538 sqq.).

382 See below (pp. 199-206), the “planetary triangles” and (Chapter 11) their domains in astrological chorography [geography. LJN].

383 Ptolemy did not use this at all in his chapter on friendships and enmities (above, Chapter 12), which is the reason we have returned to the system of Manilius (II, 670-685). The text of Manilius is obscure, and arranged differently by Scaliger and by F. Jacob. The cardinal squares: *adfines signant gradibusque propinquis* | *Accedunt* (II, 671 sqq.). As for the triangles: *Haec ad amicitias imitantes jura gradumque* | *Sanguinis atque animis haerentia pectora ducunt.* | *Utque ipsa a longo coeunt submota recessu,* | *Sic nos conjugunt majoribus intervallis* (II, 679-682), friendships which are worth more than kinship (II, 683-684). The hexagons *Proxima vicinis subscribunt tertia quaeque* | *Hospitibus* (II, 685). The principle which Manilius teaches above is very simple. It is that the signs in the birth chart which are in aspect make simple contracts of kinship, of friendship or of affinity between themselves (II, 641-642. Cf. II, 337-342, 484, 560 sqq. 652). Geminus affirms this principle (which he may have gotten from Posidonius) about the diameter (below, p. 167, 1) and the triangle δοκοῦσι γὰρ οἱ κατὰ τρίγωνον γεγόμενοι συμπαθεῖν ἀλλήλοις (*Isag.*, 1, 9). It was a comparative genethliology.

384 *Sed si quis contentus erit numerasse quadrata,* | *Divisum ut signis mundum putet esse quaternis,* | *Aut tria sub quinis signis ornare trigonum* [trigona Salmas., p. 149] *Falsus erit.* Without the exact number of degrees, *amisere loco dotes numerisque repugnant.* The triangle requires an arc of 120°: *Hanc autem numeri non reddit linea summam* | *Si signum a signo, non pars a parte notatur.* Manilius developed the idea with his usual prolixity (II, 297-351). A passage in Demophilus, which I cite further on (p. 179, 1), will explain the scruples of Manilius. There was a conflict, for the trace of the συσχήματα, between several methods the vulgar method, which treated the signs as units (ζωδιακή), is signalled as sullied with error.

385 It was Firmicus' habit (II, 14, 1; IV, 17, 2, etc.) to indicate first the *platice* method and to declare later that it did not matter, because one got quite different results by figuring *partiliter*.

386 An individual who had for horoscope the μεσεμβόλημα, οὗτος ἄλαλος καὶ κωφὸς καὶ ἄσημος τελευτήσει (Hephaest. Theb., p. 48-49 Englebrecht). The author indicated the effects of the twelve μεσεμβολήματα of the zodiac. The consideration of the μεσεμβόλημα or the mathematical zero made the astrologers submit with regret to the conditions of the astronomers who placed the equinoxes and tropics between two signs. On the μεσεμβόλημα considered in relationship to the aporrhoeia and in the construction of the “places,” (see above Chapters 8 and 9).

387 An individuality which, we repeat (cf. 132, 1), did not exist for the learned astrologers. They disassembled the signs, when it pleased them, into strong parts, weak parts, or even into contrary influences. We will see many examples. As the learned say, ὅτι καὶ ἐκ διαφορῶν ἀπλανῶν συνέστηκαν, καὶ οὐκ ἐξ ὁμοίων ἀμφοτέρων τῶν κρασέων, τουτέστι καὶ θερμοῦ καὶ ψυχροῦ (Anon., p. 80). However! this analysis would lead logically to the suppression of the figural signs.

388 Speaking of the “places” – the equivalents of the signs – the scholiast said εἰ μέντοι μηδεὶς εἴη τῶν ἀστέρων ἐκεῖσε, σκοπεῖν δεῖ ὑπὸ ποιῶν βάλλεται κατὰ σχῆμα τὸ ζῳδιον, καὶ οὗτος ἀποφαίνεσθαι μέσα τὰ ἀγαθὰ καὶ μέσα τὰ κακά τοῦτο δὲ καὶ ἐπὶ πάντων τῶν τοπων, ὅταν μὴ παρῇ ἀστήρ (Paul. Alex., 13v). We will not say that this rule was generally accepted.

389 To report the way in which the planetary aspects will be effective when the inexactitude does not exceed a certain size, a size different for each planet. [Called the “orb,” in modern terminology. LJN]. It is this at least which I believe I see in a fragment of a scholia which, for greater security, I cite *in extenso*: Αἱ ἀκτίνες τοῦ Θ ἀφικνοῦνται μοίρ. λ´, ἔμπροσθεν πεντεκαίδεκα, καὶ ὀπισθεν πεντεκαίδεκα· τῆς Δ μοίρ. κδ´, ἔμπροσθεν δώδεκα, καὶ ὀπισθεν δώδεκα· τοῦ η´ καὶ τοῦ ς μοίρ. ιη´ ἔμπροσθεν ἑννέα, καὶ ὀπισθεν ἑννέα· τῆς ρ´ καὶ του ϑ´ ιδ´, ἔμπροσθεν ἑπτὰ καὶ ὀπισθεν ἑπτὰ· τοῦ σ´ ις´, ἔμπροσθεν ὀκτώ καὶ ὀπισθεν ὀκτώ (Schol. Demoph., p. 204). Bring together these figures with those indicated above (p. 112 in note).

390 There were, Demophilus said, three ways to trace the aspects: a vulgar and erroneous one (ἡ ζωδιακὴ καὶ κοινὴ καὶ καθολικὴ, καθ’ ἣν πάντες πλανώμεθα); estimation by degree (μοιρικῶς), following Ptolemy’s table of ascensions, and another ἡ χρονικὴ, ἣν ἄν, Ἀντίγωνος καὶ Φνάης ὁ Αἰγύπτιος καὶ ἄλλοι τινὲς ὑπέταξαν καὶ ὠνόμασαν ἰσοσκελὲς τρίγωνον τῶν ζωδίων (Schol. Demophil., p. 201). The recourse to an “Egyptian” is typical, for it is a notorious fact (see above, p. 54 and below) that the ancient Egyptians ignored the inequality of the oblique ascensions.

391 I leave to the following chapter, for the sake of clarity, the combinations produced by grouping signs with signs, which go logically with the latter. These combinations are analogous in every point to those of the signs with the planets, and concurrent with these last or replacing them.

392 We have already pointed out that the true characters of the signs was independent of their appearance. Cancer burned because it sheltered the Summer Sun, and the cold, watery, nature of Capricorn came from the Winter Solstice. These relative properties were inverted for an inhabitant of the Southern Hemisphere. Manilius also proposed to sing of the planets – *adversos stellarum noscere cursus* (I, 15) – *adverso luctantia sidera mundo* (I, 259, 809. Cf. II, 119) – *contra nitentia signa* (I, 309), – but he stopped work too soon. Still, he does say that *Utcunque stellae septem laeduntve juvantve*, | ... *Sic felix aut triste venit per singula fatum* (III, 9-91).

393 Cicero, who voiced confused ideas in vague terms, seems to attribute to the “Chaldaeans” the first solution: *vim quandam esse aiunt signifero in orbe, qui Graece ζωδιακός dicitur, talem ut ejus orbis unaquaeque pars alia alio modo moveat inmutetque caelum perinde ut quaeque stellae in his finitumisque partibus sint quoque tempore, eamque vim varie moveri ab iis sideribus quae vocantur errantia*, etc. (Cic., *Divin.*, I, 44). One cannot say if the power of each part of the circle is a fraction of the power of the whole circle or if a special virtue is created (*moveri*) by the planets supposedly present (*ut quaeque stellae in his finitumisque partibus* [cf. the ὅρια]). The author of the *Hermippus* teaches that the stars add a considerable supplement (τὰ μέγιστα τοὺς ἀπλανεῖς ἀστέρων συμβαλλομένους) to the action of the planets and of the same nature ὅτι μὲν γὰρ καὶ οὗτοι [ἀπλανεῖς] τῇ τῶν ἑπτὰ ποιότητι κέκρανται πρότερον εἶρηται – καὶ δῆλον ὡς ταῦτόν ἄν ἐκεῖν ποιήσειεν οὐ τῆς κράσεως ἔσπασεν (II, 7, 60-62). Hermes Trismegistus (“Egyptian” tradition), to the contrary, it is the action of the planets which is the added portion, the principal action coming from the intelligent signs (ap. Stob., *Ecl.*, I, 41-44, p. 948). Hermes is dreaming of the Egyptian decans rather than of the Greek: ζῳδία γὰρ τινα ἔμοι ἀνέθεκεν ὁ πατήρ καὶ δημιουργὸς ἔμφρονά τε καὶ νοερά, καὶ τότε πλέον ὅταν καὶ ἐπικειμένην αὐτοῖς τῶν ἀστέρων κίνησις σύμφωνον ἐξη τὴν ἐνὸς ἐκάστου φυσικὴν ἐνέργειαν (ap. Stobl, *Ecl.*, I, 41-44.) Hermes dreamed of the Egyptian decans as much as the Greek ζῳδία.

394 See the minute estimates made, star by star, following planetary standards, in Ptolemy and Hephaestion of Thebes and likewise for the constellations outside the zodiac (Ptol., I, 9. Hephaest., pp. 68-70

Engelbr., καθώς *οἱ ἀρχαῖοι* καὶ ὁ θεῖος Πτολεμαῖος ἐκτίθεται). The *ἀρχαῖοι* always have to be at the basis of theory!

395 The principle, enough for all the applications, is τῶν πλανωμένων ἄλλους πρὸς ἄλλα τῶν ζωδίων ὤκειώσθαι (Proclus, *In Tim.*, p. 333 A).

396 One can hardly believe that Ptolemy accepted these childish inventions. He doubtless worked hard to justify bad ideas. One example is that the Sun gives more heat when it is (from the effect of perspective) in Cancer or Leo. This “fact” is born from the idea that each planet would have a preferred position, from which it radiated best, whether heat, coolness, dryness or humidity, or where its nature is modified οἱ γὰρ ἀστέρες πλησιάζοντες ἢ ἀφισσάμενοι τοῖς παρανατέλλουσιν ἀλλοίως καὶ οὐ τὰς αὐτὰς ἔχουσιν ἀπορροίας (Anon., p. 3). However, as for these planetary domains conserving active affinities with the planets when the planets are not there, the affinities encrusting their figure and various parts of their figure, this is mystical psychology, which has nothing to do with the physics of Ptolemy.

397 Anon., *Hermipp.*, 1, 19, p. 30 Kroll. Do not confuse the planetary domiciles with the 12 “houses” often called *domus caeli* (cf. above Chapter 9, Fig. 32). [Both were commonly called “houses” in English. LJN]. [The domicile or rule of a planet was later confined to signs not houses. However the earliest system, of equating sign and house, has been revived and called the Whole Sign house system.KM].

398 Cf. *Histoire de la Divination*, IV, p. 23-28, and the article “Haruspices” in the *Dict. des Antiquités* of Darembourg and Saglio. The question is who first had the idea, the astrologers or the haruspices. Martianus Cappella counted the crowd which peopled the six regions of the Etruscan temple and dreamed at the same time of the astrological domiciles, and avoided, quite ingeniously enough, choosing between the two systems *quippe discretis plurimum locis deorum singuli mansitabant et licet per Zodiacum tractum nonnulli singulas vel binas domos animalibus titularint, in aliis tamen habitaculis commanebant* (Mart. Cap., I, 44).

399 Manil., II, 433-452. Manilius follows the order of the signs, beginning with Aries, and seems not to have noticed the rule of the diameter, which he mentions only for the pair Jupiter – Juno (*Et Jovis adverso Junonis Aquarius astrum est*). He does not imagine the same for Vulcan, whom he did not put into relation with Minerva. He thought that Vulcan possessed the Balance because he had made it (*fabricataque Libra | Vulcani*)! His naiveté guarantees that he did not invent the system. The *tutela* of the gods mentioned above are in the same order upon the altar of Gabies (Clarac, *Musée du Louvre*, pl. 171) where we see the symbolic animals (the eagle of Jupiter, the peacock of Juno, etc.) coupled with the signs of the zodiac. We find this once again, but transposed by a month (Jupiter in Cancer, rather than in Leo), in the *Calendarium rusticum* (cf. Th. Mommsen, *Roem. Chron.*, 2^e ed., pp. 305-308). The order is evidently not Roman. The Romans put Mars in Aries (March), Juno in Cancer (June), Janus in Aquarius (January), etc. The couples are no less apparent following the official doctrine of the *Xviri S. F.* (cf. Livy, XXII, 10). Mommsen eagerly attributed the system to Eudoxus. However, the number of astrological ideas which it contains mean it must more recent.

400 Since the planets are favorable in the *altitudines*, *hac ex causa Babylonii ea signa, in quibus stellae exaltantur, domicilia earum esse voluerunt – dicentes Saturni quidem domicilium esse Libram, Jovis Cancrum, Martis Capricornum, Solis Arietem, Lunae Taurum, Veneris Pisces, Mercurii Virginem* (Firmic., II, 3, 4 and 6 Kroll). The Mesopotamians (of what period?) called the houses *bêtu* = οἶκος or *parakku* = *sacellum*; the Arabs call them *al-burûg*, from the Greek πύργος [tower or fortress LJN] (Hommel). The text of Firmicus seems to prove more or less that the tradition called “Chaldaean” had unique domiciles.

401 Firmicus (III, Prooem., et 1, 1 Kroll) said explicitly that the *genitura mundi* [birth chart of the universe LJN] had been given by Petosiris and Nechepso, who got it in a revelation from Hermes (Trismegistus), transmitted by Asclepius and Anubis. There may have been modifications made to “Petosiris” made by Hermeticists. Wachsmuth (*Prolegom. in Lyd.*, p. xxxi) thought that Nigidius Figulus did not yet know the system of the οἶκοι. It may have been one of them, who put the Sun in Cancer (Solstice) and the Moon, on the other hand, in Leo. One may explain in this way the mythic relationship which he established between Leo and the Moon *Nigidius refert hunc leonem nutritum apud Lunam jussu Junonis – dimissumque caelo a Junone* (Schol. German., v. 146, p. 393 Eyssenh.). Manilius shows that he knew the ὅρια (below, p. 206, 2) but he makes no allusion to οἶκοι, which Lucan mentions (*Phars.*, I, 645 sqq.).

402 Firmic., III, 1. This is the system already invoked, (p. 129, 1) to explain why, in the Egyptian tradition, Aries is κεφαλὴ κόσμου. The inventors of the *thema mundi* imagined (see above chapter 9) that, if Cancer was the ascendant, Aries had to culminate at the meridian. The same version is in Macrobius (*Somn. Scip.*, I, 21, 23-27) and Paul. Alex. s. fin. *Sic factum est ut singuli eorum signorum domini esse dicantur, in quibus, cum mundum nasceretur, fuisse creduntur* (Macr., I. c.). Macrobius was doubtless well-informed when he called Sagittarius *omnium zodiaci domiciliorum imus atque postremus* (Macrobi., *Sat.*, I, 21, 26). [It is not quite

possible for Venus to be in the middle of Libra when the Sun is in the middle of Leo, reality has been tidied a little. KM].

403 Ὡρα ἰα' νυκτερίνη (Paul. Alex., T2 v). Cf. below, Fig. 23, Solinus, speaking of the moment when, the Sun entering Leo, the Nile flood reaches its height, adds *quod temporis sacerdotes natalem mundi judicaverunt, id est inter XII K. Aug. et XI* (Solin., 32, 13, Mommsen). Horapollo (I, 10, p. 12 Leemans) places it on 29th day of the lunar month, beyond the conjunction of the Sun and the Moon, ἔτι τε καὶ γένεσιν κόσμου.

404 *Notandum hoc loco quod in genitura mundi vel ipsa rerum providentia vel vetustatis ingenium hunc stellis ordinem dedit quem Plato adsignavit sphaeris earum* (Macrobi., I. c.). This proves, to Macrobius that the Platonic order is the best; to us, that the authors of the “Egyptian” order were Greek. One searches the Egyptian zodiacs – even from the Roman era – in vain for a similar distribution of the planets (Lepsius, *Einleitung*, p. 87, and, above, p. 64, 1. In the two figures from the Roman era, based upon the zodiac of Denderah (Brugsch, p. 61-62), representing the positions of the Sun and the Moon at the beginning of the Sothic cycle, one says the Sun rising in Isis (symbol of the year?) in the West, and Osiris-Sahu in the East, which followed Isis-Sothis (Sirius). In the other figure, the so-called Full Moon, which is on top of Seta (the Tortoise = Cancer) and of Sothis, which had alongside it, to the West, Osiris-Sahu. All of which is unintelligible and even unintelligent, since the Moon is not able to be full alongside the Sun. [On the rival orders of the planets, see Beck, 1988 LJJN].

405 There is no allusion to the *thema* in the chapter *De domibus stellarum* (II, 2) nor to the domiciles in the chapter *Thema Mundi* (III, 1). He remarks only that the *thema mundi* is artificial, since the universe did not have a beginning.

406 The extravagance consisted of confusing the real presence of a planet with its domicile, and in supposing that the planet, moving from one domicile to another, is “conjoined” by diametrical, triangular, and square aspects with the supposedly immovable Sun or Moon. For example, Saturn in Capricorn is associated with the Moon by the diameter but, when it passed [into] Aquarius [its] (second domicile), it was associated in the same way with the Sun (which had doubtless waited in Taurus). [This appears to be a witticism, which might have worked had the sign been correct KM]. As for the transmission of the *principatus temporum* (= χρονοκρατορία) of one planet to another by marriage with the Moon, it is truly curious, and Firmicus swells his voice in order to make the best of it: *Libet itaque divinae istius compositionis explicare commenta, ut conjuncturae istius admirabilis ratio magisterii studio pandatur*, III, 1, 10). The planets arrived one after another, in descending order, beginning with Saturn, and by the effect of their own movements, to unite themselves (se *conjugere*) to the Moon, which gives them their “principality” (as some usurper Pharaohs had legitimized themselves by marrying the royal princesses). And, voila, that is why the world began with the Reign of Saturn and ended with the Age of Mercury, the “Age of Malice” *Quid hac potest inveniri dispositione subtilius?* (III, 1, 14). This is subtle, in effect, and the *conjugium* of the Moon and Venus is subtly conjured away by the expression *post Martem dominandi Venus tempus accepit* (III, 1, 13).

407 We are astonished to find Sagittarius called οἶκος ἐσπερία Διός (line 24) in the *Papyrus CX* of the British Museum. One may suspect that the redactor had beneath his eyes a figure similar to figure 24 and placed it, as we usually do, with West on the right. Now, ἐσπεριος is nearly a synonym for νυκτερινός or for σεληνιακός, which invert the classification. Ἐσπερία οἶκος must mean, doubtless, that, in relation to the Sun supposedly in Leo, Sagittarius setting after (ἐσπεριος), while the other domicile, Pisces, was rising in front (ἑως).

408 Ἀκολουθῶς ταῖς τῶν κινήσεων αὐτῶν σφαίραις καὶ ταῖς τῶν φύσεων ἰδιοτροπίαις *Tetrab.*, I, 18. Cf. *prout ratio siderum sequitur* (Serv., *Georg.*, I, 33). Ptolemy did not think to point out that, as an astronomer, he followed the “Chaldaean” order ♃, ♈, ♉, ☊, ♊, ♋ which is incompatible with the order of the domiciles. It is interesting to note that if one superimposes the orbits of the planets in the indicated order (see fig. 25) and if one aligns the domicile signs on a transverse diameter, one gets a series which begins with Aquarius, exactly as with the Roman civil year. More, there are evident affinities (which were already noted by Macrobius, *Sat.*, I, 12, 10 sqq., with explicit reference to the theory of domiciles) between the domicile (♊) and the month of Mars; between the domicile (♋) of Venus and April; between the domicile of Mercury (♌) and Maius; between the domicile of the Moon (♍) and June (or Juno or Diuno = Diana, the Lucina or lunar Juno, who *confert fluores menstruos*. Aug., *C. D.*, VII, 3 – *Juno Luna Regina*. *C.I.L.*, VI, 3233); between the domicile of Saturn (♎) and December, the month of *Saturnalia*. Finally, there is a symmetrical antithesis between the first six months, with divine namesakes (*Februarius* is a liturgical name) and the last six months, which made do with numbers until the time of Julius Caesar. All these – and plenty of other detailed affinities (e.g. between *Janus Consevius* and *Saturnus*, between Capricorn, the last sign, and Vesta, antithesis of Janes, *extrema*. Cic., *Nat. Deor.*, II, 27, 67) – suggests to me the idea that the Roman calendar may have been rooted in astrological ideas, at least in

part. The beginnings of the civil year having been moved from Mars to January and the completely new name of *Januarius* substituted for the old ordinal name, *Undecimber*, which led to a supposedly “natural” order, and therefore, in addition, with the traditions of *Saturnina tellus*. The adaptation must have been done by the pontiffs, being dupes or accomplices of the fraudulent “discovery” of Greek and Latin books in the tomb of Numa (181 BCE). These books, seven in number (Liv., XL, 29; Lactant., *Inst. Div.*, I, 22; Piso ap. Plin., XIII 87) or twelve (Val. Antias ap. Plin., *ibid.*; Plut., *Numa*, 22) for each language, the Latin books treating pontifical law (which included managing the calendar), the Greek ones dealing with Pythagorean philosophy (*Pythagoricos*. Liv. and Pliny, *loc. cit.*), that is “mathematics” or astrology. This is a miniature sketch of Roman astrology, made with conjectures, but not without a resemblance. The objection drawn from the fact of that these books were burned is easy to get around; and, what is more, it is weakened by the testimony of Valerius Maximus, according to whom *Latinos [libros] magna diligentia adservandos curaverunt* (Val. Max., I, 1, 12). As for the name of *Januarius*, the texts which go back to Numa prove only that the pontiffs did not innovate.

409 Ptolemy does not breathe the word “dry” about Saturn. If need be, he might have claimed that the domiciles of Saturn corrected its dryness.

410 The scholiast adds that Jupiter is pleased in Pisces, ὁ τῶν γλυκῶν ὑδάτων χορηγός (Anon., p. 70). Cf. [above](#), p. 98, 1. He does not refrain from remarking that Jupiter in Pisces is in opposition to the Sun ἀκρόνυχος Ζεύς. Nonnus, VI, 244).

411 Here, it is difficult to believe in the complete good faith of Ptolemy. The Claws (and even more, the Scales) never passed for a fertile sign, and the fertility of Taurus (mutilated in the fertile body parts) is the effect, not the determinate cause, of its status as the domicile of Venus. However, after searching thoroughly one ends by finding that, as Ζυγός = *Jugum*, Libra suited Venus, *quae velut jugo concordi jungit matrimonia amicitiasque componit* (Macrob., *Sat.*, I, 12, 11).

412 Cf. Apollo and Mercury *per Geminos proprietate quadam signi familiaris invecti* (Martian. Cap., I, 30) and the wise Virgo of Manilius ([above](#), p. 140). As Astraea or Justice, Virgo is at once οἶκος and ὕψωμα of the jurist Mercury (ὑψούμενος Ἡρμῆς ... Δίκην δόμον εἶχε δικασπóλος. Nonnus, VI, 249-250). Ptolemy remarked that Mercury and Venus are placed at their maximum elongations; Mercury is one sign, Venus, two signs from the Sun. This is true for the domiciles on the solar side; but Ptolemy is prudently silent about the anomaly of the domiciles on the opposite side, which are separated by one more sign. He only took what suited him from the theory of aspects.

413 Cf. a bas-relief showing, alongside Selene and Endymion, a crab (Cancer, the domicile of Σελήνη) in Baumeister, *Denkmaeler*, p. 480. – Likewise, the planetary domiciles on the Alexandrian coins of the year VIII of Antoninus Pius (ap. Eckhel., IV, 70 sqq.). St. Athanasius (in *Anal. Sacr.*, V, 1, p. 25 Pitra), concerning Job 9:9, says ὁ γὰρ Ἑσπερος οἶκον ἔχει τὸ ἄστρον τῶν Πλειάδων (Taurus). The domicile of Mars is in Scorpio (Lucan., *Pharsal.*, I, 653. Serv., *Georg.*, I, 35). It is a pity that the solar domiciles are not all masculine or the lunar domiciles are all feminine. Perfection is not to be found in this world. [Job 9:9, LXX, says “ὁ ποιῶν πλειάδα καὶ ἑσπερον καὶ ἀρκτοῦρον καὶ ταμίεια νότου”; according to the New International Version, “He is the Maker of the Bear and Orion, the Pleiades and the constellations of the south.” LJN]

414 Fragment of Dorotheus (ap. Hephaest., I, 7) indicating ἐν οἷς χαίρουσι τόποις οἱ ἀστέρες Saturn in Aquarius (masc.), Jupiter in Sagittarius (masc.), Mars in Scorpio (masc.), [There may be confusion between sex and sect. Dorotheus (see *Carmen Astrologicum*. Pingree, p. 164, 168, 196,) states Mars is masculine, Scorpio feminine. Aries is Mars’ masculine sign.KM]. Venus in Taurus (fem.), Mercury in Virgo (in Gemini would have been contrary to the Egyptian tradition). These are the preferred domiciles (αἰτεροὶ μᾶλλον). As for the luminaries εἷς δ’ ἔστι δόμος φωστήρος ἐκάστου. Nonnus (VI, 323-249) never mentioned more than one domicile. His list differs from that Dorotheus for Jupiter (♃) and Saturn (♄). It was in honor of Mars (Ἄρης) – or perhaps as an antagonistic and attenuating force, taking part slightly in the nature of Jupiter (Ptol., *Tetrab.*, II, 9) – that the brightest star in Scorpio bore the name of Ἀνάρης ([above](#), p. 143, 3).

415 We have no doubt that the debris, nearly the caricature, of this Chaldaean theory in the Θεμέλιος τῆς ἀστρονομικῆς τέχνης κατὰ Χαλδαίους (*Anal. Sacr.*, V, 2, p. 300-301 Pitra). The Demiurge, after having created the great Dragon and placed its Head at the ascending node, its Tail at the descending node, after having arranged the signs and the planets in the signs (following the Egyptian order), the Demiurge, I say, threw the Sun into the middle (cf. ἡλίου μεσεμβολήσας πῦρ, *Oracula Chald.*, ap. Proclus, *In Tim.*, p. 280 B), the middle being the place which he belonged in the “Chaldaean” order ([above](#), p. 107-1009). The Sun advanced from left to right over the planets already spread out. Mercury took fear and saved himself from the opposite side; the planets did the same fleeing from the brazier. Saturn did not have to move more than one sign (to ♄), ἐφθάσθη ὑπὸ τὰς ἡλίου αὐγὰς καὶ ἐκάη καὶ ἐξηράνθη, καὶ διὰ τοῦτο μέλας ἐγένετο (behold the famous “dryness” and hot temper of Saturn explained at one blow, but not the “cold”) Καὶ ἐνεκα τούτο ἔλαχε εἴ ἀστέρας ἀνά δύο

οἰκων, τὸν δὲ ἥλιον καὶ σελήνην ἀπὸ ἐνὸς οἴκου. The Moon also runs its course, and faster than the others. In turning thus, the planets finished by knowing the points at which they “rise” the highest, that is, when they move closest to the Sun, μέχρι πολλῶν περιόδων τῶν ἐπὶ τὰ ἀστέρων, ἕως ἔστησαν ἐν τοῖς ἰδίοις ὑψώμασι. The rest of this dizzying theory may be found in the course of the work, which consists of 59 leaves (*Cod. Vatic.*, 191, 229, sqq.). Human reason was not in its ὑψωμα!

416 Manetho, III, 14-15, IV, 20-26. We have said that Manetho did not know the ὑψωματα and that he confused them with the domiciles. The term ὑψωμα is not found more than three times in the *Apotelesmatica*, and all in the fifth canto (V, 33, 173, 261), which is from another hand. Probus also (*Georg.*, I, 32) called the domicile the ὑψωμα: *domicilium Saturni tradunt astrologi Libram, quod est signum aequitatis*. The house (domicile) remained the type of the planetary property. This is the implication in the expression ζῳδιον Κρόνου, Διός.

417 Paul of Alexandria also uses the word κοίλωμα. *Altitudines – in quibus naturali quadam sublimitate magnitudinis eriguntur – dejectiones, in quibus constitutae oppressa auctoritatis suae potestate minuuntur* (Firmic., II, 3) Ὑψώματα δὲ καλοῦσιν ἀστέρων καὶ ταπεινώματα ὡσαύτως ἐν οἷς χαίρουσιν ἢ ὀλίγην δύναμιν ἔχουσιν κ.τ.λ. (Sext. Emp., *Adv. Astrol.*, 35-36, p. 343-344). S. Empiricus gives a list conforming to the following table.

418 Cleomedes (*Cycl. Theor.*, I, 4, p. 14-16 Schmidt) explains that the Sun rose and descended relative to the equator, but not relative to the zodiac, where it sat in the center, οὔτε τῷ βορείῳ, οὔτε τῷ νότιῳ πελάζων. The planets went farther -- κατὰ τὴν προαιρετικὴν κίνησιν -- to the North and South of the zodiac, moving ἐλικοειδῶς, and it was to them that the expressions about ascent and descent applied. This is the movement in latitude (κατὰ πλάτος).

419 Ὑψος τε καὶ βάθος ὅτε μὲν ἀπογειότερα ὅτε δὲ προσγειότερα θεωρούμενα (Theo. Smyrn., p. 179 Miller). Cleomedes (II, 5, p. 89 Schmidt), speaking of the solar apogee and perigee, adds Οὕτω καὶ πάντων τῶν πλανήτων ἐν ἐκάστοις τῶν ζωδίων ὑψώματα καὶ ταπεινώματα ἐλέγχεται. One goes on to show that he uses the same terms, ὑψος or ὑψωμα – ταπεινῶμα for the displacements in latitudes. It is thus impossible to conserve a unique meaning, even in astronomy. Likewise, βάθος also designates, in a general manner, the meaning of a planet's approach or elongation to the earth – in opposition to πλάτος and μήκος – a sort of βάθος equivalent often to ὑψος.

420 We have seen above (p. 113 sqq.) that, in the theory of retrogradations by epicycles, the planets have more energy when they are προσθετικοί, although farthest from earth. Moreover, they who believed these things, at perigees (p. 116 sqq.) would have been when even placing the ὑψωμα there, in invoking not only the “height,” a geometric reason, but also a physical reason, the exaltation of energy resulting from proximity. We say of this – to finish the discussion begun above (p. 118, 1) – that Pliny had been fooled by the amphibology of the expression *vespertinus exortus* (ἐσπέριος ἀνατολικός), which signified for astronomers (cf. Ptol., Φάσεις) the “evening rising” or achronical rising, *toto Sole adverso*. The astronomers mean that the planet follows the Sun at a short distance and may be seen in the West for a short time before its setting (cf. Firmic., II, 8 Kroll; Paul. Alex. F v).

421 In the actual texts, there are variants in the number of degrees, variants which the editors corrected following the verse explanation in Dorotheus of Sidon (ap. Heph., I, 8, p. 72 Engelbrecht). Since the system had been transmitted secretly, the errors had not been corrected (Plin., below, p. 196, 1). The penultimate editor of Firmicus, C. Sittl, allowed it to remain in his text, an enormous heresy that Firmicus was not able to profess without warning, the rule αἱ δὲ ταπεινώσεις ἐν διαμέτρῳ (Doroth., *l.c.*, – ταπεινῶμα δὲ τὸ διαμετροῦν. S. Empir., p. 343 – ἀντικρὺ τῶν ὑψωμάτων Porph., p. 186) was not an exception. This is a case where one may make corrections without hesitation (this was made, among others, by Kroll and Sketsch). One may also rectify several numerical errors in Porphyry (*Isag.*, p. 186). The author of papyrus XCVIII *Brit. Mus.* marks well the ὑψωμα of ♄ in ΠΥ (II. 13), but a little further, he put, by mistake, the ταπεινῶμα in ♁ (II. 59). The other indications (II. 13, 19, 30, 35, 44, 49) are exact. The same is true of pap. CX (II. 14, 18, 31, 33, 36, 39) and CXXX (II. 82, 102, 118, 146).

422 We know today that the line of the “apsides” moves, but that is not very important. We take the fixed positions of the ancients. Pliny explains the movements of the planets, and he begins by enumerating the three sorts of altitudes by the apogees *Igitur a terrae centro apsides altissimae sunt Saturno in Scorpione, Jovi in Virgine, Marti in Leone, Soli in Geminis, Veneri in Sagittario, Mercurio in Capricorno, mediis omnium partibus* (i.e., in degree 15 of each sign) – *Altera sublimitatum causa, quoniam a suo centro apsidas altissimas habent in aliis signis, Saturnus in Librae parte XX, Jupiter Cancri XV, Mars Capricorni XXVIII, Sol Arietis XXIX, Venus Piscium XVII, Mercurius Virginis XV, Luna Tauri IV*. In the third place there was the altitude by inclination of the orbits of the ecliptic (Pliny, II, 63-68). The numbers given by Pliny need to be rectified. Martianus Capella

(VIII, 884-886) gives, for the three superior planets, the apogees (*altitudines*) and the astrological *ὑψώματα*, which he calls *absides*. He also means by this an “elevation” of some sort (*absidem etiam habet [Pyrois] recessumque sublimem in Capricorni confinio, hoc est, sub ejus vicesima nona parte*. VIII, 884).

423 *Omnia autem haec constant ratione circini semper indubitata* (Pliny, II, 63). The idea of the *ὑψωμα* as the extreme point of the northern declination, even though implicitly disavowed by Ptolemy, persisted just the same. The astrologer Valens calls the *ὑψωμα* of each planet the North (βορρᾶς). Thus the North of the Sun is in ♈! From ♈ to ♋, the Sun is καταβαίνει τὸν βορρᾶν; from ♋ to ♌, καταβαίνει τὸν νότον; from ♌ to ♍, ἀναβαίνει τὸν νότον, and from ♍ to ♈, λέγομεν αὐτὸν βορρᾶν ἀναβαίνειν καὶ ὕψος ὑποῦθαι (Valens, *Cod. Paris.*, 333A fol 7v). Inevitably, common speech went along with the fantasies of the astrologers in destroying common sense. Cf. ☉ in ♈ πρὸς βορρῶ ζωδίῳ ὑπομένος (*Pap. Brit. Mus.*, CXXX, II. 62-63). The order of the *ὑψώματα*, a shelter from reason, is preserved intact among the Orientals. In the Pahlavi *Bundhishn*, Jupiter (Ahurmazd) and Saturn (Kaivan) were exalted in the indicated signs (♋ and ♌). Cf. *Rev. Hist. Rel.*, XXXII [1895], p. 218.

424 The notation of the degree properly belongs to the system of the *ὑψώματα*. Paul of Alexandria (fol. T 2 v) transports them improperly into the system of the οἶκοι, doubtless because of the supposed relationship alleged by Porphyry ([below](#), p. 198), whereas Ptolemy goes back to the *ὑψώματα*. It was well-known, for S. Empiricus, (*loc. cit.*), who lived no more recently and was not an astrologer, knew the exact degree of the exaltation of the Sun. There is no reference to a specific degree in the three astrological papyri (*Brit. Mus.* no. XCVIII-CX-CXXX) which mention the *ὑψώματα* and ταπεινώματα.

425 In fact, the Sun rises to the North beginning in Capricorn (cf. [above](#), p. 193, the expression ταπεινῶμα ὑποῦσθαι. The true reason is from the “*thema mundi*,” where Aries culminates at the (ὕψος) of the sky. The Sun explains the system of δώδεκα οἶκοι to Phaethon, saying Κέντρον ὅλου κόσμου μεσόμφαλον ἄστρον Ολύμπου, Κριὸν ἐγὼ μεθέπτω ὑψόμενος εἶαρ ἀέξω (Nonnus, XXXVIII, 268 sq.).

426 Ptolemy had already spoken of the triplicities (II, 19), with which we will deal later. It is a vicious circle to invoke the reason for the “triplicity” to justify the *ὑψωμα*, for he tells us later that the Moon figures in the triplicity ♈ ♌ ♍ because it has its *ὑψωμα* in Taurus. The true reason is mythological, since Taurus is a symbol of the Moon, and as a feminine symbol, assigned sometimes to Luna, sometimes to Venus. This is all of the evidence. Horapollo (*Hieroglyph.*, I, 10) says that the bull-shaped scarab beetle is consecrated to the Moon, ἀφ’ οὗ, καὶ τὸν οὐράνιον ταῦρον ὕψωμα τῆς θεοῦ ταύτης λέγουσιν εἶναι παῖδες Αἰγυπτίων. An additional reason, which seemed excellent to the scholiast, is that the Sun and the Moon had their ὑψώματα, as well as their οἶκοι, on opposite sides (Anon., p. 39).

427 See [above](#), pp. 97, 3; 98, 2; 127, 2, and later, pp. 200, 3; 201, 1.

428 We have seen [above](#) (p. 145) that when Manilius gave fire and metallurgy to Capricorn he followed, perhaps without knowing it, the tradition of the *ὑψώματα*.

429 Ὁ δὲ τοῦ Ἑρμοῦ, ἐπειδὴ κοινός ἐστιν ἢ τε ἀκτὶς ἀμυδροτέρα διὰ τὸ πλειστάκις αὐτὸν δύνειν αὐτὸν δύνειν, τὸ αὐτὸ ἔχει οἶκον καὶ ὕψωμα. *Isag.*, p. 186. This did not slow the speed of Mercury's course, the cause of its frequent settings (and risings), not usually given as the cause of its heat and energy.

430 One may notice that the system of ὑψώματα and ταπεινώματα does not use all the signs. Paul of Alexandria remarked that Leo is ὕψωμα ουδενος κοίλωμα [a synonym for ταπεινῶμα] οὐδενός (f. A 3 v). One may say the same about Virgo and the pair Gemini - Sagittarius. It is just more evidence of what astrologers really believed when busying themselves with the astronomical positions which they had not been able to divide to their taste. 8888

431 See [above](#), Chapter 11.

432 Gemin., *Isag.*, I, 9.

433 Cf. [above](#), Chapter 8, the prediction concerning the orientation of the winds following from the συναφαί and ἀπόρροιαί of the Moon with the planets. This was an astrological dogma, which no one disputed, no one having collected contrary experiences.

434 Καλεῖται δὲ τὸ μὲν πρῶτον τρίγωνον, τὸ ἀπὸ Κριοῦ, βόρειον. Ἐὰν γὰρ τῆς σελήνης ἐν τινὶ τῶν τριῶν ζωδίων ὑπαρχούσης βορέας πνεύση, ἐπὶ πολλὰς ἡμέρας ἡ αὐτὴ διαμένει στάσις. Ὅθεν ἀπὸ ταύτης τῆς παρατηρήσεως ὀρμηθέντες οἱ ἀστρολόγοι προλέγουσι τὰς βορείας στάσεις· ἐὰν μὲν γὰρ ἐν ἄλλῳ ζωδίῳ τῆς σελήνης ὑπαρχούσης βορεινὴ γένηται στάσις, εὐδιάλυτος γίνεται ὁ βορέας· ἐὰν δὲ ἐν τινὶ τῶν ἀμφορισμενῶν ζωδίων ἐν τῷ βορεινῷ τριγώνῳ βορέας συπνεύση, προλέγουσιν ἐπὶ πολλὰς ἡμέρας διαμένειν τὴν αὐτὴν σύστασιν. Gemin., *loc. cit.* Likewise, Firmicus, without mentioning either the Moon, or the planets or any other

motif, taught *quae signa quibus subjecta sint ventis: haec enim nobis scientia maxime in apotelesmatibus necessaria est. Aquiloni sunjacent* ☿ ♄ ♂; *Austro* ☿ ♀ ♄; *Aphelioti, quem nos Solanum dicimus, II* ♄ ☿; *Africo, qui a Graecis λίψ dicitur* ☿ ♀ ♄ (Firmic., II, 12 Kroll).

435 Pliny included five theories, three of which teach the contribution of the planets *sive [venti] adsiduo mundi incitu et contrario siderum occursu nascuntur, sive hic est ille generabilis rerum naturae spiritus huc illuc tanquam in utero aliquo vagus, sive disparili errantium siderum ictu radiorumque multiformi jactu flagellatus aer, sive a suis sideribus exeunt his propioribus, sive ab illis caelo adfixis cadunt*, etc. (Plin., II, 116). Philo, who is not an astrologer, also admitted that not only the Sun and the Moon, but also the planets, created the winds (*De Opif. Mundi*, 38, p. 40 Cohn). The scholiast to Ptolemy says repeatedly that the Sun and the Moon have effects on all the winds from a particular direction (Anon., p. 37 and 79). Saturn's winds are cold and rainy (above, Chapter 11).

436 On fertilization by the fertile winds (γόνιμοι) – so often attributed to Jupiter by Ptolemy – and the sexes produced, see [above, p. 98, 2](#).

437 Jupiter is γόνιμός τε καὶ πνευματώδης οἰκείως τοῖς ἀπὸ τῶν ἄρκτων ἀνέμοις: the star of Venus, τῶν νοτίων πνευμάτων διὰ τὸ θερμὸν καὶ ἔνικμον τῆς δυνάμεως ποιητικός (*Tetrab.*, I, 19.) Jupiter, whose ὕψωμα was in Cancer, at the solstice, dispossessed the Sun, which had once excited Boreas and also ceded his breeze ([above, p. 97, 3 and 127, 2](#)).

438 Jupiter was the star of the South; Saturn, the star of the West, is also star of the East; Mars, the star of the East, is also the star of the West; Venus was first the Evening star (West) then the Morning star (East). It occurs one time – one time is not custom – among the real Egyptians and the Pharaonic monuments. See Lepsius, *Einleitung*, p. 106, and Brugsch, *Thesaurus*, I, pp. 65-78. Cf. [above, p. 67](#). It does not matter much whether or not the Egyptian orientation conformed with that of the Greek astrologers. It confirms the principle. Moreover, the Egyptian tradition contained variants, some absolutely contradictory, and among them, there are some which fit with the Greek tradition for example, Saturn, star of the East, Mars, star of the West.

439 According to Ptolemy, Saturn is in the East and excites easterly winds, διὰ τὴν πρὸς τὸν ἥλιον αἵρεσιν, East being the side of the Sun. Even Ptolemy, in the following chapter (II, 20), places the ὕψωμα of Saturn opposite that of the Sun, because of antipathy. The astrologers here show a perfect disdain for mythology, which put the old Titan in the farthest reaches of the West – *quem volgo maxime colunt ad occidentem* (Cic., *Nat. Deor.*, III, 17), and even for the Chaldaean tradition (cf. [above, p. 69](#). Jupiter is more solar than Saturn but is not, for that reason, placed in the East. As for Mars, it excites the westerly winds, because it is in the lunar αἵρεσις and the West is the side of the Moon, the side of the humid and the feminine planets. In practice, this agrees with the scholiast that Saturn loves contradictions (καὶ γὰρ τῷ ἐναντίῳ, χαίρει, καὶ οὐ τῷ ὁμοίῳ. Anon., p. 37), and Mars likewise, as it is sympathetic with hot-tempered, quarrelsome people! These are infantile bits of logic beneath big words. The two luminaries have no particular orientation.

440 Ptolemy, *Tetrab.*, I, 19. Dorotheus Sidon., Περὶ τριγώνων ap. Hephaest., I, 6, p. 71 Engelbrecht. Paul. Alex., fol. A 2-B. Cf. Firmicus, II, 10 and 12 Kroll; VI, 31, p. 174-5 Pruckner. *Pap. Brit. Mus.*, CXXX (II. 131, 170, 178). Paul of Alexandria abridges, he gives only two planets per triangle. Dorotheus passed over orientation in silence.

441 Also called – because of Leo and Aries – the royal triplicity (τὸ βασιλικὸν τρίγωνον, Hephaest. Theb., I, 22, p. 91, 16 Engelbr.; Io. Lyd., *Ostent.*, 9; etc.).

442 The οἰκοδεσπόται or τριγονοκράτορες of a triplicity are sometimes the three rulers of the triplicity, sometimes simply the three co-proprietors.

443 Dorotheus of Sidon (in a passage understood neither by Koechly (*Manethon.*, p. 116) nor by Engelbrecht (*Hephaest.*, p. 71), and which they have punctuated wrongly) substitutes Saturn for Mars, which was “expelled,” not just from rulership, as Ptolemy says (ἐξώσθέντος τοῦ Ἄρεος, *Tetrab.*, II, 19), but from the triplicity. What gives Saturn the right to intervene here, when its low spot is in Aries? Evidently, the lack of diurnal planets associated with the Sun. Another muddler, Paul of Alexandria, does not speak of Saturn. However, this forgotten Saturn must be the reason for the eastern orientation of the aforesaid triplicity, which the Chaldaeans of Geminus called “northern” (see [above, p. 199](#)). What a tangled skein of postulates! The triplicities of Ptolemy are oriented obliquely between the cardinal points, because, as we will see in Chapter 11, they corresponded to the four quarters of the habitable earth, divided by the meridian of Palus-Maeotidis and the parallel of Issus.

444 This is the agricultural triplicity, according to John Lydus, *Ostent.* 9, since it is composed of Taurus the laborer, Virgo with the stalk of grain, and Capricorn, which πρῶτος τῶν τοιούτων καρπῶν ἀπογεύεται (an allusion to *Saturnalia* in December?).

445 See [above](#), p. 199, the system of Geminus. Orientation to the South in Paul of Alexandria, *loc. cit.* After Venus, the Moon and Mars, ἐν δὲ νυ Παρθενικῇ Μαίης προσλάμβανε κοῦρον (Doroth., *loc. cit.*). Ptolemy himself returning to the triplicities ([II, 3, below](#), Chapter 11), substituted Mercury for the Moon.

446 Ptolemy himself returned it ([II, 3](#)) to the same triplicity, to take the position of the temple of Jupiter Ammon in the southwest (above Chapter 11) into account. His logic is only opportunism. He also removed the moon from its rulership, since it was exercised by Mars and Venus.

447 The scholiast assures us that this was an advantageous compensation for Mars the triplicity διδοται τῷ Ἄρει μόνῳ διὰ μὴ κατὰ πρῶτον λόγον οὔτινι τῶν ἄλλων εἰληφθαι, ὅθεν καὶ ἐν νυκτὶ καὶ ἐν ἡμέρᾳ δεσποτεῦει ὁμοίως χαίρων, διὰ τὴν εἰρημένην αἰτίαν (Anon., p. 38). He pretends, too, that, this time, Ptolemy instituted three *τριγωνοκράτορας*, like Dorotheus, who puts three in each triplicity. Either he misread Dorotheus or Dorotheus completed his explanation in a passage which no longer survives. We find nothing like it in the three verses *περὶ τριγώνων* which Hephaestion of Thebes has preserved for us.

448 Ἐπεὶ οὐ δίδονται τοῖς φωσὶ ὅρια, Ptol., *Tetrab.*, I, 21.

449 *Licet ipsum signum alienae sit potestatis et alterius habeat domicilium, tamen partes ejus quasi propriae singulis stellis dividuntur, quae partes fines stellarum nominatur hos fines Graeci ὅρια vocant* (Firm., II, 6 Kroll). Cf. Cic., *Divin.*, 42 ([above](#), 181, 1) – ὅρια δὲ ἀστέρων ἐν προσαορεύουσιν ἐν ἐκάστῳ ζωδίῳ, ἐν οἷς ἕκαστος τῶν ἀστέρων ἀπὸ ποστῆς μοίρας ἐπὶ ποστὴν *πλεῖστον δύναται* περὶ ὧν οὐχ ἡ τυχοῦσα παρ' αὐτοῖς ἐστὶ καὶ κατὰ τοὺς πίνακας διαφονία (S. Empir., *op. cit.*, 37, p. 344). Manilius meant to give a table of ὅρια, of which he knew the virtue: *Cujus enim stellae in fines in sidere quoque | Inciderit [dodecatemoron], dabit effectus in viribus ejus – Verum haec posterius proprio cuncta ordine reddam* (II, 747, sqq.). Cf. [above](#), Chapter 9.

450 The verse exposition – and for that reason less prone to alterations in the numbers – of Dorotheus of Sidon (ap. Hephaest. Theb., I, 1, reproduced in the Manetho of Koechly, pp. 113-116) permits us to correct the copyists' errors in the tables of Ptolemy, of Paul of Alexandria, of Firmicus ([II, 6](#)), this last left in a pitiful state by C. Sittl, incompletely rectified by W. Kroll.

451 Porphyry (ap. Stob., *Ecl.*, II, 7, 42, p. 390) said that one gave an advantage to the master of the sign, placed at the head, and that one sent the malefic planets to the end: αἱ μὲν πρῶται τοῦ ζωδίου μοῖραι ὡς ἂν αὐτῷ νενεμημένοι τῷ κυρίῳ τοῦ ζωδίου παρεδόθησαν εἶναι ἀμφιλαφεῖς· αἱ δὲ τελευταῖαι ἐπὶ πάντων τοῖς κακοποιοῖς λεγομένοις ἀστράσιν ἀπενεμήθησαν. In effect, Saturn and Mars occupy only the last column of the ὅρια. As for the rule concerning the “master of the sign,” it is best seen in the Chaldaean system ([below](#), p. 210).

452 It is a rule ὅτι ἕκαστος τῶν ἀστέρων οἰκοδεσποτήσας τοσαῦτα ἔτη παρέχει ὅση καὶ ἡ ποσότης ἐστὶ τῶν ὁρίων (Anon., p. 42). See [above](#), Chapter 12.

453 Ὁ γὰρ καθ' ἓνα ἕκαστον τῶν ἀστέρων ἐπισυναγόμενος ἐκ πάντων ἀριθμὸς, πρὸς ὃν φασιν αὐτῶν τὰ χρονικά μερίζεσθαι οὐδένα οἰκείον οὐδὲ εὐαπτόδεκτον ἔχει λόγον. Ἐὰν δὲ καὶ τῷ τούτου κατὰ τὴν ἐπισυναγωγὴν ἀριθμῷ πιστεύσωμεν, ὡς ἄντικρυς ὁμολογουμένῳ ὑπ' Αἰγυπτίων, πολλαξὺς μὲν καὶ ἄλλως τῆς κατὰ τὸ ζωδίων ποσότητος ἐναλλασσομένης, ὁ αὐτὸς ἀριθμὸς συναγόμενος εὐρέθη (*Tetrab.*, I, 21). In effect, in his retouched system, he kept the sums and modified the division.

454 Ptolemy said that the Egyptian system of the ὅρια deserved belief, more than the Chaldaean, καὶ διὰ τὸ τὴν συναγωγὴν αὐτῶν παρὰ τοῖς Αἰγυπτίοις συγγραφεῦσιν ὡς χρησιμὴν ἀναγραφὴν ἠξιῶσθαι, καὶ διὰ τὸ συμφωνεῖν αὐτοῖς ὡς ἔπιναν τὰς μοίρας τῶν ὁρίων ταῖς κατατεταγμέναις ὑπ' αὐτῶν παραδειγματικαῖς γενέσεσιν. He claimed the same in defense of his retouchings, τὰς τῶν προγενομένων γενέσεων μοιρογραφίας (*ibid.*). One sees what an advantage it was to the astrologers to age their doctrines and to antedate their experiences, and why the fabricators of Egyptian books beat their rivals, the Chaldaeans, who did not have an office in Alexandria at their service.

455 Ptolemy and the scholiast are as obscure as possible here: Καὶ ὁ πειθανολογεῖν καὶ σοφίζόμενοι τινὲς ἐπιχειροῦσι περὶ αὐτῶν, ὅτι κατὰ παντὸς κλίματος ἀναφορικὸν λόγον οἱ καθ' ἕκαστον ἀστέρα συσχηματιζόμενοι πῶς χρόνοι τῇν αὐτῇν ἐπισυνάγουσι ποσότητα· ψευδὲς ἐστὶ (*Tetrab.*, I, 21). The scholiast repeats καὶ τοί γε τινὲς φασὶ σοφίζόμενοι, ὡς ἕκαστῶν ἀστέρων ἐδόθη ἡ ποσότης τῶν ὁρίων πρὸς τῇν ἀναφορικῶν χρόνων τοῦ ζωδίου ποσότητα. Συναγόμενοι γὰρ οἱ ἀναφορικοὶ χρόνοι τῇν τοῖς ὁρίοις ἀποτελοῦσι ποσότητα ψεῦδος δὲ τοῦτο (Anon., p. 41). What connection are we to suppose between the lengths of the ascensions of the signs and the planets? The domiciles? The exaltations? The triplicities? The scholiast says further on (p. 43) that one may add up τὰς ἀναφορὰς τῶν δύο ζωδίων ἐκάστου ἀστέρος which can only mean the domiciles.

456 The ὅρια are distributed throughout the signs, not equally, like the decans, ἀλλὰ διαφόρως κατὰ ἄλλην αἰτίαν, ὑπέθεντο ἐν ταῖς τῶν ἀστέρων τελείας περιόδοις (ap. Porph., *Isag.*, p. 200). On these periods, see Salmas., *De annis climac.*, p. 209-215.

457 The fragments of this *Connaissance des temps* [an annual ephemeris published by the French government. L.J.N.] elaborated in the observatories of the Mesopotamians, dating to the years 219-121 BC, figure among the deciphered texts. See P. Epping, *Astronomisches aus Babylon*, p. 189. P. Epping and Strassmaier, *Neue babylonische Planeten-Tafeln* (*Zeitschr. f. Assyriol.*, V [1890], p. 341-366, VI [1891], pp. 89-1-2 and 217-244). The Mesopotamian evaluations (ἡ, 59 years; α, 83 years; σ, 79 years; ρ, 8 years; ϑ, 46 years) are always somewhat different from the sums adopted for the ὅρια (below, p. 212). [See now Otto Neugebauer, ed., *Astronomical Cuneiform Texts: Babylonian Ephemerides of the Seleucid Period for the Motion of the Sun, the Moon, and the Planets*, 3 Vols. (London Lund Humphries, 1955), Sachs, 1950, and A. Sachs, and J. Schaumberger, *Late Babylonian Astronomical Texts*, copied by T. G. Pinches and J. N. Strassmaier (Providence, RI Brown U. Pr., 1955). L.J.N].

458 This table is found only in Ptolemy (*Tetrab.*, I, 21).

459 Once the distribution is made for the first sign of each of the four triplicities, it need only be repeated for the second and third sign, as one may see in the three sections of Table II. The same symmetry is found in the system of the ὅρια κατὰ τὴν ἐπτάζωνον (below, p. 214).

460 Perhaps an effect made by the heptagonal method.

461 I had hoped to avoid the variants scattered throughout the text (*Tetrab.*, I, 21) and the various translations of Ptolemy, in the scholiast (*Anon.*, pp. 44-47) and the *Paraphrase* of Proclus (I, 24) in following the numbers all written out in words in Hephaestion of Thebes (below, p. 215, 1). However, these numbers change the partial sums; and – what settles the question – their total is 366°. I therefore hold to the text of Ptolemy (ap. Juncinus, I, p. 75).

462 Ptolemy, who hides the childishness of the doctrine as much as he can, says only διὰ τὸ βραδύτερον αὐτῶν τῆς κινήσεως. It was the scholiast who adds βραδυκίνητοι γὰρ ὄντες, μᾶλλον αὐτοὶ χαίρουσι τῇ ἀφαίρεσει, διὰ τὸ καὶ τὸν ἐλάχιστον τόπον ἐν πλείονι διεξίεναι χρόνῳ (*Anon.*, p. 44). This chapter of the scholiast (p. 44-47) is a curious specimen of the logical tours de force needed to justify pre-existing dogma.

463 Cf. above, p. 206, 2.

464 Demoph., ap. Porph., *Isag.*, p. 195. But there is no great reason to look and see if the authors of our Egyptian papyri deviate deliberately from the Egyptian canon fixed by Dorotheus when they put, for example, ♄ 16°, 4' ὁρίοις Ἡρμοῦ (CXXX, ll. 151), ♃ 20° ὁρίοις Ἀφροδείτης (XCVIII, ll. 38); ♀ 15° ὁρίοις Ἡρμοῦ (CX, ll. 29); Venus in ♄ 9°, 4' ὁρίοις ἰδίοις (*ibid.*, ll. 20-22). The planisphere of Bianchini (below, p. 227, 3) offers, out of fifteen numbers for ὅρια, a divergence α 7 in ϑ.

465 Valens, *Cod. Paris.*, Suppl. 330 A fol. 9v. - 10 r. Cf. Salmasius, pp. 290-292.

466 Ptolemy's ὅρια are not found again before Hephaestion of Thebes (I, 1). For each sign, Hephaestion first cites the verse of Dorotheus, beginning with the formula τὰ δὲ ὅρια οὕτως, and then follows with the phrase κατὰ δὲ Πτολεμαίων. Albohazen Haly (I, 5, p. 15, ed. Basil., 1571) states that there was great disagreement on the subject of the ὅρια among the "ancient sages" and that there were five opinions, those of the Egyptians, of Ptolemy, of the Babylonians, of the Indians, and of the Attarathyh (?). The majority rallied to the Egyptians, Ptolemy was little followed, and the other opinions were abandoned. We doubtless find the Indian ὅρια in the "several systems of visitations attributed to the planets" upon which the Brahmans disagreed (F. Guérin, *Astron. indienne*, p. 80).

467 See above, p. 129, 1.

468 For example, the distribution of the sexes among the degrees, as arbitrary as that of the ὅρια (see Firmic., IV, 23 Kroll); of the full or empty parts, etc.

469 The Gnostics, especially the sect of Basilides, made amulets with figures of decans. See the amulet with the name of XNOYBIC given by Saumaise (p. 566), and the descriptions in the hermetic works (v.g. *Anal. sacr.*, V, 2, p. 285-290 Pitra). [Much has been learned about the Gnostics since Bouché-Leclercq's day. See Kurt Rudolph *Gnosis The Nature and History of Gnosticism*, tr. & ed. by Robert McLachlan Wilson (San Francisco Harper & Row, 1984) for a starting point. Few of the so-called Gnostic gems can be shown to be genuinely Gnostic. Campbell Bonner, *Studies in Magical Amulets Chiefly Graeco-Egyptian* (Ann Arbor University of Michigan Press, 1934, 1950) is the classic study, while a recent study praised by reviewers is

Roy Kotansky, *Greek Magical Amulets the inscribed gold, silver, copper and bronze lamellae (Part I Published Texts of Known Provenance)* (Opladen Westdeutscher Verlag, 1994). Gideon Bohak, "Traditions of Magic in Late Antiquity," includes online photos of amulets along with much else. Neugebauer, 1957, explains the origin of the decans as an Egyptian method for telling time at night. Neugebauer, and Parker, 1969, gives Pharaonic-era images of the decans, while Wilhelm Gundel, *Dekane und Dekansterbilder* (Glückstadt und Hamburg J. J. Augustin, 1936) deals with decans in Greco-Roman art. LJJN].

470 A word ordinarily translated by *facies* (cf. *formae decanorum*, Martian. Cap., II, 200) and finally reserved for the planetary decans ([below, p. 228](#)).

471 In order to get through this repugnant jumble (the product of brains without genius) in a few words, let us describe the various ways the signs are partitioned among the planets. First, there was a division into thirds (the planetary decans). Second, there was the distribution of the planets among the twelfths of signs. I do not know where Macrobius read that the Sun *duodecimi signi, in quocumque signo fuerit, locum occupat* (Macr., Sat., I, 23, 6). Third, there was the distribution of the planets following the natural order among the 360° of the circle. The series started over with the same planet, by subdivision of the remainder. Fourth, distribution of the planets among the 360°, but by triplicities (Paul. Alex., D and Q 2-3 v). In papyrus CXXX of *Brit. Mus.* (II, 60), we find, after references to οἶκος and to ὅρια, the notation στοιχείω (= μοιρὰ?) Διός, at 14° 6' of Aries. On the distribution of the signs within the signs, first, there was distribution at the rate of three per sign (see Fig 28, The decans of Manilius) in continuous order. Second, there was distribution at the rate of twelve per sign, (δωδεκατημόριον δωδεκατημορίου, Ptol., I, 20). The system is explained at length by Manilius (II, 693-722), who calls it *teneum visu rem, pondere magnam*, and extolls the effects of the mixture. The order is no longer continuous, but each sign starts the series over again in itself, and completely contains it. The same rule is found in the *Philosophoumena* (V, 2, 13, p. 190 Cruice). These zodiacal "dodecatemoria" disappeared from classical astrology. They were confused with the completely different and differently understood system of the planetary "dodecatemoria," calculated anew each time, using the procedure of the κλήροι (see Chapter 9). [See Abraham Sachs and Otto Neugebauer, "The 'Dodekatemoria' in Babylonian Astronomy," *AfO* 16 (1952) 65-66 LJJN]. Third, there was distribution by thirties within a sign or a single degree (Herm. Trismeg. ap. Junctinus, p. 23). There are yet others. One may divide the signs in half to represent the 24 hours (ὥρονόμους εἴκοσι καὶ τετάρας ὄντας, Proclus, in *Anal. Sacr.*, V, 2, pp. 168 Pitra; cf. the twenty-four Chaldaean δικάσαι; [above p. 43, 4](#)). [Cf. David Pingree, 1963. LJJN]. Finally, the system of the decans is supercharged not only by the distinction between full and empty ([below, p. 321](#)), but with vague entities (*numina*) called the ministers or ushers (λείπουργοί - *munifices*) of the decans. Their number was related to, perhaps, first, that of the signs – seven per sign, eighty-four in all – combining the two astrological numbers par excellence, seven and twelve (Mart. Cap., II, 200). Second, perhaps, they were related to the number of the decans – three per decans, 108 in all. Other combinations are not lacking, either, complicating themselves with subdivisions to infinity (Firmic., II, 4, 4-5; text cited below, [p. 225, 1](#)). We will go no farther with this silliness, which, as Firmicus says, disgusts the "Greek" astrologers – *in primis vestigiis constitutionis istum tractatum cum quodam dissimulationis fastidio reliquerunt* (Firmic., II, 4, 6). It is based completely on the idea that each fraction of time must have its own master, its χρονοκράτωρ, in the sky.

472 Those who hold the Egyptian origin of Pythagoreanism, in looking for evidence, never hesitate to point out that the τετρακτύς itself came from Egypt ([above, p. 9, 3](#)). There was no discussion of this at that time. Proclus also was convinced that Plato, in view of his omniscience, could not have ignored the δεκανούς ἔξ καὶ τριάκοντα (Procl., in *Anal. sac.*, V, 2, p. 168 Pitra) even though he does not say the word. [In Pharaonic Egypt, months were divided into groups of ten days or *decades*, rather than our familiar seven day weeks. Cf. Gregg DeYoung, "Astronomy in Ancient Egypt," in *Astronomy Across Cultures The History of Non-Western Astronomy*, ed. H. Selain, Dordrecht Kluwer, 2000, pp. 482-483. LJJN].

473 The editors of Manilius have made him say whatever they like. Scaliger *Quam partem decimam dixere Decania gentes*. Bentley *Quampropter Graiae dixere Decania gentes*. Jacob, contra Bentley *Quam partem indigenae dixere Decania gentes* (IV, 298). We do not know if *decania* is a plural (of *decanium*?) or if *decania* = δεκανία. Let us look at etymology. The Greeks took the word δεκανός as a Greek word – δέκα μοιρῶν ἄρχειν, διὸ καὶ δεκανός καλεῖται (Schol. Demoph., p. 199). Also, δεκανομοιρία is a synonym of δεκανός (cf. Anon., *De terr. mot.*, ap. Wachsmuth; Io. Lyd., ed. 2^a, p. 174). Scaliger (*Not. in Manil.*, p. 297) declares that the word is good Latin, and Huet is of the same opinion – especially given that the sign representing "decan" in the manuscripts is the Roman numeral X, not the Greek numeral Δ. Saumaise (*De ann. climact.*, pp. 560 sqq.) fulminates against the partisans of Latin. For him, *decanus* is the transcription of δεκανός, but δεκανός is not from δέκα. It was a transcription of a Chaldaean word – *nam et Decan chaldaice inspector et excubitor, h.e., ἐπίπισκοπος, vel ἔφορος*. He is thinking evidently of the thirty or thirty-six βουλαῖοι θεοὶ of Diodorus, which our modern [1890s LJJN] Assyriologists also wish to make into the Mesopotamian decans ([above, p. 43, 4](#)). However, our Assyriologists cannot prove the word *decan* is Mesopotamian in origin and we must give up on

Saumaise's Chaldaean theory. On the other hand, neither Scaliger nor Saumaise are able to persuade me that δεκανός is not from δέκα or even that *decanus* is not from *decem*. As for the Greek sign Δ, there is a good reason for not using it as the symbol of the decan, that is, because it represents the trine aspect (cf. p. 169, Fig. 19).

474 In short, he retains a good idea from the Egyptian doctrine, forgotten by the partisans of planetary decans, to wit, that the decans were section of signs, an idea which was applied later to the subdivided signs of “universal apotelesmatica” (above, Chapter 11).

475 *Haec ratio retegite latitantis robora mundi | In pluresque modos repetita nomina caelum | Dividit, et melius sociat, quo saepius orbem. – Mixta sed in plures sociantur sidera vires.* This is a difficult mystery; raise your hearts! *Quod quaeris, deus est; conaris scandere caelum*, etc. (Manil., IV, 292-408). In spite of these big words, Manilius did not dream at all of the decans when, in the fifth book, he spoke of concurrent influences of the παρανατέλλοντα. He had to distinguish the triple contribution of the sign, the decan and the paranatellon.

476 By a strange fantasy, best explained as inattention by the poet, Manilius abandoned, for the last sign (♈), the rule observed to that point, which consisted of listing the signs in continuous order. He thoughtlessly put Aries and Taurus in the place of Capricorn and Aquarius. I make this correction without scruple in the wood-cut above [Fig. 27 LJN]. Fr. Jacob (*Tab. III*) does not correct it and, following his usual habit, lists the signs backwards.

477 It goes without saying, obliged as I am to leave Classical Antiquity, that I take all the positive details from R. Lepsius, *Einleitung zur Chronologie der Aegypter* (Berlin 1848), and H. Brugsch, *Thesaurus Inscr. Aegypt.* I (*Astronomisch und astrologische Inschriften*), Leipzig, 1883). [See now also Otto Neugebauer, and Richard A. Parker, eds., *Egyptian Astronomical Texts*. LJN].

478 The tradition is conserved in India with the *drekans* (decans). These thirty-six spirits “work to frighten the Sun by their cries” (Guerin, *Astron. indienne*, p. 76). They are planetary decans, in the Greek mode. [On Indian astrology generally, see the works of David Pingree, especially *Yavanajataka*, 1978. LJN].

479 We do not find in Egyptian language – and this is something to consider – a specific name or prototype for δεκανός – *decanus*. The decans are designate by a variety of synonyms, *sibu* (*Sterne*, trad. Brugsch [star LJN]), *sibu sepesu* (*Prachtsterne* [splendid star LJN]), *sau* (*Schutzsterne* [shooting star LJN]), *nutari* (*die Goettlichen* [the divinities LJN]), *ancu* or *bin ancu* (*die Seelen der Aufstiegender* [the souls of those ascending LJN]), *bekti* (?) and even *seked* (*die wanderen Gestirne* [wandering stars LJN]), who precede and follow the Sun), a name which fits the planets as well or even better (Brugsch, *Thesaurus*, I, pp. 133 and 176). Also, the technical name “decan” ended by being used, even in Egyptian, in the form *becan* (Brugsch, *op. cit.*, p. 177).

480 Let us remind all, for fear some will imagine an Egyptian zodiac as a prototype for the Greek zodiac, that Orion, traversed by the equator, is quite a long way from the zodiac, and that Sirius is further still.

481 Brugsch counts nine pharaonic lists and fourteen in all Lepsius (pp. 68-69) gives only four main ones, from the tomb of Seti I, the ceiling of the palace of Ramesses II, the tomb of Ramesses IV and on a sarcophagus from the time of Nectanebo I.

482 There will be a place to compare these figures with the hermetic descriptions (*Anal. sacr.*, V, 2, pp. 285-290) and with those in Scaliger (pp. 442-458), which includes the *monomoeriae*.

483 However, there is no decan for the 5 epagomenal days, an office which was filled formerly, according to Brugsch, by the last decan *Sat-Sah*, a part of *Sah* (Orion). All the systems of chronocrators which we will examine collide with the insoluble difficulty of trying to make the 360° of the circle correspond with the 365 days of the solar year. The planetary series, grouped in sevens, would not fit evenly into 360. This is perhaps one of the reasons for which the unknown author whom Manilius followed preferred the zodiacal series or tenths, which latter fit into 360 marvelously.

484 Brugsch, *op. cit.*, p. 135. It refers to Ptolemy Euergetes II, the odious Physcon (sole king after the death of Philometor, 145-117 BCE.).

485 Brugsch, *op. cit.*, p. 136.

486 Catalog of the *British Museum* (no. XCVIII, p. 126-130). The probably date of the document is between 95 and 155 AD. In a later papyrus dating to the third year of Titus' reign (81 AD), the decans carry their technical name, δεκανοί (*op. cit.*, no. CXXX, pp. 132-139). In the hermetic work supposedly translated by Apuleius (*Asclepius sive dial. Herm. Trism.*, 19), the *Horoscopi* are like “indicators of the hours” fixed upon the sphere of the Sun. *Bonum enim luminis per orbem nobis Solis infunditur XXXVI, quorum vocabulum est Horoscopi, id*

est eodem loco semper defixorum siderum. The text is not very clear and it seems that the *Horoscopi* were the sources of light which were placed in front of the Sun.

487 There were dissidents, even in Egypt for example, the author of the *thema* of Anubion (*Not. et Extr.*, XVIII, 2, no. 19 = *Pap. Brit. Mus.*, no. CX), which, while going into great detail, never mentions the decans.

488 Stob., *Ecl. phys.*, I, 21, 9.

489 It is necessary, without a doubt, to correct the reading accepted by Meinecke (I, p. 129, 28) συμφερομένους τοῖς πλάνεσι to read τοῖς ἀπλανέσι.

490 Hermes thus distinguishes the decans from the “other stars,” which – here including the stars – are illuminated by the Sun and thus become visible to us. It results from this, if the fabricator of these revelations agrees with himself, that the decans are invisible, but are “stars” all the same and not incorporeal “energies.” It is always possible that Hermes makes an allusion to the retrograde motions of the planets struck by the rays of the Sun (above, p. 118). We notice at this point the titles given to the decans – φύλακες ἀκριβεῖς καὶ ἐπίσκοποι τοῦ παντός – applied to the θεοὶ βουλαῖοι of Diodorus (II, 30, 6), τὰ καθ’ ἀνθρώπους ἐπίσκοποῦντες ἅμα καὶ τὰ κατὰ τὸν οὐρανὸν συμβαίνοντα (cf. above, p. 43, 4).

491 Ὑπολειπουροὺς καὶ ὑπηρέτας καὶ στρατιώτας – these are the *liturgi* of Firmicus and of Martianus Capella (above, p. 217 in note).

492 The name δεκανοί – *decani*, already in use by the time of Manilius, does not imply that the circle of the thirty-six decans is limited to the zodiac. The Egyptian circle was the equatorial zone. On the other hand, the system of Manilius, explained above, indicated that this limitation had already been tried, but by denaturing, or rather suppressing, the Egyptian decans, moreover without success.

493 Ἐγκεῖτα| δὲ καὶ τῶν δεκανῶν καὶ τῶν παρανατελλόντων αὐτοῖς καὶ τῶν προσώπων τὰ ἀποτελέσματα παρὰ Τεύκρου τοῦ Βαβυλωνίου (Schol. Demoph., p. 200). Psellus (in *Paradoxographici graeci*, p. 147 Westermann) also cites Teucrus on *elections* from the decans, and Teucrus is mentioned again (ap. Salmas., p. 565) on decanic amulets. We have no indications for his dates.

494 Ὑπόκεινται τούτοις τοῖς δεκανοῖς οἱ εἰρημένοι ἐν τῷ ζωδιακῷ κύκλῳ παρανατέλλοντες, ἔχουσι δὲ καὶ πρόσωπα τῶν ζ’ ἀστέρων ἃ τίνα συμπάθειν ἔχουσι πρὸς τοὺς ἐπικειμένους αὐτοῖς ἀστέρας κ.τ.λ. (Schol. Demoph., ap. Porph., *Isag.*, pp. 199-200). This ambiguous text, which each person corrects after his own fashion, leads to endless discussion. Just what exactly are these “paranatellonta?” They are confused with the πρόσωπα under the name of *alineia* (περί τῶν λζ’ δεκανῶν καὶ τῶν παρανατελλόντων αὐτοῖς [καὶ add. Salmas., p. 554] προσώπων) and are distinguished by several lines of distance. Scaliger (*In Manil.*, p. 298) concludes without hesitation that the παρανατέλλοντες (ἀστέρες) are the planets which rise at the same time as the decan signs of Manilius. They are identical to the πρόσωπα. He has grammar on his side, since ἀστέρες in the masculine gender ordinarily designates the planets. However, against him is the astronomical usage of calling “paranatellonta” those fixed stars which rise in a synchronic relationship with a designated part of the zodiac. This usage is not weakened by the accidental use of παρανατέλλοντες to label the planets which rise at the moment of an eclipse (Ptol., *Tetrab.*, II, 6. Cf. above, Chapter 11). The planetary figures which encrust the decans are not the planets which genuinely rise with them. Saumaise (*De annis clim.*, Praef. and pp. 552 sqq.) refines this, in his usual fashion. For him, the παρανατέλλοντες are the λειτουργοὶ of Firmicus *terna numina decanis singulis applicarunt, quos munifices appellandos esse voluerunt*, i.e., λειτουργοὺς, *ita ut per signa singula novem possint munifices inveniri*, a division which is itself subdivided *per infinitas numinum potestates* (Firmic., II, 4, 4-5 Kroll. Cf. above, p. 217). Let us leave these objections, which do not matter, to one side. Saumaise does not want to subdivide the decans into thirds for him, the division must be decimal, into degrees. Since Demophilus successively places the “figure” at the tenth, twentieth, and thirtieth degrees, Saumaise supposes that the decan leaves 3° to each of his servants and enthrones himself at the tenth *tanquam magister et dux eorum decimo loco cujusque Decadis sedem videtur habuisse* (p. 555) the decans are at the tail of the string, *quasi agminis coactores, vel οὐραγούς* (p. 556), and that they have their πρόσωπον par excellence. Look well at the spirit used to resolve this morsel of incoherent text. The important thing, if anything is important here, is that, without any doubt, the πρόσωπα bear the names of the planets they are the decans disguised as the planets.

495 There was one ambiguity which was carefully maintained. Firmicus did not say that the decan was the planet itself, but that it is “affected” by the planet, like a domicile *ipsi decani singulis stellis deputantur, et si cum in ipso decano stella fuerit, licet sit in alieno domicilio, sic est habenda quasi in suo domicilio sit constituta* (Firmic., II, 4, 2). The decan, which “possessed” a third of the sign, is itself possessed by a planet, which only works through it, and in the end we do not know which is which. It was a δύναμις τις δέκα μοίρας ἔξουσα ἐν τῷ ζωδίῳ (Schol. Arat., I, p. 372 Buhle).

496 Ἴσις δὲ παρ' αὐτοῖς ἐστὶν ἀστὴρ αἰγυπτιστὶ καλούμενος Σῶθις, ἑλληνιστὶ δὲ Ἀστροκύων, ὃς καὶ δοκεῖ βασιλεύειν τῶν λοιπῶν ἀστέρων (Horapollo., I, 3) – *Quae autem stella in capite ejus (Canis) Isis dicitur, quam quidam Sirium vocant* (Schol. Germanic., p. 415 Eyssenhardt). @@

497 See above, pp. 129, 1. [The first of Nisan, the Mesopotamian New Year, takes place approximately when the Sun enters Aries. LJN].

498 However, the reason is not very “Chaldaean.” As Firmicus says, the Babylonians, identified the ὕψωμα and the domicile and put the domicile of Mars in Capricorn. The hypothesis of a Mesopotamian adaptation is suggested to me by the name of Teucros of Babylon and also by the fact that this adaptation in reality confiscates the Egyptian decans for the profit of the planets, which are the constant and nearly unique object of the attention of the real Mesopotamia.

499 Firmicus, II, 4; Paul. Alex., Περὶ ὧν ἐπέχουσι κατὰ δεκανὸν προσώπων ἐν τοῖς ἰβ' ζωδίοις οἱ ζ' ἀστέρες (C 2 v). Cf. *Cod. Parisin.*, no. 2419 Omont, Περὶ δεκάνου ἥτοι μορφῆς καὶ προσώπων τῶν ἰβ' ζωδίων καὶ περὶ τῶν ζ' ἀστέρων ἔχουσι αὐτοῖς ἀστέρων ἔχουσι αὐτοῖς ἀστέρων καὶ τῶν προσώπων αὐτῶν (fol. 8 r.). The decans again further on (fol. 38 v. and 47 r.). Demophilus (p. 200) gives only the beginning of the list; but that is enough, since the beginning determines all the rest. The planetary decans are shown upon the zodiac or planisphere named for Bianchini (*Hist. Acad. des Science*, year 1708, p. 110), actually in the Louvre Museum. It is a marble plaque upon which are line engravings, with the two Bears and the Dragon at the center. Next, there are four concentric circles first, an oriental zodiac; second and third, two identical Greek zodiacs, with the numbers of the Egyptian ὄρια (cf. above, p. 213, 4); fourth, the Egyptian decans. The Greek πρόσωπα in medallions are around the exterior circle. Our fragments come to about a third of the original, and the decans are complete for only two signs (♈ and ♉). Letronne (*Oeuvres choisies*, IIe serie, I, pp. 231-232) estimates that the monument is “more recent than the second century of our era.” In the circular zodiac of the Temple of the Sun in Palmyra (Robert Wood, *The Ruins of Palmyra, Otherwise Tadmor, in the Desert* (London Pickering, 1753) pl. XIX A). Cf. Letronne, *op. cit.*, 234; R. Lepsius, *op. cit.*, p. 80), there were images of planets coupled with the signs, that is, ♂ in ♈, ♀ in ♉, ☉ in ♊, ☿ in ♋, ♀ in ♌, ♀ in ♍, ♀ in ♎, ♀ in ♏, ♀ in ♐, ♀ in ♑, ♀ in ♒, ♀ in ♓, and ♀ in the middle of the whole. Lepsius concludes a little quickly that they are the decans. This might rather be a royal geniture for example the founder of the temple. We know that, from Augustus on, parvenus used astrology to legitimate themselves with the decrees of the stars. Septimius Severus, according to Dio Cassius (LXXVI, 11) engraved his chart on the ceiling of his praetorium on the Palatine. Another reason is that ♀ in ♉ or ♀ in ♋ would be a heresy. [The “Temple of the Sun” is now known to be the temple of Bel (Marduk), identified with Zeus. Wood's engraving is not accurate. More accurate reproductions do not support the interpretation of the zodiac as a horoscope. Cf. Malcolm A. R. Colledge, *The Art of Palmyra* (London Thames & Hudson; Boulder, CO Westview Press, 1976) and the photos there; also Kasimierz Michalowsky, *Palmyra*, photographs by Andrzej Dziewanowsky (NY Washington, London Praeger, 1980). LJN].

500 These are probably the “paranatellonta,” λειτουργοί, ὑπολειτουργοί, *munifices*, etc. (above, pp. 217, 225-226, and they have perhaps already been integrated into the zodiac by the “Egyptians,” who had a mania for the μονομορφία, “myriogenesis,” or even “moerogenesis.” See in Scaliger (*Notae in Manil.*, pp. 442-458) the *Monomoeriarum ascendentes in singulis signis cum significationibus et decanis sui aegyptiacis*, following the Arabs. We cannot attribute this complicated iconography to the Arabs, iconoclasts by religion. According to Abbé Guérin (*Astron. indienne*, pp. 81-83), the thirty-six decans or Hindu “drekans” are represented by the planets, three signs, but arranged in a different order (influenced by the triplicities). Scaliger (*op. cit.*, pp. 336-347) gives a division into decans in the Persian, Indian and “barbaric” sphere – his is the Egyptian constellations παρανατέλλοντες, but without the decan images – following ibn Ezra: *Sphaerarum Persicae Indicae et Barbaricae ortus ex libro Aben-Ezrae Iudaeorum doctissimi*. Haly (I, 5) counts three opinions on the decans that of the Greeks (the planetary decans), the most truthful and most often followed, that of the Indians, which follows the order of the triplicities, and that al-Kindi, which he does not explain.

501 The decans are always called “gods” by those who hold to the Egyptian tradition, notably Hephaestion of Thebes (v.g., ἐκ θεοῦ [=δεκάνου] ἐνεργείας, pp. 48, 27 Engelbr. – οἱ τοῦ θεοῦ [=δεκάνου] κλιμακτῆρες, pp. 51, 29, etc.) and Firmicus: *sunt autem decani ipsi magni numinis et potestatis – quia deum frequenter alius deus vincit – iste deorum numerus, id est, decanorum* (Firm., IV, 22, 2-3 Kroll). Celsus also knew them as such ἐξ καὶ τριάκοντα δαίμονες ἢ θεοὶ τινες αἰθέριοι (ap. Salmas., p. 841). The signs, in comparison, are inferior beings, just simple lodgings.

502 The size of the decans varies from 2° (*Uiu*) and 10° (*Futile*); there are empty spaces, from 1-9°. These are no longer δεκανοί or arcs of 10°. The idea of intercalating empty spaces came naturally to the astrologers, because they are in the real zodiac. However, it would do them too much honor to look for any kind of

relationship between their numbers – which are, moreover, in complete disarray in the manuscripts of Firmicus – and the empty spaces counted by Hipparchus (*In Eudoxi Phaen.*, III, 3).

504 The comparative lists put together by Brugsch (*Thesaurus*, I, pp. 137-184) show well there had never been any orthodoxy, not for names, not for order, not for iconography, in Egypt itself. Nor did the Greek astrologers find any in the dogma in Nechepso and Petosiris. *Istam rationem veteres involutam variis obscuritatibus reliquerunt, <ne> ad omnium notitiam verissima haec et immutabilis ratio perveniret. Sed et magnus ille Petosiris hanc partem leviter attigit, non quod eam nesciret (ad omnia enim secreta divinitatis accessit), sed cum docere nollet, ne immortalem operis sui relinqueret disciplinam* (Firmic., IV, 22, 20 Kroll cf. 22, 1). It stopped only with the mechanical distribution of the planetary πρόσωπα (above, p. 228). We have seen above (p. 221) that the pharaonic lists give 40 names, which are not listed throughout even in the same order (Brugsch, pp. 137-143, 155-158). The lists of the Greco-Roman epoch (Brugsch, pp. 147-150, 162-164) held no more than 36 names (8 of them new). However, the order has numerous variations, especially at the “suture point” of the cycle, where the list begins and ends, in the sign of Cancer. The astrologer-astronomers, tugged at by both systems, disagreed where to put the suture (the tropic). Some put it at the beginning, some in the middle, some at the end of the sign of Cancer, or even – looking at the precession of the equinoxes – going back to the end of Gemini (*Phui-hr* at the head of the lists L and M, of Denderah). The old leader, *Tpa-Kenmut*, disappeared, replaced by *Sit* or *Seta*, which the oldest list, that of Edfu (H), put at the head, in the middle of Cancer. The others (lists I and K) began with *Kenmut* or *Knum*, at the end of Cancer, and ended the list with *Sit*. Finally, as *Sit*, *Seta*, *Sita*, *Setu*, *Siθu* (the Tortoises) is the Crab itself (Brugsch, pp. 113, 164), *Sit* thus being at once the beginning in the middle of Cancer. But, if one makes the year begin with Cancer, the first place returns to *Sothis* or *Sati* (Sirius), which precedes the rising of Cancer and that the exigencies of the tripartite division made it enter this constellation. The rising of Sothis indicates equally well the end of one year and the beginning of the next, its decan being put at the head or tail of the list. We see the wavering of the ideas and the causes of the divergences. The lists of Hermes and of Firmicus represent complete anarchy, in order and in nomenclature. Papyrus XCVIII recto, (*Brit. Mus.*, pp. 127-130) poses an enigma, to which the author has hidden the key. He distinguishes or seems to distinguish, on the one hand, the thirty-six λαμπροὶ ὠροσκόποι, on the other, the δεκανοί, although these terms may be synonyms and the names of the ones like the others may be, in close order, derived from the Egyptian lists. As far as the state of the text permits, I conjecture that he wanted to call ὠροσκόποι the decans coinciding with the positions of his planets and “centers.” He wished to call δεκανοί the decans coinciding with the dodecatemoria of the said planets. This seems more probable to me than the hypothesis of C. W. Goodwin (ap. F. Chabas, *Mélanges égyptologiques*, IIe serie, pp. 294-306, Chalon-sur-Saône, 1864), who proposed to distinguish the ὠροσκόποι (as isolated stars) from the δεκανοί (as unlabeled isolated stars) neither rising signs nor decans. This document still needs to be interpreted. However, supposing that one could find some sort of method, the authority of an anonymous practitioner would not amount to much more, when it comes to treatises on form, than the sketches of decorators. Meanwhile, I have taken the trouble of placing, in the adjoining table, the names taken from papyrus XCVIII after their probable homophones. I indicate in parentheses the sign with which I think they are related. The figures or sculptured images have just as many variants. There are already notable differences in the two series of figures (L and M) given by Brugsch (pp. 151-152), most with the head of an ibis (Thoth) with various headdresses. There are not just variants, but incompatibilities, as one will notice if one compares these figures with those on the list of hermetic images described in the *Ἱερὰ Βιβλος* (*Anal. Sacr.*, V, 2, pp. 284-290 Pitra). For example, *Knum* (Ἐνουμῖς) from list M is an upright figure, wearing a pschent headdress; the hermetic Χνοῦμος, a lion-headed snake, such as one may see on an engraved stone, published by Saumaise (p. 566), with the name Χνουβίς. There are even greater reasons for seeing the figures of the Persian, Arab, etc., spheres as pure fantasies.

506 I have no desire to add to my count the speculations of R. Lepsius (*Einleit. zur Chronol.*, p. 121), who finds the seventy-four gods found in the tombs of the Theban kings in the sum of the 36 decans and the 38 *loci vacui*. These gods would be the demi-decans ἡ ἑξ καὶ τριάκοντα ἡ διπλασίας τούτων. Iamblichus, in *Myst.*,

VIII, 3) assigned 72 to the half-decades or pentads of the year (360 days), and one to the pentad of the epagomenal days, the 5 extra days at the end of the Egyptian year. There was one for the day which was intercalated every four years (?). It is rather strange that one would feel the need of a protective spirit for a day which did not exist, because the Egyptian calendar did not add a leap year. Egyptian scholars preferred having the first day of the “vague” year go through the 1461 years (1460 Julian years) of the Sothic cycle.

507 Cf. in the *Cod. Parisin.* 2419 the chapters entitled *Περὶ μοιρῶν ἀρρένων θηλειῶν* – *Περὶ μοιρῶν λαμπρῶν καὶ σκοτεινῶν καὶ σκιωδῶν καὶ κούφων τῶν ἰβ' ζωδίων* – *Περὶ εὐτυξῆν μοιρῶν* (fol. 71r - 72r), etc. The Arabs, beyond these shadowy, cloudy, and smoky, degrees, knew of green, yellow, moist, dry, indifferent, debilitated, etc., degrees, and saw holes or “pits” (*partes puteoles* – φρεατιαίαι, Salmas., *Praef.*, f 6) in the zodiac (cf. Junctinus, 24-27, who gives the table according to Albumasar and the *Frater Brittanus*).

508 Manil., IV, 411-499. He brings up the subject after explaining his system of decans, but without saying that there was any connection at all between the two questions. He uses a banal transition *nec satis est signis dominantia discere signa | Per denos numeros, et quae sint insita cuique, | Sed proprias partes ipsas spectare memento*.

509 *Ad iussa loquendum est | ... Ostendisse deum nimis est, dabit est sibimet Pondera* (437-440). For those who like such arcana, see the table of the *partes damnandae* of Manilius and the *Λαμπραὶ μοῖραι* of Hephaestion. Perhaps one may find here the origins of some superstitions concerning the good or bad luck attached to certain days of the month (a subject broached farther in Chapter 13). I have found it impossible to perceive any relationship whatever between the “brilliant degrees” and the stars cataloged by Ptolemy in books 8-9 of the *Almagest*. This is not astronomy but astrology.

510 The vogue for divisions by degrees (μονομοιρίαι) excited and guaranteed an etymology in the Stoic mode, connecting the *Μοῖραι* - Fates with the *μοῖραι* - degree. *Has [totius Zodiaci CCCLX particulas] Graeci moeras cognominarunt, eo videlicet quod deas fatales nuncupant Moeras et eae particulae nobis velut fata sunt* (Censorin., *De die nat.*, 8, 5).

511 In good Egyptian fashion, Hephaestion of Thebes not only wanted to know the state of the planetary πρόσωπα in the decans. He also confiscated to their profit the influence of the signs upon individual charts. In each sign, he only considered the action of the decans and made three sets of predictions for each sign, different for the first decan, the second decan, and the third. On decanic medicine and pharmacy, see above Chapters 10 and 15.

512 See [above, p. 210](#), the ὅρια of the Chaldaeans.

513 See above Chapter 12. [888](#)

514 The titles of the planets to oecodespotia are five in number, according to him. Four are titles of properties and the fifth is a relationship by position or aspect: ἐν τριγώνῳ τε καὶ οἴκῳ καὶ ὑψώματι καὶ ὅριοι καὶ φάσει ἢ συσχηματισμῷ (*Tetrab.*, III, 2). What is curious, is that the partisans of decans considered as planetary πρόσωπα, unconsolated that Ptolemy was not among their number, absolutely wanted φάσις ἢ συσχηματισμός here to signify πρόσωπον, that is, planetary decan. This is how the author of the *Isagoge* translated it (Porphyr., p. 103). Beyond this, Saumaise (*Praef.* fol. e-f) sought to demonstrate that Porphyry meant by πρόσωπον, not a decan, but a planet which is in direct motion, and as a consequence its face (φάσις = ὄψις = πρόσωπον) turns in the sense of its movement, as said by the other scholiast – φάσιν δὲ ἵνα ἀνατολικὸν εἴη ἢ προσθέτης (Anon., p. 91). This is what, Saumaise avows, Ptolemy must have meant here by φάσις, which signifies position relative to the Sun, this very special “phase” which he elsewhere calls ἰδιοπροσωπία ([below, p. 243](#)) and which is a rather complicated συσχηματισμός. It is this ἰδιοπροσωπία which Porphyry wanted to translate with πρόσωπον, a litigious term, to which Ptolemy refuses the meaning of “decan.”

515 Always, as a prudent man, under the form of an enumeration ἐπὶ μὲν φάρ τῆς τάξεως τῆς καθ' ἕκαστον δωδεκατημόριον παραλαμβάνεται τὰ τε ὑψώματα καὶ τὰ τρίγων καὶ οἱ οἴκοι (*Tetrab.*, I, 21). The scholiast is more explicit: προτιμηθήσεται γὰρ τὸ ὕψωμα εἴτα μετ' αὐτὸ τρίγωνον ταχίησεται, καὶ τρίτον ὁ οἶκος (Anon., p. 42) – τρίγωνον τιμιώτερον οὖν ἔχει τοῦ οἴου π'. - ὑψώμα προτετίμηται οἴκου καὶ τρίγωνου (p. 45). Also, in the chapter treating the *oecodespotia* of the geniture, he paid no attention to the order indicated by Ptolemy, and he enumerates the titles in an order (ἐν ἰδίοις ὅριοις, ἢ οἴκος, ἢ τριγώνοις, ἢ ὑψώμασι) which, if it is ascendant, reproduces the preceding (Anon., p. 94). [Ptolemy deals with dignity in the order house, triplicity, exaltation, term, (*Tetrabiblos*. Robbins. Loeb Classics. p. 79-107), which differs from “triplicity the first place and the ὅρια last” (B-L Chapter 7 [p. ?](#) above) or the different order two sentences later of exaltation, triplicity, house, which B-L states was Ptolemy's actual order of precedence. B-L may have inferred this order based on the allocation of rulers in Ptolemy's favoured terms (?), since B-L believed that Ptolemy made these terms up himself. (No actual evidence for this is offered). I cannot find an explicit statement of Ptolemy's preferred order.KM].

516 Hephaest., I, 13, p. 73 Engelbrecht.

517 Hephaest., I, 19, p. 75. Ἀνατολή becomes here the equivalent of φάσις which, one may say, had been probably substituted for πρόσωπον = decan.

518 Paul. Alex., B 3 v and C v.

519 Firmicus, II, 2, 1 Kroll (*in domibus*); II, 3, 2 (*in Altitudinibus*); II, 6, 1 (*in finibus*); II, 4, 2 (*in ipso decano*); II, 13, 1. It is a question, in this last passage, of the dodecatemoria as types of the κλήρος, which are dealt with in Chapter 9.

520 *Nos autem scire debemus ... omnes stellas melius decernere in altitudinibus suis quam in domiciliis suis* (Firmic., II, 3, 4 Kroll) – *gaudet autem stella principe in loco, in altitudine sua posita, secundo in posita* (Firmic., VIII, 32, p. 244 Pruckner).

521 See [above \(p. 208\)](#), the critiques which Ptolemy addressed to the system of the Egyptian ὄρια, and, in detail (ap. Anon., pp. 44-47), the subtle evasions which would permit him to avoid making objections just as strong about his own system. I cannot tell if, in making a hierarchy, Alcabitius succeeded in imposing an orthodox opinion upon the Arabs. According to him, a planet in its οἶκος had complete liberty and possessed five powers. In its ὑψωμα, it commanded the height and had four powers. It fell to three powers in its ὄρια, to two in its triplicity, and to one in its decan, where it was no more than a worker in his shop (Salmas., *Praef.*, fol. f3 and f6).

522 The word οἰκοδεσπότης must date to a period when the οἶκος was the only planetary fief known. The meaning was meant to cover all imagined properties for the group, and especially, the “master of the geniture” (οἰκοδεσπότης τῆς γενέσεως). Hephaestion wanted to limit the coverage to two: the master of the domicile and the master of the geniture. However, if one admitted a planet which had a title to some property into the οἰκοί of another, it would be its συνοικοδεσπότης (Hephaestion, I, 13, p. 73 Engelbrecht). The master of the chart itself was subdivided into a number of masters, οἰκοδεσποτία τῆς ψυχῆς, τοῦ σώματος, etc. Another vague expression is χαίρειν – *gaudere* or rejoice. The planets rejoiced and were favorable first in their domiciles (οἶκοι), and it is the first meaning of the word. This is clearly indicated in the fragment of Dorotheus of Sidon ἐν οἷς χαίρουσι τόποις οἱ ἀστέρες [now in Dorotheus Sidonius, *Carmen Astrologicum, Interpretationem Arabicum in lingvam Anglicam versam vna cum Dorothei fragmentis et Graecis et Latinis*, edidit D. Pingree (Leipzig B. G. Teubner, 1976) LJN], conserved by Hephaestion (I, 7, p. 72 Engelbrecht). However, the planets rejoiced, too, in all sorts of domains and for all sorts of reasons the hours of the night, the hours of the day, etc. They also rejoiced – the good ones – to find themselves, not only in their own domiciles, but in the domiciles of sympathetic planets, planets of the same sex, the same αἵρεσις, etc. (Anon., pp. 49-50). Firmicus calls this point to our attention (II, 20, 9 Kroll). They rejoice especially when exchanging domiciles (ἐναλλαγή) with their friends ([see below, p. 241, 1](#)). The more planets were present *in domiciliis suis* in a birth chart, the happier it is (Firmic., II, 21 Kroll). “Nature” wants her weight in gold!

523 These are the relationships which hold the titles of property of the planets. There was reciprocal hospitality in the case ἐναλλαγή or μεταλλαγή (*receptio*), [mutual reception] already seen [above \(p. 240, 1\)](#). The ἐναλλαγή (*immutatio*) figures at each instant in the prognostics, with diverse effects depending on whether the guests who thus change their domiciles are sympathetic or antipathetic to each other (Maneth., I, 302; IV, 182, 189, 202, 250; IV, 242, 367, 467, 505, 670; Firmic., II, 29, 19 Kroll; VII, 15 Pruckner). For example, the combination most favorable to marriage is ὅταν ἐναλλάξωσι καὶ ὁ μὲν ἥλιος τῇ σελήνῃ, ἡ δὲ σελήνη τῷ ἡλίῳ (Anon., p. 153; id., p. 155). Ptolemy mentions another exchange, i.e., ὁ τῆς ♀, τῷ μὲν τοῦ ἡ συνῶν, ἡ συσχηματιζόμενος, ἡ ἐνιλλαχῶς τοὺς τόπους (*Tetrab.*, III, 11, p. 263 Juncstinus). There is also a reception, in the broader sense, when the Moon and the Sun are lodged each in a sign of the opposite sex: “Ἦν δὲ τ’ἐναλλάξωσι Σεληναίῃ μὲν ἐπ’ἄρρεν, | Ἡέλιος δ’ἐπὶ θῆλυ πολυζώοισιν ἐπ’ἄστροις (Maneth., IV, 515-516). On the sort of antipathetic reception producing the ἀντανάλυσις, see [below, p. 255](#). There is a μετοχή or “participation” between συνοικοδεσποταί, when – by real presence or by aspect – two planets find themselves in one sign, which is the domicile of one and the exaltation of the other. The joy or sadness is that of a planet which, occupying the house of another, is not content that it is well-placed (Firmic., II, 20, 7-8 Kroll).

524 Λέγονται δὲ ἰδιοπρόσωποι μὲν ὅταν ἕκαστος αὐτῶν διασώζη πρὸς Θ ἢ καὶ Δ σχηματισμὸν ὄνπερ καὶ οἱ οἶκοι αὐτοῦ πρὸς τοὺς ἐκείνων οἶκους· οἷον ὁ τῆς ♀, λόγου ἔνεκεν, ὅταν ἐξάγωνον ποιῇ πρὸς τὰ φῶτα διάστασιν, ἀλλὰ πρὸς Θ μὲν ἐσπέριος ὢν, πρὸς δὲ Δ ἕως ἀκολουθῶς τοῖς ἐχ’ ἀρξῆς οἶκοις. *Tetrab.*, I, 22. Hephaestion (I, 19, p. 75 Engelbr.) repeats Ptolemy nearly word for word but Engelbrecht’s text demands correction. [“Vesperal” means “belonging to the evening.” “Matinal” refers to “morning”. LJN]. [A Matinal star or planet rises before the Sun in the morning, i.e it is earlier than the Sun in longitude, (at the time in question).

A Vesperal body sets after the Sun in the evening, it is later than the Sun in longitude, (also at the time in question).KM].

525 Remember (see [above, p. 174](#)) that *to the right* means *ahead* in the sense of daily motion; *to the left* = *behind*. [Matinal relative to the Moon would be earlier than the Moon in longitude, e.g. Venus at 10 Aries, when the Moon is 20 Aries KM].

526 It must be admitted that, in the text already cited in Ptolemy, ἡ καί, which is also found in the text of Hephaestion, is equivocal and may also be interpreted in this fashion. Ptolemy is never more obscure than when he denatures and disguises something which embarrasses him.

527 This sophistication, already suspected by Saumaise (who did not believe in it, *Praef.*, fol. f4) seems indubitable to me. For Ptolemy, ἰδιοπροσωπία is an aspect, a σχηματισμός, the positions which make souls strong and spirits lucid being, according to him, αἱ ἀνατολικαὶ ὠροσκοπίαι καὶ μάλιστα αἱ ἰδιοπροσωπίαι (*Tetrab.*, III, 14, p. 525 Juncinus). He took the word πρόσωπον and made it a synonym of *phase* πρόσωπα δέ (καλεῖ) ἀπηλιωτικά καὶ λυβικά τεταρτημόρια καὶ τὰς ἐσπερίους καὶ ἑώους φάσεις (Anon., p. 156). The sense is clearly forced and betrays a deliberate deformation.

528 *Tetrab.*, I, 22; Hephaest., I, 19, p. 75 Englebrecht.

529 Anon., p. 49.

530 Porphy., *Isag.*, p. 190. Cf. [above, p. 113, 1](#).

531 It was Proclus (in *Anal. Sacr.*, V, 2, p. 138 Pitra cf. p. 84) who recalls the θρόνοι of Plato, disposing them in a triangle. In this connection, he mentions Petosiris (ἀνὴρ παντοίαις τάξεσι θεῶν τε καὶ ἀγγέλων συναλισθείς) as having adapted the θρόνος or the κληρος Ἀνάγκης to astrology ([above](#), Chapter 9).

532 The Arabs, according to Juncinus (pp. 40-55), counted nearly 25 *habitudines planetarum ad invicem*!

533 Ptol., *Tetrab.*, I, 23 (συναφειῶν καὶ ἀπορροίῶν). Anon., p. 50; Hephaest., I, 14, p. 73 Englebrecht; Porphy., p. 187; Paul. Alex., H-H 3v. (Περὶ ἧς ποιεῖται συναφῆς ἡ Σελήνη πρὸς τοὺς πλανωμένους ἀστέρας) and, for the συναφή of the Moon with the Sun, S 3v. (Περὶ τοῦ τῆς Σελήνης συνδέσμου). Cf. *Cod. Parisin.* 2419, fol. 47 v. (Περὶ τῶν συναφῶν τῆς Σελήνης πρὸς τοὺς ἀστέρας μετὰ τὸ χωρισθῆναι αὐτὴν τὴν σύνοδον ἢ τὴν πανσέληνον καθ' ἕκαστον ζῶον [for ζῴδιον]). The latter was made to happen, beyond the consideration of the phases, those of the signs. Firmicus (IV, 2-16 Kroll) treats, in great detail, the prognostics drawn from the conjunction or separation after other conjunctions with other planets, one by one, in taking into account lunar phases and of the quality, day or night, of the birth. The same goes for Manetho (II, 441-480).

534 Porphy., *I.c.*

535 Hephaest., *I.c.* According to Paul of Alexandria (S 3v), the συνδεσμός τῆς Σελήνης is a dangerous period for its subjects. This includes the approach, [application] the contact, [conjunction] and the separation in relation to the Sun (or to a position which is in any aspect with the Sun) extending over an arc of 10°, 5° to the West, 5° to the East. [5° applying and 5° separating]. The Anonymous scholiast (p. 50) makes distinctions, for intervals, between the συναφή and the ἀπορροία, between the slower planets (βραδυκίνητοι) and the faster ones (ταχυκίνητοι) he also distinguishes between contacts and separations in longitude (κατὰ μῆκος) and in latitude (κατὰ πλάτος). One would like to cry for mercy. In the συναφαὶ ἀπορροϊκαὶ ([below, p. 247, 1](#)). The μεσεμβόλημα or line of demarcation between two signs forming a barricade blocking the approach (*ad nullum feratur [Luna]* and the separation (*a nullo defluit*. Firmic., IV, 25, 3 Kroll). Of course, contact does include the occultation when the planets encounter a node in their common orbits.

536 See [above, pp. 112 and 113, 1](#).

537 Ἡ δὲ συναφή διπτὴ λέγεται εἶναι· ἡ μὲν κατὰ σῶμα, ὅταν ἐν τῷ αὐτῷ ζωδίῳ, ἡ δὲ κατὰ σχῆμα κ.τ.λ. (Anon., p. 50).

538 Firmic., IV, 25 Kroll. I cannot see why the Greeks reserved the name of συναφαὶ ἀπορροϊκαὶ for this special genre (Firmic., *ibid.*).

539 Δίχα δὲ τοῦ περὶ ἀπορροϊκῆς καὶ συναφῆς λόγου οὐ πολυχρονιότης, οὐ πάθος, οὐ σῖνος, οὐ πλοῦτος, οὐ δυστυχία, οὐ δόξα, οὐ αδοξία, οὐκ ἀνδρεία, οὐκ ἀσθένεια, περὶ γενέσεως καθέστηκεν (Paul. Alex. H 2v.) Scholiast: Ἐπὶ πάντος γὰρ πράγματος καὶ ἐπὶ πάσης γενέσεως καὶ ἐπὶ καταρχῶν, ἀδύνατον, φησί, τί προειπεῖν, χωρὶς ἀπορροϊκῆς καὶ συναφῆς σεληνιακῆς (H 3 v). Without counting that, by virtue of the orientation by triplicities, of the encountered planets ([above, p. 199 sqq.](#)), one could say from which direction the wind emitted by the encounter itself would blow (*ibid.*).

540 Porphy., p. 188.

541 Porphyr., *ibid.*

542 Porphyr., p. 189.

543 On actinobolia, see Porphyr., p. 189; Maneth., IV, 165 sqq.; Hephaest., I, 16, p. 74 Engelbrecht.

544 The comet's tail floating among men (do not forget that the word πλανήτης [ἀστήρ], "wandering star," is in the masculine gender) was a sort of Parthian shot. So was, perhaps, the fact that Venus was called ὁ [ἀστήρ] τῆς Ἀφροδίτης, "the star of Aphrodite," also masculine gender. The theory of the ἀκτινοβολία is probably older than Ptolemy. The reference to Thrasyllus (below, p. 249) is not evidence to the contrary. It must date to a time when the Parthians or Persians haunted and terrified the Greco-Roman imagination.

545 There was a third hypothesis envisaged by Saumaise (*Praef.*, e 8). It was to distinguish between left and right in the bodies of the planets in presence each one *aeque ab altera conspicitur et radiis pulsatur, sed a sinistris partibus videtur, a dextris radiatur*.

546 Θράσυλλος δὲ τὴν ἀκτινοβολίαν ἀναίρεσιν λέγει, ἀναίρεσιν λέγει, ἀναιρεῖν τοὺς τοῖς τετραγώνους σχήμασιν ἐπιπαρόντας, while the diametrical shot does not have as much effect as ἐν τῷ διαστήματι τῆς ὠροσκοπούσης μοίρας, having the ascendant in the West (Porph., p. 189). This Thrasyllus (which one?) seemed to be a little out of date on the distinction between the ἀκτίς and the ὄψις or to be passably mixed up. In certain cases which he outlines, he says that it matters little if the ray goes left or right, (οὐ διοίσει φησὶ πότερον ἐκ δεξιῶν ἢ εὐωνύμων) that is, he confused the glance with the ray. Basically, it is a matter here of the ἀκτινοβολία of the anaeretic planets used as engines of death, without which it would have the same value as the energy of the diametrical shot— *ex recto certior ictus* (cf. above, p. 173, 3). We will see further on (Chapter 12) that, according to the systems, that it is the West (shooting down the diameter) or a planet (in square aspect) which destroys the work of life. Our scholia are collections of detached phrases, whose meaning it is necessary for us to guess.

547 On the καθυπερέρσεις and ἐπιδεκατεία, see Porphyr., p. 188, text altered and rectified after Hephaestion, I, 16; Anon., pp. 74 and 139. Anonymous formulates the rule summarily καθυπερτερεῖν λέγονται οἱ ἀστέρες ὅταν ἐλαττόνων μοιρῶν εἰσὶ that is, in going back up the ordinal series of the degrees of the zodiac. Cf. Maneth., VI, 279, 651. Hephaestion seems to have had little curiosity about the minute issues disdained by Ptolemy (save for the decans). He simplifies in saying that a planet which is regarded by another is also *pre-eminent* over it and levies tithes from it. Ὁ δὲ προηγούμενος τὸν ἐπόμενον ἐφορᾷ μὲν καὶ καθυπερτερεῖ φερόμενος ἐπ' αὐτόν, οὐκ ἀκτινοβαλεῖ δέ... ὁ δὲ καθυπετερώων καὶ ἐπιδεκατεύων ὁ αὐτός ἐστιν. However, if every planet extracting tithes is pre-eminent, the opposite is not true. The examples cited by Porphyry and Hephaestion themselves are founded upon the square aspect, and it is evidently a perfect square which is assumed in the case viewed by Manetho. It is one in which Saturn gets tithes from the Moon and Mars from Venus, Venus and Luna being τετράγωνοι (VI, 278). That is, all of them get tithes from one another in turn. The eclectic astrologers of the Renaissance added, in the case of a conjunction, two motives for καθυπερτέρησης, in favor of the planet which is closest to the apogee of its epicycle (following *Centiloq.*, p. 63) and the one which, in latitude, is closest to the zenith. I have noted only one allusion to the καθυπερτέρησης in the *Tetrabiblos* (IV, 6), and, in a general way, genethliology makes little use of all these relationships of etiquette. They are, on the contrary, the preferred resource for the techniques of καταρχαί (or elections), especially those which consisted in rooting all problems in conflict and all solutions in finding superiority (above, Chapter 13).

548 Ὅππότε' ἂν ... Πυρόεις διάμετρον ἀκτῖσιν Μήνην καθορᾷ (Maneth., VI, 29-30). In the nearly fifty passages where Manetho uses the expressions ἀκτῖσι βάλλειν, αἰθροβάλλειν, αἰγλοβαλεῖν, etc., there seems to be no trace of the distinction mentioned above. Cf. below, p. 252, 3.

549 On the περισχέσις, see Porph., pp. 187-188. Hephaest., I, 15.

550 This nicely suppresses the distinction between ἀκτίς and ὄψις. One may ask if it is a ray which Mars throws into Libra, and a glance – even in trine – which produces the same offensive effect in Leo.

551 In reality, the περισχέσις or ἐμπερισχέσις – if one marks the boundary of the blockade by real presence – is merely a variety of the συναφή and the ἀπόρροια with more hostile intent. The assailants are most often κατοικοί and in any case, hostile to the besieged planet. Manetho and Firmicus, who do not use the word, know the thing very well. Ἄρεος ἡδὲ Κρόνου μοῖσιν δέχονται Σελήνην (Maneth., I, 250). – Ἄρεος ἡδὲ Κρόνου μέσση Κύπρις οὐ καλοερὸς (I, 256). – Ἡνίκα δ' ἡ βασιλεία μέση συνέχοιτο Σελήνη | Ἄρεος ἡδὲ Κρόνου (V, 197), etc. The same situation is found in Firmicus *Si autem (Luna) a Saturno ad Martem feratur, i.e., si utrumque latus ejus Mars Saturnusque possederint* (Firmic., IV, 16, 2 Kroll). This is the ordinary case of ἀπόρροια following συναφή. An eclipse may also be ὑπὸ τῶν κατοικοῶν περισχεθεῖσα (Hephaest., I, 23, p. 93, 21 Engelbrecht).

552 On the μεσεμβόλησις, see Porphyry., p. 188.

553 On doryphoria, see Porphyry., pp. 190-191; Hephaest., I, 17, p. 74 Engelbrecht. Hephaestion reproduces, somewhat abridged, the text of Porphyry. Ptolemy does not define δορυφορία, but puts it into the predictions about parents (*Tetrab.*, III, 4) and especially the chapter on honors, on the τυχή ἀξίωματική (*ibid.*, IV, 2). See above Chapter 12.

554 The planets which “sees” fascinates and subordinates the one at which it looks and which shoots at it. Hephaestion, who went on to define ἀκτινοβολία (I, 16) and who called the doryphoria τὸ δεύτερον γένος τὸ κατὰ τὴν ἀκτινοβολίαν λεγόμενον, has the air of forgetting completely the distinction which he had gone on to make in such clear terms ἡ μὲν ὄψις εἰς τὸ ἔμπροσθεν φέρεται (in the sense of the proper movement of the planets), ἡ δὲ ἀκτίς εἰς τοῦπίσω. He writes that, in the first mode of *doryphoria*, the satellite planet “looks at” the side whence it “throws its rays,”-- κατοπτεῦη ἐπὶ τὴν προαφερομένην αὐτοῦ μοῖραν τὴν ἀκτῖνα βαλὼν. It is very human to aim when shooting; but it is not necessary to announce ahead of time that the planets look ahead and shoot behind. In the second mode of doryphoria, the satellites of the Sun shoot at him; but those of the Moon must look at it, and, nevertheless, one also says that they “actinobolize.” Further on, (third mode) he goes on to tell us that the Sun has for satellite the planet which rose before it, that is, which looks at it – δορυφορηθήσεται ὑπὸ τοῦ προαναφερομένου (Porph., p. 192). It is a complete mess. The coexistence of the two movements, daily or cosmic and planetary, has been completely mixed up, with the notions of *ahead* and *behind*, about which there could have contrary theories, confounded further by the scholiasts and the abbreviators.

555 There is no question of aspects here, and we speak of short distances, such as 7° for the Moon and 15° for the Sun. For the rest, Porphyry and Hephaestion repeat the same incoherent phrases, and it is necessary to renounce orienting oneself in this jumble. After having specified (second mode) that the satellites of the Sun throw their ray ahead (to the right) and admit (third mode) that the satellites may be ahead or behind (προηγούμενοι ἢ ἐπόμενοι), Porphyry adds κατὰ τοῦτο δὲ σχῆμα ὁ ἥλιος δορυφορηθήσεται ὑπὸ τοῦ προαναφερομένου, σελήνην δὲ ὑπὸ τοῦ ἐν ταῖς ζ' μοίραις ἐπαναφερομένου, Just because everything is the opposite of the second mode, and there is no σχῆμα? In turn, the Anonymous scholiast (p. 47) tells us that the *doryphoria* for Sun is not the same as for the Moon, and that, in the one case as in the other, the distance of the satellite must not be more than one sign ἐπὶ μὲν γὰρ τοῦ ἡλίου χρὴ εἶναι τὸν δορυφοροῦντα ἀστέρα μὴ πλεῖον ἑνὸς ζωδίου ἀπέχοντα ἐν τοῖς προεγουμένοις μέρεσιν, ἐπὶ δὲ σελήνης ἐν τοῖς ἐπομένοις. Anyone who thinks they can explain this may try.

556 Suet., *Caes.*, 20.

557 Right and left each have 180° on each side of the diameter.

558 See above, p. 242, 1, and 247, 1. Cf. Firmicus, II, 14, 2 Kroll.

559 On the κενοδρομία, see Porphyry., p. 189; Firmic., IV, 8 (*Luna si ad nullum feratur*); Maneth., II, 486 sqq. One also calls κενοδρομία the state of either luminary when it finds itself deprived of satellites (ἀδορυφόρητα). *Κενοδρομεῖν* οὐ λέγει[Πτολεμαῖος] τὸ μηδένα τῶν ἀστέρων σχηματίζεσθαι, ἀλλὰ τὸ ἐστερῆσθαι *δορυφορίας* (Anon., p. 98). These potentates did not like to move without an entourage. There is a case when the κενοδρομία of the Moon is relatively useful, that of premature births (above, Chapter 15) in the system of the καταρχα, *elections*. [“Nor on the point of a short delay (for the space of 30°)” seems meaningless as B-L has written it. By the 9th century Abu Ma’shar gives what is the current definition of a void of course Moon, which is one that will make no more aspects *before it enters the next sign*. Sign boundaries do not seem to have been explicitly mentioned as part of the definition of void of course early on. Dorotheus and Antiochus mention only lack of aspects. It is easier to infer the relevance of sign boundary in Hermes but it is not referred to. Neither Ptolemy nor Valens seem to use void of course at all. Firmicus contradicts the others – and possibly himself - he seems to see void as the Moon either unaspected or in an otherwise empty sign but still able to have aspects.

Early practice made sign and house the same. Aspects were considered valid between whole signs, therefore immediately the Moon changed sign a previously unaspected Moon could form new aspects. This means void of course might be very brief. Before orbs were introduced the boundary defined the aspects, crossing it changed them. It would not have been necessary to mention that void of course continued until the Moon reached the end of the sign until house systems had evolved that differed from signs or aspects were differently defined. B-L offers us the elements of “short delay (for the space of 30°)” without a reference source, suggesting he understood the rule, but declined to involve himself in proving whether it was always understood or evolved later. KM].

560 Porphyry., p. 187. On the precision required, cf. above, pp. 176, 3 and 248.

561 The comparison was invented, we are told, by Nigidius, later surnamed *Figulus*. Nigidius, *dum rotam figuli quanta vi potuit intorisset, currente illa bis numero de atramento tamquam uno ejus loco summa celeritate percussit; deinde inventa sunt signa quae fixerat, desistente motu, non parvo intervallo in rotae illius extremitate distantia. Sic, inquit, in tanta rapacitate caeli, etiamsi alter post alterum tanta celeritate nascatur quanta rotam bis ipse percussi, in caeli spatio plurimum est*, etc. (Augustin., *Civ. Dei*, V, 3). Nigidius was a bit naive in trying this experiment, which was possible. He could have placed his second ink-mark upon the first, if the wheel made one complete, exact, turn between the two contacts. To reinforce the argument, the astrologers emphasize the enormous size of a single degree measured upon the celestial vault, a size Firmicus evaluated at 21,400 stades (VIII, 4 Pr.).

562 Or, by abbreviation, γένεσις – *genitura*, but not “horoscope.” [Called, however, horoscope in modern English. LJN].

563 Augustin., *Civ. Dei*, V, 2. The Latin authors who wished to translate the Greek term rather than transliterate it, used *ascendans* as an equivalent, which indicates the point of emergence better. [Modern English terminology is confusing on this point. The “theme of geniture” is commonly called the “horoscope” while the *ascendens* or ὠροσκόπος is called the “ascendant.” LJN].

564 “Theme of geniture” is a term which I judge convenient and which I adopt upon my own responsibility. The authors content themselves with names for its smaller segments, such as τόποι κλήροι. [I have changed “theme of geniture” to “birth chart” or “chart,” or to “horoscope,” depending on context. LJN].

565 It is of the change in the character of the signs when combined with the compartments or “places” of the circle of geniture that Manilius said *Omne quidem signum sub qualicunque figura | Partibus inficitur mundi; locus imperat astris | Et dotas noxamque facit*, etc. (Manil., II, 856 sqq.). *Vincit enim positura genus ... et praetereuntia cogit | Esse sui moris* (*ibid.*, 861, sqq.). [“Places” are called “houses” in English terminology. LJN].

566 The author of the *Hermippus* thought that it was to make up for the small number of the planets that the astrologers assimilated two or three stars per sign to them, as having the same temperament (τῇ τῶν ἐπὶ τὰ ποιότητι κέκονται; Hermipp., II, 7, p. 44 Kroll). We have seen (above, p. 132, 1; 181, 2) that the same thing was true of the extra-zodiacal stars.

567 More or less poetic synonyms of *Ascendant* include ὥρα by itself; ὥρα (or μοῖρα) ὠρονόμος, ὠρονομοῦσα, βιοτοσκόπος, τεκνοσκόπος, μεροποσπόρος, γονίμη, πανεπισκόπος, etc., or even ὠρονόμος ὠροσκόπος, to distinguish it from ὠροσκόπος = δεκανός (cf. above, p. 222, 4).

568 We may say this much without anticipating the discussion farther on about the Ascendant sign properly so-called, and the sign harboring the Sun or the *chronocrator* of the month. [The rising sign and the sun-sign in modern English. LJN].

569 The *minutes* (λεπτά) are noted in our three Egyptian papyri (*Brit. Mus.*, XCVIII-CX-CXXX). One even went (or pretended to go) to *seconds* (δευτέρα) and further (τῶν λεπτῶν λεπτῶν λεπτά καὶ λεπτότερα *Philosophum.*, VI, 2, p. 279 Cruice). The author of papyrus CXXX pretends to estimate impossible fractions of the degree (μέρος μοῖρης δισμυραξίλεχακοοσιτόν. II. 114).

570 As the initial point, the Ascendant is πρώτη ἀρχή πάντων καὶ ρίζα (Anon., p. 90) ἀρχή καὶ οἶαχ τῶν ἄλλων (*ibid.*, p. 99). The word κέτρον, “sharp point,” is the ordinary technical term, and it has an adjective ἐπίκεντρος, “placed upon a center.” At the risk of creating an equivocal term (which also exists in Greek), we will translate κέντρον as “center,” since synonymous term commonly used by the Latin authors, *anguli*, is yet more equivocal. *Anguli* is the translation of γωνία, used – rarely – by Ptolemy αὐτός δὲ [Πτολεμαῖος] καὶ γωνίας ἐκάλεσεν εἰκότως πᾶσα γὰρ γραμμή εἰς κύκλον ἐμπύπτουσα καὶ τέμνουσα αὐτὸν γωνίας ἀποτελεῖ (Anon., p. 26). It is because the “centers” are always in square aspect that *tetragonum et centron vocatur* (Censorin., *Fragm.*, III, 8, p. 59 Hultsch cf. p. 273, 3).

571 Do not confuse the Midheaven with the *zenith* (κορυφή), which is not the intersection of the zodiac and the meridian, but the vertical of each place, as is its antithesis, the *nadir*. Both zenith and nadir are words of Arabic origin.

572 Geminus (*Isag.*, 5) explained that the meridian did not divide the square containing the equinoxes and the solstices into equal parts, save at the moment when the equinoxes coincided with the line of the horizon. At every other position, the zodiac is divided into four unequal quadrants, the difference ranging from simple to double (quadrants between 60° and 120°). [Simple here is not written in error for single. The two words are less easy to confuse in French or Greek. KM]. Demophilus (p. 198) says the same, and he attaches to these differences (p. 197) the classification of the signs into *προστάσσοντα* (which enlarged the Eastern quadrant)

and ὑπακούοντα (which increased the size of the Western quadrant). Cf. above, p. 163, 2. In the Stobart papyrus (*Brit. Mus.* XCVIII recto), the work of an Egyptian scholar, the Ascendant is at 25° ♄ (Il. 42) and Midheaven at 10°, 31' ♑ (Il. 47). The eastern quadrant covers 104°, 30'. In the chart of Anubion (*Notices et Extr.*, XVIII, 2, no. 19 = *Brit. Mus.*, CX, Il. 25-30) the Ascendant was at 25° ♄, and Midheaven was at 8° ♒. The eastern quadrant enclosed 77°. In papyrus CXXX *Brit. Mus.*, the Ascendant is at 18° ♒, and the Midheaven is “on the back of the Lion,” i.e., in the space between 78° and 108° (Il. 165-175). Manetho, in his own birth chart (VI, 738-750), puts Midheaven in the third sign, i.e., at least 90° from the Ascendant. In the chart of Proclus (*Marin.*, *Vita Procl.*, 35), the distance from the Ascendant, at 8°, 19' ♑, to Midheaven at 4°, 42' ♒, is 93° 37' (the latitude of Byzantium, modern Constantinople or Istanbul). The Anonymous scholiast (p. 179) said that there must be three to five signs between the Ascendant and Midheaven. Demophilus (p. 197) posed the case where the eastern quadrant held 72°. Examples abound. Those above suffice to show the constant preoccupation, if not the mathematical virtuosity, of our authors.

573 P. Epping (*Astronomisches aus Babylon*, p. 46) believed that the unequal ascension of the degrees of the ecliptic “was certainly known to the Chaldaeans.” However, he is only concerned with the Mesopotamians of the second century BCE and does not make the affirmation without reserve even for them.

574 See above, p. 107, 1.

575 *Notices et Extr.*, p. 65; Tannery, pp. 290-291. Geminus (*Isag.*, 5), jeers at the Egyptians. They are stubborn in believing (according to him) that their vague year always made the Feast of Isis fall at the same epoch of the solar year, “a degree of ignorance which cannot be surpassed” (ὑπερβολὴν οὐκ ἀπολείρουσιν ἀγνοίας).

576 According to Vettius Valens (ap. Riess, *Necheps. fragm.*, p. 334), the king Nechepso τοῦ πρώτου κλίματος μόνος τὰς ἀναφοράς ἐδήλωσεν. These ἀναφοραὶ of the first clime (see the table below, p. 269) are those calculated by Hypsicles. The author of papyrus *Brit. Mus.*, no. XCVIII, took pains to say that he had determined the Ascendant δι’ ὅλην τὴν ἀναλογίαν ἐκ τοῦ ἀναφορικοῦ πρὸς κλειψύδα (Il. 40-41).

577 Firmic., II, 15 (*De cardinibus geniturarum*) and 19 (*De duodecim locorum potestatibus*). Nevertheless, he knew (or rather, he had read some place) that the Midheaven was sometimes found in the eleventh place, that is, less than 60° from the Ascendant. *In hoc medium caelum frequenter partiliter invenitur* (Il, 19, 12 Kroll). However, the ideas did not restrict his spirit.

578 *Debemus ostendere quoto anno unumquodque signum in genituris oriatur*. There follows a list of numbers applied to years (Firmic., II, 11 Kroll). Pruckner (II, 13) has corrected this table, which teams with errors, after his own fashion. The climes are, in order: Alexandria, Babylon, Rhodes, Hellespont, Athens, Ancona, Rome. The ascensions are supposed to be equal *in climate primo atque in climate secundo*. In fact, there are no “chronocratoria” to say that, when calculating the length of a life, the degrees of ascension count for so many years. He has confused these two ideas and has made what I call, at risk of offending Saumaise at the same time (below, p. 266, 1 and Chapter 13), a non-sense. [*Climes*, from κλίμα, κλίματα, are zones of latitude. There were several rival systems, but the one mentioned here divides the οἰκουμένη (roughly, the north temperate zone) into seven parallel zones. LJN].

579 See above, p. 129, 1, 185-187, 197, 1.

580 *Quae res et a plurimis incognita et a paucis leviter videtur esse tractata, nam et istum tractatum Petosiris (ut mihi videtur) invido voluit livore celare. In omnibus enim genituris nonagesima pars sagaci debet inquisitione perquiri, ex ea namque exitus vitae, mors, infortunia, pericula, felicitates et tota substantia geniturae colligitur* (Firmic., VIII, 1 Pruckner). Behold the grand secret of the ἐννενηκονταμέρος (below, Chapter 12).

581 Today, the astronomers have abandoned longitudes measured along the ecliptic and latitudes parallel to the ecliptic for other co-ordinates; right ascension (*AR* - *ascensio recta*) measured along the equator, usually in units of time, and declination, south or north of the equator. [Right ascension and declination are the equivalents of earthly longitude and latitude. LJN].

582 See K. Manitius, *Des Hypsikles Ἀναφορικός nach Ueberlieferung und Inhalt kritisch behandelt*. Progr. Dresden, 1888. Cf. P. Tannery, *Recherches*, p. 40. [Also <http://www-history.mcs.st-and.ac.uk/Biographies/Hypsicles.html>, which dates him to around 190 BCE. LJN.] One may reproach Hypsikles, first, for having adopted a progression of a constant rate and, second, for not having applied the progression to the interior of the signs, degree by degree, but solely sign by sign. One curious detail is that the name of Hypsicles was travestied by the Arabs (and perhaps by others before them) as *Esculeus* = *Asclepius*, a name belonging to the Hermetic tradition (Manit., op. cit., p. xii). For the rest,

Hypsicles, as an Alexandrian, was an “Egyptian.” It would not have been hard to confuse him with “Petosiris.” This was not done, as Manitius thought, to hide the fact that Hypsicles worked for astrologers and not astronomers.

583 Pappus in *Coll. Mathem.*, II, p. 160.

584 Demophil. ap. Porphyry., pp. 194-197.

585 Paul of Alexandria cites the astrologers who use *τὰς κατὰ Πτολεμαῖον ἀναφοράς* – καὶ Ἀπολλιναρίου παρακελευμένου ἐν τῷ περὶ ἀφαιτοῦ καὶ οἰκοδεσποτοῦ καὶ ἀναιρετοῦ ταύταις κεχρῆσθαι – καὶ Ἀπολλωνίου τοῦ Λαοδικέως ἐν τοῖς ἰδίοις πέντε βιβλίοις διαβάλλοντος *τούς Αἴγυπτίους*, ὡς πολλὴ ἀπάτη αὐτοῖς γεγενῆσθαι ἐν ταῖς τῶν ζωδίων ἀναφοραῖς (Paul. Alex., *Praef.*). Some among Paul of Alexandria's contemporaries did not understand him. We have seen (above, p. 54) that Macrobius had not a clue of the difficulty, nor did Servius. Servius knew that the signs of the zodiac did not rise at the same moments in the different climes. He taught that the reason for this was that the Sun could not enter into each sign at the same time everywhere (Serv., *Georg.*, I, 205). He confused the *ortus* above the horizon, or heliacal rising, with the *ingressus in signum*, entry into a sign. The latter was completely independent of the terrestrial horizon and had nothing to do with the ἀναφοραί. Martianus Capella gave a list of ἀναφοραί (VIII, 844-845), but only one, which he doubtless believed to be universal, exact at all latitudes.

586 See Gemin., *Isag.*, 5; Cleomed., *Cycl. Theor.*, I, 6, p. 24 Schmidt; Martian. Capp., VIII, 844; Τὰ βραδυανάφορα τῶν ζωδίων ταχυκατάφορα γίνεται, καὶ τὸ ἀνάπαλιν, τὰ βραδυκατάφορα ὀλιγοανάφορα (Anon., p. 114).

587 Above, p. 151, 3. Geminus (*loc. cit.*) refutes the “ancients” who did not know that Pisces rose as fast as Aries or that Libra set as slowly as Virgo.

588 In the four figures, the projection of the celestial sphere is made upon the meridian, close to the latitude of Rhodes (arc HN = 36° North). The plane of the equator, always perpendicular to the plane of the meridian, is represented throughout by the line EE. Likewise, the plane of the zodiac, in two initial positions where 0° Aries (the vernal point) is level with the horizon HH, on the east side (I) and the west side (III). If one turns the sphere, the divisions of the zodiac describe circles parallel to the equator (dotted lines) and the plane of the zodiac is projected as an ellipse. When, moving from position I, the movement of the sphere causes the 30° of Aries to rise above the horizon, the arc of the equator which rises in the same length of time is represented in II by the line which goes from the center of the figure at 0° Aries. It is enough to fold back the plane of the equator upon that of the meridian to see that this arc is equal to that of arc a-b (about 20°). In following the same direction in moving to position III, one ascertains that the arc of the equator descending below the horizon in the same length of time as the 30° of Aries equivalent to the arc a'-b' (IV), which must be equal to 60° – 20° (below, p. 267, 2). The plane of the zodiac not being perpendicular to that of the meridian so that when the equinoctial points are at the horizon, it results from this that the quadrants of the zodiac are unequal in every other position (above, p. 259; 261, 4.)

589 They used movable spheres to replace or verify the calculations. Propertius (V, 1, 76) mocked a *vates* | *Nescius aerata signa movere pila*. Strabo (II, 5, 10, p. 116) speaks of terrestrial spheres ten feet in diameter. Martianus Cappella (VIII, 815) of the *sphaera aenea quae κρικωρή dicitur*, where the axis was made to turn in holes. We know the famous sphere of Archimedes (Cic., *Rep.*, I, 14, 22; *Nat. Deor.*, II, 35; *Tuscul.*, I, 25; Ovid., *Fast.*, VI, 277; Lactant., *Inst. Div.*, II, 5). One may also cite Posidonius (Cic., *N. D.*, II, 34), Eudoxus (Cic., *Rep.*, I, 14, 22), Anaximander (*Diog. Laert.*, II, 2) and even Thales (Cic., *I. c.*). See the curious small work Λεοντίου μηχανικοῦ περὶ παρασκευῆς Ἀρατείας σφαίρας (ap. Arat., ed. Buhle, I, pp. 257-266). In the *Dionysiaca* of Nonnus, the elderly Astraeos, to give a consultation to Demeter, was made to carry “a turning sphere, image of the world” (σφαῖραν ἐλισσομένην, τύπον αἰθέρος, εἰκόνα κόσμου. VI, 65). [For a useful account of how such celestial globes worked, see Savage-Smith, Emilie, *Islamicate Celestial Globes, Their History, Construction, and Use* (Washington, DC, 1985; Books on Demand, ND). LJJ].

590 On the arrangement of the climes, see below, Chapter 11.

591 I do not want to enter here into the debate between Scaliger (*Not. in Manil.*, pp. 215-235) and Saumaise (*De ann. clim.*, pp. 666-714) about the calculations of Manilius. It would be an *Excursus* as long as it would be useless. The opinion of Saumaise is that *miserrime hallucinatus est Scaliger ad Manilium* (p. 686). As for himself, mixing together Manilius, Valens, Firmicus, and confusing (out of respect for Firmicus) the *degrees* and the *years* that the degrees represent, he is a conciliator to the bitter end and obscures things at pleasure (see pp. 692-697, etc.). The object of the quarrel, the text of Manilius, has itself, since their day, been corrected and confused in such a way that it is hardly comparable in the editions of Scaliger and of Fr. Jacob [See now the edition of A. E. Houseman, *M. Manilii Astronomicon*, 4 vols., (London 1903-1930) LJJ]. Manilius began by

explaining (as a thing true in all places) that, at the Solstice in Capricorn, the day $9\frac{1}{2}$ equinoctial hours (*vernales horas*) and the night, $14\frac{1}{2}$ hours. He taught then *quot stadiis et quanto tempore surgant | Sidera* (III, 275-300 Jacob), matching 40 stades or $1\frac{1}{3}$ hours of Aries, with progression of 8 stades per sign, a progression increasing as far as Libra, decreasing after. Since the sphere turned with an angular speed of 15° per hour, it is evident that $1\frac{1}{3}$ hours represents 20° , equivalent to 40 stades. (The celestial stade of Manilius was $\frac{1}{2}^\circ$ or 2 minutes of time.) Let us go on to the explanation of the general method, applicable to the calculation of the hours *quot surgant in quoque loco cedantque per horas* (III, 385-417 Jacob). It was this same method which he then repeats (III, 418-442) for calculating the tides, without announcing (unless it was done in a transition now lost, a lacuna between III, 417 and 418?) that it is the same. Moreover, we run into an enigma, poorly resolved until now, which forced Scaliger into adventurous expedients. Since the stade was $\frac{1}{2}^\circ$, there must have been seven hundred twenty stades (360×2) in an entire circle. Now, Scaliger wrote *quae cum tercentum numeris vicinaque constant* ($300 + 20 = 320$) and he took care to explain, nevertheless, this strange number. Jacob corrected *quae cum ter centum et quater vicinaque constant* (III, 419), with the pretense of translating $300 + 4(00) + 20 = 720$. Th. Breiter (*Zu Manilius in Jahrb. f. kl. Philol.*, 1889, p. 701) returns to the reading of Scaliger, but by translating *ter centum vicinaque* as $3 \times (100 + 20) = 360$. One thus has 360 stades, not for an entire circle, but for a semicircle. It must be admitted that one makes, mentally, the sum of the two semicircles and that it is from this sum which, in the following verse, Manilius deduces the length of the shortest nights *Detrahitur summae tota pars*, etc. (III, 420 Jacob). This is hardly believable; but it the only way to respect – or at least solicit respect for – the text and of conserving the value of the stade given above.

592 Concerning the determination of the Ascendant by the ἀναφοραὶ *Quod nisi subtili visum ratione tenetur*, | *Fundamenta ruunt artis, nec consonat ordo* (III, 206-207 Jacob). Then he repeats (III, 483-502) the vulgar method which he had, a little earlier (III, 218-246), and with good reason, declared inexact, which he believed exact only for the equatorial zone (III, 304-308), an error reproduced by Lucan (*Phars.*, IX, 533 sqq.).

593 Look at the calculation recommended twice by Manilius. Take the length of the day of the solstice (*sub Cancro*) in equinoctial hours or in stades. Divide this number by six and attribute the quotient to Leo as ἀναφορὰ, that is, to the sign following Cancer. In the same way, take the complementary period of time, that is, that of the night of the same solstice or the day of the winter solstice. Divide this by six and attribute the quotient to Aquarius, that is, to the sign following Capricorn. (Instead of Taurus, Manilius says ἰσανάφορος of Aquarius, which amounts to the same thing.) These two reference points thus fixed, it remained to find the ratio (αὐξομείωσις – προσθαφαίρεσις) of the arithmetic progression. This was obtained by taking the difference of the two quotients mentioned above and dividing this difference by three. The ratio once found, one subtracts it from the side of Taurus next to Aries and adds it to the neighboring side of Gemini. In operating in the same way upon Leo, one obtains by subtraction the side of Cancer, by addition that of Virgo. The progression, increasing from Aries to Virgo, reproduced, in inverse order, that from Libra to Pisces. The method of Valens, analyzed by Saumaise (p. 680 sqq.), amounts to the same thing. One calculates directly the anaphoric degrees by supposing that the day of the summer solstice equivalent to an arc of 210° (= fourteen hours) for the first clime (Alexandria). This quantity increases by 4° (= 16 minutes) for each of the six following climes. One $\frac{1}{6}$ of 210° (or 35°) gives the ἀναφορὰ of Leo. The anaphora of the opposite sign (Aquarius) is the complement of 35° subtracted from 60° , i.e., 25° , since the sum of the ἀναφορὰ of two opposite signs is always equal to 60° . The ratio of the progression is $\frac{1}{3}$ of the difference of these two ascensions, which is $(35 - 25) / 3 = 3^\circ, 20'$. This number, which increases from clime to clime, is as much as 6° in the seventh clime. I wonder if this would not be the number of 6° which one encounters mislaid in the jumbled scholia of Demophilus and is given to as the αὐξομείωσις, not of the signs, but of the quadrants τὸ προστασσόντων ἡμικύκλιον, τὸ ἀπὸ Ὠ μέχρι Πη ὠροσκοποῦν, αἰὶ τὰ ἀφελιωτικὰ τεταρτημόρια μείζονα ποιεῖ πάντα τῶν ζ' μοιρῶν, τὰ δὲ λιβυκὰ ἐλάττονα (Demoph. ap. Porphyr., p. 297). I do not know with what these six degrees rhyme, the quadrants give much larger variations in amplitude (cf. above, p. 259, 2). However, to explain these methods does not help one to comprehend their spirit. See how I represent the chain of reasoning. It is agreed that the signs joined by parallel lines perpendicular to the line of the equinoxes have the same ascension times (ἰσανάφορα, see above, Fig. 17, p. 161) and that the length of the ascensions increases from the vernal point to the autumnal equinox. The signs are divided by the line of the solstices into two groups of six, the signs of short ascension (ὀλιγοανάφορα) and the signs of long ascension (βραδυανάφορα). On the other hand, we know that the difference between the two groups increases with latitude, which is expressed by the difference between the longest day and the shortest night. We then attribute, altogether, the length of the longest day to the group of six βραδυανάφορα, and to the group of the six others, the complementary length. If the distribution is to be equal, each of these two quantities must be divided by six. This $\frac{1}{6}$, the mean quotient, is attributed to the pair of signs which occupy, in each group, the mean position (♊ and ♋ on one side, ♎ and ♏ on the other). Since these two groups are *three* signs apart, one obtains the reason for the supposedly regular progression (ὁμαλή) taking the *third* of the difference between the two mean ἀναφοραὶ. In short, let j be the solstitial day, and n be the

complementary night, and one arrives at the formulae ἀναφοραὶ of $\alpha - \mathbb{M} = j/6$; ἀναφοραὶ of $\vartheta - \approx = (j/6 - n/6)$: 3. The conversion of time into degrees, or vice versa, takes place at the rate of 4 minutes of time per degree (μοῖρα χρονική).

594 The first column reproduces the numbers of Hypsicles. The Scholiast of Ptolemy (Anon., p. 41) censures the regular progression (ὁμαλὴν παραύξησιν) and points out that the Egyptian figures are inexact. However, as with the ὁρία, it was the “Egyptian” figures which prevailed. [Tables of Ascensions and Descents, p. 267.]

595 I leave to the mathematicians the trouble of untangling the methods recommended by the astrologers for determining the “centers.” They repeat constantly that it is necessary to determine the Ascendant from the ascensions proper to the clime. The Midheaven must be calculated by right ascension (Anon., pp. 66, 91, 92, 101, 120, 122, 168, 169, 170, 180, etc.). This means, I suppose, that since the lengths of the ἀναφορά and the καταφορά are inverse, the movement of the signs in the middle part (Midheaven and Lower Midheaven) have a medium speed, that of the equatorial circle. The difference between the equator and the zodiac was considered insignificant when measured according to *sphaera recta*, the right sphere (where the plane of the equator is perpendicular to the horizon). Since the state of the Greek texts do not allow us to follow the calculations, see the rule formulated by Haly. To get the rising or descent of the twelve “houses” or celestial sectors, take the difference between the rising in the East and the descent in the West, and divide the difference by 6. If it is a question of the ὀλιγοανάφορα signs, add 1/6 to the 12th through the 7th “houses” inclusively, and subtract 1/6 from the 8th through 1st “houses.” Do the opposite with the βραδυανάφορα (Albohazen Haly, *De jud. astr.*, IV, 7). Ταχυ– or Ὀλιγο– in compounds are synonyms (cf. above, p. 264, 1).

596 Demoph., p. 197.

597 Τὸ περὶ τὸν ὠροσκόπον δωδεκατημόριον, ἀπὸ πέντε μοιρῶν τῶν προαναφερουμένων αὐτοῦ ὀρίζοντος μέχρι τῶν λοιπῶν καὶ ἐπαναφερουμένων εἴκοσι πέντε (*Tetrab.*, II, 12, pp. 318-319 Junctinus. The same for Demophilus (p. 202). The three opinions find us back in the text of the Anonymous scholiast (pp. 109-110), provided that it is rectified and complete. The place ἐπίκεντρος – it contains the Ascendant – has, he says, degrees above and below the horizon. It is necessary to add to the 5° above the horizon (προανενεχθείσας) to the 25° below (ἐκ τῶν ἐπαναφορῶν). In this case, Ptolemy οὐχ ἔρεται τῇ τῶν Αἰγυπτίων δόξῃ, ὅτι χρή ἰε' μοίρας καὶ προανενεχθείσας (καὶ) ἐπαναφερομένας λαβεῖν. Here there is lacuna in the text where it was evidently a question of those who put the Ascendant in an opposite way, the horoscopic place being completely above the horizon, in the position of the twelfth place. The former Ptolemy no longer follows: οὐκέτι ἐπόμενος αὐτοῖς φασίν· ἐκ τούτων γὰρ χρή ἀκολουθῶν [αὐ]τοῦς ἐν τῷ ὑπὲρ γῆν ἡμισφαίρῳ λαβεῖν τὰς λ' μοίρας τοῦ Κακοδαίμονος, κ.τ.λ. In reality, Ptolemy is anxious to scratch what is below the earth (τό τε γὰρ ὑπὸ γῆν πᾶν εἰκότως ἀθετητέον *Tetrab.*, III, 12), and yet not place the Ascendant in a μεσεμβόλημα – a superstition which he shared, or which he respected without admitting it. Others spoke of putting 10°, instead of 5°, above the horizon. Demophilus (p. 197) explains to both sides, that, in view of the variable extent of the quadrants, there need be no fixed number of degrees, but a fixed proportion. It was 1/6 according to Ptolemy. If then, for example, the quadrant Ascendant to Midheaven is reduced to 72°, each place need be no more than 24°, of which 1/6 is 4°. The horoscopic place begins then at 4° above the horizon. In fact, the practitioners did not pay attention to these scruples. Another question arises, posed by those who wished to combine the houses and signs. If the horoscopic house overlaps, as it nearly always does, parts of two neighboring signs, which is the Rising Sign? One decides that the sign which has the greater part of its degrees above the horizon should be excluded to the profit of the following sign (ἔσται τὸ ἐπαναφερόμενο ζῳδίων χρηματίζν τῷ ὠροσκόπῳ, Demoph., p. 193).

598 See in Firmicus (V, 1-2, p. 116-124 Pruckner) the *Simplicia cardinum decreta sine alicujus planetae testimonio* (coinciding with only the signs) and the *Horoscopi decreta cum omnium planetarum societate*. Generally, the classic astrologers did not bother with the planets. See the third book of Manetho (v. 132-225), the planets placed upon the opposite centers.

599 Εἰρήκαμεν πολλάκις ὅτι τὰ κέντρα δύνανται τοῖς ἐν αὐτοῖς ἐπιβεβήκασιν παρέχουσι καὶ ὅτι τὰ ἰσχυρότερα τῶν κέντρων τὸ μεσουράνημα ἐστὶ καὶ ὁ ὠροσκόπος (Anon., p. 102).

600 Ptolemy classed, from the point of view of the κυρία ζωῆς (he would have done better to say βίου), the centers in the following order; first, the Midheaven; second, the Ascendant; third, the Descendant; fourth, the Lower Midheaven, which did not count for this purpose (*Tetrab.*, III, 12). This did not impede the recognition that, from the logical point of view, the Ascendant is πρῶτον καὶ κυριώτατον (*Tetrab.*, III, 2). The opinion of Dorotheus of Sidon in Anon., p. 110. Manilius held for the Midheaven. *Primus erit summi qui regnat culmine caeli* (II, 810). The Midheaven is the head of the universe. Firmicus hesitated, *quia frequenter, immo semper MC. in omnibus genituris possidet principatum*, etc. (III, 1, 18). Stephen of Alexandria (ed. Usener, p. 23)

extolled the Midheaven and in revenge, Paul of Alexandria never tires of the efficacy of the Ascendant. (*Papyr. CXXX Brit. Mus.*, II. 165-166). The same was true of Proclus, for whom the μοῖραι ὠροσκοποῦσαι τὴν ὅλην ἔχουσι τῆς γενέσεως δύναμιν (*Anal. Sacr.*, V, p. 173, 29 Pitra).

601 See above, p. 270, 1. This is doubtless the reason which kept him from accepting – at least overtly – the theory of the places. The scholiast insists upon this idea. In “universal” astrology, an eclipse taking place beneath the earth does not concern us (Anon., p. 70). The same was true for natal work. Our life passed on top of the earth (ἐν τῷ ἐμφανεῖ κόσμῳ), and not below (p. 190). Only three centers counted the Ascendant which symbolized life and “the first age”; the Midheaven which represented mature or “middle” age, and the Descendant corresponding to old age and “the final center” (τὰ γεροντικά· τὸ γὰρ τελευταῖων κέντρον. pp. 68-69). The author of *Hermippus* limited the action of the stars and the cycle of life to the upper hemisphere, the other hemisphere representing the shadows and death (ὅλως τε ὁ καθ’ ἡμέρας οὗτος βίος τῷ ἀπ’ ἀνατολῆς ἡλίου μέχρι δύσεως χρόνῳ καὶ τοπῳ ἀπείκασται, τὸ δὲ λοιπὸν σκότος καὶ θάνατος μάλα τοι συνάδειν ἔοικασιν; II, 6, p. 44 Kroll). Ptolemy seems to have forgotten that he himself had compared the entire circle and its four seasons to the four ages of life (*Tetrab.*, I, 10. Cf. above, Fig. 15).

602 Cf. Ptolemy, *Tetrab.*, I, 11; Anon., 27; Paul. Alex., L 3 v. sqq.; N v. In reality, Ptolemy did not think of the horizon and the four winds, which blew from the four cardinal quarters, in making the observation that the stars, according to their positions, participated in the dryness or moisture, heat or cold, of these winds. The scholiast seeks the text in order to make a χαριέστατον θεώρημα.

603 Paul of Alexandria, *Περὶ ἀποκλιμάτων* (P2 – Q) protests against the supposed ineffectiveness of the ἀποκλίματα. Ἰστέον ὅτι εσθ’ ὅτε καὶ τὰ ἀποκλίματα χρηματίζει καὶ ἐνεργίαν οὐ τὴν τυχοῦσαν περὶ τῶν ἀποτελεσματικῶν λόγων ποιεῖται κ.τ.λ. Besides useless protestation, the theory of places triumphed without contesting the silent contempt of Ptolemy, which is constantly reduced by his scholiasts who were convinced he had used them from time to time. Ptolemy replaced the word ζώδιον, which he did not like, often with δωδεκατημόριον, sometimes with τόπος (see II, 8). From his equivocations, we cannot always tell if he did not also use τόπος in his own technical sense.

604 They are always called “Egyptians” for example τὸν πέμπτον τόπον οἱ Αἰγύτιοι τοῖς τέκνοις παρέχον (Anon., p. 158 etc.); or else they are “Ancients” γαμικὸν τόπον εἰώθασιν αὐτὸν (the eighth place) οἱ παλαῖοι προσαγορεύειν (Anon., p. 139) – γαμαστόλον in an Egyptian papyrus (*Notices et Extraits*, XVIII, 2, no. 19 = *Brit. Mus.*, CX) and Paul of Alexandria (M 2).

605 Ptolemy did not give reasons for disdaining the theory of houses, and ordinary people did not understand astrology well enough to resolve these objections. The amateur astrologer who wrote the *Hermippus*, rejecting the theory of the οἶκοι, must have had a very strong reason to eliminate them, but he says nothing. It was the “Christian astrologer,” Ciruelo (I, 2) who posed the question and avowed his scruples. He had found in the authors, he says, (I do not know which ones) three opinions. First, that there was an immobile sphere, whose influences formed continuous jets which crossed the mobile spheres. Second, that there was no immobile sphere. It was “angelic” movers of the skies who lived in them, the influences or “virtues” mentioned above. Third, the angles at which they arrived on the Earth made the influences differ. The first opinion is pure stupidity, seeing that the point which is the Ascendant for one location is in the middle of the sky for another and is in the West for a third. The second view comes from theological discussion. Ciruelo rallied to the third, and found reason for accepting it under the guarantee of Aristotle. While this mattered to him, it did break with the system of the twelve places or “celestial mansions,” the principle instrument of Greco-Arabian astrology, the usual clock face forming the background of a birth chart. It established, moreover, the divergences of opinion on the *quality* of influences, the order of the planets in the mansions, the gender of the said mansions, etc., and tilted, in sum, for the demi-skepticism of Ptolemy. It was experience which decided *Quod autem virtutes singularum domorum tales sint quales descripsimus, experientie relinquitur probandum*.

606 The theory of the *antiscia*, put a little to one side by Ptolemy, does not seem to have been much used, and I do not find any ancient text explicit enough to support the assertion above. However, the Renaissance astrologers (cf. Juncinus, I, pp. 460, 466, etc.) applied the *antiscia* to houses (*domus caeli*), following, no doubt, a Greek tradition transmitted by the Arabs.

607 *Primus erit summi qui regnat culmine caeli, | Et medium tenui partitur limine mundum, | Quem capit excelsa sublimem Gloria sede* (II, 810 sqq.). He emphasizes that it is a point of the duodecimal system, and not a compartment. I must say that Scaliger did not agree to a construction of eight compartments. Eight places plus four centers, he said, add up to twelve compartments. *Mirum vero ὀκτάτοπον dici quae omnino δωδεκάτοπος sit* (p. 183). However, a surprise is not an explanation.

608 The Lower Midheaven is less glorious, but perhaps more useful than the Midheaven *Sustenet alternis nixum radicibus orbem, | Effectu minor in specie, sed major in usu. | Fundamenta tenet rerum censusque gubernat; | Quam rata sint fossis scrutatur vota metallis, |* etc. (II, 820, sqq.).

609 After the Lower Midheaven comes the Ascendant, *Tertius aequae illi pollens* (II, 826 sqq.), but “third.”

610 One finds the Ἀἰδοῦ πύλη again in Paul of Alexandria, but in the second place (rather than the twelfth) in the ἐπαναφορά of the Ascendant (below, Fig. 31 and p. 282).

611 It may have been new in the time of Pythagoras, who supposedly invented it and calculated it at the rate of twenty years per age. (Diog. Laert. VIII, 1, 10; Ovid., *Metam.*, XV, 199-215, etc.).

612 The relationship of the planets with the places is indefinable. It is neither genuine presence, nor aspect, nor κληρος, nor zodiacal domain. Scaliger (p. 183) reproaches Pico della Mirandola for having taken these protectorates for possessions. He did not want one to say that the planet is, in its own place, οἰκοδεσπότης, but only *numen tutelare*.

613 Venus is identified with Fortune *Haec tutela docet Venerem sua tela movere. | Nomen erit Fortuna Loco* (II, 926-927).

614 *Tarda supinatum lassatis viribus arcum | Ascendens seros demum complectitur annos*, etc., (Manil., II, 853 sqq.). Identical symbolism is found in Paul of Alexandria (D 2-3). It is the contemplative mode (cf. below, p. 280, 1), which considered the sphere in repose and proceeded contrary to the order suggested by the movement of the sphere.

615 *Conjugia atque epulas, extremaque tempora vitae* (II, 839 sqq.) a hemistich for each of the two juxtaposed systems! See below, the δωδεκάτοπος.

616 It is reasonable to cite these incredible bits of nonsense *Porta laboris erit; scandendum atque cadendum* (this is for the two ἐπικαταφοραί of Ascendant and Descendant); now for the ἐπαναφοραί: *Nec melior super occasus, contraque sub ortu | Sors agitur mundi: praeceps haec, illa superne | Pendens aut metuit vicino cardine finem, | Aut fraudata cadet. Merito Typhonis habentur | Horrendae sedes*, etc. (Manil., II, 870 sqq.).

617 Manilius found a new place here for Fortune *Jupiter hac habitat. Fortunae crede regenti* (II, 890), with the epithets *Veneranda* and *Felix* (II, 887-888).

618 *Daemonien memorant Graii, Romana per ora | Quaeritur in versu titulus* (II, 897-898). It is another Fortune, sometimes good, sometimes bad.

619 *Cui parti nomen posuit qui condidit artem | Octotopos* (Manil., II, 969). Remarking that the name is Greek and that Manilius explains elsewhere (below, pp. 289 sqq.??) a system of twelve compartments (ἄθλα – *sortes*). If he were not just absent-minded, he ought to have explained the difference. It may be that the *octotopos* was the work of a Greek or Etruscan adapter who wished to introduce to the astrological “temple” the structure of the Etruscan “temple” with eight thundering deities corresponding to the eight ages of the world (see “Haruspices” in the *Dict. des Antiq.* of Daremberg and Saglio. Again, the adapter mentioned above may have, from distraction or from a taste for novelties, applied to the zodiacal circle the division into eight parts which Hyginus (*Astron.*, IV, 2) recommended for the tropical circles, in the name of Pythagorean scruples. Finally (and most simply) the system may have been copied from the lunar cycle of eight phases (above, p. 166, 1).

620 Firmicus, II, 14 *De octo locis*. The eight places of Firmicus corresponded to the first, (Ascendant) second, third, fourth (Lower Midheaven), fifth, sixth, seventh (Descendant), and eighth places of the duodecimal system. The system ignores one third of the circle, the one which is consecrated to intellectual and moral life.

621 Cf. below, the places of the *Dodecatopos* declared ineffective because “inconjunct” (p. 281) or for other reasons (p. 287, 2) and which are not the same as those eliminated by Firmicus.

622 I also indicate, in figure 31, the places which would have been the “twelfths” relative to the centers, according to Ptolemy (see below, p. 270, 1).

623 Cf. above, pp. 152 (Fig. 15), 277, 278, 1.

624 The system of the twelve houses is explained here according several lists which agree, although more and more overloaded. They are those of S. Empiricus (*Adv. Astrol.*, pp. 340-341; Fabricius, in the *schema* given in the notes, enumerated the places backwards, in the sense of the daily movement); of Firmicus (II, 15-20 Kroll); of Paul of Alexandria (L-O2); and of Vettius Valens (*Cod. Paris.*, Suppl., no. 330 A, fol. 29 r.-30 v.). Most of the terminology in quotes is from Firmicus. I do not know if there are any Pythagorean speculations in

the system, which sometimes contradicts the dogmas of the school. For example, the Pythagoreans attached the idea of marriage to the number six (Theo. Smyrn., p. 102 H). They would not have put it in the seventh house. Hephaistion (I, 12, p. 73 Engelbr.) disqualifies even the third house. However, the perfections of the numbers seven and ten aided the predictions of the seventh house and assured the “natural” preeminence (culmination) of the tenth house.

625 *Spei ac possessionis incrementa* (Firmic., II, 19, 3). – κληρονόμους ἀλλοτρίων (Paul. Alex., L 2). For the specific qualities of the twelve houses, the shortest definitions are those brought together in this medieval verse: *Vita, lucrum, fratres, genitor, nati, valetudo, | Uxor, mors, pietas, regnum benefactaque, carcer.*

626 Ἐσθ’ ὅτε δὲ καὶ τὸν περὶ πράξεων λόγον σημαίνει διὰ τὸ σύμφωνον αὐτὸ εἶναι κατ’ εὐώνυμον τρίγωνον τῷ μεσουρανηοῦνται. The good planets give one inheritances, the bad ones, poverty and exile (Paul. Alex., loc. cit.). There may have been contamination from the circle of the ἄθλα (below) or the Militia and the Voyages that alert the idea of the hope of gain.

627 *Huic loco Dea nomen est; est autem peregrinantis locus* (Firmic., II, 19, 4). This has the air of an explanation, even a suspect explanation, for the true place of the *peregrinatio* (ξενιτεία) is in the opposite, the ninth place.

628 Above, p. 277. Demophilus the scholiast (ap. Porphyr., p. 204) still puts Mercury in the Ascendant, leaving the others in the traditional places. Paul of Alexandria does the same. The author of *Papyr. CX Brit. Mus.*, who improvises as he pleases, makes Mercury and the Ascendant coincide (II. 23-27).

629 We know what “good fortune” means among us and the prize would go still to Venus.

630 Firmicus (II, 17 and 19, 9 Kroll) particularly calls the eighth house, not *anafora*, but *epicatafora*, a near synonym of ἀπόκλιμα. It is evidently a memory of Manilius’ system where the place which reaches the Descendant feels fear of falling when upon the slope (ἐπικαταφορά) (above, p. 278, 3).

631 Ἀρχὴ θανάτου in S. Empiricus (op. cit., p. 340).

632 The conditions are first, that it is necessary that the chart be a nocturnal one; second, that the waxing moon be in the eighth place; third, that it be either in its own zodiacal house or the house of a friendly planet; fourth, that it be seen by Jupiter in a favorable aspect; fifth, that it neither be coupled with, nor surrounded by, nor seen by, malefic planets. In return for this, the Moon *maximas decernit felicitates et ultra modum divitias et magnificas potestatum glorias et nobilitatis ornamenta perspicua* (Firm., I, 19, 9). This goes from one extreme to another and for good measure! – This superfluity must come from the circle of the ἄθλα (below, p. 297-298), where the eighth lot is occupied by Nobility and Fame.

633 S. Empiricus piles up disparate titles such as κάτω μερίδα (= ἀπόκλιμα ?) καὶ μονομορίαν (μόνος = *solus* = *Sol*?) καὶ θεόν.

634 The astrologers, Arellius Fuscus says, seek *quo ierint motu sidera, in quas discurrerint partes; contrane Deus steterit an placidus affulserit Sol* (Senec., *Suasor.*, 4). One finds *Deus* once again in the hepatic temple of the haruspices (see “Haruspices” in *Dict. des Antiquités* of Daremberg - Saglio).

635 The astrologers have created or redefined the meanings of the words ἀγαθοδαιμονεῖν, κακοδαιμονεῖν, κατοχυεῖν, to designate the position of a planet in the places so designated v.g. Ἀφροδίτης ἀγαθοδαιμονούσης (Steph. Alex., p. 21 Usener) signifying Venus in the eleventh place.

636 This is the reason which Ciruelo gives (I, 2): *Sed quod circinus circulorum descriptor non ubique presto est volentibus, consueverunt iudices astrologici facere figuras rectilineas quadrangulares, et hoc bifariam.* There follows the description of the two methods: that of Fig. 33 b, which he declares preferable, because it emphasizes the four cardinal houses, and the other (Fig. 32) which is the most commonly used. According to him, the empty square in the middle represents *concavum celi*. Fig. 33 is printed in *Thema Cod. Vindobon.*, after H. Usener (*De Stephan. Alex.*, p. 57) save that is a rectangle in the manuscript and I have made it a square. Fig. 34 – after Cunrad Dasypodius [Rauchfuss] of Strasbourg, commentator upon Ptolemy (ap. H. Cardan., ed., Basil., 1578, p. 722) – is a fantasy of astrologers who have found the compass handier than the straight-edge for cutting a circle into compartments, without any care for exactitude.

637 He knew the usual houses, but he never designates them by their numerical order and he takes pains to say of such a place ὃ λέγεται τόπος ἀργός – of another ὃ καὶ καλεῖται κακοῦ δαίμονος (*Tetrab.*, II, 12). His disciple Hephaistion of Thebes has only six lines Περί διαφορᾶς τόπων (above, p. 281, 1).

638 S. Empiricus (above, p.281, 1).

639 Or affected by the ἄθλα of Manilius ([below](#), p. 298). The “Perils” were all associated completely naturally with the μακραὶ ξενεῖται.

640 Demophil. ap. Porphyr., p. 193. One kept first, the four centers (first, fourth, seventh and tenth places); second, the two places (fifth, ninth) forming a triangle with the Ascendant; third, the ἐπαναφορά of the Ascendant (second place). Hephaestion enumerated the καλοὶ τόποι in the order Ascendant., Midheaven, eleventh, fifth places, Descendant, Lower Midheaven, ninth place; the κακοὶ, the second, third, eighth places; and the κάκιστοι the sixth and twelfth places. A Hermeticist (C. *Aphor.*, p. 841 Juncinus) established the following order: *Centers* Ascendant, Midheaven, Descendant, Lower Midheaven – *favorable places*: eleventh, second, fifth, ninth, third, and eighth. – *unfavorable places*: sixth and twelfth. Cf. The τόποι ἀφεικτικοί of Ptolemy, tenth, first, eleventh, seventh and ninth places ([below](#), Chapter 12).

641 Demoph. ap. Porphyr., pp. 202-203. Cf. Paul of Alexandria, fol. K 2 where the Lower Midheaven symbolizes “old age, burial, καὶ τὰ μετὰ θανάτου πάντα.” There is no indication of the origin of this aberrant system, which shattered the usual order and substituted the following succession: twelfth, first, second – ninth, tenth, eleventh – sixth, seventh, eighth – third, fourth, fifth.

642 Represented in the manuscripts by the sign $\oplus$, a circle with a cross inside, the “wheel” of Fortune or the hieroglyphic symbol for Time, the rolling serpent. Scaliger (p. 198) thought that it was the origin of all cleromantic markers (*sortes*).

643 The Anonymous scholiast (p. 94) explains why Ptolemy, who rejected all the lots imagined by the “Egyptians,” nevertheless used – as we will see further on – the Lot of Fortune. It is because Ptolemy οὐ κλῆρον τύχης λέγε, ἀλλὰ σεληνιακὸν ὠροσκοπὸν. The prudish savant does his best to color the concessions which he makes to traditions stronger than he was. The name ἄθλα comes from the twelve labors of Hercules, the archetype of militant humanity, and, in the course of achieving apotheosis, the plaything of Fortune. See [below](#) (p. 298, 3) the objection of Saumaise, unjustified for the plural form ἄθλα.

644 Cf. F. Allegre, *Étude sur la déesse grecque Tyché*, These Doct. Paris, 1889, and the article by Bouché-Leclercq, “Tyché ou la Fortune” (*Rev. Hist. Rel.*, XXIII [1891], pp. 273-307).

645 And even, by Manilius, to Jupiter ([above](#), p. 278, 4).

646 We need not be naive enough to believe that this division was respected by all. One encounters classifications of all sorts (cf. Salmas., p.126, and above Chapter 13), and, among their number, one who adjudges τὰ σωματικά τῷ ὠροσκοπῷ, τὰ φυσικά τῇ Σεληνῇ. Paul of Alexandria (K 3) attributes to Fortune τὰ περὶ τοῦ σώματος πάντα.

647 See above ([p. 295](#)) for an explanation of figures 1 and 2.

648 On the word ἄθλα, see above, [p. 298, 3](#). The term translated into Latin by *pars* is κλῆρος, which is also rendered – and very often – by *locus, pars*. κλῆρος is used even for τόπος in the technical sense of place (see Nonn., *Dionys.*, VI, 83). Manilius sometimes makes *sors* a synonym of *pars*, portion or lot of any sort. It is for this reason that decan is *sors* or *pars* as well (IV, 313).

649 Manil., III, 176-202. Firmic., IV, 17 (*De loco et efficacia Fortunae*), 3-5 Kroll. Scaliger (pp. 197-199), who had doubtless forgotten Firmicus, was stubborn in making Manilius agree with the scholiast of Ptolemy, making him say the opposite of what he really said. The gradation of the zodiac going from right to left, moving an arc to the right of the Ascendant is to subtract (*ortivo totidem de cardine duces*); to move the arc to the left is to add (*tot numerare jubet fulgens horoscopus a se*). These words “add” (προσθεῖναι – *adnumerare*), “take away” or “subtract” (ἀπολύειν – ἐκβάλλειν – διεκβάλλειν – *deducere*), are the sources of perpetual confusion, depending on whether one is considering the daily motion or the opposite. One sees this particularly in connection with the retrogradation of the planets. The authors constantly use διεκβάλλειν and ἀπολύειν in the sense of “starting from” (ἀφεῖναι – ἀρχεσθαι), the direction not mattering. Cf. the examples cited by Saumaise, pp. 272-273, and notably Hephaestion (I, 19, p. 75 Engelbr.), Paul of Alexandria (K v), etc. It matters little to us which one, Manilius or the scholiast, best understood Petosiris. The vices which sully the calculation are the same. Firmicus gives two methods, the one *platica*, which consists of always putting the distances to the left of the Ascendant and which genuinely differentiates the day from the night genitures; the other *partilis*, that of Manilius, without seeming to suspect that it contradicts the first. Finally, Firmicus commits a second (or third) blunder, which goes back to a point where he was confused with his arithmetic. For putting the arc to the right or left of the Ascendant, certain mathematicians found it more convenient to start from the beginning of the horoscopic *sign*, rather than from the horoscopic *degree*, in adding to the sum of degrees with which he operated, the number of degrees between the Ascendant and the new point of departure. Let us suppose, for example, Paul of Alexandria (K 4 v) said, one deducts (ἀπολύσομεν) – i.e., adds – [an arc of 33°](#), the Ascendant being at 11° Leo. One adds these 11° eleven degrees to 330° (= 341°) and one takes the beginning of Leo as

the point of departure. [B-L does little to clarify the maths here. Based on [James Holden's](#) translation of Paulus the arc to be added is not 33° but 330°. However much of the calculation is omitted here, which leads to confusion about where the figure comes from. It is made clearer by Paulus, p.44. KM]. The result is the same as if one started from the Ascendant in subtracting 330° rather than 341°. Firmicus, who did not understand this, wrote *additis horoscopi partibus unam numeri facis summam, quam a parte Horoscopi incipiens per omnia quae ab Horoscopo sunt signa dividis*, etc. (IV, 17, 4 Krollcf. [below](#), p. 294, 1). Pruckner (IV, 10, p. 98) does his best to weaken the mistake in adding, after *additis Horoscopi partibus, si opus fuerit*.

650 Τὶ οὖν ἔφασαν οὗτοι (Nechepso and Petosiris); ὅταν κλῆρον Τύχης λαμβάνης, ἡρέρας μὲν ἀπὸ ἡλίου ἐρὶ σελήνην ἀριθμεῖ καὶ τὰ ἴσα ἀπὸ ὠροσκόπου ἐπὶ τὰ ἐπόμενα τῶν ζωδίων ἀπόλυε, νυκτὸς δὲ ἀνάπαλιν. Τὸ δὲ ἀνάπαλιν τί ἐστίν; ἴνα ἀπὸ σελήνης ἐπὶ ἡλίον ποιήσης καὶ μηκέτι εἰς τὰ ἐπόμενα, ἀλλ' εἰς τὰ ἡγούμενα ἀπολύσης. But this reversal is not very apparent: πάλιν γὰρ ὁ αὐτὸς εὕρισκετι [sc. Κλῆρος Τύχης] ὁ καὶ πρότερον εὕρεθεις ὁ ἀριθμηθεὶς ἀπὸ ἡλίου ἐπὶ σελήνην (Anon., p. 111). It was the method applied by the author of papyrus CXXX (*Brit. Mus.*), an astrologer who prided himself on using the true Egyptian traditions. In this nocturnal birth chart, dated 81 BCE, ☉ being at 14° ♈, ☾ at 13° ♉ and the Ascendant at 18° ♊, the Lot of Fortune falling at 17° ♈. The “ignorant” (like Manilius and Firmicus) would have reported 19° ♎. Ὁ κλῆρος δὲ τῆς τύχης εἰς Διὸς καὶ ζωδίων καὶ τρίγωνον (i.e., Sagittarius) ἀνάπαλιν ἐστὶ ὃν τινες Ζυγῷ δωρήσονται ἀγνοίᾳ ὅμως Ἀφροδίτης πάλιν ὁ κλῆρος (Il. 177-184). The word ἀνάπαλιν makes an allusion to the text of Nechepso, interpreted in so many different ways. On the κλῆρος Ἀφροδίτης or Ἔρωτος, see [below](#), p. 30. This papyrus CXXX, like its congeners, contains some rather strange things. The Moon, which, at ♉ 13°, must have been 5° below the horizon in the West, is said ἀπ' ανατολῆς φερομένη (Il. 74-75) one reads (Il. 112-115) that a certain sum of minutes (3 or 13?) constituted 1/21,600th (?) of a degree (μέρος δισμυροχιλεξακοσιοστόν, cf. [above](#), p. 258, 3). Higher (Il. 79), it is a question of a thousandth of a degree (καὶ ἔτι μέρος χιλιοστόν μοίρης). The expression στοιχείῳ Διὸς applied to the fourteenth degree of Aries (Il. 60) must have indicated a division of the planets, degree by degree (στοιχεῖον = μοῖρα) in the order, ♃, ♄, ♅, ♆, ♇, beginning with ♄ = 1° of ♈ (cf. [above](#), p. 216, 3). We find no other positions mentioned, save for the position of the Sun. In revenge, the astrologer forgot for his part the reference to ὑψώματι ἰδίῳ, which he had taken pains to do for the Moon. The decans and their dodecatemoria appeared only for the positions of the two luminaries. As for the evaluation of the apparent sizes of the planets, 4/3 (ἐπιτρίτος ὄγκῳ) for Saturn (Il. 106-17), 3/2 for Jupiter (ἡμιόλιος τε ὄγκῳ καὶ προστάσσω [as it was in the northern hemisphere and in its own ὑψωμα], Il. 124-125), I leave the trouble of verification to the astronomers. However, all this seems like a charlatan trying to dazzle a dupe.

651 Ἐν γὰρ τῇ τρισκαίδεκάτῃ βίβλῳ ὁ βασιλεὺς ... [περὶ κλήρου τύχης] καὶ αἴνιγμα τέθηκε τὸ ἔμπαλιν καὶ ἀνάπαλιν (Valens, III, 5, fr. 19 Riess). Cf. the text already cited, which also discusses the meaning of ἀνάπαλιν.

652 See [below](#) (p. 295) the explanation of figures I and II.

653 Valens, III, 5 = fr. 19 Riess.

654 *In omni genitura nocturna computa a Luna usque ad Solem, in diurna genitura a Sole computa rursus ad Lunam, et quantuscunque signorum <fuerit> numerus, tanta ab Horoscopo incipiens signa numera; et quodcumque signum habuerit novissimum numerum, ipsius locum Fortunae demonstrat. Sed haec platica computatio est, quam ideo posuimus, ne quid a nobis praetermissum esse videatur partiliter vero locus Fortunae ista ratione colligitur, quam tu sequi in omni disputatione debebis.* Following the method explained [above](#), (p. 289), a method which Firmicus imagined no doubt to be the same, save that, in place of determining the over-all sign, it makes the degree more precise (Firmic., IV, 17, 1 sqq. Kroll). See the texts [below](#), p. 294, 1.

655 *Locum daemonis ista ratione colligimus; quam ideo huic libro indidimus, quia Solis eum locum esse Abraham similiter ratione monstravit et iniquum erat ut a loco Lunae Solis separaretur locus* (Firmic., IV, 18, 1 Kroll). Follow the method below. Further back, speaking of the *locus Fortunae*, he had said *appellatur autem, sicut Abraham designat, Lunae locus* (IV, 17, 5). It is, I suppose, the *locus Daemonis* which is ὁ δεῦτερος κλῆρος τῆς Τύχης in the chart of Anubion (*Notices et Extr.*, XVIII, 2, no. 19 = *Greek Papyri of the Brit. Mus.*, no. CX). This document is the work of an astrologer who affects an extreme precision in his measurements and who places his two “Lots of Fortune” in an absolutely unintelligible fashion. The facts are ☉ in ♈ 13°, 23', ☾ in ♉ 3°, 6', and the Ascendant in ♈ 15°, the distance SL = 49°, 43', [SL = Sun to Moon, fig 37.KM] transferred to the left of the Ascendant ending at ♉ 4°, 43'. Now, our man puts his πρῶτος κλῆρος τῆς Τύχης, the first Lot of Fortune, in ♉ 29°, that is, 5°, 43' beyond the Ascendant. The same distance SL transferred to the right of the Ascendant ends at ♎ 25°, 17', while the “second Lot of Fortune” is marked at 104°, 17' from there, at ♊ 11°. In working with the complementary distance LS, one arrives equally at two points, ♉ 4°, 43' and ♎ 25°, 17'. It follows necessarily that either our author had used a completely unknown method, a transfer by some ricochet, or that he simply pretended to make calculations which he had never taught. One may find the second hypothesis a little more

believable. The chart on papyrus no. XCVIII, recto, has three κληροι, of which the first is Ἀγαθὸς δαίμων, the two others anonymous. Since the lacunae of the text suppress indispensable facts, there is no opportunity for verification. A curious detail is that the κληροι here are not points, but arcs which may coincide with the ὅρια of the two different planets (ll. 55 and 59). See here what has been retained from the big quarrel everyone was involved in at the end of the fourth century *Aegyptii protendunt deos praestites homini nascenti quattuor adesse, memorantes Δαίμονα Τύχην Ἐρωτα Ἀνάγκην et duos priores Solem ac Lunam intelligi volunt, quod Sol, auctor spiritus caloris ac luminis, humanae vitae genitor at custos est, et ideo nascentis δαίμων id est deus creditur, Luna Τύχη quia corporum praesul est, quae fortuitorum varietate jactantur* (Macr., Sat., I, 19, 17).

656 With the epithet in *Pap. Brit. Mus.* XCVIII (above, p. 293).

657 We have seen already that Firmicus did not make a difference, from the point of view of precision, between his methods of *platina* and *part liter*, which he recommended especially (above, p. 292, 4). See how he applied this to the determination of the *locus Fortunae* and of the *locus Daemonis*. [NB these are parallel columns in the original. LJN].

Locus Fortunae (IV, 17).

For a day chart, transfer the distance from the Sun to the Moon, *oddities horoscope part bus*, to the right of the Ascendant.

In nocturna vero genitura a Lunae parte incipiens et per sequentia signa simili modo pergens usque ad partem Solis totas signorum colligis partes et additis Horoscopi partibus unam numeri facis summam, quam a parte Horoscopi incipiens per omnia quae ab Horoscopo sunt signa dividis, singulis tribuens – XXX partes.

Locus Daemonis (IV, 18).

For a day chart, transfer the distance from the Sun to the Moon to the left of the Ascendant (*per sequentia signa*).

In nocturna vero a Luna usque ad Solem omnium signorum colligis partes et omnem istam summam ab Horoscopo incipiens simili ratione (i.e. per sequentia signa and at the rate of 30° per sign) totis dividis signis, et in quocumque signo <pars ultima ceciderit, ipsa tibi> pars geniturae Daemonum monstrat.

Thus, according to Firmicus, in a night chart, the *locus Fortunae* and the *locus Daemonis* were calculated in the same way, and they would have fallen at the same point if he had not introduced, on the side of the *locus Fortunae* and increase of distance (*additis horoscopi partibus*) which, as was demonstrated above (p. 290), came from a mistake. Firmicus had simply forgotten that, for the *locus Daemonis*, it was necessary to reverse either the distances or the meaning of “transfer.” With the nocturnal transfer to the right, his system would be coherent, exactly the counterpart of that of Paul of Alexandria. The same for the *locus Fortunae* his procedure, purged of the addition of the *partes horoscopi*, went back to that of Manilius, which is that of Nechepso-Ptolemy applied in an opposite sense.

658 Or, which comes to the same thing, at the end of the complementary distances transferred to the same side (Paul. Alex. K3 – L).

659 In all the figures given above (35 -37), SL = 150° and LS = 210°. Fig. 35, I. The single Lot of Fortune, according to Nechepso and Petosiris. It is evident that the distance SL transferred to the left of the Ascendant ends at F, the complementary LS transferred to the right, by the method called nocturnal, ended at the same point. Ptolemy kept, in consequence, only the first procedure. The angle LOF = the angle SOH (below, p. 296, 2). Fig. 35, II. The method of Nechepso, interpreted by Manilius and Firmicus, also gives a single terminus for the two procedures; but the conditions required by Ptolemy for the “lunar Ascendant” are not fulfilled, the arc LOF not being equal to SOH. Manilius is evidently mistaken, and Firmicus followed Manilius, whom he never cites. Fig. 36, I and II. The system of the Lot of Fortune, different for the daytime chart (transferring SL) and the nighttime one (transfer of LS). The conditions demanded by Ptolemy are not fulfilled in the case of the nocturnal geniture. Fig. 37, I and II. The figures show that the daytime κληρος Δαίμονος [Lot of Spirit] fulfill the nocturnal κληρος Τύχης [Lot of Fortune] and vice versa. The result would have been, as Paul of Alexandria wanted, that one would have kept the transfer to the left and used complementary distances, LS for SL, and SL for LS.

660 Cf. above, p. 288, 2 and the following note.

661 Κλήρον μέντοι τύχης [παραληπτέον] τὸν συναγόμενον ἀπὸ τοῦ ἀριθμοῦ πάντοτε τῶν μοιρῶν καὶ ἡμέρας καὶ νυκτὸς, τοῦ τε ἀπὸ ἡλίου ἐπὶ σελήνην, καὶ τὰ ἴσα ἀφαιρούντες ἀπὸ τοῦ ὠροσκόπου κατὰ τὰ ἐπόμενα τῶν ζωδίων. Ὅπου δ' ἂν ἐκπέσῃ ὁ ἀριθμὸς ἐκείνην τὴν μοῖραν τοῦ δωδεκατημορίου καὶ τὸν τόπον φαμέν ἐπέχειν τὸν κλήρον τῆς Τύχης, ἵνα ὃν ἔχει λόγον καὶ σχηματισμὸν ὁ ἥλιος τὸν ἀνατολικὸν ὀρίζοντα τοῦτον ἔχη καὶ ἡ σελήνη πρὸς τὸν κλήρον τῆς τύχης, καὶ, [οὗτος] ἢ ὥσπερ σεληνιακὸς ὠροσκόπος (*Tetrab.*, III, 12, p. 329 Junctinus). Ptolemy repeated again, further on, (*Tetrab.*, IV, 1, p. 614 J) that he used only this method for positioning the Lot of Fortune. The scholiast knew that Ptolemy arrived at the same result by two procedures from Petosiris. He seems to have had beneath his eyes a passage of the *Tetrabiblos* now lost, where Ptolemy himself says the same thing, by accusing his opponents of not understanding “the Elder” (Petosiris) <οὐ> γάρ, φησι, νενόηκασι τὰ ὑπὸ τοῦ παλαιοῦ περὶ κλήρου Τύχης γεγραμμένα. Λέγει δὲ παλαιὸν τὸν Νεχεψῶ καὶ Πετόσιριν· οὗτοι γὰρ πρῶτοι τὸ δι' ἀστρολογίας ἐξήπλωσαν προγνωστικόν (Anon., p. 111). See the following text, [above](#), p. 291, 1.

662 *Ex haec loco [Fortunae] qualitatem vitae et patrimonii substantiam et felicitatis atque infelicitatis cursus ostendi datur. Amor etiam et adfectus virorum circa mulieres qualis sit ex hoc loco discitur, et nutrimentorum et desideriorum omnium effectus ex istius loci substantia quaeritur. Hic locus patriam facili ratione demonstrare* (Firmic., IV, 17, 5 Kroll). Basically, it is a farrago. As language, it is gibberish. I admit I do not know just what Firmicus meant by *patria*, especially as this word is found again in the litany of the prerogatives and offices of the Lot of Spirit *hic locus [Daemonis] vocatur et animae substantia; ex hoc loco actus omnisque augmenta substantiae quaerimus, et ostendit qualis circa virum mulieris sit affectus. Sed et hic locus, et quadrata latera istius loci, patriam nobis manifesta ratione demonstrat* (IV, 18, 2 Kroll). Firmicus read somewhere that, as the place of the Moon, the Lot of Fortune is feminine, passive, concerned with the body, loves feminine things, etc. The Lot of Spirit, as the place of the Sun, is masculine, active, concerned with the soul, and loves masculine things. His book contains, in a chaotic state, debris from an enormous quantity of speculations, from which Ptolemy took some things for his system, while causing the rest to be forgotten.

663 Manilius, III, 96-159.

664 There were other contaminations, quite interesting, between the astrological *places* or *lots* and the division of the temple into sixteen compartments, which the haruspices assigned to the gods. At the ninth compartment of the temple, one finds *Fortuna* (eleventh place or the place of the eleventh place, in Manilius, [above](#), Fig. 30) and *Validudo* (eleventh lot of Manilius). At the fifth Tuscan compartment, *Juno* and *Genius*, the gods of marriage (the fifth lot of Manilius) are found. At the ninth compartment, *Genius Junonis Sospitae* (corresponding to the education of children, ninth lot; for *Juno Sospita Mater* is the goddess of maternity. L. Preller, *Röm. myth.*, I³, p. 276). At the second compartment, *Quirinus*, *Mars*, *Lares militare* (second lot of Manilius); at the third, *Minerva Discordia*, *Seditio* (third lot of Manilius, *urbani labores – jurgia – hoc quoque militiae genus est*). Cf. *Hist. de la Divination*, IV, pp. 24-25, and the article “Haruspices” in the *Dict. des Antiquités* of Daremberg and Saglio.

665 Scaliger never passes a chance to repeat (p. 186 sqq.) that he is the first to recognize the independence of Manilius' system of ἄθλα, unknown to any other astrologers, ancient or modern, *quum ante nos nullus Mathematicus, ne gloriosuli quidem inter illos, quid essent ἄθλα, scriverint* (p. 187). Concerning this subject, Saumaise, irritated, remarked that neither Manilius, nor Scaliger, understood the true meaning of the ἄθλα, which signified prizes (ἐπαθλα) and not fights or competitions, the ἄθλοι (pp. 127-128). It is possible, not to say probable, that each of the κλήροι listed later served as a point of departure, like the Ascendant, for autonomous cycles parallel to these things, each one containing one of the multiple aspects of existence.

666 The system of *dodecatemoria* passed for Mesopotamian (Firmic., III, 13, 14 Kroll), that of the κλήροι, for Egyptian (below). However, the scholiast (Anon., pp. 47-48) also attributed the δωδεκατὶ dōdekathmo/ria to his “Egyptians.” [But now see researches of Francesca Rochberg, who has found subdivisions of the signs in Mesopotamian clay tablets. See, for example, Chapter Seven, “Elements of the Babylonian Contribution to Hellenistic Astrology, in Francesca Rochberg, *In the Path of the Moon; Babylonian Celestial Divination and its Legacy* (Leiden: Brill, 2010). LJN]

667 Ptolemy protested as much as he could on this subject: καὶ τὰ μὲν περιεργῶς ὑπὸ τῶν πολλῶν φλυαρούμενα καὶ μηδὲ πιθανὸν ἔχοντα λόγον πρὸς τὰς ἀπὸ τῆς φύσεως αἰτίας ἀποπεμπόμενοι [ἡμεῖς], τὰ δὲ ἐνδεχομένον ἔχοντα τὴν κατάληψιν οὐ διὰ κλήρων καὶ ἀριθμῶν ἀναπιολογήτων, ἀλλὰ δι' αὐτῆς τῆς τῶν σχηματισμῶν πρὸς τοὺς οἰκείους τόπους θεωρίας ἐπισκεπτόμενοι, κ.τ.λ. (*Tetrab.*, III, 3, p. 148 Junctinus). He had already said, of the number of subdivisions of the zodiac ταῦτα μὲν οὐ πιθανόν καὶ οὐ φυσικόν, ἀλλὰ κενόδοχον ἔχοντα λόγον παρήσομεν (*Tetrab.*, I, 21, p. 76 Junct.). No doubt; but he joined a society of monomaniacs of his own free will, and he is no less naive, in our eyes, in his belief in the “natural” virtues of the aspects and of the οἰκεῖοι τόποι. The scholiast insists upon the κενόδοχία of the inventions of the “first Egyptians.”

668 On the dodecatemoria, see Manilius, II, 693-750; Firmic., II, 13 (*De duodecatemoriis*); Schol. Demophil., p. 194; Hephaest., I, 18; Paul. Alex. (Περὶ δωδεκατημορίου, K-K2). Paul of Alexandria began his explanation like this τὸ δὲ τῶν ἀστέρων δωδεκατ ημόριον, καὶ οἰουδήποτε εἴτε κέντρου, εἴτε κλήρου, πραγματευτέον οὕτως, etc. The (planetary) dodecatemoria are noted in the birth chart on the papyrus of 81 CE (*Gr. Pap. Brit. Mus.*, CXXX).

669 Firmic., II, 13, 1; III, 13, 14; IV, 17, 12 Kroll.

670 Firmic., II, 13, 3. It ought to fall at 6°, 5' in Gemini. The mistake, committed upon Firmicus by his guide Manilius, consists of giving 30°, rather than 24°, 25', to Aries. In other words, he took, as point of departure, the beginning of Aries by keeping 12 as the multiplier. The author of papyrus *Brit. Mus.*, no. XCVIII recto, knew how to count better. He makes the dodecatemorion of an Ascendant in ♉ at 25° fall at ♎, 25° (II. 42-45). That is, that he took twelve as multiplier and allotted it 300° (12 x 25 = 300), starting from ♉, 25°. This author has also calculated the dodecatemoria of all the planets. His calculations are a little more exact here where the facts are conserved. The author of papyrus CX (the chart of Anubion), who notes with care the stations (στηριγμοί) of the planets, says not a word about the dodecatemoria. This is the person who calculated, in such a strange fashion, the two “Lots of Fortune” (above, p. 293, 1). The pretentious redactor of papyrus CXXX only gives the dodecatemoria of the ☉ and the ☾, with large errors in calculation. The solar δωδεκατημόριον which he placed (II. 71-72) Σκορπίου πάλιν περὶ τὸν σφόνδυλον (up to 15° ♎) must have been $\underline{\alpha}$ 3° 18' and the lunar was at Σκορπίου πάλιν περὶ τὸν αὐτὸν τόπον (II. 92-94) would have been at $\underline{\alpha}$ 19°. He made a mistake of more than 40° in the first case, and of about 30° in the second. I do not know how the Arabs managed this calculation, which they called *Dorogen*, according to Scaliger (p. 162).

671 These faulty texts lend themselves to hypotheses. The scholiast must have proposed – in a lacuna in the text – the case of the quantity = 30° ♏. Then, he says, 30 x 12 = 360°, and (if one begins the transfer at 1° ♏) the dodecatemorion will fall at 30° ♏ and does not reach ♏. Now, τότε γίνεται ἐναργέστερον δωδεκατημόριον ὅταν ἀπὸ τοῦ αὐτοῦ ἐπὶ τὸ αὐτὸ καταλήξῃ. Καὶ τοῦτο γίνεται, καὶ ἵνα τοῦτο γίνεται, ὁ πολλαπλασιασμός, κ.τ.λ. (Schol. Paul. Alex., K 2 v). However, with a quantity less than 28°, one no longer re-enters the same sign, even with thirteen as the multiplier. Scaliger (pp. 162-165) is here beneath himself. He is so occupied with ridiculing his scapegoat, Bonincontro, that he neither understands the blunder of the scholiast (whom he confuses with Paul of Alexandria) nor those of Manilius, Firmicus and others. He repeats *nugae, nugae sunt haec*: but, meanwhile, he takes pity on Bonincontro, who had understood very well the phrase of Manilius *Inde suas illi signo in quo Luna refulsit | Quaeque hinc defuerant partes numerare momento* (II, 729-730). Disposing of completing the sign, this to speak of returning to the beginning. Scaliger declared this reading “ridiculous” and he read *Et quae dehinc fuerint*.

672 The scholiast (Anon., p. 48) says that the method by multiplication, the most clear, is also the oldest οἱ παλαιοὶ διὰ τὸ σαφέστερον ἐπὶ τὸν δωδέκατον ἀριθμὸν ἐπολλαπλασίαζον. Dorotheus of Sidon did it this way but Ptolemy made no allusion to the method by division (*Tetrab.*, I, 21). He only speaks, moreover, of removing the whole system *en bloc* (above, p. 299, 2).

673 This for the point of departure. Demophilus (p. 194) put it doubtless like everyone else, at the beginning of the sign, without telling us if this 2° 30', covered the whole sign. One looks forward to the point of arrival, to see how it will coincide with the fractional ½° which remains to be distributed, in the example posed by him, with a fraction of a sign. However, here he contents himself with an over-all estimate. The dodecatemorion of the Moon placed at ♏ 13° falls, he says, “in Virgo, house of Mercury.” Like Manilius, Demophilus does not concern himself with the Moon.

674 τριακοντάς in Demophilus, *loc. cit.*

675 Once more (cf. above, p. 302, 1), where did the astrologers place, in a sign, their twelfths of a sign? They doubtless contented themselves at first with taking the whole sign in which fell – wholly or partly – the last portion of 2°, 30'. Later, however, this was no longer enough, and one preferred the method of multiplication by twelve, which ended by designating not only the sign but the degree of the sign holding the dodecatemorion. Nevertheless, I must say that the scholiast seems to consider this method, that of the “Egyptians,” was the older.

676 Unless, as Ptolemy wanted it (above, p. 196, 3), the quality of a ὕψωμα extended to the entire sign. This was the view of the redactor of papyrus XCVIII; for he notes, about the dodecatemoria, that they fell in this sign, that house, this ὅρια, and, when there is a place, that ὕψωμα.

677 Above, pp. 195 and 199, 1.

678 Firmicus accepted it all nevertheless, including the “aspects” seeing the point in question as well as the places. He mixed in, in his inimitable way, the *conditio* (αἵρεσις) of the proprietary planet, the state of which “dispatched his dodecatemorion,” etc. *Quaere itaque ne Luna plena per diem in finibus Martis duodecatemorion mittat, ne minuta id est deficiens in Saturni aut ne Mars in occasu aut ne Venus in Martis et Mars in Veneris et a finibus et a decanis et a conditionibus ... accipiant potestatem ... Sed et malitia Saturni fortius crescit, cum ex loci qualitate vel ex finium vel ex decani vel ex signi vel ex conditione provocata ad nocendum acceperit potestatem* (II, 13, 4-5). Some lines further on (II, 13 and 14), Firmicus used *locus* in the four senses of “place” or general position, of “sign,” of fixed astrological “house” or τόπος and of mobile “place,” ὠδωκατημόριον or κλήρος, calculated *partiliter*.

679 *Quid sit quod dicitur esse | Dodecatemorion: namque id per quinque notatur | Partes; nam totidem praefulgent sidera caelo | Quae vaga dicuntur; ducunt et singula sortes (sors = μοῖρα = degree) | Dimidias, viresque in eis et jura capessunt* (II, 740 sqq.). Scaliger here is unintelligible, and the reasoning of Th. Breiter (Zu Manilius, pp. 206-207), who considered this verse to be a gloss introduced into the text, is at least as useless.

680 Anon., p. 49.

681 We said before (p. 300) – we repeat – that, for the eclectics, who were responsible for this mess, a κλήρος may be, in turn, transported by the method of the dodecatemoria *Sed et Fortunae duodecatemorium diligenter inquire, ne te apotelesmatum fallat intentio* (Firmic., IV, 17, 12 Kroll).

682 Firmicus, IV, 32. The explanation is very ample (pp. 182-187 Pruckner), confirmed and made more complex upon certain points by Schol. Paul. Alex., K4v – L. This did not keep Firmicus from repeating from time to time that the vulgar method, false in particular, was good enough for general purposes. [See, however, Tamsyn Barton's discussion of the competitive aspect of astrological writing and practice in *Power and Knowledge Astrology, Physiognomy, and Medicine under the Roman Empire* (Ann Arbor, MI Univ. of Mich., 1995). Competition between rival astrologers was the reason for these successive revelations, similar to the progressive revelations given to initiates of some mystery religions. LJN].

683 If Saturn is ὕπαυγος (i.e., at least 15° from the Sun) replace with the distance between ♄ and ♃, with its inverse (Schol. Paul. Alex., l. c.).

684 In mythology, Jupiter saved his *brothers* swallowed by Saturn.

685 The spouse is above all the future mother, the wife of the *father*.

686 Firmicus was afraid that no one would understand the motif; he added *meminisse autem debes quod generaliter uxorem Venus, maritum vero Mars semper ostendit*. We will see in Chapter 12 that Mars and Venus represent adultery especially.

687 This is an application opposite from the καθυπερτέρησις (above, p. 250).

668 An anonymous author, who probably thought only of the hermetic lots, pretended that the Lots of Fortune and of the Spirit served to determine all the others (Cod. Florent, p. 167).

689 See, without further comment, the list of other subjects brought in by Firmicus. Remember, the distances are opposite for the day and the night, and are always related to the Ascendant. *Locus cupidinis*, the distance between the κλήρος Δαίμωνος and the κλήρος Τύξης; *necessitatis* between the κλήρος Τύξης and the κλήρος Δαίμωνος; *cinaedorum*, between the ☾ and ♀ (VII, 16); *libidinis*, between ☾ and ♀ (*ibid.*); *honorum*, between the tenth place and the ☉; *militiae*, between ♂ and the ☉; *peregrinationis*, between ☉ and ♂; *existimationis*, between the ☉ and the Midheaven; *corporis virtutis*, between ☉ and ♀; *basis*, between the κλήρος Τύξης and the κλήρος Δαίμωνος; *possessionum*, between ♄ and ♃; *accusationis*, between ♂ and ♀; *adversariorum, inimicorum*, between ♂ and ♄; *gloriae*, between ♀ and ♃; *Nemesis*, between the κλήρος Τύξης and ☾; *potestatis*, between ♀ and ☉; *servorum*, between ♄ and ☾. The text given by Pruckner requires too much caution for him to be used to remark on things, other than the appearance of certain κλήροι under the name “hermetic” (Νέμεσις – Ἐρως [*cupido*] – Ἀνάγκη [*Necessitas*] but without the relationship to the planets to which they correspond in the Hermetic tradition. At the moment when this chapter was in press, the *Codices Florentini* supplied me with materials to lengthen the list of Firmicus, with completely different formulae for the same cases. I find here again the enigmatic κλήρος βάσεως (pp. 160, 16; 170, 19) or βάσεων (p. 169, 28), which is the κλήρος of the Ascendant itself, moved a certain distance from its real position and added, as an eighth “lot,” to the seven hermetic lots (βάσις, ὃ ἐστὶν ὠροσκόπος. Paul. Alex., K 3. Cf. *Cod. Florent.*, p. 160, and below, p. 308, 1.

- 690 Paul. Alex., K2-4 (Περὶ τῶν ζ' κληρῶν τῶν ἐν τῇ Παναρέτῳ). The Hermetic book has the same title as the Πανάρετος or "Ecclesiasticus," the Wisdom of Jesus Son of Sirach. One finds this Hermetic Πανάρετος cited in a magic papyrus of Leiden (W., p. xxii, 31) alongside book 5 of the *Ptolemaïka* of Ptolemy Euergetes II. It was during his reign the Πανάρετος, was translated by the son of Sirach. A philosopher named Πανάρετος, appointed by the king, also lived at the same time. There is material for conjecture here! (cf. A. Dieterich, in *Jahrb. f. kl. Philol., Supplbd.*, XVI [1888], p. 754). The scholiast tells us that there are a number of other κληροί, left to one side by Paul, those which we listed a little while ago (πατρός καὶ μητρός καὶ ἀδελφῶν καὶ τέκνων καὶ γάμων καὶ ἄλλων πολλῶν).
- 691 On Saturn-Nemesis, see [above, p. 94, 1](#).
- 692 Νίκη is constantly associated with Zeus –Νίκη Διὸς τοῦ μεγάλου παῖ (Himer., *Orat.*, XIX, 3) – ἐν Ὀλύμπῳ Ζηνὶ παρισταμένα (Bacchyl., fr. 9).
- 693 Mercury-Ανάγκη must have become a philosophical symbol. Mercury is Science and science knows only Necessity, which rules the material world.
- 694 The seven lots, with the Ascendant under the name of βάσις, ζωῆς καὶ πνεύματος παραιτία (Paul. Alex., *I.c.*), forming a complete cycle, closed by Nemesis which, among other effects, is the cause καὶ ποιότητος θανάτου.
- 695 *Tetrab.*, II, 23. See the whole discussion of συναφαί ἀπόρροιαὶ καθυπερτερήσεις. etc., etc. (above, ch. 8), which we will not summarize here.
- 696 Ap. Porphyr., *Isag.*, p. 203. Do not forget that even the κακοποιοί are less malefic when they are relaxing (above, p. [101, 3](#)). Cf. Anon., p. 74.
- 697 This is no advantage when the planet is malefic, or else the scholiast plays with words τότε γὰρ οἱ μὲν ἀγαθοποιοὶ στερεοῦσι τὸ ἀγαθόν, οἱ δὲ κακοποιοὶ τὸ κακόν. It must mean that the sign fixes (i.e., *consolidates*) the good and fixes (i.e., *stops*) the bad effects!
- 698 The evil planets associate with each other for evil purposes, but they do not like each other. Their tempers are sweetened by contact with the good ones.
- 699 Anon., p. 74.
- 700 This is a refinement neglected by Ptolemy, even though it fits the logic of his doctrines. Ptolemy was content to say, in a general manner, that the planets are more energetic in the east and in direct motion (*Tetrab.*, I, 23). Cf. [above, p. 113, 1](#).
- 701 [Above, p. 112, 1](#). A new text, (*Cod. Florent.*, p. 145) tells us that the exception made for the planets ἐγκάρδιοι – ἐν τῇ καρδίᾳ τοῦ ἡλίου – dates from Antiochus ταύτης δὲ τῆς φάσεως οὐδεὶς τῶν ἀρχαίων ἐμνήσθη.
- 702 Plato, *Critias*, p. 109 B.
- 703 See chapter 11, for the various systems of chorography. They could logically be discussed here, and were left out of this chapter only so as to concentrate better upon the practical applications.
- 704 See C. Boetticher, *Der Baumkultus der Hellenen*. Berlin, 1856.
- 705 See Chapter 15.
- 706 Cf. the very recent edition of *Scriptores physiognomici graeci et latini*, by R. Fester, 2 vols., Lips., 1893. The series opens with the *Fusiognomika* of Pseudo-Aristotle. The physiognomists were not affected by the astrologers, but the astrologers were very much affected by the physiognomists. Cf. the portraits of individuals born under each of the twelve signs in the *Philosophumena*, IV, 3, pp. 84-93 Cruice.
- 707 Saturn is the little finger, the Sun in the ring-finger (because the sign of the Sun is a ring ☉?) Mercury is the middle finger, Mars is the index finger, Venus is the thumb. I will say no more on this subject, as my goal is the study of astrology, not its related disciplines.
- 708 See [above, p. 41, 1](#).
- 709 See Chapter 11. [Cf. Reiner and Pingree, 1981], about the colors planets and stars sometimes show when on the horizon. LNJ]
- 710 One knows very well that it is difficult to understand the meanings of the words expressing colors and especially their nuances. I prefer to give the Greek terms according to Ptolemy (*Tetrab.*, II,) and his Anonymous scholiast (p. 75), Hephaestion (I, 29), Demophilus (ap. Porph., p. 199), Vettius Valens (ap. Salmas., pp. 620-

623), leaving to one side the colors of the walls of Ecbatana (Herod., I, 98). *Saturn* is colored [χροιά] μέλαινα ἢ υπόχλωρα (Ptol., Anon., Hephaest.), μέλαινα (Valens), βαφῆς καστοριζούσης (Demoph.), πορφυρέαις ἀκτίσι (Maneth., IV, 188). – *Jupiter* is colored λευκή (Ptol., Anon., Hephaest.), λαμπρά (Val.); [χροιάς] γαλαϊζούσης ἐπὶ τὸ λευκὸν ῥεπούσης (Demoph.); – *Mars*, colored υπόκιρρα (Ptol., Anon., Hephaest.) κίρρα (Val.); [χροιάς] πυρίνης, φλογίνης (Demoph.). – the Sun is, all agree, χρύσεος or χρυσοκίτρινος (Demoph.). – *Venus* is λευκή (Demoph.), ξανθή (Ptol., Anon., Heph., Proclus), τῷ χρώματι ποικίλη (Val.), ἀκτίσι χρυσέησι (Maneth., IV, 225), κρυστάλλω ὁμοία (Pap. CXXX Brit. Mus., II, 150) *colore aureo* (Schol. German., p. 422 Eyssenh.). *Mercury* is colored ποικίλη (Ptol., Anon., Heph.); ὠχρά (Val.), ἀληθινή (Demoph.). – the Moon is, nearly unanimously, silvery or ἀερῶδης (Val.), πρασίνη (Demoph.) or even (accidentally perhaps) χρυσῷ ὁμοία (Pap. CXXX, II, 85). There ought to be new recensions of the texts, notably of Demophilus, to be more sure of these attributions.

711 Proclus, *Anal. sacr.*, V, 2, p. 71 Pitra.

712 Valens never dreamed that the planetary colors might be natural. He thought that they had to exist for symbolic reasons and sought διὰ ποίαν αἰτίαν τοιαύταις χροιαῖς τοῦ πλανήτας καὶ τὴν σελήνην καὶ τὸν ἥλιον οἱ παλαιοὶ ἐτύπωσαν.

713 Μνεῦις βοῶν ἔστι μέγιστος, σφόδρα μέλας, μάλιστα ὅτι καὶ ἥλιος ὁ πολὺς μελαίνει τὰ ἀνθρώπεια σώματα. Likewise, the lunar Apis, ὅτι καὶ τῆς σελήνης τὸ φῶς ἐκ ἡλίου· ἡλίου δὲ σημεῖον τὸ μέλαν τοῦ σώματος (“The Egyptians” ap. Euseb., *Praep. Ev.*, III, 13, 1-2). This is one more affinity (cf. [above](#), p. 93, 2) between Saturn and the Sun.

714 For the triplicities, see above, [Fig. 19](#). According to Saumaise (*Praef.*), with whom I agree on this point, *Horoscopus et VII locus... albi sunt, II et XII virides, III et XI crocei, IV et X rubri, V and IX mellei, VI and VIII nigri*, six colors, each occupying two opposing sectors. On the colors, odors and tastes spread around the zodiac, see Firmicus, in Pruckner, II, 12.

715 “Ἐκαστα τῶν μετάλλων, ὥσπερ καὶ τῶν ἄλλων, ἀπὸ τῶν οὐρανίων ἐν γῇ φύεται θεῶν καὶ τῆς ἐκεῖθεν ἀπορροίας (Procl., *In Tim.*, p. 14 B.).

716 It was appropriate, in view of the affinities between astrology and magic, that the metal of Saturn was the preferred choice for engraving curse formulae (ἀραι – κατάδεσμοι, *defixiones*). One finds “lead lamellae” expressly recommended for this purpose λαβὼν πλάτυμμα μολυβοῦν γράψων τὸν λόγον – μολυβοῦν πέταλον καὶ σιδηροῦν κρίκον (the metals of Saturn and Mars), etc. Cf. A. Dieterich, in *Jahrb. f. Philol.*, Supplbd. XVI [1888], pp. 790-791. The number of lead foil curse tablets increases every year. P. Delattre recently found 55 in a tunnel beneath the amphitheater of Carthage (*C.-R. Acad. Inscr.*, 1897, pp. 318 sqq.). [There have been many more curse tablets discovered since 1899. Cf. F. Graf, *Magic in the Ancient World* (Cambridge, Mass. and London, UK Harvard University Press, 1997) and the sources cited there. LJN].

717 See the distribution of metals in Proclus (*In Tim.*, p. 14 B), Olympiodorus (ap. Fabricius, *Bibl. gr.*, V, 6), the *Anecdota* of Ludwich (p. 121), the metallic ladder of Mithra (κλιμαξ ἐπτάπυλας) in Lobeck, *Aglaophamus*, p. 934, and, a work which replaces all the others, the *Collection des anciens alchimistes grecs* of M. Berthelot, notably the “Introduction,” Paris, 1888, pp. 73-85. The names of mercurial or martial medications, extract of Saturn, etc., have passed into current language. One calls a preparation based on tin “jovial” pills (Littré, s.v.). It goes without saying that the metals were designated by the signs of the planets. The ὑδράγυρον, known “from the time of the Peloponnesian War,” took first the sign of the Moon (silver) with the horns to the left. It later became “mercury.” The change was made some time between the fifth and seventh centuries CE (M. Berthelot, *Introd.*, pp. 84, 94-95, 112).

718 There is a whole “lapidary” literature. See the collection of Mély, of which tome II, the *Lapidaires grecs*, by F. de Mély and Ch.-Ém. Ruelle, is about to appear (Paris, Leroux, 1898). It contains much unedited material (v. g., *Les Cyranides*), but nothing astrological. This is a lacuna which needs to be filled. [See now Dimitris Kaimakis, ed., *Die Kyraniden* (Meisenheim am Glan Hain, 1976). LJN].

719 See the *Anecdota* of Ludwich (p. 121).

720 See the decanic amulets carved upon stones, in Τοῦ Ἑρμοῦ πρὸς Ἀσκληπίον ἡ λεγούμενη Ἰερὰ Βίβλος (*Anal. Sacr.*, V, 2, pp. 284-290). All these superstitions appear in texts of the late era, but they go back very far, and it is pointless to try to determine their age. We will meet them again in “iatromathematics” (Chapter 15). [Cf. Graf, 1997 for recent bibliography. LJN].

721 Look, to begin the riddle-play, at this example of clues. First, there is Aries with its three planetary decans (♈ - ☉ - ♈). The first stone, the λίθος Βαβυλώνιος, makes an allusion to Aries' protectorate over Babylonia (in the system of Dorotheus, Chapter 11). Mars, the first decan, moves back to the second rank and

replaces the Sun (λίθος σιδηρίτης). There remains Venus, third decan, which has for a symbol the “curly one” (λίθος βοστρυχίης). Taurus, exaltation of the Moon, begins with the λίθος σεληνίτης. As domicile of Venus, there follows the λίθος ἀφροδισιακός and its third decan, πρόσωπον of Saturn, motive for the violet color of the λίθος ὑακίνθος, etc.

722 See the pharmacopeia of Ἡρμοῦ τοῦ Τρισημέστου πρὸς Ἀσκληπίον περὶ βοτανῶν τῶν ζ' ἀστέρων, etc. (*Anal. Sacr.*, V, 2, pp. 279-284 and 291) and the *Anecdota* of Ludwich, pp. 120-121. The list of decanic amulets in the Ἱερὰ βιβλος of Hermes Trismegistus (above, p. 316, 4 and 5) also contains one plant per decan. I mention for a memorandum the rudiments of the distribution of the mineral, vegetable and animal kingdoms among the signs of the zodiac (Ludwich, pp. 119-120). In the case of the vegetable kingdom, the olive is assigned to Cancer, wheat to Virgo, the palm to Libra, the vine to Scorpio and to Sagittarius (the period of wine-making?), legumes to Capricorn (from the idea of irrigation, κήπτων ἀρδευτῶν). In the case of the animal kingdom, wild animals to Leo, birds to Virgo (because winged?), fish to Pisces, human beings to the human signs (Gemini, Libra, Aquarius).

723 See the *Anecdota* of Ludwich, pp. 121-122 (*Τί ἐκλήρωσατο ἕκαστος τῶν ἀστέρων ἀπὸ τῶν ζώων*).

724 Τὰ τῆς νυκτὸς πετεινά – whether Saturn is diurnal sect or nocturnal. However, on the other hand, Saturn is “black” and black prevails.

725 Diogenes Laertius ends his epigram upon Diodorus the Megarian, surnamed Kronos, with this pun τοιγὰρ εὐρέθης Κρόνος | ἔξωθε τοῦ ῥω κάππα τε (Diog. Laert., II, 112). I am persuaded that the astrologers made the correlation earlier and then found, to justify it, many affinities between the old, slow, cold, Saturn and the animal *frigidum, indocile, tardum – longae vitae* (*Physiognom. graec.*, II, pp. 136 and 139 Fester). The long ears were a sign of long life (Plin., XI, 27) and Saturn had influence over the ears (p. 321). I propose to demonstrate farther on, concerning the planetary week (Chapter 13), that the attribution of the ass to Saturn is probably the reason that the Jews, observers of the Sabbath (the day of Saturn) were thought, in the Roman world, to adore or revere the head of an ass. Note provisionally that Plutarch (*Quaest. Conviv.*, IV, 5) associates the hare and the ass and says that both are honored by the Jews. The hare was honored because of its resemblance to the ass, and the ass “for having discovered a source of water for them” in the wilderness, at the time of Moses. (Tac., *Hist.*, IV, 3) This reminds us that Saturn was lodged in Aquarius and was the patron of water-carriers (above, p. 96).

726 Was the zodiacal melothesia – the decanic especially – more “Egyptian”? The other one more “Chaldaean”? There were only arbitrary solutions to the question. Manilius did not concern himself with it, and S. Empiricus, for whom all the astrologers were Chaldaeans, attributed the zodiacal melothesia to “certain Chaldaeans” (τινὲς Χαλδαίων, op. cit., pp. 341–342), while others gave the honor to the Egyptians – οἱ Αἰγύτιοι (Schol. Arat., v. 544). – *Hunc enim locum divinus ille Nechepso, ut remedia valetudinum inveniret, diligentissime quidem, ut divinum tanti viri potuit ingenium, manifestis tractatibus explacavit* (Firmic., VIII, 3 Pruckner).

727 Manil., II, 453-465.

728 None of which are easy to indicate. Cf. Scorpio as laborer (above, p. 143, 2); here, ἐπ’ ἀρότρῳ παίδων. Sagittarius sometimes replaced Scorpio, by an analogous symbolism (*Cupidinis arcus*). The scholiast upon Aratus (v. 544) found these assimilations very satisfying. He is convinced that the choice had been made by the “Egyptians” κατὰ ἀναλογίαν τῶν μελῶν. Certainly, their canon was not that of Polyclitus. The lot of the Virgin was a bit scandalous, especially in its variants *Quid enim pugnacius dici posset quam testes et pudenda Virgini assignari, ut Alchabitus?* says the author of the *Margarita philosophica* (VII, 18).

729 Firmic., II, 24 Kroll. The melothesia mixed in with other considerations in the Firmicus of Pruckner (II, 12) is an interpolation, eliminated in recent editions. See, moreover, Paul. Alex., A-B 2, Demoph. ap. Porphy., p. 198. The latter notes the variants κατ’ ἐνίου, for example, the flanks (πλευραί), are attributed to Cancer rather than Leo. The zodiacal melothesia was still like this in the time of Saint Augustine: *ipsum corpus nostrum secundum XII signa compositum adstruunt Mathematici, constituentes in capite Arietem ... ad plantas usque, quas Piscibus tribuunt* (Augustin., *De Haeres.*, 70). In ms. 2419 of the Bibliotheque Nationale we find, in a frontispiece, a human figure surrounded by the twelve signs of the zodiac, disposed in two alternating series each of six signs, one from Aries to Pisces on the right semi-circle, the other from Taurus to Pisces on the left (cf. the description of M. Berthelot, *Introd.*, p. 205). The figures, dressed in fifteenth century styles, are not at all in proportion to the relative size of the signs. Cf. the figure given in book VII, 2, 1 of the *Margarita Philosophica* of Greg. Reisch (Argentor., 1504). The gnostic Marcus had the original idea of calling this anatomical specimen “Truth” and of arranging the letters of the alphabet around it in two series of twelve letters, one descending, the other ascending. The head corresponds to the A and the Ω, which was evidently the *raison d’etre* of the system (*Philosophum.*, VI, 5, 45, p. 314 Cruice). The Priscillianists replaced the signs with

the twelve Patriarchs of Israel (Concil. Brag., Can. X). Finally the twelve “places” or celestial mansions could be substituted for the signs, the first mansion corresponding to the head and the twelfth to the feet. This was the system preferred by the Arabs.

730 Origen., *Contra Cels.*, VIII, 58, trad. Aubé (text [seen above, p. 229, 2](#)). See the melothesia by decans in the hermetic Ἱερά βιβλος *Hiera biblos* ([above, p. 316, 4](#)), preceded by a summary melothesia by signs.

731 Trismegistus (ap. Ideler, p. 387) who claimed the honor of inventing it, called his science ὑπηρετικὴ τῆς φύσεως ἀνάγκη γὰρ ταύτην συγκροτεῖν τῇ φύσει. There was no objection to what went before this ἀνάγκη γάρ.

732 *Tetrab.*, III, 11, p. 258 Junctinus; Anon., p. 138-140.

733 This goes without saying, if one begins by admitting that Saturn and Mars, authors of all infirmities (Chap. 12), made people deaf and mute in collaboration with Mercury (Maneth., II, 192-193; V, 263). Saturn is to the right, as oriental and diurnal; Mars, to the left, as occidental and nocturnal. There was a more topical reason for Saturn. It was that Saturn was assimilated to Nemesis ([above, pp. 93, 2 and 307](#)), and that Nemesis sat behind the right ear, at a place where one touched with the little finger to ask pardon from the gods with some advantageous word *est post aurem aequae dexteram Nemeseos [locus] ... quo referimus tactum ore proximum a minimo digitum veniam sermonis a dis ibi recondentes* (Plin., XI, 251). Astrology is a receptacle for all superstitions.

734 Cf. [above, pp. 97-98, 201](#).

735 Τῶν ἀρχικωτάτων καὶ ἡγεμονικοτάτων (Anon., p. 138). The Stoics hesitated to locate the ἡγεμονικόν. Some placed it in the head; Chrysippus, ἐν τῷ στήθει (Phaedr. Epicur., p. 21 Petersen). Ptolemy avoided the trouble of choosing.

736 Ptolemy says simply χολῆς καὶ ἔδρας the scholiast, embarrassed, adds only διὰ τὸ κινητικόν.

737 It is here that the scholiast surpasses himself and dispenses with philosophy ἀναλογεῖ γὰρ τῇ γεύσει ἢ ἑλκτικῇ [δύναμις], τῇ δὲ καταπόσει ἢ καθεκτικῇ, τῷ δὲ στομάχῳ ἢ ἀλλοιωτικῇ, τῇ δὲ κοιλίᾳ ἢ ἀποκριτικῇ. Metaphysics comes to the rescue when physics fails. Farther on, it was apparent that Ptolemy had forgotten to match a planet to the masculine genitalia, and he took a risk in attributing them to the Moon a general influence over τὰ σπερματικά καὶ γόνιμο γένη. [Robbins' translation of Ptolemy gives genitals to Mars, without specifying sex and the womb to the Moon. *Tetrab.*, p. 319. KM.]

738 Demoph. ap. Porph., p. 198. According to the Egyptian tradition, the Sun was the right eye of Horus or of Osiris; the Moon, the left eye (Brugsch, *Thesaurus*, II, pp. 436-438). The innovation here consists of adding attributions for the feminine sex.

739 One may even go beyond these subtleties, in attributing *in nativitate diurna oculum dextrum Soli et sinistrum Lune; in nativitate autem femine tenent modos oppositos* (Ciruelo, III, 7 fol. I).

740 *Hermippus*, I, 13, 80-92, pp. 18-20 Kroll; II, 3, pp. 37-39.

741 The Saturnian σπέρμα is a πνεῦμα (*Philosophum.*, pp. 134-135 Cruice). Cf. Saturn πνεύματος βραθεύς (Maneth., V, 262).

742 One could take even the size of the planets into account. The small Mars is reduced to the spleen. Venus, which was thought to be enormous ([above, p. 100, 1](#)), had a very extensive domain.

743 In the cosmogony of the “Chaldaean theurgists” ([above, p. 192, 1](#)) the Demiurge is τὸ ἡλιακὸν πῦρ *κραδίης* [sic LJN] *τόπῳ ἐστέρηξεν*. Varro makes the remark that the navel is not in the middle of the body (Varr., *L. lat.*, VIII, 17). (He was thinking of the ὀμφαλός of Delphi, which was placed, we are told, exactly in the middle of the inhabitable world.) This is even more true of the heart. Likewise, the supposed cold of the head is temporary. One speaks of a head cold, but only metaphorically. This applies to the etymology Κρόνος from ἀκήρατος νοῦς (*Hermippus*, II, 3, 24), an etymology in the mode of Plato and the Stoics. Theon of Smyrna (p. 187 Hiller) explains a theory, perhaps from Poseidonios, which would have led to a different melothesia. He says that the world has two centers a center of life (τῆς ἐμψυχίας), the Sun, which is associated with the heart, and the center of the image (τοῦ μεγέθους), the navel, corresponding to the earth. The lower part of the body would have the same planets, in inverse order. The idea of the zodiacal melothesia must have occurred to some astrologer. Trismegistus (ap. Ideler, I, pp. 387 and 430) assigned the head to Aries and distributed the seven planets within the head. He attributed the right eye to the ☉, the left one to the ☾, the ears to, ἡ the brain to ♃, the tongue and inside the throat to ♄, the senses of smell and taste to ♀, the blood to ♂. He may have been following, perhaps unconsciously, the Platonic tradition which made the spherical head the complete person ([above, p. 21](#)). I do not know whence the author of the *Margarita Philosophica* (VII, 2, 5) took the

elements in his Table of Pythagoras, with the signs in a vertical column and the planets in horizontal series (eighty-four compartments), entitled *Quas corporis partes planetae in diversis signis respiciant*. It was the human body cut up into ὅρια. Thus Saturn ruled in ♄, the chest; in ♃ and ♀, the belly; in ♄ and ♀, the genitalia; in ♀ and ♄, the feet; in ♄, the knees; in ♀, the heels; in ♄, the head; in ♄, the neck; in ♄, the shoulders. Each planet changed the patronage of each sign. [The changed position of Sagittarius is true to B-L, however the number of errors I found in this section suggests it was a bad week and caution might be required here. I was not able to check the source material.KM.]

744 Exterior members κεφαλή, στέρνα, γαστήρ, διπταὶ χεῖρες, διπταὶ βάσεις; interior organs στόμαχος, καρδία, πνεύμων, σπλήν, ἥπαρ, νεφροὶ δύο (Philo, *De opificio mundi*, 40, 118). The hermetic distribution (ap. Stob., *Ecl.*, I, 15, 14, p. 176) ἡ δάκρυ + αὐτὸ γένεσις + ψ λόγος + σ θυμός + οὐπνος + ρ ὄρεξις + θ γέλως. See the divisions into thirds and sevenths of the soul, of the body and the physical life, even *in utero*, in Macrobius (*Somn. Scip.*, I, 6, 34-83) even the senses are rooted there in the seven-fold order, because there are seven openings in the head for their service (*septem foraminibus sensuum celebrantur officia*, 81). It was a road which led directly to the seven sages, the seven wonders of the world. Further, it led to the Christian psychothesia the three theological virtues, the seven deadly sins, the seven sacraments, the seven gifts of the Holy Spirit, the seven sorrows of the Virgin, etc. Astrology, like perfume in the air, is everywhere, unsuspected, but present.

745 Cf. the twenty-eight ells of intestine, according to Herophilus (Theo. Smyrn., p. 104 Hiller, as many as the compartments of the lunar zodiac (above, pp. 55-56). [The French ell or *aune* was equal to 54 inches. LJN].

746 Martian. Cap., I, 28. There was no doubt that the thing was very well arranged with Urania in the starry sphere, which gave the sharpest sound. Polyhymnia was in the circle of Saturn. Euterpe was in that of Jupiter (cf. *risum Jovis*, *ibid.*, I, 16). Erato was at home with the amorous Mars. Melpomene accompanied the Sun. Terpsichore went with Venus. Calliope accompanied Mercury. Clio held to harsh bass sounds in the circle of the Moon. As for Thalia, deposed to the earth by her lazy swain, “she sings with the same abundant force as a flowery field” (*in ipso florentis campi ubere personabat*).

747 Proclus, *In. Tim.*, p. 348 A. Cf. in the Καρπός (86) ὁ ἥλιος ἐστὶ πηγὴ τῆς ζωικῆς δυνάμεως, ἡ δὲ σελήνη τῆς φυσικῆς, ὁ δὲ Ζεὺς, τῆς ἀνδρική, ὁ δὲ Ἑρμῆς τῆς λογικῆς, ὁ δὲ Ἄρης τῆς ἐπιθυμητικῆς. Saturn and Venus are missing. I do not know what mystificator had the idea of transporting the melothesia to human artifacts and attributing to Ptolemy an analysis of the “members” of a ship, assigning the prow to Aries, the bow to Taurus, the sides to Leo, the hull or belly to Virgo, the mast to Sagittarius, etc. (P. Lichtenstein, following Haly, p. 549).

748 See Macrobi., *Somn. Scip.*, I, 12, 68; Serv., *Aen.*, VI, 714; XI, 51, and the texts cited by Lobeck, *Aglaophamus*, pp. 932-936.

749 One cannot imagine how tenacious these survivals of mysticism are. Niebuhr modelled the ancient city on the solar or lunar year (v.g. Athens, four tribes or seasons, twelve phratries or months, thirty γένη per phratry or 360 for the whole city) with the conviction that their founders had done the same. Huschke wrote that Rome had had ten curia per tribe, because there are ten digits on the hands and the feet. This was only a circumlocution for the decimal system. However, he decided later that there had been two military centuries per tribe, because the army marched and needed two feet. Another said that Rome was so fecund because it combined the Roman or male element with the Latin or female element. Even today, since J. Grimm, it is nearly a dogma that “humanity walks from Orient to Occident,” like the Sun. Nor did the poets willingly give up saying that the Orient is the land of the Sun. To compare a city with a human being is especially common in Plato. To compare the sky with the single city (or with a collection of cities, friendly or hostile), in Manilius (*Sic etiam magno quaedam respublica mundo est*, with the senatorial, equestrian and plebeian orders V, 734-745), which inspired the Stoics (*mundus quasi communis deorum atque hominum ... urbs*. Cic., *Nat. Deor.*, II, 62; κόσμον εἶναι πόλιν, with the Sun for counsellor, Hesperus for prytany member, etc. Plut., *Adv. Stoic.*, 34). Demados also approached, without knowing it, these nicely distinguished discoveries, when he said ἔαρ δὲ τοῦ δήμου τοῦς ἐφήβους, τὸ δὲ τεῖχος ἐσθῆτα τῆς πόλεως (ap. Athen., III, p. 99 D). Iphicrates found that, in an army, the infantry resembled the hand, the cavalry, the feet, the phalanx, the chest (Plut., *Pelopid.*, 2). He invented the metaphors while making comparisons which took the place of reasons.

750 Cf. A. Bouché-Leclercq, “Chorographie astrologique,” (*Mélanges Graux* [Paris, 1884], pp. 341-351) and the adaption of the system to modern cities and kingdoms in Junctinus, pp. 811-821. Χωρογραφία is not an especially astrological word. The astrologers were able to avoid the influence of even the geographers. They preferred to analyze it in concrete terms and to write upon their tables Αἱ χῶραι συνοικειούμεναι τοῖς ἰβ' ζωδίοις (Ludwich, *Anecdota*, p. 112) or Περί τῆς τῶν χωρῶν πρὸς τὰ τρίγωνα καὶ τοὺς ἀστέρας συνοικειώσεως (Ptol., *Tetrab.*, II, 2). One encounters, in our texts, a subject which could appear equally in this chapter or the

preceding. This is the division of the patronages of the signs upon the earth from the point of view of the configuration and nature of the soil, a point of view which the authors of the chorographic charts are supposed to have taken into account. Thus, Aries rules pastures and grasslands; Taurus, the plow-land; Gemini, mountains and high, uncultivated, areas (the legends of Hercules and Apollo?); Cancer, low, humid, wooded, places; Leo, deserts and wilderness, the homes of wild animals; Virgo, fields of grain; Libra, palms and unworked plains; Scorpio, vineyards on flat land, cedars, cypresses, etc.; Capricorn, market gardens and goats; Aquarius, lakes and rivers; Pisces, the ocean and fish. See the detritus of such traditions in the abridgements in the late era (Ludwich, pp. 119-120).

751 *Ἀποτελεσματική [τέχνη]*, science of the completion [ἀποτελεῖν] or realization of astrological predictions. The word has no equivalent in Latin or French [or English LNJ] and I adopt it as such, in its restricted sense.

752 Manil., IV, 742-805.

753 *Aethiopes maculant orbem* (IV, 723). The text of the passage concerning Gemini and Cancer (755-759) is very uncertain. The *Gemblacensis* carries *Ultimis et solidos Ganges et transcolit India Cancer* the reading of Scaliger (*post, brachia fratris | Ultimis ex solido tetras. Colit India Cancrum: | Ardent Aethiopes Cancro*). As a hot country, India belongs to Cancer, not to Gemini. Fr. Jacob gives *post brachia fratris | Ultimis occulit os Ganges et trameat Indos* and K. Rossberg (*Jahrb. f. Phil.*, 1889, pp. 711-712) proposes *Alterius folio fragrans colit India Gangem*. This verse is so crippled and deformed, it needs an orthopedic surgeon. The idea of “clime” or earthly latitude is absent from this distribution, save for Cancer, the most northerly of the signs, which must have had another affectation. Lucan (X, 210 sqq.), who confuses everything he touches, assigns “the mouths of the Nile” to Cancer as regulator of the floods, along with Syene because of the heat. Virgil says correctly: *Aethiopum versemus oves sub sidere Cancri* (Virg., *Ecl.*, X, 68). [Ethiopia was the region where very dark skinned people lived, not the modern nation-state of Ethiopia. Usually it meant Africa south of the Sahara, but sometimes included southern India. LNJ].

754 *Macetum tellus, quae vicerat orbem* (IV, 762).

755 This is one of those shameless flatteries – maladroït because excessive – which show the poet to be timid or hungry: *Est Rhodos, hospitium recturi principis orbem, | Tumque domus vere Solis, cui tota sacrata est, | Quum caperat lumen magni sub Caesare mundi* (IV, 764-766).

756 In Stephen of Byzantium (p. 22^a Usener), Ζυγός is not a balance, but a yoke of servitude. Did he think of a conquering Rome or of submission to Rome? The idea of “balance,” or physical and moral equilibrium in Nature in Italy, was familiar to other astrologers. Vitruvius thought northern peoples brave but stupid, southern ones clever but cowardly. Italy combined the qualities of North and South: *namque temperatissimae ad utramque partem, et corporum membris animorumque vigoribus, pro fortitudine sunt in Italia gentes – itaque (Italia) consiliis refringit barbarorum virtutes, forti manu meridiorm cogitationes*: Italy, not Greece, was still rather northern. To be properly praised, one must praise oneself!

757 The verse *Tirrenas lacrimis radiatus Scorpis arces* (ms. G) became, under the pen of Fr. Jacob *Et Zmyrnes lacrimis radiates Cyprios arces* (IV, 780). It would be better pruned, as Scaliger does (p. 326). K. Rossberg substitutes for *Tirrenas (arces)* the (*rura*) *Cyrenes* with the “tears” of the *laser Cyrenaicum* and *acer* replacing *arces*. Likewise, Th. Breiter, who substituted *armis* for *arces* (*Jahrb. f. kl. Philol.*, 1889, pp. 852-855).

758 Cf. [above, p. 144, 2](#).

759 Fr. Jacob writes *Assyriam* and adds proudly “*Aegyptum omnes ego coerexi*” [Egypt everywhere; I have corrected it] (IV, 798). His motive escapes me completely.

760 The chorography of Dorotheus of Sidon is in the uncertain text in the *Anecdota* of Ludwich (pp. 112-119) or is mentioned briefly in the most diverse systems, those of Ptolemy, Paul, Dorotheus, Valens, Odapsos, Hipparchus and the anonymous writers designated as Egyptians or simply under the rubric τινές ἄλλοι. The method is that of the zodiacal melothesia ([above, p. 319](#)).

761 The Balearic Islands are not in the text. However, I suppose that the compiler forgot them and Crete is put here by analogy.

762 I do not know if it is only chance that the Peutinger Table is divided into twelve sections, or if it perhaps reproduces a zodiacal division. [The Peutinger Table is a sort of road map of the Roman Empire. It survives in one medieval copy, but reflects the roads of the Later Roman Empire, and perhaps Agrippa’s map from the first century. LNJ.]

763 I will not take the trouble here to reproduce the examples which I have given of these ineptitudes in the *Mélanges Graux*, pp. 348-350, following the *Anecdota* (pp. 112-119 Ludwich). Their authors must be from

the late period and I am unsure if there was a sarcastic intention in the fact that Macedonia is in the belly of Leo, while Hellas is in the chest (*ibid.*, p. 349). We can only say that Greece in the heart of Leo has a “royal” place and that the “Egyptian” who put it there must have been a Greek. As a specimen of dissection, it is enough to cite Scorpio, which from head to tail, ruled over more than twenty countries, spread from Bactria to Iberia and from Bastarnia [Ukraine] to Libya. It is clear that he must have renounced bending these fantasies to the yoke of mathematics.

764 Bardaisan indicated this in passing (ap. Euseb., *Praep. Evang.*, VI, 10, 37) and, for want of texts, one would be right to suppose it *a priori*.

765 Hephaest., I, 21, pp. 82-89 Engelbr. Please excuse me from detailing this special chorography. The same system of trihorion, without the same addresses, is in the fragment of Leon (*Hermes*, VIII [1874], pp. 173-176). It is perhaps a reminiscence of the division of the circle into 48 parts ([above](#), p. 60, 2). Here, there are four duodecimal divisions following one another.

766 See Brugsch, *Thes. Inscr. Aegypt.*, I, pp. 376-377. One re-enters a hermetic system, perhaps built upon old Egyptian traditions, which represented the Earth lying upon its back, ὥσπερ ἄνθρωπος, οὐρανὸν βλέπουσα. The head was to the South, the feet to the North and thus it received the celestial influences perpendicularly, combined with those of its organs to it. It goes without saying, this time, that Egypt is the house of the heart (Stob., *Ecl.*, I, 41-45, p. 302 Meineke). [In the art of Pharaonic Egypt, the earth was Geb and the sky was his wife, Nut. Often she is portrayed as arched over him, toes and finger-tips touching the earth. In Greco-Roman period art, often the signs of the zodiac are added to her body. LJN]

767 See the geodesic discussions, very prolix with regard to detail for a survey, in the second book of Strabo. Ptolemy, in his Φάσεις (ap. Wachsmuth, pp. 200 sqq.), limits himself to five climes, going from Syene – Berenice (first clime) to Heliopolis – Alexandria – Cyrene (second clime), Rhodes (third clime), the Hellespont (fourth clime) until the parallel of Aquileia – Vienne (fifth clime). The length of daylight on the solstice was 13 ½ (equinoctial) hours at Syene and 15 ½ hours at Aquileia. In *Almagest* (II, 6), he counts seven Meroe, Syene, Alexandria, Rhodes, Hellespont, mid-Pontus-Euxinus and Borysthenes. Since the size of the climes was taken from the *times*, the arcs between the parallels continuously diminished – in other words, the parallels became closer one another – from South to North. [Φάσεις has not come down to us intact. Since Bouché-Leclercq wrote, some fragments have come to light in Arabic translation. See Régis Morelon, “Fragment arabe du premier livre du Phaseis de Ptolémée,” *Journal for the History of Arabic Science* 5 (1981), pp. 3-22. LJN].

768 The partisans of zodiacal chorography, on the contrary, pushed for twelve climes. The Valentinian Gnostics imagined that the signs of the zodiac dropped their effluvia straight down (κατὰ κάθετον) upon these twelve “climes” and engendered similar beings there (ὁμοούσια τέκνα τῇ καταπεμπούσῃ κατὰ τὴν ἀπόρροϊαν δυνάμει) *Philosophum.*, VI, 5, 54, p. 331 Cruice). This is close to the Egyptian conception ([above](#), p. 334, 2).

769 Firmicus held for the five zones, but lodged all these living spaces, and thus the influences of the signs and planets, in the two temperate zones. The appearance of the races depended on the action of the neighboring zones and individual variety was caused by the planets *Unde manifestis rationibus comprobatur zonarum quidem esse quod nigri vel candidi sunt, stellarum vero quod in illa unitate coloris dissimilium formarum varietatibus corporantur* (Firmic., I, 10, 11, Kroll).

770 It was necessary at the very least to give the constellations, which Ptolemy did in another way. Achilles Tatius (*Isag.*, 29) explains the system of the five terrestrial zones corresponding κατὰ κάθετον with the celestial zones. They also, by an unknown means, corresponded with the five planets. Saturn presided over the arctic zone, Mars over the torrid zone, Venus over the southern temperate zone and Mercury over the glacial antarctic zone. One would not have believed the brilliant Στίβων was so icy. The same distribution is in Ps.-Eratosthenes (ὁμοούσια τέκνα τῇ καταπεμπούσῃ κατὰ τὴν ἀπόρροϊαν (ad Arat., *Phaenom.*, 9). The system, known to Lucan (*Frigida Saturno glacies et zona nivalis* | *Cessit*. X, 205) went back to Vitruvius (cf. IX, 1, 16).

771 Οἱ δὲ ἀστρονόμοι φασὶ τὴν γῆν ταύτην μεμερίσθαι εἰς ἑπτὰ κλίματα καὶ ἄρχειν ἐκάστου κλίματος ἓνα τῶν ἑπτὰ ἀστέρων (Bardesan. ap. Eusebius, *Praep. Ev.*, VI, 10, 36 cf. [below](#), p. 347). We do not have a planetary chorography by χῶραι properly speaking, save that of Ptolemy, which is a part detached from the whole, a fragment of a system which attributed ♀ to Egypt and Syria, ♂ to Libya, ☾ to Palestine, the Orient in general to ☿ and the Occident, to ♀ (Steph. Alex., pp. 22-23 Usener). The Arabs have chorographies by climes and planets or by signs; witness the indecipherable chapters of Albohazen Haly (VIII, 34-37). ♀

772 Ptolem., *Tetrab.*, II, 3, pp. 82-86 Juntinus. The moderns go from one extreme to the other in their evaluations. For Schleiden (cited by Häbler, p. 29 and Böll, p. 201), this chorography is a genial idea in the

highest degree. For Böll, Ptolemy is one of the “stale sauces of geography.” Of geography, doubtless; but he is a marvel of astrological cuisine and his sauces do not lack the unexpected.

773 Fr. Böll, *op. cit.*, (see Bibliography). The principal argument of Fr. Böll is that the chorography of Ptolemy is obsolete compared with the geography of Ptolemy the geographer. The author of the *Tetrabiblos* ignored nearly everything which was not known in the time of Poseidonius. Is then Ptolemy the chorographer is the same as Ptolemy the geographer? A falsifier would not have hesitated to follow Ptolemy's *Geography*. If they are the same, it is necessary to believe that Ptolemy inserted into his *Tetrabiblos*, without correction, an earlier work, perhaps that of Poseidonius. It is this geography to which Strabo (II, 3, 7, pp. 102-103) clings, when he refutes the theory that aptitudes depend on the “zones.” However, Poseidonius spoke of zones parallel to the equator and I hesitate to attribute Ptolemy's division by triplicities to him.

774 See the discussion of the argument in Chapter 16.

775 Ptolemy and his scholiasts or disciples, even Paul of Alexandria, insist that the “catholic” predictions are the most important and dominate all individual charts. The same arrangement of planets (it cannot be exactly the same, because of different latitudes) does not bring about identical results for an Egyptian or an Ethiopian as for a Gaul or a Scythian (cf. Ptol., *Tetrab.*, III, 12; Anon., pp. 73-74; Paul. Alex., B 3). Concerning the influence of the “milieu” upon various populations (above, p. 12), see the texts reunited by R. Foerster, *Script. physiognomici*, II, pp. 321-352. Firmicus did not concern himself with universal apotelesmatica and says no more than a word in passing. He admits, however, the influence of the zones upon the physical appearance of the populations (above, p. 12), but not upon their habits *De moribus vero gentium supervacua disputatio est*, since one meets sober Asiatics, serious Greeks, sweet-tempered Scythians, etc. (I, 10, 12 Kroll).

776 The τεταρτημόρια of Ptolemy, orientated at 45° to the meridian, are right triangles having their 90° angle towards the center of the figure (Anon., p. 58). The contour of this figure would then be a lozenge more or less elongated in the direction of “longitude.” I do not understand how the οίκουμένη [oecumene, the habitable world, roughly the north temperate zone LJN], projected in a rectangular, or even an elliptical, form, could enter a lozenge. Cardanus, for whom there were no difficulties, pretended to resolve the problem by drawing (p. 228) a sort of trapezoid with curvilinear sides, in which the four right triangles representing the interior part in the center. The hypotenuses of these triangles are common to four exterior triangles which impressed their two other curvilinear sides of the contour of the figure. I would rather renounce giving an opinion on this question, which remains, for me, unintelligible from a geodesic point of view.

777 It is necessary to add, too, the influence of the major stars outside the zodiac (Ptol., *Tetrab.*, II, 4; Anon., pp. 69-70, 71.) It is, however, a question of the constellations παρανατέλλοντες. Ptolemy, distracted no doubt, or because he did not consider the rising of the stars (Ascendant) but their passing the meridian (Midheaven), associated the stars to signs by relationship with the meridian. The scholiast rectified this without remark. Hephaestion (I, 5, p. 7 Engelbr.), copied Ptolemy.

778 Ptolemy (or Posidonius) was very embarrassed by the co-existence of differing traditions. It would have been very simple to divide the earth, like the sky, into two parts one, solar, to the East; the other, lunar, to the West. One finds a fragment of such a system in John Lydus (*Ostent.*, 9). However, the Magi or Chaldaeans of Xerxes had affirmed already Ἡλίου εἶναι Ἑλλήνων προσδέκτορα Σελήνην, δὲ σφέων [sc. Περσῶν] (Herod., VII, 37) and the “Egyptians” diviners of Alexander said the same *affirmant Solem Graecorum, Lunam esse Persarum* (Curt., IV, 10, 6). Ptolemy did not want to accept the whole of this tradition, which gave different addresses for eclipses of the Sun or Moon. However, it obliged him to make – contrary to the theory of αἵρεσις – the solar temperament dominate in the East. The system of triplicities, which reunited the most distant points of the circle, was evidently the most proper way to mask and avoid the difficulties.

779 The reference to phase is a refinement which it was not necessary to question in the chapter on triplicities (above, pp. 199-206). Cardanus (p. 228) explains it by saying that the four planets which dominated each at the cardinal points (above, p. 201, 3) did not dominate others, save in a condition or phase connected with a region. Thus, Jupiter governed the North at all times. However, it had no effect on the West, save when in vespereal phase. Cardanus improvised, as always. He forgot that Ptolemy demanded that the phase be connected with the principal oecodespot or ruler, which is supposed to be in its own domain.

780 One is surprised to see the Greeks insist on transferring to the barbarians – the western barbarians – the ignominy of a vice to which they themselves had given such notoriety, making it a literary and even a philosophical theme. It was not, to be sure, the barbarians who gave them the idea. This accusation (whose historical value we cannot discuss) goes back at least to Aristotle. Speaking of peoples who were bellicose and therefore voluptuous (always Mars and Venus!), Aristotle said that these peoples are in danger of falling under the domination of women, “with the exception of the Celts and other such peoples who have openly encouraged commerce with males” (*Polit.*, II, 6, 6). Against the Celts, terror of the human race, all was fair. The

affirmation of Aristotle was made more precise and stronger by Posidonius, the appointed historian of the northern barbarians, and no doubt by Timagenes as well. It is reproduced by Diodorus (V, 32), by Strabo, who alleged the rumors τοῦτο δὲ τῶν θρυλομένων ἐστίν (IV, p. 199), by Athenaeus (XIII, p. 603), by Ptolemy, who extended the story to all the northern peoples, and by S. Empir., (*Hypotyp.*, III, 199), who applied it to the Germans as a rumor. Bardaisan (ap. Euseb., *Praep. Ev.*, VI, 10, 27) goes farther. Interpreting Aristotle, he assures us that these unions are “legal” among the Gauls and the Germans. We know how Bardaisan interpreted things. Having read somewhere, perhaps in the *Germania* of Tacitus (12 and 16), that the Germans hanged traitors or that they escaped dishonor by hanging, he *Γερμανῶν οἱ πλεῖστοι ἀγχονιμαίω μὲν ἀποθνήσκουσι* (*Praep. Ev.*, VI, 10, 34). By the end of the fourth century, it was only the Germans to whom one imputed the vice contrary to nature. Ammianus Marcellinus makes this reproach (always as a rumor) against the Germanic tribe, the Taifals (XXXI, 9, 5) and Procopius against the Heruli (*Bell. Goth.*, II, 14, p. 204). History shows similar witnesses, always about the most poorly known peoples. At the same time, we must not forget that the Romans preferred the opposite story. Tacitus boasts the pure manners of the Germans, who for the ancients were the Celts who remained barbarians. Quintilian, speaking of the corrupt manners of the civilized, said *nil tale novere Germani, et sanctius vivitur apud Oceanum* (Quintil., *Declam.*, III, 16). Firmicus calls the Gauls *Galli stolidi* (I, 2, 3 Kroll), but nothing more. From him, this is the pot calling the kettle black.

781 The Anonymous scholiast (p. 60) was not content with using Aries to justify this master's thesis. He found that the hindquarters, not only of Aries, but also of Leo and of Sagittarius, promoted the vice contrary to nature, as αἰσχροτέρα καὶ τεθλυσμένα, i.e., which he extended to Italy, Gaul and Spain. See Chapter 12 the abundance of predictions on the *cinnaedi*.

782 Here, not only is the accusation unanimous and specific (Herod., III, 31; Ctesias ap. Tertull., *Apolog.*, 9; Philo, *De spec. leg.*, p. 778; Strabo, XV, p. 735; Diog. Laert., IX, 11, 83; Athen., V, p. 220, etc.), but the accused admit it. The theologians of the Avesta have even made a virtue of incest, as preserving the purity of blood within families. See J. Darmesteter, “Le Hvaeévdathā chez le Parsis,” (*Rev. Hist. Rell.*, XXIV [1891], pp. 366-375); the *Zend-Avesta* (Ann. Mus. Guimet, XXI-XXIV [1892-1893], t. XXI, pp. 126-134). D. Menant, *Les Parsis* (Bibl. Guimet, VII [1898], p. 157). Since then, natural morality has been restored. The *hvaeévdathā* or *khétûkdas* among the Parsis is only marriage among cousins. In response, Bardaisan (ap. Euseb., *Praep. Ev.*, VI, 10, 25-26) assures us that the *ἀσεννοκοίτης* was disgraced and committed suicide ἀπὸ Εὐφρατοῦ καὶ μέχρι Ὀκεανοῦ. Cf. Curt., X, 3. Ammianus Marcellinus said of the Orientals *effusius plerique soluti in venerem aegreque contenti multitudineque pelicum, puerilium stuprorum expertes* (XXIII, 6, 76). However, Herodotus says of the Persians καὶ δὴ καὶ ἀπ’ Ἑλλήνων μαθόντες παισὶ μίσγονται (Herod., I, 135; Athen., XIII, p. 603) and S. Empiricus assures us παρὰ μὲν Πέρσαις ἔθος εἶναι ἀρρενομιξίαις χρῆσθαι (*Hypotyp.*, I, 152). St. Cyril. (*Adv. Julian.*, IV, p. 117) extends the incest to the Mesopotamians themselves. He writes μητρογαμεῖν δὲ φασὶ *Χαλδαίους*. Strabo, always without guarantee of the fact, also imputes to the Britons, not only cannibalism, but τὸ φανερώς μίσεσθαι ταῖς τε ἄλλαις γυναίχιν καὶ μητράσιν καὶ ἀδελφαῖς (IV, p. 201, a witness challenged by H. d’Arbois de Jubainville, *Nat. Rev. Hist. des Droit*, XXII [1898], p. 439, 3). Catullus (LXXXVIII-XCI) does not hesitate to speak of the *Persarum impia religio* [sic] in connection with Gellius. The Byzantine Ps.-Stephen of Alexandria imputes to the Arabs a penchant πρὸς τε συνουσίας γυναικῶν καὶ ἀρρενομανίας (ap. Usener, p. 22), by virtue of the chart of their empire, in which Saturn is associated with Venus.

783 The cults of Astarte, Ishtar and Anahita fit well with the patronage of Venus. However, Ptolemy did not forget Mithra and the other solar gods. He brings them in by assimilation. Ptolemy assimilated Isis to Venus, Mithra to Saturn, oriental or solar, Μιθρανῆλιον προσαγορεύοντες (Procl., *Paraphr.*, II, 3, p. 93), because of mutilations to the generative organs. The text here is uncertain, and the departure point of the religions, insufficient. The Arabs did not hesitate to note religious aptitudes deriving from the planets, as did the Christians. According to some, Christianity is under the patronage of Virgo, of Mercury and Jupiter, or even, of Leo and the Sun (Ciruelo, p. 51). Islam was ruled by the particularly ill-famed association of Saturn and of Venus (below, p. 371)

784 Cf. above, p. 205, 1.

785 Ptolemy was thinking of his compatriots and homonyms, the Lagids, who were rather more faithful to the practice of consanguineous marriages than were the Seleucids. It was a common practice in Hellenistic Egypt, to the point that, in 189 AD, such marriages were in the majority in the *Arsenoite nome* (U. Wilcken ap. *Sitzungsberichte d. Berl. Akad.*, 1883, p. 903). Rule by women was well-represented by the dozens of Arsinoes, Laodiceas and Cleopatras, who were often not content to “share” the throne. The tradition goes back – both the marriage and the superiority of the woman to her husband – to the couple Isis and Osiris. (Diod., I, 27). It imposed itself to the point that the queen of Egypt, whether or not she was the blood sister of the king, was always ἀδελφή, sister, in protocol.

786 John Lydus (*Ost.*, 71) kept only the *ψιλή έκθεσις τίνα ἔθνη τίσιν ὑπὸ σημείοις κεῖται* placed after Ptolemy's chapter (above). This served him as an address for his brontosopic or seismic predictions. However, Campestrius and Vicellius (*Ost.*, 10-15, 54-58) have, for comets and earthquakes, chorographic distributions similar or identical to those of Ptolemy. The same is in the *Tonitruale Aegyptiacum* (*ibid.*, 23-26).

787 See above, the chorographic table (p. 332) and the orientation of the triplicities according to Paul of Alexandria (p. 203, Fig. 26).

788 Paul of Alexandria (A-B 2) seems convinced that the distribution of the domains here is based upon the "climes." He says this sign corresponds with that clime or parallel and by virtue of its triplicity, to this wind or orientation. Thus the twelfth sign (Pisces) κεῖται κλίματι τῷ Ἐρυθρᾷς Θαλάσσης καὶ Ἰνδικῆς χώρας ἀπομεμερισμένον ἀνέμῳ Βορρᾷ. He wanted, no doubt, like Dorotheus, to go from East to West and to end by returning to the East. He followed the series as far as Italy, which he injured by taking it from Libra to the profit of Cyrene and putting it under Scorpio (cf. the same – Σκορπιανὸν ... τὸ τῆς Ἰταλίας κλίμα. Harpocrat., in *Revue de Philologie*, II, p. 75 Graux). Starting from this, he is a slave to associations of ideas, which obliged him to assign Sagittarius to Crete, Capricorn to Syria, Aquarius to Egypt and Pisces to the Erythraean Sea. During this time, his mechanical orientation obviously took control and one sees the result. The coins tell us how well-known some chorographic systems were (see Eckhel., *D. N.*, III, pp. 283-284). The sign of the Scorpio appears on the coins of Commagene. One encounters Capricorn at Zeugma, Aries at Antioch and at Cyrrhus, Libra at Palmyra, like Rome, Sagittarius at Resaina and at Singara. Concerning the lion of Miletus, Letronne (*Oeuvres* II^e série, I, p. 227) makes the reasonable observation that the lion of Miletus dates to the century of Alexander, at a time when there was no astrological chorography. I decline to go further down the road of overly conjectural research. Entire zodiacs were often engraved by decorators, without care for conditions and traditional opinions. They included signs of the zodiac or animals reputed to be such or extra-zodiacal constellations. All these were distributed or to be distributed among different regions and cities. They offer no more than a very mediocre interest for our subject, which, already complicated enough in itself, would be encumbered with no profit. We will not consider the hypotheses of J. N. Svoronos (*Zeitschr. f. Numism.* XVI [1889], p. 219-232; *Arch. Ephém.*, 1893, pp. 1-11; *B. C. H.*, XVIII [1894], pp. 101-128), which, even if verified, have nothing to do with sidereal mythology, nor with astrology properly. [Cf. H. G. Gundel, "Zodiakos. Der Tierkreis in der Antike," *Pauly-Wissowa's Realencyklopaedie der classischen Altertumswissenschaft* (Stuttgart J. B. Metzler, 1972), vol. X.A, cols. 597-705, and also published as a separate fascicle; H. G. Gundel, "Imagines Zodiaci zu neueren Funden und Forschungen," in *Hommages à Martin J. Vermaseren*, ed. by B. M. de Boer and T. A. Ettridge (Leiden E. J. Brill, 1978), pp. 438-54; and H. G. Gundel, *Zodiakos: Tierkreisbilder im Altertum kosmische Bezüge und Jenseitsvorstellungen im antiken Alltagsleben* (Mainz am Rhein Verlag P. von Zabern, 1992). This last is very well-illustrated. LNJ].

789 New examples of confusion (cf. 279; 329, 2; 332) between the orientation of the signs by position and by temperament. Cancer is northern by position (Armenia) and southern by its heat (Africa); Capricorn, southern by position (India), northern as cold (Thrace, the land of Boreas).

790 *Hermipp.*, II, 12, pp. 51 sqq. Kroll. I have long sought – although without finding – a plausible interpretation of this spun-out, disconnected, text, where an astrological monstrosity figured, the *τρισκαίδεκαμοῖρια* or arc of 13°. ## The author, it seems to me, rendered unintelligible, by the needless addition of Paradise, a system which divided the *οἰκουμένη* (the zone in which grains mature) into seven climes and assigned to it the empirical limit of 48° of latitude. This limit corresponds to the northern limit of the zodiac, the Tropic of Cancer. The effects of solar heat prove it. From this tropic to the equator, at the vernal point, or zero degrees of Aries, is a quadrant of ninety degrees. A seventh part occupies about 13° (12.857°). It is the part of the clime, the *τρισκαίδεκαμοῖρια τοῦς κλίματος* (p. 57, 14). However, it is enough to mention this bizarre mixture, made in the land of dreams and truly taking "mathematics" too far. We are dealing here with a speculative, adventurous, reformer who neither believed in domiciles for the planets, nor (probably) in the theory of the places, nor in the domination of the stars over private life, and whose opinion never had authority for anyone.

791 See above, p. 48, 1.

792 *Tetrab.*, II, 8.

793 *Hermipp.*, II, 11, pp. 49-50 Kroll.

794 See, in Chapter 16, the metaphysical discussion on the *causes* and the *signs*.

795 The explanation occupies the rest of book II (Chapters 4-13) of the *Tetrabiblos*, pp. 63-85 of the Anonymous and the pp. 75-102 of Hephaestion, who summarized "the Divine Ptolemy," but with petosiriac objections (fr. 7 and 7 Riess).

796 Ptol., *Tetrab.*, II, 5; Anon., pp. 63-64.

797 This is a common sense rule, if one considers eclipses to be warnings sent by the gods, which Ptolemy did not. However, it is contrary to the theory of *houses*, which, for individual charts, are just as effective below the horizon as above. This, too, was not accepted without argument (above, pp. 270, 1; 272, 1 and below, p. 356, 3).

798 Since the ecliptic nodes move regularly, one may, in their cycle of about eighteen years (above, p. 123, 4), not only predict eclipses but know in advance to which country it is addressed.

799 The Midheaven is a symbol of authority, of domination (above, p. 271). Ptolemy, who did not want the *houses*, even when unavoidable, is careful to avoid saying the tenth *house* rather than the Midheaven. The state is identified with its chief. Ptolemy wrote under the Roman Empire it is a sign of the times. Ptolemy adds again the consideration of the “monthly phases” and stations of the three upper planets: καὶ τῶν πλανομένων αἱ κατὰ καιροὺς ἔμμηροι φάσεις, ὅταν στηρίζοντες ποιῶσι τὰς ἐπισημασίας (*Tetrab.*, II, 4), to torment his colleagues who were less well-informed about astronomy. It was to escape these thorny calculations that Egyptians had applied, from the beginning, to the signs and pushed to an extreme (cf. above, p. 333, 1), the dissection which had already produced the *decans* (p. 217 sqq.) or the system of the “trihoria” (p. 334, 1). It took into account the direction of the winds which blew, whether at the beginning or at the end of the eclipse, as well (Hephaest., I, 21, p. 82 Engelbr.). Furthermore, whereas Ptolemy gave the same address for eclipses of the Sun as for eclipses of the Moon, the Egyptians distinguished and changed the addresses (Hephaest., I, 21). This obliged them to have four chorographic tables – as many as the trihoria) for each of the two luminaries. One encounters, in John Lydus (*Ostent.*, 9), a summary system, which assign, over-all, solar eclipses to Asia and lunar eclipses to Europe, in virtue of the astrological aphorism that the Sun dominates the East and the Moon, the West (above, p. 339, 1).

800 Ptol., *Tetrab.*, II, 6; Anon., pp. 64-66.

801 Cf. Manilius *nec tamen aequali languescunt tempore cuncta*, etc. (IV, 853 sqq.). One does not use the same units of measure for the solar eclipses, which are very short, as for lunar eclipses, which last a long time. The Moon can be totally eclipsed for about two hours, the Sun, for only a few minutes (from two minutes to ten minutes, depending on latitude). [Equinoctial hours are the equivalent of modern clock hours, twenty-four of equal length in each period midnight to midnight. However, the ancients commonly used sundials, which divided the daylight hours into twelve equal segments. The length of the segments (measured in clock hours) varied from day to day with the length of daylight. Only on the days of the equinoxes were sundial hours equal to clock hours. Cf. Gerhard Dohrn van Rossum, *The History of the Hour: Clocks and Modern Temporal Orders* (Chicago: University of Chicago Press, 1996). LJN].

802 All these *thirds* come from the liking that Ptolemy had for his *triplicities*. Cf. the *thirds* inserted in the gentiliac sides (below, 380, 382). The Egyptians did not like the triplicities. Hephaistion (I, 21, p. 83) divided the circle into quarters, each corresponding no doubt to three “hours” (to convert to months, etc.). However, he mingled two independent facts the angular *position* of the ecliptic point and the *duration* of the eclipse. He thus assumed the situation where the eclipse took place at the Ascendant and lasted three hours, or it took place at the fourth hour and lasted two hours, “and so on in this way until the twelfth hour.” At the fourth hour, it was already delayed six months. At the twelfth, it came in eighteen months. One cannot tell if his hours are 1/12 or 1/24 of the circle or only of the upper hemisphere. He compiled and abridged at random.

803 Τῶν δὲ κατὰ μέρος ἀνέσεων καὶ ἐπιτάσεων ἀπὸ τε τῶν ἀνὰ μέσου συζυγιῶν [θεωροῦμεν], ὅταν κατὰ τῶν τὸ αἴθριον ἐμποιοῦντων τόπων ἢ τῶν συσχηματιζομένων τόπων αὐτοῖς συμπίπτωσι (*Tetrab.*, II, 6). Always brief and imprecise, Ptolemy needs to be interpreted. Now, the scholiast here is only four lines in disarray, and Hephaistion (I, 21, p. 76 E) copied Ptolemy, word for word. I believe that I have surprised Ptolemy *in flagrante delicto*, making a concession to the system of *elections* (Chapters 13-14), which he did not acknowledge, neither to accept nor to reject. This was the system which made the influences wait their turns in line, rather than enclosing them all in one instantaneous blow.

804 Ptol., *Tetrab.*, II, 7; Anon., p. 66-70.

805 It is the system of the “lord of the chart,” with which we will deal later (Chapter 12).

806 I assume that the astrologers had made this shadow of reasoning and, for the sake of symmetry, reasoned in the opposite way for the fixed stars. However, it seems that the Arabs made or appeared to make, a schism on this point, in holding for the center *preceding* the place of the eclipse. That is, they unify the method in treating, in the same way, centers and fixed stars (Haly Abenroda ap. Ciruelo, fol. d 8).

807 Οἷον τίς αὐτῶν ἐστὶν ἐν τῷ ὑπὲρ γῆν ἡμισφαίριῳ, τίς προσθετικός καὶ τίς ἀνατολικός. Εἰ δὲ ταῦτα κοινὰ ἐπὶ πάντων εὐρίσκονται, τὸν τῆς αἰρέσεως μάλλον προτιμήσομεν. (Anon., p. 67; id., p. 69).

808 No doubt because the gods and priests are at the top of the universe (Equator in “*sphaera recta*” [right ascension LJN]) and at the head (Aries) of the human race, making authority and equilibrium (Libra) to reign there. Equinoctial predictions dealt with the size of trees (Hephaest., p. 78), plants and high things in general (τῶν φυτῶν τὰ ἄκρα. Anon., p. 68).

809 For the “tropical” signs, the analogy is in the word itself (from τρέπω). It is not hard to see why the “solid” signs menaced the solidity of edifices. As for the “bicorporeal” signs, the scholiast forgets the double nature of humanity. However, he estimates that a king represents two relationships, those of the king with his subjects and those of the subjects with the king (p. 68). Cardanus (p. 255) properly discovers *quia Reges plerumque sunt duplicis animi et valde callidi*. Ptolemy did not want to stir up the flood of melothesian superstitions (above, Chapter 10) which furnished him and others with associations for all things minerals, plants, animals and species of animals. He takes from it even when he thinks he does not. One finds another system in Hephaestion (p. 89), which would have tempted Ptolemy, if it had existed in his day, for it divides the zodiac into three arcs enclosed by the points of a triangle. The first arc (♈ to ♎, inclusive), perhaps because it includes Aries and the two centers (solstice - equinox), concerns kings; the second (from ♏ to ♊), largely bestial signs, is about riots; the third, no doubt in honor of Virgo and Libra, deals with sacred places. Yet another system, used for eclipses under the horizon, (below, p. 356) takes the four triplicities. An eclipse taking place in the “royal triplicity” (♈, ♊, ♎) affected kings, in the agricultural triplicity (♈ - ♎ - ♊), the fruits of the earth. In the human triplicity ♋ - ♌ - ♍, it affected people in general, menaced by pestilence (☿ - ♏ - ♍), crowds, decimated by riots, wars and shipwrecks (Io. Lyd., *Ostent.*, 9).

810 By virtue of the rule or axiom of “sex by position” (above, p. 102), the evening planets become female and the others become masculine. In consequence, they aid the Moon and counter the Sun or vice versa.

811 Pascal remarks that to predict misfortune was still the best way for astrologers to avoid being wrong “they say that eclipses predict misfortune, because misfortunes are common; ... whereas, if they say that it presages good fortune, they often lie.” (*Pensées*, XXV, 13, ed. E. Havet).

812 Hephaestion listed the presages sign by sign, trihorion by trihorion, even hour by hour, and took care to predict nothing but misfortune. There were many wars between Egypt and Syria, and allusions, clear enough, to the history of the Seleucids and Lagids. There are questions of competitions for the throne, kings overthrown, often by their companion and co-regent (cf. above, p.343, 2), or kings who were not able to pass on their throne to their children, etc. This was especially so in the chapter on presages – universal, too – drawn from the positions of the planets at the moment Sothis rises (Hephaest., pp. 91-97 Engelbrecht cf. below, p. 367). The Byzantine “philosopher” Leon (above, 334, 1) took into account first the month, second the sign, third, the hour.

813 Others added the winds (above, p. 349, 5), the rains, thunderclaps and shooting stars. Hephaestion (p. 82, cf. p. 89) poses the case where the Moon is eclipsed, διὰπτων ἀστὴρ διαδραμὼν ἔλθῃ εἰς αὐτήν, which presages “a great tyrant.” Modern astronomers are concerned also with the colors of the corona in solar eclipses. Astrologers are here their predecessors.

814 Depending on whether, in partial eclipses, the bright or eclipsed part is North or South on the disk, etc.

815 We cite, as examples, *black*, signifying the death of a head of state, famine and revolution; *red*, ravaging a country; *gray*, an animal epidemic; *violet*, war and famine; *gold*, pestilence and death (Hephaest., I, 21, p. 82).

816 Hephaest., I, 22 (Περὶ τῶν ἐν ταῖς ἐκλείψεσι σημείων); I, 24 (Περὶ τῶν ἐν ταῖς ἐκλείψεσι χρωμάτων καὶ κομητῶν); I, 25 (Περὶ τῆς τῶν μετεώρων σημειώσεως, pp. 89-102 Engelbr.). Cf. the chapter of the same name in Ptolemy (II, 13), but given over exclusively to meteorological predictions (below, pp. 365-366). See also Io. Lyd., *Ostent.*, 9, which Campestris cited ταῖς Πετοσιριακαῖς ἀκολουθῶν παρδόσεσι, the predictions founded upon the color of the Moon in each sign and each watch (φυλακή - *vigilia*) and upon everything which takes place – including eclipses of the Sun, Venus shrouded in haze, celestial rumbles, shooting stars, etc. – while the Moon is in the sign. This is a mass of traditions in a disorganized jumble. [Such omens are also found in *Enuma Anu Enlil*, the major Mesopotamian collection of astral omens. LJN].

817 Hephaest., I, 22, p. 91. It is in the following chapter, several lines farther on, that Hephaestion cites the παλαιγενεῖς σοφοὶ Αἰγύπτιοι. However, it all comes from the same source and one cannot help a smile when seeing people who knew that there were eclipses ὑπὸ γῆν disguised as “ancients.”

818 Καθόλου δὲ αἱ ὑπὸ γῆν ἐκλείψεις ἡλίου ἢ σελήνης σεισμοὺς ἀποτελοῦσιν ὥς ἐπὶ τὸ πλεῖστον (Anon., *De terr. mot.*, p. 169 [174²] Wachsmuth). The effect started low, moved higher and thus agitated the earth.

819 Ptolemy put Sarmatia under Virgo (Paul of Alexandria paired Virgo and Egypt). As for the Lion, it is an inhabitant of thirsty countries. The compilers knew no more than what they said. According to Hephaestion (p. 83), an eclipse of the Sun in Taurus (a worker) presaged in general σφρου φθοράν due to locusts. A few lines away, an eclipse in Taurus between the fourth hour and the ninth hour presaged εύφρορίαν σφρου έν αϊγύπτω. The distributions have been multiplied, either to enlarge small differences or to juxtapose contradictory opinions.

820 On comets, bolides, etc., see, on the side of the astrologers, Manil., I, 805-927; Ptol., *Tetrab.*, II, 9; Anon., pp. 75-76; Hephaest., I, 24; Campestris ap. Io. Lydus, *Ostent.*, 10-15. Cf. Riess, *Fragm.*, 8-11, pp. 343-351 and the texts reunited by Wachsmuth, *Supplementum disputationis Lydianae de Cometis* (pp. 161-166). On the side of the polygraphs, Plin., II, 89 sqq.; Senec., *Quaest. Nat.* (the whole of the seventh book); Stob., *Ecl.*, I, 27 (Περὶ κομητῶν καὶ διαπτόντων καὶ τῶν τοιοῦτων); Avien. ap. Serv., *Aen.*, X, 272.

821 Fr. Lenormant, *La divination chez les Chaldéens*, p. 38. It was the appearance of comets going towards the Sun. The Chaldaeans of Diodorus (II, 30, 5) also interpreted κομητῶν ἀστέρων ἐπιτολάς.

822 Aristot., *Meteor.*, I init. Still a naive opinion – comets gushing from the shock of colliding planets – distorted by people who knew that the planets could not really touch. Then the comets are the planets themselves reunited by visual projection (ὅταν διὰ τὸ πλήσιον ἐλθεῖν δόχωσιν θιγγάνειν ἀλλήλων). This became absurd, seeing that one could see the planets in their place – i.e., separated most often – during the appearance of comets. For the opinions and scientific discussions, see Seneca, notably in *Quaest. Nat.*, VII, 12.

823 Δύσεις εἰς τὸ βάθος τοῦ αἰθέρος ὥσπερ εἰς τὸν τοῦ πελάγους βυθὸν οἱ ἰχθύς (Stob., *Ecl.*, I, 28). The comets were supernumerary planets.

824 According to Achilles Tatius (*Isag.*, 34) comets are οὐκ ἐν οὐρανῷ ἀλλ' ἐν τῷ ἀέρι. that is, below the Moon, the αἰθήρ being above it.

825 Emanated (above, pp. 4-10) or nourished (pp. 75-76) by terrestrial vapors.

826 Ap. Stob., op. cit., I, 21.

827 Ptolemy here probably follows a Mesopotamian tradition. For the Mesopotamians, Mercury was a burning torch, an incendiary, at least as much as Mars (above, p. 69). The comets οὐ τὰ αὐτὰ ἀποτλεοῦσι, κακὰ δὲ πάντες (Lyd., *Ostent.*, 10).

828 Cold and humid, although Ptolemy made Saturn exceptionally dry elsewhere (above, pp. 95-96; 190, 1). Ptolemy is in revolt – silently, as always, – not only against an authentic Mesopotamian tradition, but also against that attributed to Epigenes, disciple of Berossus. According to Epigenes, the principle mover of winds and thunderclaps is Saturn, by its συναφαὶ and ἀπόρροια. *Haec [stella] cum proxima signa Marti premit aut in Lunae viciniam transit aut in Solis incidit radios, natura ventosa et frigida contrahit pluribus locis aera conglobatque. Deinde si radios Solis assumpsit, tonat fulguratque. Si Martem quoque consentientem habet, fulminat* (Senec., *Q. Nat.*, VII, 4). One would not want Ptolemy to have found this bomb too complicated to build.

829 This is not all, for there is no orthodox dogma, nor an end to the development of vocabulary. *Stoici dicunt has stellas esse ultra triginta duas* (Serv., *Aen.*, X, 272). Others, to the contrary, simplified a comet is κομήτης when the tail is below, λαμπράς when the tail is above, δοκίς when the tail is horizontal (Ach. Tat., *Isag.*, 34). See, to abridge, the current lists κομήται - *crinitae*, from the Sun (above); ῥάβδοι, from Jupiter (Heph.); προγωνιάς, with the beard or tail below (Plin., Io. Lyd.); ἀκοντίας (Plin., Lyd.) in the shape of the dart; ξιφίας or ξιφοειδής – the same but shorter (Plin.), from Mercury (Lyd., Heph.), from Mars (Schol. Lucan., I, 529); κερατίας or κεράστης (Plin., Lyd.); ἵππεύς or ἵππιον (Plin., etc.), from Venus (Lyd.), ἱερὸς ἀστήρ τῆς Ἀφροδίτης (Heph.), from the Sun (Schol. Lucan.) *δισκεύς* (Plin., etc.), from Mercury (Sch. Luc.); *δοκεύς* or *δοκός*, the “beam” (*trabes*), – often confused with *δισκεύς*, – from Saturn (Heph.); *πιθεύς* or *πίθος* (Plin., Ptol., etc.), *σαλπίγξ* (Ptol., Heph.) *Τυφῶν*, with precise origin (Lyd., Heph.) *nec stella verius quam quidam igneus nodus* (Plin.), from Saturn (Schol. Luc.). The list was never closed, seeing that γίνονται γὰρ τοιαῦτα εἶδη ποικιλόμορφα κεραμῶν, ζώων, παντοίων φυτῶν ἔχοντα ἀπομόρφωσιν (Anon., p. 76). One understands speaking of βόθυνοι or “broken” comets (Stob., *Ecl.*, I, 34) of *τράγοι*, which go, no doubt, to drink milk from the Milky Way (Plin., II, 91, with the correction of *hirci* for *hirti*; Io. Lyd., *Ostent.*, 10). Hephaestion knew a comet *Εἰληθείας*, round, rosy, with the face of a young girl, with rays between rose and silver, which presaged misfortunes, but to liars, and, in consequence, a “change for the better.” This is an ingenious way of changing the rule that comets are signs of misfortune. The rule had already been breached for the κομήτης of Augustus, which had made, the world rejoice, it seems, promising *gaudia omnibus gentibus futura* (Serv., *Aen.*, X, 272).

830 Cf. Hephaest., p. 99 (with δοκεύς in place of δισκεύς); Serv., *Aen.*, X, 272.

831 The ancients had noticed that comets often appear outside the zodiac, even near the poles (Plin., II, 91 v.g. The Τυφών in the North; the τράγοι in the Milky Way. Lyd.). However, one may always make a correspondence to their position, using the meridian or the horizon (παρανατέλλοντες), with the zodiac.

832 *Stella crinita, quae summis potestatibus exitium portendere vulgo putatur, per continuas noctes oriri coeperat – ex Balbillo astrologo didicit solere reges talia ostenta caede aliqua illustri expiare*, etc. (Sueton., *Nero*, 36). Cf. *regnorum eversor cometes* (Sil. Ital., VIII, 637) and many a passage in Pliny (II, 23), in Lucan (I, 528 sqq.), in Tibullus (II, 5, 72 sqq.) and others. Vespasian was only half joking when he said the comet which appeared in his time menaced, not his bald head, but the king of the Parthians, *qui capillatus esset* (Suet., *Vespas.*, 23). He had perhaps been reassured by Balbillus. The author of the *Margarita Philosophica* (IX, 23), who did not want to believe in astrological presages, but who neither wished to deny absolutely the effect of the comets, risked, among other natural explanations, this one, which is quite ingenious *mortem autem Principium cometa fortasse ex eo significare dicitur, quod Principes, ut magis delicati vel intemperati, ab aere corrupto citius inficiuntur*. In the same way, the infection of the air produced war and seditions, by exciting “the irascible and concupiscent appetite.”

833 Anon., p. 76. It is a way to menace people via their food supply and, when they are threatened by “barrels” (πίθοι), their storerooms. One may also be able to mix in predictions of the weather with the others, without even making a connection between them. Thus, as Avienus says (ap. Serv., *Aen.*, X, 272), the *λαμπαδίας* presages fogs in the East, drought in the South, floods in the West and famine in the North. The famine in the North is not due to the drought, which is in the South. Imagination works easily without logic.

834 Plin., II, 93 his *tibiae* are perhaps the σάλπιγγες interpreted in another way, one which, as John Lydus says, was not known to Ptolemy.

835 Anon., p. 76. The scholiast gets this, not from Ptolemy, but from his teacher (ὁ ἡμέτερος διδάσκαλος). The beam symbolized no doubt the rams of warships in addition.

836 Pliny compiled and mixed the most diverse considerations *Referre arbitrantur in quas partes sese jaculetur aut cujus stellae (planets) vires accipiat, quasque similitudines reddat et quibus in locis emicet. Tibiarum specie musicae arti portendere, obscenis autem moribus in verendis partibus signorum, ingeniis et eruditioni si triquetram figuram quadratamve paribus angulis ad aliquos perennium stellarum situs edant* (extra-zodiacal stars), *venena fundere in capite septentrionalis austrinaeve serpentis* (Plin., II, 92-93).

837 The distinctive logic of the astrologers wanted Mars, although occulted, to be more powerful, because fire was added to fire. The γυναικῶν φθορά, for Venus, is an equivocal prediction it is either modesty or life which is menaced (Io. Lyd., *Ostent.*, 10).

838 This was based upon experience, said his disciple: καὶ οὕτω (Anon., p. 76). He wanted the theory to be more general and formulated it in this way. Given a comet, its effect ceased when the planet whence it came changed the direction of its motion.

839 Proclus in *Anal. Sacr.*, V, 2, pp. 142-143 Pitra. We know that the ephors of Sparta observed shooting stars as a form of divination which made predictions about the kings of Sparta (Plut., *Agis*, 9). Astrology ran its roots everywhere. For the physicists, shooting stars (*bolides - faces - stellae micantes*) were the ἀπόρροιαί, *ignis aetherii* (Serv., *Georg.*, I, 365). The ancients do not seem to have noticed a flow of meteorites like those today at a fixed time from certain parts of the sky, such as, for example, the “Leonids” coming from the constellation Leo (since about 1864).

840 Io. Lyd., *Ostent.*, 10. *Chasma* or *discessus caeli* (Cic., *Divin.*, I, 43; II, 28; Plin., II, 96); classed *inter ostenta in auguralibus [fulguralibus ?] libris* (Serv., *Aen.*, IX, 20).

841 See Fr. Lenormant, *La divination chez les Chaldéens*, pp. 67-76. Lenormant attributes to the Chaldaean of Mesopotamia, without any scruple, the tripartite division of the *principes doctrinae viri* of Pliny (below, p. 363, 2). On lightning, see, [beyond texts below](#), the second book of *Quaest. Nat.*, of Seneca.

842 See “Haruspices” (1896) in the *Dict. des Antiquités* of Daremberg and Saglio.

843 Pliny (II, 82) is astonishing. He makes a mixture of physics and providential intention, of superior spheres and of terrestrial atmosphere, which is pure gibberish. It is by mechanical action, according to him, that *e sidere caelestis ignis expuitur praescita secum adferens, ne abdicata quidem sui parte in divinis cessante operibus*. For this good Stoic, the intelligent fire profited from the occasion and charged with thought the fire expelled by the play of the laws of nature. The air intervened, whether as efficient cause (*quia collectus umor abundantiam stimulat*), whether because it was far from Jupiter, whether as submissive to the action

from on high (*quia turbatur quodam ceu gravidi sideris partu*). The Tuscan theology of *ostenta* - *prodigia* - *portenta*, etc., was simpler and more reasonable. The Etruscans also had their diagnostics based upon color. The dark red bolts came from Mars, only they meant by this the god Mars, not the planet.

844 Io. Lyd., *Ostent.*, 21-26 (Περὶ βροντῶν), monthly presages based upon the presence of the Sun in the signs corresponding to the months, with a retardation of one sign (beginning with ♄ in January – Roman system). Ἐφήμερος βροντοσκοπία τοπικὴ πρὸς τὴν Σελήνην (*Ostent.*, 27-28), after Figulus and Tages, daily presages, from the first of June to the thirtieth of May, all the months having thirty days (Egyptian system). *Βροντοσκοπία* of Fonteis (*Ostent.*, 39-41), monthly presages, based upon the Moon (beginning with ♄) and addressed upon chorography. Next Περὶ κεραυνῶν (*Ostent.*, 42-52), translated by Labeo with monthly presages based upon the position of the Sun (beginning with ☿, the Chaldaean system) and addressed chorographically. It is not a question of “procuring” lightning bolts, an art belonging to magic and supposedly Etruscan, but claimed also for Numa, to whom it was revealed by Faunus and Picus. The legend hints that this revelation was of astrological origin, having been extorted from the deities mentioned earlier, pinioned by the *duodecim juvenes* (Arnob., V, 1), in whom one may recognize the twelve signs of the zodiac.

845 Of a fictional Moon, which moved through a thirty day month.

846 One often encounters the case εἰ κεραυνὸς ἐπὶ δένδρου καρπίνου κατενεχθείη, a presage about agriculture, good or bad, depending on the signs (v.g., *Ostent.*, 48, 49, 51).

847 Plin., II, 191-192. Πνεύματος κίνησις (Procl., in *Anal. Sacr.*, V, 142 Pitra). John Lydus, Περὶ σεισμῶν (*Ostent.*, 54-58), makes the underground fires intervened, hot springs, jets of air from when the ocean engulfs grottoes, etc. One may also invoke subterranean eclipses (above, 356, 3).

848 We know that researching the “desires” (*postiliones*) of the offended gods was a specialty of the haruspices.

849 *Babyloniorum placita et motuus terrae hiatusque qua cetera omnia siderum vi, sed illorum trium quibus fulmina adsignant, fieri autem meantium cum Sole aut congruentium, et maxime circa quadrata mundi* (Plin., II, 191. There was a mixture of the fulgural art and of astrology. Others attributed earthquakes to “Typhon” (above, p. 359), a hurricane which, for some simple meteorologists, was born spontaneously in the atmosphere (the arctic region) but for others, came from the planets. Naturally, the Hermeticists and the Orphics came to the rescue. We have around 67 verses, vague and inept, Ἑρμοῦ τοῦ τρισημεγίτου Περὶ Σεισμῶν, ἐν ἄλλῳ Ὅρφεως (*Anal. Sacr.*, V, 2, pp. 275-278 Pitra), a calendar with monthly predictions, where the *seismo*i depend upon the sign occupied by the Sun. In short, from rudiments of theories, the point of doctrine. There is a place, even today, for astrological explanations for earthquakes. H. de Parville wanted absolutely in making the subterranean seas coinciding with certain phases of the Moon. This would be a pretty rare effect from such frequent causes.

850 John Lydus (*Ostent.*, 54 sqq.) taught that Providence converted the physical phenomena into revelatory signs and that οὐ μόνον αὐτοὶ καθ'ἑαυτοὺς οἱ σεισμοὶ βλάπτουσι τοῦ καθ'ᾧ συμβαίνουσιν, ἀλλὰ μὴν καὶ ἄλλων πόρῳ που τόπῳ καὶ χρόνῳ μεριζομένων γίνονται μηνυταὶ οὐ μετρίων κακῶν. Above this, he gave a seismic calendar drawn up by the “Roman Vicellius following the verses of Tages,” with monthly predictions (beginning with Aries), addressed by means of a chorography conforming to that of Ptolemy, for his Tages – who paid particular attention to the sex of the signs – has become an expert in astrology late in the day.

851 *Tetrab.*, II, 10-13; Anon., pp. 77-85. The scholiast went into ecstasies over τὸ ἐπιστημονικὸν καὶ ἐμμέθοδον τοῦ Παλαιοῦ (p. 80). Before his conversion to astrology, Ptolemy shared the general faith in meteorological predictions (ἐπιστημασσίαι) drawn from the positions of the Sun, the Moon, the planetary phases and from the rising and setting of the constellations. These were no more than the chorographic indices, but the planets already represented the influx of the primary elements for him, cold ♀, humid ♂, dry ♂, hot ♀, moist wind ☿. Cf. his Φάσεις or *Apparitions*, 8 (ap. Wachsmuth, p. 209).

852 This is the third use for thedecans. Ptolemy, who did not want the decans, took them up again disguised as natural forces. Hephaestion had reported these qualities of the signs, by parts (μέρη προηγούμενα, μέσα, ἐρόμενα, βόρεια, νότια), in his general description of the signs and decans (I, 1, pp. 46-47 Engelbrecht).

853 See, as an example, the analysis of Cancer τὸ δὲ δὲ τοῦ Καρκίνου δωδεκατημόριον καθόλου μὲν ἔστιν εὐδίων καὶ Θερινόν, κατὰ μέρος δὲ τὰ μὲν προηγούμενα αὐτοῦ κατὰ τὴν Φάτην πνιγῶδη καὶ σεισμιοῖα, ἀχλυσῶδη, τὰ δὲ μέσα εὐκρατα, τὰ δὲ ἐπόμενα πνευματῶδη, τὰ δὲ βόρεια καὶ νότια ἔκπυρα καὶ καυσῶδη (II, 11). In the sign of *Gemini* τὰ δὲ βόρεια πνευματῶδη καὶ σεισμιοῖα, τὰ δὲ νότια ξηρὰ καὶ καυσῶδη. It was a

widespread idea that winds and storms came especially from the North, seat of gods and, for the physicists, the side whence the winds stopped the Sun at the Solstice, etc. The Milky Way also intervened, working by its two points of intersection with the equator, where the Eagle and the Dog are found, *quoniam in his tantum locis solis terraeque centra congruunt* (Schol. vett. ad German., *Prognost.*, II, p. 116 Buhle). Cf. the manner of predicting the rains according to the chronocrators of the year (ἐκ τῶν τοῦ κυρίων), Venus, Mercury and the Moon (*Cod. Florent.*, pp. 131-134), whence the enumeration of the effects of each planet in diverse positions (*ibid.*, pp. 134-137). Otherwise, in the case of meteorology, the astrologers were not alone. Everything was mixed in and no one knew what was meant. This is a mixed subject, which I exclude from astrology proper.

854 This indication is a ray of light which permitted dating these supposed observations. This Sothic cycle began 20 July 1322 BCE, in the Julian calendar (J. Oppert, "La Chronologie de la Genèse," *Rev. des Études juives*, XXXI [1895], p. 1-25). Thereafter, the rising of Sothis (Sirius), which was one day later each four calendar years, must have fallen on the first of Epiphi 1200 years (300 days from the first of Thoth to the first of Epiphi X 4) after 1322, i.e., in 122 BCE. The παλαιγενεῖς Αἰγύπτιοι are pseudo-Nechepso and Petosiris. The twenty-five days of Epiphi represented a century of observations made in July-August, from 122 to 22 BCE.

855 Hephaest., I, 23 (Περὶ ἐπισημασιῶν τῆς τοῦ Κυνὸς ἐπιτολῆς καὶ τῶν πρὸς αὐτὴν ἀστέρων), pp. 91-97 Engelbr. There is above this a hermetic work, cited by the astrologer Palchos: Ἡρμῆς ἔγραψεν ἐν τοῖς κοσμικοῖς ἀποτελέσμασι περὶ τῆς τοῦ Κυνὸς ἀνατολῆς (ap. Fr. Cumont, op. cit., p. 6). Manilius meant to speak of this astrological method, whose cradle he placed in Asia *Hanc [Caniculam] quam surgentem primo cum redditur ortu | Montis ab excelso speculantur vertice Tauri, | Eventus frugum varios et tempora dicunt, | Quaeque valitudo veniat*, etc. (I, 401-411). So did Cicero *Etenim Ceos accepimus ortum Caniculae diligentur quotannis solere servare conjecturamque capere, ut scribit Ponticus Heraclides, salubrisne an pestilens annus futurus sit* (Cic., *Divin.*, I, 57, 130). This could be an ancient usage, from the time of Heraclides, one of the first manifestations of astrological faith in a Greek country.

856 We call the Parilia (21 April) the *dies natalis Romae*. When astrology became fashionable, it was assumed that the founders of cities, such as Seleucus Nicator founding Seleucia on the Tigris, waited for a favorable hour (Appian., *Syr.*, 58). The astrologers thus dispossessed the diviners who genuinely had helped the founders in the ancient manner. However, the Greeks, in general, did not celebrate the "birthdays" of cities and their calendars did not list their "anniversaries." This was a distinctly Roman practice (cf. Lobeck, *Aglaophamus*, pp. 595-597).

857 Eclipses also entered, in individual cases and by virtue of logic, into individual birth charts, with a preponderant and redoubtable influence. Misfortune came to those who have a point of coincidence in their chart, whether from the positions of the "luminaries" (τόποι φωσφοροῦντες), whether from those of the "centers" with the place of any eclipse, or with the place diametrically opposite! They had more than their share of announced problems, especially if the coincidence is exact to the degree (*Tetrab.*, II, 8). One might ask if Ptolemy forgot or pretended to abrogate a contrary rule, according to which – as the example of Romulus proves – an infant born (or conceived) at the moment of an eclipse is marked out for a high destiny.

858 Ennius ap. Cic., *Divin.*, I, 48, 108; Plut., *Romul.*, 12. Plutarch cites as guarantor the epic poet Antimachus of Teos, date unknown.

859 *Romamque in Jugo cum esset Luna natum esse dicebat nec ejus canere fata canere dubitabat* (Cic., *Divin.*, II, 47, 98). It was a subject upon which the haruspices and astrologers exercised themselves and especially Tarutius, who was both. Solinus completes *Sole in Tauro, Luna in Libro, Saturno, Venere, Marte, Mercurio in Scorpione*, perhaps following a chorographic system which assigned Italy to Scorpio. The combination is otherwise impossible, since neither Venus nor Mercury could go far enough away from the Sun to be in Scorpio in the month of April. Plutarch indicates the hour (between the second and third, on the ninth of Pharmouthi) according to Tarutius. John Lydus (*Mens.*, I, 14) established the chart as follows Ἡλίου μὲν Ταύρω, Σελήνης δὲ Παρθένῳ, Κρόνου δὲ Ζύγῳ, Διὸς δὲ Λεώντι, Ἄρεος Ζύγῳ, Ἀφροδίτης Ταύρῳ, Ἑρμοῦ Κριῶ. If the Moon is in Libra or Virgo, when the Sun is in Taurus, an eclipse is not possible. Cf. in Junctinus (pp. 813 sqq.), the charts of Rome, Byzantium, Bologna, Milan, Florence, Venice, etc., restored by a very simple proceeding. It consisted of composing the chart to fit an interpretation already desired. In the Renaissance, the disciples of Ptolemy pretended to discover the rising sign or the patron of a city by comparing the dates of known calamities with the dates of eclipses or of conjunctions of the upper planets – the former alone, the latter *pro negotiis parvis* (Cardan., p. 282) occurring in this or that sign.

860 Plut., *Romul.*, 12. See the discussion of the chronographic problem – the Egyptian months being connected to a fixed year – in Soltau, *Röm. Chronologie*, pp. 52 sqq., 432 sqq. Thus explaining itself and the passages where Virgil offers to Augustus a celestial domicile in Libra (*Chelae*) and Manilius, toadying, says *Hesperiam sua Libra tenet qua condita Roma* (in the person of its founder) ... *Qua genitus Caesarque meus*

nunc condidit orbem (IV, 776 sqq.). Manilius promises the empire – imprudently enough, if one thinks of the future – to he who was *Felix aequato genitus sub pondere Librae* (IV, 547). He was even enthusiastic for Capricorn *Contra Capricornus in ipsum | Convertit visus, quid enim mirabitur ille | Majus, in Augusti felix cum fulserit ortum* (II, 507). On the Ascendant of the conception, see below, Chapter 13. One goes back also to Aeneas *Multi volunt Aeneam in horoscopo Virginem [et ibi Venerem] habuisse* (Serv., *Aen.*, I, 314. Cf. Ps.-Lucian., *Astrol.*, 20). Naturally one finds another eclipse of the Sun at the death or apotheosis of Romulus (Plut., *Romul.*, 27; *De Fort. Rom.*, 8).

861 See the birth charts of Oedipus, of Paris, of Demosthenes and of Hermodorus, of Plato, of Pindar, of Archilochus, of Archimedes, of Thersites, considered as moral or intellectual types in Firmicus (VI, 26-31 Pruckner). Minos was “king,” Ps.-Lucian says (*Astrol.*, 20), because Jupiter dominated his geniture. Aeneas owed his looks to the “influence of Venus, etc.” All mythology passed by, explained by astrology. Teiresias, Atreus and Thyestes, Bellerophon, Daedalus, Pasiphae, Endymion, Phaethon, and so on, were all learned astrologers. Manilius knew this as well as if he were taken there. Given the *Sagitta* (V, 294-311), he was able to assign several legendary archers to it, Teucer, Philoctetes, an ancient prototype of William Tell, Alcon in Virgil (*Ecl.*, V, 11. Cf. Servius, ad loc.). The same went for Libra *Non alio potius genitus sit Servius astro*, etc. (IV, 213).

862 See H. Usener, *De Stephano Alexandrino commentatio*, Bonnae, 1880, pp. 17-32 and 56. The idea of the denomination of Venus had been suggested by the fact that the holy day of the Muslims is the *dies Veneris*. They did not drink wine, which has a solar nature and did not eat pork, which has a martial nature, because of antipathy with Saturn and Venus. They practice circumcision in homage to Saturn (περιτέμνονται δὲ τὴν ἀκροβυστίαν δι' αὐτὸν Κρόνου, p. 22). Cf. the Jews as worshipers of Saturn (above, p. 318, 1 and below, Chapter 13).

863 The proof, for the Greeks, comes from the corrections and interpolations made in the part which was future for the author, past for the corrector (861-926 AD). The Arabs also made a chart to suit their fantasies. Albohazen Haly (VIII, 16) did not speak of Saturn. He had the rising sign in Scorpio, Mars and Venus for master planets.

864 See above, p. 36, 2. E. Maas (*Aratea*, p. 328) proposed an Anchimolus who would be the Molon of the *Thalysia* of Theocritus (VII, 125). Trismegistus taught that ἐν τῇ καταβολῇ τοῦ ἀνθρωπείου σπέρματος ἐκ τῶν ζ' στοιχείων ἀκτίνες ἐπιπλέκονται ἐφ' ἑκάστον μέρος τοῦ ἀνθρώπου. The 12 signs worked the same way ἐπὶ τῆς ἐκτοπῆς (*Phys. et med. gr. min.*, I, pp. 387, and 430 Ideler). It was very ingenious. The temperament (which worked with medicines) resulted from the collaboration of the planets at conception and the signs at birth.

865 See K. Humann and O. Puchstein, *Reisen in Klein-Asien und Nord-Syrien*, Berlin, 1891, pp. 333-334. One finds, at Nimrud-Dagh, not far from Samosata, in the ruins of the edifices erected by Antiochus, a bas-relief (reproduced below, Fig. 41), representing a conjunction of planets in Leo, planets listed in the order ♂, ♀, ♄. It is probable that it is a chart of the state of the sky at a given moment. Which moment? If one takes the order of the planets as real and deliberate, the astronomical calculations allow this conjunction (including the Moon, too, which is left out) only for the date of 17 July 97 BCE. Now, Antiochus was said to be born on 16 Aydynaeos (= December 97 or January 96). So, supposing the birth was in the seventh month of pregnancy, he could have been conceived in July. This chain of postulates is very fragile. The king, who celebrated the anniversaries of his birth and his accession (10 Loos), does not make a single allusion to his conception, nor to any charts or horoscopes. It is true that the planets, in Leo, form a royal chart (above Chapter 13), and it is possible that the bas-relief is an astrological symbol of the royalty of Antiochus. However, affirming that it is about the conception of the king is a very risky conjecture. The case awakes the same doubts as that of Palmyra (above, p. 228 in note). [Cf. the discussion in Otto Neugebauer and H. B. Van Hoesen, *Greek Horoscopes* LjN]. As for the conception of Augustus, it is a thorny question to debate. We have seen above (p. 369, 1) the two horoscope signs of Augustus (Libra and Capricorn) cited, without other reflection, by Manilius. Fr. Jacob (p. 57, ad v. II, 290) pretends to assign Capricorn to Tiberius, born on 16 November 42 BCE (Suet., *Tib.*, 5). However, the precise text does not allow this loophole. Germanicus, speaking of Capricorn, said *Hic, Auguste, tuum genitali corpore numen ... In caelum tulit* (Germ., *Arat.*, 557 sqq.). It was a question of Augustus dead and not of Tiberius. Suetonius, for his part, tells us that Augustus divulged his birth chart and struck the silver denarius *nota sideris Capricorni, quo natus est* (Suet., *Aug.*, 94). The assertion of Suetonius is superabundantly proven by numismatics. Cf. the word of Horace *Orte Saturno* (*Od.*, I, 12, 50), ὦς was the house of h. A simple enough solution presented itself first of all to the mind. Libra was perhaps the sign of the month in which Augustus was born (23 September 63 BCE) and Capricorn the Ascendant sign (see below). Scaliger thought of this (*op. cit.*, pp. 147-148), but he established that it was then necessary to challenge another text of Suetonius, the one where he said *Natus est Augustus ... paulo anto Solis exortum*.

In such a case, the sign of the month (the one containing the Sun) is at the same time, the Ascendant sign, and, if the Sun was in Capricorn, it was the one for the month of December. Scaliger thought to resolve the problem by pointing to the disorder the calendar was in during 63 BCE (see the contrary opinion of W. Soltau, *Röm. Chronol.*, p. 52 sqq.). The disorder was such that Augustus himself did not know the proper correspondence between the months and the signs. Theagenes, poorly taught, thought it good to opt for Capricorn, a sign which made kings, according to Firmicus (VIII, 28 Pruckner). This explanation is not acceptable, save for want of a better. The chart of conception seemed, first of all, more learned and conclusive than that of the nativity. It would not have been abandoned later, save for the uncertainty of the basic data. If Tarutius calculated the moment of conception for Romulus (above, p. 369), it is easy to believe that he or Theagenes had done the same for Augustus. The difference between December and September corresponds to the period of a normal gestation, and *natus* for *genitus* or *conceptus* is a trivial imprecision. Capricorn would be, according to this hypothesis, not the “horoscope” sign (rising at the *hour* of conception), but the sign of the “chronocrator” of the *month* of the conception.

866 The oracles, in their decadent years, gave consultations of this sort. The astrologers did not want to be left behind. Cf. the chapter “*Utrum gravida sit mulier*,” cited by the Arabs as being from Dorotheus (ap. Engelbrecht, p. 31). However, it was the method of *καταχαί elections* (above Chapter 13 and 14) which he used, and not that of genethliology.

867 Since the astrologers lived by apocryphal traditions, it would be naive to ask of them if this Cleopatra was the famous queen of Egypt. We have, under the name of Cleopatra, a *Chrysopeus*, that is, a work on weights and measures, without counting a conversation between Comerius the philosopher and Cleopatra (M. Berthelot, *Intro.*, pp. 174-175, 187, etc.).

868 Two sorts of information *συναισθητικῶς*: πολλαῖς γὰρ τῶν γυναικῶν γίνεται συναίσθησις τῆς συλλήψεως, κλονουμένης τῆς μήτρας καὶ εἰς αὐτὴν συνερχομένης καὶ ἀναρπαζούσης τὸ ἐν τοῖς ἔξω μέρεσι σπέρμα – καθ’ ὃ Κλεοπάτρα φησί. Παρατηρητικῶς ἐκ τῶν ἐπιμηνίων· ὅθεν οἱ Αἰγύπτιοι ἐλέγοντο ἅπαξ τοῦ μηνὸς ταῖς γυναιξί, ἐκλεξάμενοι τὴν ὥρον καὶ τὴν ἡμέραν καὶ εἰ μὲν τοῦ καιροῦ τῆς καθάρσεως ἔγνωσαν τὴν σύλληψιν γεγονέναι, κατ’ ἐκείνην ἐκείνην ἐσημειοῦντο τὴν ἡμέραν (Anon., p. 88). One recognizes, from the choice of a moment, the Egyptian method of *elections* (above, Chapters 13 and 14).

869 I have heard that the Arabs, with their theory of the “dormant seed,” admitted, at need, years between fertilization and birth.

870 *Tetrab.*, III, 1. Conception is the ἀρχή and birth is the καταρχή. However, τὸ μέγεθος αὐτῆς [sc. Ἐκτροπῆς] τῷ μὲν χρόνῳ γίνεται δεύτερον, ἴσον δὲ καὶ μᾶλλον τελειότερον τῇ δυνάμει, σχεδόν τε δικαίως ἐκείνη [sc. Σπορὰ] μὲν ἂν ὀνομάζοιτο σπέρματος ἀνθρωπίνου γένεσις, αὕτη δὲ [sc. ἐκτροπή] ἀνθρώποι. The scholiast repeats and affirms [ἡ τῆς ἐκτροπῆς ὥρα] πολλὴν ὁμοιότητα ἔχει πρὸς τὴν τῆς σπορᾶς καὶ πάντως ἐξ ἀνάγκης εὐρίσκονται οἱ σχηματισμοὶ τῶν ἀστέρων τῶν τότε παρόμοιοι (Anon., p. 88). This “necessarily” (repeated, p. 89) is an evasion. He did not respond to the objection *quod alium stellarum agmen foret, quo primum tempore conciperetur homo in utero matris, aliud postea cum in decem mensibus proximis in lucem ederetur* (Favorin. ap. Gell., XIV, 1, 19).

871 Censorin., *De die natali*, 8. Cf. the summary versified by Ausonius, *Eclogarium De ratione puerperii maturi* (pp. 541-546 Toll.).

872 One can hardly say τόπος τῆς σπορᾶς (or συλλήψεως), but, roughly, σπόριμον ζῶιδιον. Censorinus calls the aspect *conspectus*, the glance or ray *conspectus* or *lumen* or *radius*. He did not care about the distinction between the ἀκτίς and the ὄψις ο!yij (above, p. 248-249).

873 Cf. above, p. 235, 1. P. Pomponazzi (*De Incant.*, Chapter X, Basil., 1556), said the same, using as argument a similar play on words, that the *Genii* are the *geniturae hominum*.

874 One may ask why Hephaestion (ap. Salmas., pp. 643-644) did not admit (? (sic)) births after this triangle, the triangle of the “right” (δεξιός).

875 Empedocles had a genial idea. In the beginning, human beings were the work of a single solar day which lasted six months long. The days since then have been shortened by the acceleration of the daily motion (Plut., *Plac. phil.*, V, 18, 1; above, p. 12, 2).

876 One encounters Epigenes of Byzantium and Hippocrates among the dissident astrologers [*Epigenes*] *neque nono fieri posse contendit, nec Hippocrates Caus decimo* (Censorin., op. cit., 7). Aristotle accepted the seventh, ninth, tenth, and even the eleventh month (*undecimum mensem Aristoteles solus recipit*). (He was alone in this last opinion.) Herophilus, Philostratus, and others did not believe in seven month births. However, they seemed more natural in the eyes of the Pythagoreans, saying τὸν ἐπτάμηνον ἡπατημένων ὑποληφθῆναι

γυναικῶν (Proclus, in *Anal. Sacr.*, V, 2, p. 163 Pitra). Polybius, Diocles, and the "Empiricists" maintain, against all the astrologers, that eight month fetuses are viable (Plut. *Plac. phil.*, V, 18, 3). One can understand the importance of the question for the juriconsults, who discuss the legitimacy of infants born *undecimo mense*, the eleventh month (Gell., III, 16). Hadrian, an amateur astrologer, drew juridical consequences from the date of conception substituted for that of birth (cf. Gaius, I, 92, 94; *Dig.*, I, 4, 18, etc.).

877 Demophil. (ap. Porph., *Isag.*, p. 194) and Hephaestion (II, 1 and III, 10, ap. Riess, p. 358) mentions only Petosiris. Proclus, an expert on the "Chaldaean Oracles," adds Zoroaster and the approbation of Ptolemy: οἱ δὲ περὶ Πετοσίριν Αἰγύπτιοι καὶ Ζωροάστρης διατείνονται καὶ Πτολεμαῖος ἀρεσκεῖται (Proclus, in *Anal. Sacr.*, V, 2, p. 174 Pitra). This Ptolemy is the author of the *Καρπός*, which adds an option, for the horoscope at the time of birth, between the sign where the Moon was at conception ἢ τὸ τούτου διάμετρον (*Centiloq.*, 51). The case ἢ τὸ τούτου διάμετρον was foreseen by Petosiris, according to Demophilus (p. 194).

878 The rule is encountered enunciated in nearly identical terms in the texts seen in the preceding note and in Vettius Valens (III, 4, ap. Riess, p. 358).

879 Hephaest. ap. Salmas., pp. 653 sqq. The same computation is found in Proclus (*loc. cit.*). Saumaise reads ὥρων γ' (three hours) there where Proclus gives ὥρων γ" (p. 175) or 1/3 of a day. He has confused *one third* (γ") with *three* (γ') and adds ὥρων.

880 See [below](#) (p. 382), 278 days, 9 and 1/3 hours in a chart in Hephaestion; 276 days in *Pap. Brit. Mus.*, CXXX, II. 17-20, p. 139.

881 There were – approximately – two sorts of conception *συνοιδική* and *πανσελενιακή* σπορά (Valens, *ibid.*). The synodic conception led to panseleniacal birth and vice versa (Proclus, p. 164 Pitra). As for conceptions taking place in the first and last quarters (ἐν διζομηνίαις), they led to births at either (for first quarter conceptions) at the Full Moon or (for last quarter conceptions) at the New Moon. The same birth taking place ἐν διζομηνίαις results from conception either synodic (first quarter conceptions) or panseleniacal (last quarter conceptions). For confirmation and symmetrical arrangements, see the ordinary procedures of the astrologers. See the discussions of numbers, months, days and hours, in Saumaise (*op. cit.*, pp. 627-649), who takes the trouble to refute the partisans of the seven-fold and nine-fold periods, and with arguments hardly any better than those refuted. A person who believes (because Aristotle said so) that Egyptian women possess *septenos*, *immo et novenos interdum uno utero gerunt* (p. 645), and that, by special privilege, – refused, for example, to Cyrene – *in Aegypto octimestris partus vitalis est* (p. 716), is not in contact with reality. The astrologers have a very simple way of sheltering their rules from contradictions. They considered births contrary to these rules to be miscarriages of nonviable fetuses, deformed or mentally retarded, or, as a last resort, infants deprived of generative force (Procl., p. 163 Pitra).

882 Proclus (*loc. cit.*) calls τὰ ἐννεάμηνα the δεκαμηνιαῖοι of Saumaise. The Christian astrologers were occupied with the question of the birth of Jesus Christ and the 275 days between the Annunciation (25 March) and Christmas (25 December). Ciruelo (I, 3) extolling late births, states that the Savior, in over nine months, *sex diebus in virgineo alvo moram traxit*. He uses months of thirty days and includes Christmas.

883 Cited by Hephaestion γυμνασίας χάριν (II, 1) the text in Engelbrecht, p. 36. Demophilus (p. 194) also gives a method affected by Antiochus, which was in two parts (φησὶ δύο ἐφόδους ἔχεσθαι τῆς ἀληθείας). The text is too mutilated to be used. Look at, according to the same author, the calculation from which some find the Horoscope of a conception. Take, in the rising sign of a birth, the ascendant degree. Multiply the degrees which have risen above the horizon by the sum of the hours (?) and distribute the product, beginning with the horizon, at the rate of 30° per sign καὶ ὅπου δ' ἂν ἐκπέσῃ ὁ ἀριθμὸς ἐκεῖνο ὠροσκόπησε κατὰ τὴν τοῦ σπέρματος καταβολήν. It is the method of the dodecatemoria (above, p. 300 sqq.). Scaliger (*Not. in Manil.*, p. 236) builds on this chimerical connection with a passage in Manilius.

884 Heph. ap. Engelbrecht, pp. 22-23. I have been forced to eliminate an obvious error from this text, the Moon in Capricorn and nevertheless ἐν τοῖς ἐπομένοις τοῦ ὠροσκόπου (!), and also the excess of numbers coming from glosses. The year is, without contest, the Alexandrian year. With the vague year, the 30 Athyr 97, which corresponds to 27 November 381 CE, fell on 18 August, and the Sun could not be in Sagittarius. The position of the Sun has been estimated according to the day of the month, ignoring the precession of the equinoxes, which would have moved it retrograde about 8°. If the Moon was at 65°, 47' after the Ascendant, it would have to be in Taurus. The author took the trouble to subtract, in addition, the intercalary quarter day which had been inserted ninety days earlier, at the end of the epagomenal days of ninety-six (29 August 381 CE). This date, 381, serves to date Hephaestion's book, which would not have been considered earlier than that of Firmicus. The addition proves well here that σογ' γ' [sic] signifies 273 1/3 days and not 273 days, 3 hours (cf. above, p. 380, 2).

885 Proclus, in *Anal. sacr.*, V, 2, p. 175 Pitra. He follows a geometric verification by the σπóριμον τρίγωνον which permits him to decide if the birth would be better placed in the seventh or the ninth month. Outside of this, the product would be ἀλογον ζῶον ἢ τερατώδες. Proclus boasts much of the Pythagorean right triangle (στοιχείον τῆς τῶν ὅλων γενέσεως, Io. Lydus, *Mens.*, II, 7), constructed according to the method of the philosopher Nestorius, the grandfather of Proclus' master, Plutarch. The ὥρα σπορίμῃ as the principle summit, which permitted the discovery of all the powers one should invoke during gestation (*op. cit.*, pp. 177-178). It is the triumph of magic and stupidity. These people who had such faith in their incantations did not, it seems, have any in Nature. The right triangle, used to predict deformed births, became the object of special treatment by Firmicus *illic enim ratio trigoni orthogoni, quae a quibusdam Graecis obscuris videtur involuta, [a nobis] manifestis et brevissimis explicationibus explicata est* (Firmic., VII, 6, p. 200 Pruckner).

886 On the ambiguity of this technical term, see above, p. 289, 2.

887 We have said that Ptolemy mentions in theory and carries out in practice the chart of conception. Ps-Manetho, in the same way, proposed revealing the decrees of the stars σπείρομένοις καὶ πικτομένοις δελοῖσι βροτοῖσιν (I, 6); but in fact he was only concerned with the nativity. The horoscope of conception may aid in explaining differences between twins, upon the condition that one admit that they may not have been conceived at the same time. However, this possibility was itself much discussed (see above, Chapter 16).

888 See above, p. 34, 1. The Caniculus or Dog which Chrysippus speaks of is outside the zodiac.

889 See above, p. 111, 3.

890 Above, p. 373. See in Letronne (*op. cit.*, p. 202) the mention of Petemenon, born in January 95 AD, under the sign of Capricorn.

891 In Manilius, one meets two independent series of predictions drawn from the rising sign. In the first (IV, 122-292), the poet hinted – without saying it expressly – that the ascendant came from the daily motion, calculated in the manner of the genethliologists. In the other (IV, 503-582), the ascendant is rising heliacally. On this last point, doubt is not possible. It is to heliacal rising which these expressions apply (*signa*) *ortu* | *Accipiunt proprias vires ultraque remittunt* (IV, 504-505), and the refrain *ubi se summis Aries extollet ab undis* (505); – *Geminis cum profert unda* (525), etc. It is just when the Sun is in Cancer that the latter, *velut exustus Phoebis ignibus ignis*, is enveloped in vapors (530 sqq.). In the end, it is not the daily rising of which the poet says *Sed cum autumnales coeperunt surgere Chelae* (547). Manilius has first followed an author who is a vassal of the first system, and then switched to another, in all innocence. It is astonishing that Scaliger (p. 305) remains silent on the question.

892 See the “types” of individuals born under the different signs in the *Philosophoumena*, IV, 3, pp. 84-93 Cruice, portraits imputed not to astrology but to “metascopic” divination, here made a vassal of astrology.

893 One should not hesitate to suppose this case was fulfilled for Augustus (above, p. 373, 2). Theagenes could thus avoid choosing between the two systems.

894 The Moon crosses a sign in a little less than two and one half days.

895 In one of the two Mesopotamian cuneiform horoscopes from the time of the Arsacids (above, p. 50), the sign under which the infant is born, between midnight and dawn, is that of the Moon, and not that of the Sun, which is beneath the earth. In the other, the infant is born “under Jupiter (*Te-ut*) of the night.” There is no question of the classical Ascendant, of the Moon or Jupiter rising at the same time as the nativity. On the elimination of the sky beneath the earth by Ptolemy, see above, pp. 270, 1; 272, 1; 349, 3; 356, 2.

896 With the Sun at the Ascendant, that is, *in signo horoscopi*, it has an effect even on some nocturnal genitures, at dawn, when the star still below the horizon (cf. Firmic., III, 5, 11 Kroll).

897 For example, the popular idea (of astrological origin or a modification of an astrological doctrine) was that each person has his star in the sky, a guardian star, born and dying with him: *sidera quae adfixa diximus mundo, non illa, ut existimat vulgus, singulis attributa nobis, et clara divitibus minora pauperibus, obscura defectis, ac pro sorte cujusque lucentia adnumerata mortalibus nec cum suo quaeque homine orta moriuntur nec aliquem extinguere decidua significant* (Plin., II, 28). The same belief was attacked by the bishop Eusebius of Alexandria (p. 17 Philo), who, taking the argument to absurdity (ὅσοι ἀστέρες, τοσοῦτοι καὶ ἄνθρωποι), responds would there have been only two stars in the sky in the time of Adam and Eve, and only eight when Noah and his relatives left the Ark? A shooting star was a symbol of conception for the Neoplatonists, of death for the “vulgar” (cf. above, p. 362).

898 The author of the *Hermippus* did not want this abstraction. He defined the Ascendant ὁποῖος τῶν ἀστέρων κατὰ τὸν καιρὸν τῆς γενέσεως ἀνεισι τὸν ὀρίζοντα (*Hermipp.*, II, 6, p. 44 Kroll). The author was an amateur who reverted instinctively to the true tradition.

899 Ptolem., *Tetrab.*, III, 2. It is the Sun which marks the hour: *ut ratio signis ducatur ab ignis* (Manil., III, 299 sqq.; III, 442). With tables of the Moon or of the planets, one may find the hour from another star. The estimates of degrees and minutes which one finds in the charts certainly do not come from direct observation.

900 To learn the rising sign is easy. The hard part is to learn the precise degree of the Ascendant: ἰστέον δὲ οὐκ αὐτὸν τὸν ὥροσκόπων ἐπαγγέλεται σοι διδάσκειν [Πτολεμαῖος] ἀλλὰ διὰ κανόνος προγνωσθέντος αὐτοῦ διὰ τῆς νῦν ῥηθησομένης μεθόδου τὴν μοῖραν αὐτὴν καὶ τὴν θίξιν εὐρίσκειν (Anon., p. 90). All the methods given above are applied to an already known rising sign. The syzygy is considered to be a natural reference point, where the two luminaries are associated in a common and sovereign action.

901 It is important to cite this text, which has a capital importance: Δεῖ δὴ λαμβάνειν τὴν τῆς ἐκτροπῆς προγινομένην ἔγγιστα συζυγίαν, ἂν τε σύνοδος ἢ ἂν τε πανσέληνος, καὶ τὴν μοῖραν, ἀκριβῶς διασκεψομένους, συνόδου μὲν οὔσης τὴν ἀμφοτέρων τῶν φωτῶν πανσελήνου δὲ τὴν τοῦ ὑπὲρ γῆν αὐτῶν ὄντος [κατὰ τὸν χρόνον τῆς ἐκτροπῆς], ἰδεῖν τοὺς πρὸς αὐτὴν οἰκοδεσποτικὸν λόγον τῶν ἀστέρων, τοῦ τρόπου τοῦ καθόλου τοῦ κατὰ τὴν οἰκοδεσποτίαν ἐν πέντε τούτοις θεωρούμενον ἐν *τριγώνῳ* τε καὶ *οἴκῳ*, καὶ *ὑψώματι*, καὶ *ὀρίῳ*, καὶ *φάσει* ἢ *συσχηματισμῷ* τουτέστι ὅταν ἐν τι ἢ καὶ πλείονα τούτων ἢ καὶ πάντα ὁ ζητούμενος ἔχει τόπος πρὸς τὸν μέλλοντα οἰκοδεσποτήσιν. Ἐὰν μὲν οὖν ἕνα πρὸς ταῦτα πάντα ἢ τὰ πλείεστα οἰκείως διακείμενον εὐρίσκομεν, ἢν ἂν ἐπέχη μοῖραν οὗτος ἀκριβῶς καθ'ὸ παραδεύει δωδεκατημόριον ἐν τῷ τῆς ἐκτροπῆς χρόνῳ, τὴν ἰσάριθμον αὐτῇ κρινοῦμεν ἀνατέλλειν ἐν τῷ διὰ τῆς τῶν ἀναφορῶν πραγματείας εὐρημένῳ ἐγγυτέρῳ δωδεκατημορίῳ (Ptol., *Tetrab.*, III, 2). Cf. Anon., pp. 91-92; Porph., *Isag.*, pp. 191-192; Hephaest., II, 2, ap. Salmas., *op. cit.*, Praef., f. 3. The quickest planet does not move noticeably during the longest childbirth. On φάσει ἢ συσχηματισμῷ, cf. above, p. 238, 2.

902 The scholiast tells us that many people misunderstood the text of Ptolemy and believed that it was necessary to use the position at which the luminary which was found above the horizon at the moment of birth. There was a gloss which he condemns κατὰ τὸν χρόνον τῆς ἐκτροπῆς and which was found, he said, ἐν πλείστοις τῶν βιβλίων, had been placed higher within brackets. Proclus (*Paragr.*, III, 3, p. 156 Allat.) reproduces it. Junctinus (p. 119) also holds out for the moment of birth but assumes that all night-time births will be lunar.

903 Cf. above, pp. 238-239. [The lunar syzygies are the New Moon (conjunction) and the Full Moon (opposition). LJJN].

904 This was somewhat repressed in the physics of Ptolemy. He accepted the hegemony of the Ascendant, imposed by tradition, but he attributed more natural energy to the Midheaven (cf. above, 271, and, p. 416), as τόπος ἀφαιτικός τόπος ἀφαιτικός.

905 I believe I have recognized the hand of Ptolemy in the effort to unify the apotelesmatic doctrine in its two parts, universal and individual. The syzygies [New and Full moons] (which will come up again in calculating the length of life) are, in genethialogy, what eclipses are in the “universal” prognostics. They are quasi-eclipses, produced at the ecliptic points. The planet which dominated the last syzygy is master of what follows, that is, during the next half-month. One may find, after the fact, physical and philosophical reasons for the capitol role of the syzygies. The true reason is that they take the place of the eclipses the New Moon, the place of the solar eclipses, the Full Moon, the place of lunar eclipses.

906 Annubion, ap. Koechly, *Manethon.*, p. 117. If the distance is insufficient, one is thrown back to the square or the diametrical aspect of a point where one is stopped (χρὴ τετράγωνα Θ' ὁρᾶν καὶ διάμετρα τόπων). It is possible that by μέχρι Σεληναίης ἀστέρος ἱσταμένου, it may be extenuated to the New Moon, but the name may also be a point. Cf. above (306, 3), the transfer of the Horoscope to the κλῆρος βάσεως.

907 It is the method of the *κατὰ τρίγωνον μονομοιρίαί*. The text of Paul of Alexandria (fol. Q 2-R) is in a bad state, and the figures in the table placed there do not match the facts in the text.

908 *Tetrab.*, III, 3, pp. 148-149 Junctinus (the text cited above, p. 299, 2. This is a notice signifying klh~roi and Egyptian arithmetic. He rejects in the same way “the old method of prediction” which pretended to take all the stars into account (above, p. 125, 2). Cf. Anon., p. 89). For the κλῆροι, the scholiast (p. 94) remarks that “the Ancient” did not reject all of them, but only τοὺς ἀνυποδεῖρους. The apotelesmatica of Ptolemy is a triage performed upon many different systems, invented independently of one another. One system interpreted the presence of the Ascendant in a sign; another, in the same place with the planets; yet others, with the decans, with the ὅρια, with the full or empty degrees, with the degree itself (μονομορία). As well as the Ascendant, one

may consider the other “centers,” which triple or quadruple the number of predictions. Finally, since aspects replaced real presence, the data could increase indefinitely.

909 Ptolemy measures the energy of the planets from two points of view: 1) from the general point of view, that is, at all times (κατὰ τὸ κοσμικόν), the planets are δραστικώτατοι when they are a) ἐν οἰκείῳς ἢ καὶ ἰδίῳς τόποις; b) ἀνατολικοί καὶ προσθετικοί τοῖς ἀριθμοῖς, feeble in the opposite case (cf. above, p. 113 2) From the point of view of the moment of nativity (κατὰ γένεσιν), they are active ὅταν ἐπὶ τῶν κέντρων ἢ, τῶν ἐπαναφορῶν παροδεύσωσι, καὶ μάλιστα τῶν πρώτων, λέγω δὲ τῶν κατὰ τὰς ἀναφορὰς καὶ τὰς μεσουρανήσεις, weak in the ἀποκλίματα.

910 Ἐῷοι μὲν γὰρ ὄντες ἢ ἐπὶ κέντρῳ καταρχὰς γίνονται δραστικώτεροι, ἐσπέριοι δὲ ἢ ἐπὶ τῶν ἐπαναφορῶν. Cf. Anon., pp. 92-95.

911 *Propria est [Chaldaeorum] genethliologiae ratio, uti possint ante facta et futura ex ratione cinationibus astrorum explicare* (Vitruv., IX, 4 [7]); Οὐ μόνον τὰ μέλλοντα ἐξετάζουσιν, ἀλλὰ καὶ τὰ παρεληλυθότα καὶ τὰ πρὸ τῆς γενέσεως (Bardesan., ap. Euseb., *Praep. Ev.*, VI, 11, 58).

912 See above Chapter 16. Prognostics about the past furnished arguments for the Neoplatonic thesis of the stars as *signs*, and not *causes*, of events (σημαντικά not ποιητικά).

913 It is clear that if an astrologer predicted to a client that he would become an orphan at a given date, he predicted, at the same time, the death of the client's parents.

914 Among these clients, there were children eager to inherit: *motus astrorum ignoro; funus promittere patris | Nec volo, nec possum* (Juven., III, 42 sqq.). There were also children or suspicious fathers researching paternity. Likewise parents, ignorant of the date of their own births, seek their destinies in the charts of their children, etc. In Firmicus, see the chapters *Filiorum cum patribus dissidentium geniturae* (VII, 9 Pruckner). – *Parentum mortis tempus et conditio* (VII, 10). – *Orborum filiorum natalia genituraeque* (VII, 11). – *Adoptivorum filiorum geniturae* (VII, 12).

915 *Tetrab.*, III, 4 (Περὶ γονέων). Cf. Anon., pp. 95-100. These predictions supplement those already drawn from the chart of the father or of the mother. In this way, the chart of an infant may replicate that of its mother who died giving birth to it; one may foresee the future of the mother as if one looked at her horoscope by looking in the “Heart of the Ram” (♈ 17° Firmic., VIII, 19), or ♄ 12° (VIII, 21) or at ♄ 16° (VIII, 27). Firmicus abounds in predictions about parents – especially the manner of their death – drawn from the charts of their children. Fr. Juntinus (*op. cit.*, p. 185) gives a *Figura nativitatis patris ex genitura filii facta*, following the of Cardanus, who created a restored chart for his father from his own (p. 342, different from the real one, given p. 633), as well as for his mother (p. 635), for his two last children (p. 666), and also reversed the operation (below, p. 394, 1).

916 Or rather – in the system of Manilius – under the tutelage of Saturn, which was the beginning (above, Fig. 30, pp. 277-278).

917 One finds, here and there, fragments of other systems. A father would die prematurely if the infant was born with ♄ in the fourth place (Firmic., III, 2, 8-9 Kroll). Illnesses were sent to parents by ♄ (Maneth., III, 276) and by ♂ (I, 168); father and mother are killed by ♄ and by ♂ (I, 328-337). Violent death of parents by separation of the Moon, of ☾ to ♄, or of the ☾ to ♂ (Firmic., IV, 11, 6-7; 12, 9-10), especially if it is full at the moment when it is pierced by the ray of Mars (Anon., p. 97). Cf. above (p. 249, 1) the ἀκτινοβολία. Cardanus accumulated observations from children and grand-children to demonstrate the after-shock, the influence of the nativities of infants upon the destinies of parents and grandparents (*op. cit.*, pp. 652-666). His own chart (*Nativitas nostra ex primogeniti, filii ultimi, filiae, nepotis, etc., nativitate*, pp. 632, 663, 665, 669) changed with each birth. He thus discovered nine distinct periods (*status novem*) in his own existence, without counting the chart of the conception, which he knew very well *juxta dictum matris* (p. 632). These are combinations of genethliology with *elections* following a method similar to that of the *Revoluciones* (above Chapter 14), which introduced into the initial chart the calculation of successive influxes considered at certain critical dates.

918 Λάμβανε ὥσπερ ὠροσκόπον τὸν σημαίνοντα ἀστέρα καὶ τὰ ἐφεξῆς ζῳδία. Anon., p. 99. It is a method similar to that of the κληρος Τύχης and of the ἄθλα (above, pp. 289 sqq.), applicable to all questions, and which Ptolemy preferred to that of the κληροί.

919 *Tetrab.*, III, 5, Περὶ ἀδελφῶν, pp. 192-193 Junct. Cf. Anon., pp. 100-103. The scholiast finds six questions to analyze first, if there are or will be brothers and sisters; second, if they will be few or many; third, if they are generous and happy; fourth, if they are brothers or sisters; fifth, if the brothers and sister are older or younger; sixth, if there will be friendship or enmity between them (Anon., p. 101).

920 Cf. the *ἀδελφείαι* in Manetho (VI, 307-337). It addresses, first of all, the third place (ἐφ' ὠρονόμου ζῶω τριπάτῳ) – δισσοὶ κασιγνήτοι (the uterine siblings) in the δίσωμα ζῶδια, the consanguineous brothers (δῆμαιοι), dependant on Saturn, ὅς μὲν φαίνει πατρὸς γόνον ἢ δ' [sc. Σελήνη] ἄρα μητρός (v. 328).

921 Firmic., VII, 13 (*Fratrum cujusque nati numerus*), p. 203 Pruckner. Cf. VI, 32, p. 184 (*fratrum locus partiliter inventus*), and above, pp. 305-306.

922 In the method of the κληροί, one always works with the distance from ἡ to αἰ (daytime) or from αἰ to ἡ (nighttime). Others speculations: ἡ to the Ascendant makes all the brothers die (Maneth., VI, 336-227, or exiles them, in order that the Saturnine person presently born may have primacy [*Saturno per diem in horoscopo partiliter constituto*] erit iste qui nascitur major omnibus fratribus, aut, si quis ante eum natus fuerit, a parentibus separatur (Firmic., III, 2, 1 Kroll). In the following phrase, Saturn does the same in omnibus quattuor cardinibus. The same prognostic for αἰ per noctem in order that the newborn solus in domo paterna habeat principatum (Firm., III, 3, 2-3), like Saturn and Jupiter in mythology. In the Hesiodic theogony, the primacy went to Kronos, last born of the Titans, then to Zeus, last born of the Olympians.

923 Ptol., *Tetrab.*, III, 6-9 *Περὶ ἀρρένικῶν καὶ Θηλυκῶν – Περὶ διδυμογόνων – Περὶ τεράτων*. Anon., pp. 103-109. Cf. *Geminorum geniturae cum suo sexu* (Firmic., VII, 2 Pr.). *Monstrosorum foetuum geniturae* (VII, 6). *Expositorum vel non nutritorum geniturae* (VII, 1). Maneth., VI, 19-98 (*Περὶ τροφῆς καὶ ἀτροφίας παιδῶν*).

924 This was a subject of frequent and awkward questions for the diviners, who were obliged to risk failure within a short time. The ancient Egyptians knew how to recognize the size and sex of the infant before birth by an ingenious procedure, which consisted of causing grains of barley and wheat to germinate in the urine of the presumably pregnant woman. The germination of the grains of wheat announced a boy, of barley, a girl. Point of germination, point of size (*Papyr. Berlin.* of the nineteenth dynasty). One cites a method based upon a reasoning from analogy. It consists of making a bird's egg hatch with a pregnant woman's warmth, the sex depending especially upon the temperature. This was how Livia, pregnant with Tiberius, knew in advance that she would bear a son. (Suet., *Tiber.*, 14). The astrologer Scribonius was doubtless caught short, for he intervened, after the birth of the infant, when he predicted a royalty then unknown *regnaturum quandoque, sed sine regio insigni*. In 371, a certain Bassianus was put to death by Valens, *licet ipse de qualitate partus uxoris consuluisse firmaret* (Amm. Marcell., XXIX, 2, 5). We cannot say what sort of diviners he consulted. It is a question we meet again in *elections*, καταρχαί, in all the popular methods. Cf. *Cod. Florent.*, p. 15, F. 189 (Εἰ ἄρρεν ἢ θῆλυ τὸ ἐγγάστριον), and above Chapter 13. **mmm**

925 He flattered himself that he would escape, in this way, a metaphysical objection, insoluble with the birth chart, when one considers sex, deformities, etc., all decided prior to birth. If the positions of the stars are “causes,” can the effect pre-exist the cause?

926 The planets, as we have said above (pp. 102 and 353, 3), become “masculine” in the East and “feminine” in the West.

927 When it is a question of adapting a prognostication retrospectively to a *fait accompli*, one can always find the desired sex in some sign or other, by rejecting degrees which were alternately masculine or feminine: *ex his enim partibus invenitur cujus sit genitura masculina, cujus femina* (Firmic., IV, 23, 1 Kroll). There is, in Firmicus, a capricious distribution, similar to that of the “full” and “empty” parts. 197° of the 360 were masculine while 163 degrees were feminine. This was doubtless the proportion of the two sexes admitted by the astrologers, improvising as demographers.

928 The question of the origin of the sexes is a subject which much occupied the philosophers. It is still open today [in 1899 LJN], in spite of the recent “discovery” of Dr. Schenk, which goes back very simply to the theory of the strongest, a force depending on alimentation. A pretty secret, to transport to the rubber-neckers easily. See, for the philosophers, the texts reunited in the *Doxographici* of Diels, pp. 191-194. These are brief summaries toward which it is necessary to keep a certain defiance. The physicians are not far behind. The majority accepted heat, and especially the right side of the uterus, as causes for the masculine sex, and they sought to divine, from certain symptoms, if the fetus were on the right or the left side of the uterus.

929 Cf. the similar conditions (♀, ☾, ☽, ☿ ζοῖδοῖσι διμορφώτοισι) posed by Manetho (IV, 450-461) for the twins or triplets and the distribution of the sexes. The conditions were similar, not identical ones.

930 The scholiast, for want of the Ascendant, makes the Midheaven take part.

931 This curious passage, unique in its genre, greatly tormented the commentators. Ptolemy does not speak precisely of divine patronages, but of analogous conditions ἰδίως δὲ τρεῖς μὲν ἄρρένας πληροφοροῦσιν ὑπὸ τὴν τῶν Ἀνακτόρων γένεσιν, κ.τ.λ. It is rather a popular tradition which he enlists, and which he does not inspect too closely when he says Demeter, Kore, and Dionysus were siblings. In the end, however, the

scholiast affirmed that Ptolemy wrote theology, and that he “related these sorts of births to one of the divine powers.” He would not have done so if it were not useful for the art. Useful to whom? According to him, it was a question of τῶν πρὸ τῆς γένεσεως ἐφόρων θεῶν. One may predict, from their character, that the dependants of the Anactores are upper-class and honored; those of the Graces, cheerful; those of the Dioscuroi, redoubtable and fearless; those of Demeter, showered with all sorts of “fruits.” In short, he can hardly be understood and one can only tell that he meant that the Anactores were “princes” of some sort. The Arabs understood even less: they mutilated the mythological names into Albetatriz, Alchatis, Diasaccora, Dimantorcoris (Junctinus, p. 207). Cardanus, who never hesitates, affirms (p. 348) that, of the three “Anactores,” two were bad (their natures from Saturn and Mars) and one good (its nature from Jupiter). The title of Ἀνάκτορες (Ἀνακτες – Ἀνακες) having been carried by the Dioscuroi, the Cabeiri, and the Curetes, I do not know to which group he alluded. Perhaps he did not know himself.

932 *Tetrab.*, III, 8 (Περὶ τεράτων), pp. 213-213 [sic. LJN] Junct. Cf. Anon., pp. 104-106. The works of the Renaissance astrologers abound in examples of deformed births, suspect witnesses, no doubt, but from whom scientific teratology may be drawn in part, with necessary prudence. Cf. Junctinus, *op. cit.*, pp. 213-224. The chart above [Fig. 41 LJN] is drawn from Cardanus (p. 351). It is one of twins joined at the point where the umbilical cord leaves, born near Oxford in 1552. Cardanus explains the problem marvelously.

933 Cf. the chaotic explanation in Firmicus (*Monstrosorum foetuum geniturae*, VII, 6 Pruckner) where, beyond the signs and the planets, the “places” intervened, the *dominus horoscopi*, the *dominus Fortunae*, etc. One may foresee the deformations from the *trigoni orthogoni ratio* (above, p. 383, 1).

934 *Tetrab.*, III, 9 (Περὶ ἀτρόφων), pp. 224-225 Junctinus, with commentary, pp. 226-244. Cf. Anon., pp. 106-109 (Περὶ ἀτρόφων καὶ ἐκθέτων); Maneth., VI, 19-111. Paul of Alexandria puts non-viable, infirm, sickly, and orphaned infants into the same category: ἐπὶ τὰς τῶν κακοποιῶν ἀστέρων ὠροσκοπήσῃ καὶ τὸν Θ ἢ τὴν Ϟ κατοπτέυσῃ, ἄτροφα ἢ ὀλιγοχρόνια ἢ σεσινωμένα ἢ ἐπιπαθῇ ἢ ἐν ὀρφανίᾳ διατελοῦντα τὰ γενώμενα ἔσται (L2).

935 *Tetrab.*, III, 10 [12 p. 318 Junctinus].

936 Ptolemy uses an expression (ταῦτα δὲ μοιρικῶς καὶ κατ’ἰσοσκέλειαν) which the scholiast does not explain. Cardanus (p. 353) interprets this to mean that the opposition must be exact, not only in longitude but in latitude as well. Junctinus (p. 227) imagines an isosceles triangle whose long side is the diameter, i.e., a right triangle. Could this be the famous right triangle which rules over intrauterine life (cf. above, p. 383, 1)? The scholiast announces that the calculation of the length of life was ruled by the power of the planets. The same numbers signify the *months* with the planets προσθητικοὶ καὶ ἀνατολικοί, the *days*, or even the *hours*, with the planets δυτικοὶ καὶ ἀφαιρέται (Anon., p. 108).

937 See above, pp. 270, 1; 272, 1; 349, 3; 356; 385, 4 and below, p. 415, 2.

938 Ptolemy responded to this question with another. He simply affirmed the diversity of the connected methods. One method was simple because the period of time is no more than a year, the other more complicated – ὅτι πῇ μὲν ὁ τρόπος οὗτος ἔχεται τοῦ περὶ χρόνων ζωῆς, ἐπειδὴ τὸ ζητούμενον εἶδος οὐκ ἀλλότριον ἐκάτερου πῇ δὲ κεχώρισται παρὰ τὸ κατ’αὐτὴν τῆς ἐπισκέψεως δύναμιν διαφέρειν πῶς... Ἐνθεν κακεῖνος μὲν πολυμερεστέραν ἔχει τὴν ἐπίσκεψιν, οὗτος δὲ τὴν ὀλοσχερεστέραν (III, 9, pp. 224-225 Junctinus). Thus, the method changed, depending on whether one were making an experiment, on pre-existing conditions, or if one wanted the precise numbers.

939 See the interminable casuistry of Firmicus (VII, 1, Pruckner), where the discussion is of infants born dead or extracted in pieces, with the death or survival of the mother, or drowned in their first bath, or exposed and eaten by dogs, etc. It would be interesting to know if the astrologers of the fourth century were libeling their contemporaries by insisting they exposed babies (cf. *Cod. Theod.*, V, Tit. 7, *De Expositis*; Tit. 8, *De his qui sanguinolentes emptos vel nutriendos acceperint* = *Cod. Just.*, VIII, 52). Manetho speaks also of deformed fetuses, born too early because the Moon was blocked or assailed by Mars or Saturn (VI, 185-195). He discusses ἄτροφοι and difficult births at length (VI, 19-111). He distinguished six varieties, both for day and night, and does not forget exposed infants, slaves or adopted children, depending on interference from Saturn or from Jupiter (VI, 51-68. Cf. IV, 365-383, 513-596). If one were surprised by something which resembled a general idea in this jumble, it would be that the life of the infant is represented by the Moon, and that its lot depends on the sign which the Moon enters at the end of three days (VI, 109-111). This is an arcanum to which we will return in Chapter 14.

940 Such as the woman who δὴ πολλῶν μῆτηρ ἐπὶ δάκρυσιν ἔσται ἀτεκνος (Maneth., V, 325), or the one who φθείρουσι γόνας ἀπὸ γαστέρος ὠμοτοκοῦσαι (VI, 289). Ptolemy moreover knew very well that certain women, because of their own genitures, ἐκτρωσμοῖς ἢ ἐμβρυοτομίαις περικυλίνονται. He also knew that Mars

τὰς γυναῖκας ἔτι καὶ ἐκτρωσμοῖς καὶ ἐμβρυοτοκίαις ἢ ἀναβρώσεσιν εἴωθε περικυλίειν (*Tetrab.*, III, 12). However, he treats the subject in the chapter on infirmities.

941 This is what Plato says in his own words in *Timaeus* (p. 89 b-c beyond this, death by disassociation of the constituent triangles). The same is found in the Christian Platonist author of the *Hermippus* (II, 6, p. 43 Kroll), who concluded from this that the length of life did not depend upon the stars. Cf. as a sample of the traditions, the morsel *De aetatibus animalium*, where Ausonius (pp. 533-536 Toll.) fixed the maximum human life at 96 years and then enumerated, in increasing progression, the years of life of the crow, the deer, the raven, the phoenix and the baboon. Tollius' notes take us to other texts.

942 See the ten hebdomads of Solon, the twelve hebdomads of Staseas, the irregular septenarians of Hippocrates, etc, in Pliny (VII, 160-161) and in Censorinus (*De die nat.*, 14.). The haruspices had also speculated upon this and one cannot but admire the imperturbable aplomb with which they declared that a person who had passed eighty-four years had outlived himself and did not count anymore. He was contrary to nature (Censorin., *loc. cit.* Cf. the article "Haruspices" in the *Dict. des Antiquités*). This, moreover, fit very well with the Etruscan theory of the *saecula* of 100 or 110 years. The century was measured by the length of the longest human life which began when it did.

943 See *sideralis scientiae sententiam Epigenes CXII annos impleri negavit posse, Berosus excedi CXVII. Durat et ea ratio quam Petosiris ac Necepsos tradiderunt (tetartemorion apellant a trium signorum portione) qua posse in Italiae tractu CXXIV annos vitae contingere adparet*, etc. Plin., VII, 160. We will return further on (p. 412, 1) to this text. *Dioscorides astrologus scribit Alexandriae inter eos qui mortuos sallunt constare hominem plus C annos vivere non posse*, because the heart atrophies progressively after the age of fifty years (Censorin., 17, 14). It is perhaps upon the faith of the Egyptian embalmers that the author of *Ecclesiasticus* affirms thus *numerus dierum hominum ut multum centum* (XVIII, 8) [The number of the days of men at the most are a hundred years... Rheims-Douay translation, 18:8. L.J.N.]. Lactantius (*Inst. Div.*, II, 12) was not thinking of this when he wrote *auctores idonei tradunt ad CXX annos perveniri solere*.

944 We are told that the oracles of Apollo absolutely forbade this sort of consultation: μὴ χρηματίζειν καθόλου περὶ Θανάτου (Diod., XV, 10). The astrologers did not imitate this reserve, even, and especially, when it concerned the deaths of kings. However, this is a subject most often treated by the method of *elections* and (also relevant to kings) of universal apotelesmatica. On the penal laws dealing with this, see Chapter 16. One supposes that the μετωποσκόποι, imitators of the astrologers, also knew how to predict the length of life, to the point that one of them, without otherwise knowing of a portrait painted by Apelles, *dixisse aut futurae mortis annos aut praeteritae* (Plin., XXXV, 89)!

945 Manil., III, 563-580. Cf. above (p. 209), the theory of the ὄρια based upon the ἀναφοραί, the meeting point between estimation by signs and estimation by planets. It is probable that the sign chosen is the one occupied by the Sun. This is the one which, for Manilius himself, opened the series of annual chronocrators (above, Ch. 14). Paul of Alexandria thought much the same (S2; cf. Scaliger, p. 262; Valens ap. Salmas., p. 210). Computation by places, which counts upon the *locus Lunae*, presupposes a symmetrical and concurrent calculation by the *locus Solis*. Manilius did not suspect, no doubt, the rule which he applies, for he operates on the halves of the anaphoric sides and does not announce that they vary, depending on the climes. Firmicus himself knew that they varied. However, he misunderstood the whole subject, imagining that he would use it to determine *quoto anno unumquodque signum in genituris oriatur* (II, 11 Kroll), which is in itself unintelligible, save to Saumaise (p. 665 sqq.), who reproaches Scaliger "of not understanding Firmicus" (cf. above, p. 261).

946 Manil., III, 581-617. This is perhaps the system that Cicero alluded to: *cum ortus nascentium luna moderetur, et ea notent sidera Chaldaei quae cumque lunae juncta videantur* (Cic., *Divin.*, II, 43). Manilius, author of the *Octotopos* (above, p. 276) and also of the duodecimal cycle of the ἄθλα (p. 297), follows here the normal division into twelve places, each "center" having its ἀπόκλιμα in front and its ἐπαναφορά behind.

947 Look at the table (cf. Scaliger, p. 264 and 266) of years of life opposite the signs occupied by the Sun and the "places" in which the Moon is found, according to Manilius (VII, 33 – rather than Scaliger's 23 – according to the text of Fr. Jacob). For the places, the reasons are mysterious. The "centers" come first, save for the Lower Midheaven. The ninth and the fifth compartments are given an advantage, from being in trine aspect with the Horoscope, to the right, and the left, respectively. On the side of the signs, the eighth month represent the fraction 2/3. On the thirds, cf. above, pp. 350, 3 and 380.

948 *Scire debemus quod neque Sol neque Luna in aliqua genitura domini efficiantur* Firmic., IV, 19, 4; IV, 19, 31 Kroll.

949 Elucidating this chaos is an unending task. We have seen earlier (p. 387) the autonomous system of Ptolemy. Firmicus (IV, 19) cites four solutions, drawn from the two groups mentioned above. There is *dominus*

geniturae: 1), *qui in principalibus geniturae locis positus in signis suis aut in finibus suis fuisset inventus*: 2), *in cujus stellae finibus Sol et Luna fuissent inventi, i.e. Sol in diurna et Luna in nocturna genitura*; 3), *qui altitudinis Lunae dominus fuisset inventus*; 4) *cujuscumque signum (domicile?) post natum hominem Luna, relicto eo signo in quo est, secundo loco fuerit ingressa*: this last system – a true heresy which introduces the future state of the sky into the chart (see above, p. 402, 1) – was preferred by Firmicus. In the chart of Annubion (*Not. et Extr.*, XVIII, 2, p. 237; *Pap. CX Brit. Mus.*, II, 41), the οἰκοδεσποτῆς τῆς γενέσεως is Venus, which is found in the same sign as the Sun. In papyrus CXXX *Brit. Mus.*, it is Mercury, which is also found beside the Sun (II, 160-164), a good thing since it is a nocturnal geniture. Paul of Alexandria (C1) also collects from the debris of different methods. It is οἰκοδεσποτῆς τῆς γενέσεως, the planet ἐπίκεντρος ἐν ὁρίοις οἰκείοις ἢ ὑψώματι, καὶ ἐν τριγώνῳ οἰκείῳ καὶ οἴκῳ καὶ ἀπλῶς, ὃς ἔχει τῶν πέντε οἰκοδεσποτείας ἢ πάσας ἢ τινάς (see the five titles admitted by Ptolemy, above, p. 387) καὶ μὴ ὑποποδίζει μήτε ὑποποδίζει μήτε ὑπαυγός ἐστι μᾶλλον δέ, ὅστις πλείονας λόγους ἔχει, ἡμερινῆς μὲν γενέσεως οὔσης, πρὸς Θ καὶ τὸν ὠροσκόπον, νυκτερινῆς δέ, πρὸς C καὶ τὸν κλῆρον τῆς Τύχης (the lunar Ascendant, above, p. 288, 2; 296, 2). Elsewhere (S4-T), he proposed the planet which lodged the Sun or the Moon on its properties τοῦ Θ [or τῆς C] τὸν ὀριοκράτορα ἢ οἰκοδέκτορα ἢ τριγωνικόν δεσπότην (it is the second solution of Firmicus), but on the condition that the luminary be ἐν τοῖς χρηματίζουσι τόποις τῆς γενέσεως (places I, X, XI, II, VII. Cf. Demoph., p. 193, above p. 287, 2) in default of this, the “master” of the last syzygy, or the κλῆρος Τύχης or of the κλῆρος Δαίμονος, etc. One also sees, it seems, as title the “oriental phase” and the “idiotronia”. All this was impressed from right and left on various systems, including that of Ptolemy, embroiled by confusion between the οἰκοδεσποτῆς and the κύριος, between them and the χρονοκράτωρ in the system of the elections. This is a Tower of Babel. Ps.-Porphyry (*Isag.*, pp. 191-192), establishing this anarchy (οἱ γὰρ παλαιοὶ πλέξαντες τὰς ὀνομασίας τὴν ἐπτανγελίαν οὐ διέκριναν), wanted to define the terms οἰκοδεσποτῆς, κύριος, ἐπικρατήτωρ. However, he records opinions rather define the words. His ἐπικρατήτωρ is, following cases minutely previewed, the Sun or the Moon, or, when they are missing, the Horoscope. It was, as Saumaise says, the xronokratwr. The οἰκοδεσποτῆς is in a relationship with the ἐπικρατήτωρ for example, as proprietor of the domicile (οἶκος) or the ὅρια occupied by it. Finally, the κύριος τῆς γενέσεως (τῆς ζωῆς, τῆς ἀφέσεως = ἀφῆτης) in Ptolemy's is the planet which, for many reasons – most of them invoked above for oecodespotia – had primacy. The sort of influence and the degree of energy of the κύριος are much debated questions, καὶ σχέδον ἀπάντων δυσκολώτερα. However, this is a combination as rare as it is happy, it was ὅταν ὁ εὐρεθεῖς κύριοις ὁ αὐτός ἢ τοῦ ἐπικρατήτορος φωστήρος οἰκοδεσποτῆς, ὅσπερ ἄρξει μεγάλου ἀποτελέσματος. Valens (III, 1, fr. 18 Riess) fabricated, with the reminiscences of Ptolemy and the method of κλῆροι, the following system. See if the geniture is συνοδική or πανσελειακή. In the first case, count the distance from the conjunction to the place occupied by the Moon at the moment of confinement, and transfer it to the left of the Ascendant (κατὰ τὸ ἐξῆς) there where the transferred arc ends, ὁ τοῦ ὀρίου κύριος ἔσται οἰκοδεσποτῆς τῆς ζωῆς καὶ τῆς ἀφέσεως. In the second case, take the distance from the place of the Moon (to the preceding opposition?) and transfer it, not to the left, but to the right of the Ascendant at the end of the arc, ὁ τοῦ ὀρίου κύριος κριθήσεται οἰκοδεσποτῆς. Depending on the nature of its relationships to the sign, with the Sun, the Moon, etc., this oecodespot will be granted the maximum, the minimum or the mean or even be deprived of oecodespotia. We have not reached the end, but it is necessary to stop. Here, where the Greeks have left a mess, we see that the Arabs have exercised their ingenuity in dividing the work between the *alcochoden* (οἰκοδεσποτῆς) and their *hylech* (ἀφῆτης).

950 Firmicus, according to his habit, gives a complete series of prognostics, concerning the body, the soul, the dignities, etc., for each planet-master (IV, 19 Kroll).

951 A proposition contested by the disciples of Ptolemy and muddled even by its partisans. Firmicus affirmed that *dominus geniturae* and *dator vitae* were synonyms: *si itaque dominus vitae vel dator vitae, id est, dominus geniturae* (II, 25, 10 Kroll; cf. 25, 2). However, he put himself in the wrong by failing to remark that he had not written the Sun and the Moon among the *datores vitae*, which he had put in the list of the *domini geniturae*. This was precisely the difficulty which led to the distinction between the luminary ἐπικρατήτωρ and the οἰκοδεσποτῆς or the κύριος (above). Paul of Alexandria also admits that the ἔτων δοτῆρες (λέγω δὲ τῶν τῆς ζωῆς χρόνων) are the οἰκοδεσποταί (C 1).

952 One would like to know who the free-spirit was who imagined that the planets had the medium speed when the Ascendant was in Libra, the Balance (Firmic., II, 25, 10 Kroll).

953 See above, pp. 208-209. I imagine that a play on words made upon ὅρια = *finis* = “limits of life” may have suggested this solution to the astrologers and then served to confirm it.

954 Above (p. 208, 2), the text of the scholiast. The same is found in Paul of Alexandria. As a last resort, the astrologers invoked experience and observation. This was how Ciruelo responded (*op. cit.*, Prolog., II, 7) to Pico della Mirandola.

955 See Scaliger, pp. 262-266; Salmas., pp. 209-222.

956 This number figures in the Tables of the Mesopotamians from the time of the Arsacids (above, p. 209, 3). This is also the number of degrees measuring the separation of Venus at “heliacal rising” (above, p. 111, 3) and the efficacy of its ray (below, p. 421, 2). We will find all these sides in Chapter 14, in the *distributio temporum* or system of chronocratoria.

957 It is perhaps the reason the system of the *ἐπτάζωνος* was invented (above, pp. 213-215).

958 See the text cited by Saumaise (p. 247) where it is said that the μηνῶος κύκλος is *κατὰ μοῖραν* ἡμέρας κε'. Despite the considerable separation (the real duration is 27 days, 4 hours, 43 minutes), the number of 25 days as *ἰδίᾳ* περίοδος of the Moon is attested in Valens (ap. Salmas., p. 209), Firmicus (II, 25, 9 Kroll), Nicephorus Choniates (ap. Fabric., *S. Empiric.*, II, 236), etc. Pruckner (Firmic., II, 28-29) writes 29. The adjoining table (p. 410) is given by Pruckner (Firmic., II, 28-29) and Saumaise (p. 215), who takes the pointless trouble of adding ½ of the averages of the odd sums, but forgot to correct the error of the average (h, 42) made by Pruckner. It was drawn up following Valens, Firmicus (II, 25 Kroll, *Quis deorum quot annos decernat*) and Paul of Alexandria (T1). We know how many of the numbers in the manuscripts are subject to caution. Here too, the recent editors of Firmicus must have been dreaming and not paying attention to (above, p. 195, 1; 207, 1) mistakes easy to correct. It is to a similar mistake that I attribute the peculiarities in the numbers of the months, days, and hours added by Firmicus to the minimum numbers. The astrologers thought to accommodate their tables to the calculation of the life-span of the *ἄτροφοι*. Since these do not live more than a year (above, p. 400), they have decided that the numbers of the minimum represented, depending on the case, the months, the days, or the hours. The numbers should not vary and they do not vary, in effect, in the assessments given by Paul of Alexandria (*l. c.*). There was only one mistake possible. It was *adding* the years, months, days and hours rather substituting them. One finds in Firmicus, first the various numbers, then *et* where *aut* should be. For example: *Saturnus si dator vitae fuerit et in integrum decreverit annorum numerum, LVII annos decernit; si vero male decreverit, XXX annos aut menses XXX et horas XII decernit* (II, 25, 3 Kroll). [The tropical month is the time it takes the Moon to travel once through the zodiac. LJN]

959 Paul of Alexandria (*loc. cit.*) sought to formulate a rule for the additions and subtractions due to the ἐπιμαρτυρίαί of the planets which helped or hindered the planet which was “ruler of the birth chart.” Well placed, these planets added their minimum assessment to that of the oecodespot. They were removed in the contrary case, that is, placed ἐν τοῖς ἀποκλίμασι ἢ ὑπο τὰς ἐλιοτίδας αὐγὰς ἢ τοῖς ἀριθμοῖς ἀφαιρούντες. Valens (ap. Salmas., pp. 210, 713, etc.) mixed the signs and planets. He calculated the sum of life by adding a sign and a planet (p. 210), of two signs (p. 713), of a sign and two planets (*ibid.*). As for the *climacteres*, which belong principally to the system of the καταρχαί or *elections*, we will return to this subject further on, obscured by the exuberant erudition of Saumaise (above, Chapter 15).

960 It is not without hesitation that I venture into the shadows of “aphetic” theory. Those shadows are thickened by the wars of words between, and the contradictions of, the ancient astrologers (especially Vettius Valens and Paul of Alexandria), of the Arabs and of the Renaissance scholars. The latter were intent on mixing, combining, and exchanging between the two principle systems, affecting the length of life on the one hand, its division into periods on the other. Saumaise even (pp. 264 sqq.) passed up the pleasure of refuting Scaliger and some *insulsum pecus Lojolicum* (p. 271), and maintains that Ptolemy, like everyone else, bestowed the quantity of life from the oecodespot planet and used his ἀφέται only as *χρονοκράτορες*, to subdivide this quantity into stages. He confused calculating the absolute length of life with the διαίρεσις χρόνων ζωῆς, with which we will deal later (Chapter 14). Among the Arabs, the ἀφέτης of Ptolemy *hyleg* - *alhyleg* is joined to a *cochoden* or *alcochoden*, in which I believe I recognize the name, disfigured, of the οἰκοδεσπότης. The *alcochoden*, a sort of divine Word without which the *alhyleg* could do nothing, is, at the same time, the “giver of life” (βιοδότηρ) in genethialogy and the chronocrator in *elections* (above, Chapters 13-15), two roles which are often confused. Albohazen Haly (IV, Ch. III, sqq.) declared that he had written a special treatise in five chapters on the *hylech* and the *alcochoden*. He said that the subject would be more clear in his new explanation, and that it was the “ancient sages” who were in hopeless disagreement. To cap all the information, commentators and translators of Ptolemy did not understand either the precise meaning of the word ἀφέτης or κύριος τῆς ζωῆς, vaguely translated by *prorogator*, *vitae gubernator*, *liberator*, *significator*, *dispositor*, or by *promissor* (a word which for some signifies ἀναιρέτης). Nor did they understand the role of the ἀφέτης, not even the sense of a movement imparted by it or to it. Saumaise (p. 426) proposed *decursor* for ἀφέτης, *decursio* (or *directio*, *progressio*, *profectio*) for ἀφεις and declared opinions less paradoxical than his own to be false (see below, p. 418, 2). A note from a scholiast, cited above (p. 249, 2), makes me believe that Thrasyllus was content with a simple system, which consisted of assuming an ἀκτινοβολία producing the ἀναιρέσεις, by diametrical shot, from the Descendant to the Ascendant. See above (pp. 425-426), the same antagonism of the Descendant and the Ascendant determining not just the date but the manner of death.

961 Pliny gave the rule of the quadrant (τεταρτημόριον) according to Petosiris and Nechepso. He also stated that the conversion into degrees of right ascension might go as far as 24° at the latitude of Italy (above, p. 403, 3). He adds *negavere illi quemquam XC partium exortivam mensuram (quod anaphoras vocant) transgredi, et* (implying “affirm”) *has ipsas incidi occursu maleficorum siderum aut etiam radiis eorum Solisque. Schola rursus Aesculapii secuta quae stata vitae spatia a stellis accipi statuit* (this is the system of life dispensed by the οικοδεσπότης τῆς γενέσεως explained above), *sed quantum plurimum tribuat incertam est*, etc. (Pliny, VII, 160). Thus, according to Pliny, the two systems are Egyptian, and the aphetic system preceded the other one. The rule of the quadrant is affirmed on all sides: Πᾶσαν δ’ αὐτ’ ἄφεσιν πλευρὴ τετράγωνος ορίζει (Maneth., III, 427). Demophilus, identifying ἀφετής with the ἐπικρατήτωρ (above, p. 406, 2), wrote ἐπικρατήτορα, σκόπει τὰς τῶν κακοποιῶν ἀναιρετικὰς ἀκτῖνας μέχρι ἐνενηκόντα μοίρας, καὶ ἐκ τῶν ἀναφορικῶν χρόνων γίνεται δῆλη ἡ ποσοτὴς τῆς ζωῆς (ap. Porph., p. 193). See above (p. 262, 1) and p. 414, 1), the ἐνενηκοντάμερος of Firmicus, based on the rule of the quadrant, with various points of departure.

962 Servius, juxtaposing ideas where he could see no connection, explained that *tribus humana vita continetur: Natura, cui ultra CXX solstitiales annos concessum non est; Fato, cui XC anni hoc est tres Saturni cursus exitum creant, nisi forte aliarum stellarum benignitas etiam tertium ejus superet cursum; Fortuna, i.e. casu, qui ad omnia pertinet quae extrinsecus sunt* (Serv., Aen., IV, 653). Servius did not understand that Nature and universal Destiny are synonyms and that these two different numbers represent the same maximum, extending one quadrant. The remark that 90 equals three revolutions of the destroyer, Saturn, is pure mysticism.

963 This is the system Ptolemy called “horary” or of the fixed hour –κατὰ τὴν ὠριαίαν or ὠριμαίαν. Here the ἀφετής does not throw anything, but is itself thrown. It often takes the name of κρατήτωρ or ἐπικρατήτωρ. This leads to the confusion we have seen above (p. 406, 2). The name is also applied to the eastern ἀφετής, when it pleases the authors. Death arrives naturally by descent κατὰ τὸ δυτικὸν τοῦ κρατήτορος καταφορᾷ (p. 416 Juncinus). I note eagerly – for this will excuse my own insufficiency – a critique addressed to Porphyry by Leon the Philosopher, in the scholia εἰς τὴν ὠριμαίαν. “Porphyry himself” did not understand “the thought of the great Ptolemy.” He took, in the tables, the ἀναφοραὶ for the καταφοραὶ and is thus fooled into taking thirty-five years as the length of a life which the scholiast estimated at seventy-five years, rather than forty (Cod. Florent., p. 139).

964 In the system of Ptolemy, the ἀφεσίς left from the MC and went to the East, where it met the shock of the anaeretic planets moving to that side.

965 This is an eternal quarrel between the two sorts of symbolism, one appropriate to a motionless sky, the other to a turning one. For one, the future is above the horizon, for the other, below it. It seems to me that one can rediscover traces of the inventors' hesitations and of the conflict between the systems in Firmicus (VIII, 1, p. 212 Pruckner above, p. 262, 1). Firmicus goes on to explain (he says) the doctrine of the ἐνενηκοντάμερος, a little-known doctrine, and one which Petosiris willingly left hovering in mystery. It was necessary when leaving the Ascendant, to seek *per cetera signa partem nonagesimam – ex ea namque exitus vitae, mors, infortunia, pericula, felicitates et tota substantia geniturae colligitur*. Everything! Firmicus has a habit of making everything depend on each detail. Not only does he not render a good account when it is a question of the length of life and of dangerous points or climacterics encountered along the route. He does not tell in what sense it is necessary to seek the right angle when leaving the Ascendant. The learned also quarreled on this subject. Scaliger (p. 263) held for the quadrant which goes from Ascendant to Midheaven, the others, with more reason, in my view, for the one which runs from Ascendant to Lower Midheaven (cf. Riess, fr. 16, pp. 359-360). Firmicus (if he had really consulted Petosiris) found several different solutions, from which he did not choose. Finally, to confuse the issue, he began the same calculation with another point of departure, a Luna, and reproduces his invariable anthem *sic invenies mortis exitum, sic vitae ordinem, sic totam denique humanae geniturae substantiam*. These are two different systems, which, we are told, must be applied at the same time, and each gives the key to everything!

966 The Stoics used the etymology Ἄρης ἀπὸ τοῦ αἰρεῖν καὶ ἀναίρεῖν to justify the role of Mars, the “anaeretic” planet *par excellence* (Cornut., Theol. gr., 21 cf. above, p. 99, 1). On actinobolia, see p. 248 sqq.

967 Ptolemy calls it, among other names, ἄφεσις κατὰ τὴν καλουμένην ἀκτινοβολίαν (p. 332 Juncinus) or ἀκτῖνος-ἄφεσις καὶ ὑπάντησις (p. 416); the scholiast, κατὰ τὴν ἀκτῖνα or ἀκτινοβολίαν (Anon., p. 163). The planet ἀναιρέτης then takes the subsidiary qualification ὑπαντήτωρ, ὁ ὑπαντῶν.

968 See the explanation of the doctrine in the Tetrab., III, 10-15 (reunited into a single chapter by Juncinus), under the titles Περὶ χρόνων ζωῆς (p. 318 Juncinus) – Περὶ τόπων ἀφετικῶν (pp. 318-319) Περὶ τοῦ κλήρου τῆς Τύχης (pp. 329) – Πόσοι ἀφέται (p. 330) – Περὶ τρόπων ἀφέσεως with Ὑπόδειγμα (pp. 332-335, 338-340). The commentary of Juncinus of these chapters fills nearly 100 folio pages. One may well

suspect that he is not very clear. Manetho (II, 401-421; III, 399-428) reproduced, summarily, the doctrine of Ptolemy, while Proclus gave a faithful resume in his *Paraphrase*. The Anonymous scholiast (pp. 109-134) dilutes, to his best, the text of his master. However, he is a mediocre helper, for his text before him was in such a state that one cannot revise his calculations with the revised numbers and signs. The thread breaks free each instant.

969 Τὸ ὑπο γῆν πᾶν εἰκότως ἀτεθητέον πρὸς τηλικαύτην κυρίαν (cf. above, pp. 270, 1; 272, 1; 349, 3; 385; 4; 401, 2). The scholiast admires it εἰκότως δὲ τὸ ὑπὲρ γῆν ἡμισφαίριον μόνον παρέλαβε· τοῦτο γὰρ ἀναλογεῖ τῇ ζωῇ ἐν τῷ ἐμφανεῖ κόσμῳ ὑπάρχον (Anon., p. 109). We have already said that Ptolemy's dogma did not prevail. Did nothing happen, the opponents said, if the two luminaries and the five planets were below the horizon?

970 To eliminate the eighth and twelfth places, rather than be content to say that they are ἀσύνδετα, Ptolemy, clinging to his usual physics, assumes that they are extinguished by the vapors of the horizon, which apparently did not weaken either the Ascendant or the Descendant! Saumaise also finds the reasoning poor (p. 333), but for a reason which is hardly any better *quod est ineptum et inscitum, quasi vapores e terra ascendentes eo pervenire possint*. It was not a question of knowing if the terrestrial vapors were able to rise to the stars (which the ancients generally admitted). Rather, the question was, were the rays of the star diluted and deprived of their power traveling through the stratum of vapors.

971 Dorotheus of Sidon did not accept the pre-eminence of the Midheaven over the Ascendant (Anon., p. 110. Cf. above, p. 271).

972 See above, p. 270, 1.

973 In a *nocturnal* chart, the Sun cannot be above the horizon and must be eliminated (above, p. 386, 1). Ptolemy writes this here to make it follow the Moon in the diurnal chart. It is a curious example of the obsession with symmetry. The scholiast (Anon., p. 111) says simply ἐπὶ τὸν ἥλιο ἐλευσόμεθα ἐὰν δὲ μὴ αὐτὸν εὐρήσομιν, appealing to no. 3. (ἐν ἀφετικῷ τοπῳ is implied, but how can it be there? Perhaps in the 25° below the *place* of the Ascendant?) In remedying his silence with a text from Omar (*De nativ.*, p. 121 Pruckner), who cites Ptolemy and Dorotheus, one sees that the Sun must be here replaced by the degree which is in diametrical opposition. Manetho simplified everywhere, he suppresses the second ἀφέτης of Ptolemy and preserves the three others in the same order.

974 It is here that Ptolemy and the scholiast specify the unique manner in which they intend to determine the κλῆρος Τύχης, so that it may be ὥσπερ σεληνιακὸς ὠροσκόπος (differently from Nechepso and Petosiris). See above, pp. 288, 2; 296, 2.

975 I do not believe that I have altered, in paraphrasing, the meaning of a somewhat obscure text of Ptolemy. Moreover, see this εἰ δὲ καὶ ἀμφοτέρω τὰ φῶτα καὶ ὁ τῆς οἰκείας αἰρέσεως οἰκοδεσπότης ἐν τοῖς ἀφετικοῖς εἶεν τόποις, τὸν μὲν τῷ κυριωτέρῳ τρόπῳ τῶν φῶτων παραλεπτέον, τότε δὲ μόνον τὸν οἰκοδεσπότην ἀμφοτέρων προκριτέον ὅταν περὶ κυριώτερον ἐπέχη τόπον καὶ πρὸς ἀμφοτέρας τὰς αἵρέσεις οἰκοδεσπτίας λόγον ἔχη* (p. 330, Junctinus). The scholiast establishes the αἵρεσις of various points aimed at. The Ascendant is always diurnal. On the other hand, the lunar Ascendant or κλῆρος Τύχης must be nocturnal (correcting ἡμερινὸς το νυκτηνικός). Of the two syzygies, δοκεῖς γὰρ ὥσπερ ἡμερινὴ μὲν εἶναι ἡ σύνοδος νυκτερινὴ δὲ πανσέληνος. This is why, when the last syzygy is diurnal, one takes the Ascendant; when it is nocturnal, the Lot of Fortune. It was, no doubt, some blundering glossator who wrote further on δοκεῖ γὰρ αἵρεσιν μετατιθέναι σύνοδος ὥσπερ τὴν α δοκεῖ γὰρ ἡ σύνοδος ὥσπερ τὴν αἵρεσιν μετατιθέναι καὶ νυκτερινὴ οὕσα εἰς ἡμερινὴν μεταβάλλειν. The glossator must have used the following associations of ideas: New Moon = absence of light = nocturnal. However, what if the κλῆρος Τύχης is by chance below the earth? The situation never happens, the scholiast says (p. 113), if it is a Full Moon which precedes the birth, and if it is a New Moon, it is agreed that one takes the Ascendant.

976 The ἀφέτης εἰς τὰ προηγούμενα is called ἀναποδιστικός (Valens. ap. Salmas., p. 432). The war of words (cf. above, p. 117, 1) is not solely in the words. It is evident that, using the daily movement as measure, the term *directio* in the sense of motion from West to East has the air of a misinterpretation. One may see the impropriety still better if one thinks that, since the ἀφέτης was thought to be immobile, it is the ἀναιρέτης which made the trip, from East to West. However, Saumaise reproached those who, like me, understood the passage this way, saying that we could not understand Ptolemy less if he wrote in Chinese (p. 430). Whatever the meaning of ἄφεις might be, he wanted the ἀφέτης to be displaced, “directly,” West to East, as much as “retrograde,” East to West. He has reason, against those who want *directio* to mean diurnal movement and against those who confuse the *directio conversa* with the retrogradation of the planets. However, if, in theory, it is based upon maintaining that ἄφεις εἰς τὰ ἐπόμενα could not signify movement of the ἀναιρέτης εἰς τὰ προηγούμενα, he was completely wrong. He forgot that the astrologers were obliged to adopt a common

measure for the two meanings of ἄφεςις and that this measure could only be the daily movement. Otherwise, in the ἄφεςις εἰς τὰ ἐπόμενα, each ἀφέτης played the role of “giver of life,” for them. Each had its special quota, such as οἰκοδεσπότης τῆς γενέσεως following the methods seen above (pp. 405-410). However, there was in their method a modification which rendered this expression improper. Saumaise, a good anathematizer of Cardanus, found it necessary again to challenge the ancient interpreters of Ptolemy. The scholiast, envisioning the situation where the ἀφέτης would be in the MC, said πρώτη μὲν γὰρ θέσις ἡτοῦ ἀφέτου, εἰς ἣν ὀφείλει ἔλθειν ὁ ἀναιρέτης, and it is the MC which produced the κόλλησις τῆς ἀναιρέσεως (Anon., p. 127). Cf. Paul. Alex., R3-4 (κόλλησις οὖν περὶ ἐκείνῳ ἐστίνῳ ἥτις καὶ ἐνταῦθα κατὰ περίπατον λεγομένη, helped also by the diurnal movement). Saumaise here denies the evidence, which came to him from time to time.

977 I am persuaded that, if Ptolemy had been free to do what he liked, he would have reserved the system of the system of the *directio*, of the ἀφέτης struck by the ray of the anaeretic planets, for violent deaths.

978 The Arabs, worthy successors of the Egyptians, were not convinced that the conversion was necessary. They commented upon this point extensively, some holding for right ascension, others for oblique ascension (cf. Junctinus, p. 381.) [A good celestial globe could make conversion between right and oblique ascension easy. Cf. Emilie Savage-Smith, *Islamicate Celestial Globes, Their History, Construction and Use; with a Chapter on Iconography by Andrea P. A. Belloli* (Washington, D.C. Smithsonian Institution Press, 1985, c. 1984) LJN] The explanations and examples made by Ptolemy (pp. 338-340 Junct.) are summarized by Proclus (*Paraphr.*, pp. 185-201). They are much diluted by the scholiast (Anon., pp. 109-134), whose text is riddled with lacunae or interpolations, with flaws and mistakes, (for example πλ for γλ). Neither were intelligible to the mathematicians. These are models of calculation for the aphetic places at the latitude or clime where the longest day is fourteen solstitial hours long. The aphetic point (προεγούμενος) is placed at 1° ♏, and the anaeretic point (ἐπόμενος), at 1° ♐. Following the positions occupied by these points relative to the horizon, their distance (60 degrees of the zodiac), converted into degrees of right ascension, varied from 46° to 60° or years. Unless Ptolemy reversed, without telling us, the respective positions of the ἀφέτης and of the ἀναιρέτης, it seems to me that it all goes back to the ἄφεςις εἰς τὰ ἐπόμενα, as it was understood later by the Arabs (cf. Junctinus, p. 380). Also, one may suspect that the said chapter has been rewritten and interpolated. The empirical calculations which supplant trigonometry are not important to us. Rather, it is the principle which is important, to wit, that the number of years of life is equal to the number of degrees of right ascension between the aphetic place and the anaeretic place.

979 Οὐκ ἀναρίρουν διὰ τὸ μὴ ἐπιφέρει τῷ ἀφετικῷ τοπῷ, ἀλλ' ἐκείνον τοῖς αὐτῶν (*Tetrab.*, III, 14, p. 334 Junctinus. See above (pp. 249, 2; 251, 3; 377, 2), the theory of the ἀκτίς and of the ὄψις, often forgotten, used here.

980 Ptolemy, not wishing to return to the assessments of the βιοδοτήρες planets (above, p. 410), instituted a proportion, added or subtracted, which had its zero point at the Descendant and its maximum (the value in degrees of a ὥρα καιρικά, day or night) at the Ascendant (p. 335 Junct.).

981 The planetary assessments reappear the ray of Jupiter, to be effective, must be carried upon the anaeretic degree, to the rear, active in a space of no more than 12°. The ray of Venus was in action over only 8°. These numbers, 12 and 8, are the assessments of the ἰδία περίοδος of each one of these planets (above, p. 409). Cf. the assessments of the size of the planetary rays (above, p. 178, 2).

982 It was even an astronomical idea. The shot did not go out from either the planets or their aspects: ἐάν τε σωμάτων ὄντων ἀμφοτέρων, τοῦ τε ἀφέντος καὶ τοῦ ὑπαντῶτος, μὴ ταῦτο πλάτος ἢ ἐκατέρων (p. 335 Junct.).

983 For example, the ἀναιρέτης is deadly by sextile aspect, if it is found in slowly ascending signs (πολυχρόνια); by trine aspect, if in quickly ascending signs (ὀλιγοχρόνια). Critics must have been intimidated by this display of geometry and kenetics. It is impossible to refute what one does not understand.

984 Look at the questions to be resolved ὅταν οὖν δύο ἢ καὶ πλείονα ἢ ἐκατέρωθεν τὰ τε βοηθοῦντα καὶ κατὰ τὸ ἐναντίον ἀναιροῦντα, σκεπτέον τὴν ἐπικράτησιν ὁποτέρου τῶν εἰδῶν κατὰ τε τὸ πλῆθος αὐτῶν συλλαμβανομένων αὐτοῖς καὶ κατὰ τὴν δύναμιν. Κατὰ μὲν τὸ πλῆθος αὐτῶν, ὅταν αἰσθητῶς πλείονα ἢ τὰ ἕτερα τῶν ἐτέρων· κατὰ δύναμιν δέ, ὅταν τῶν βοηθούτων ἢ ἀναιρούντων ἀστέρων οἱ μὲν ἐν οἰκείοις ὥσι τοπῶν, οἱ δὲ μὴ μάλιστα δ' ὅταν οἱ μὲν ὥσιν ἀνατολικοί, οἱ δὲ δυτικοί. Καθόλου γὰρ τῶν ὑπὸ τὰς αὐγὰς ὄντων οὐδένα παραλητέον, οὔτε πρὸς ἀναίρεσιν, οὔτε πρὸς βοήθειαν· πλὴν εἰ μὴ τῆς Σελήνης ἀφετίδος οὔσης αὐτὸς ὁ τοῦ Ἥλιου τόπος ἀνέλοι, συντετραμμένος μὲν ὑπὸ τοῦ συνόντος κακοποιοῦ, ὑπὸ μηδενὸς δὲ τῶν ἀγαθοποιῶν βοηθούμενος καὶ ἀναλελυμένος (p. 335 Junctinus). By itself, the comparison of the οἰκεῖοι τόποι (domiciles, exaltations, triangles, etc.) would go a long way.

985 On the climacterics, see Chapter 15.

986 I will leave to one side the intricate combinations of Ptolemy's aphetic method with the others, which gave pleasure to the compilers. Saumaise (p. 368) cites an interesting one from Valens. The role of the "giver of life" is auctioned off in public, and given a reduced price. The debate is between the ἀφέτης (ἐπικρατήτωρ and χρονοκράτωρ at the same time) and the οικοδεσπότης τῆς γενέσεως. The one which gives the fewer years takes the role of regulator. This is the invention of a pessimist. dddd

987 *Tetrab.*, IV, 8 *Περὶ ποιότητος θανάτου* (Chapter transferred to III, 13 by Junctinus, pp. 416-417, and given an enormous commentary, pp. 417-524). Cf. Anon., pp. 163-165. The creators of the system of the twelve places lodged the facts of the problem in the eighth place. *Ex hoc loco mortis qualitas invenitur* (Firmic., II, 19, 9 Kroll above, pp. 283-284). It was much more simple. The same for the *octotopos*, where the *janua Ditis* is at the Descendant (pp. 276-277).

988 Is it still necessary, at the present point, to signal here the mythological allusion to the "master of thunder?"

989 The scholiast insists upon the distinction between the *ἰδιοθάνατοι* or θάνατοι κατὰ φύσιν and *βιαιοθάνατοι* or θάνατοι παρὰ φύσιν (the Latins wrote *biothanati*). Firmicus sows *biothanati* throughout (cf. IV, 1 Kroll; VIII, 6-17 Pruckner) and consecrates two chapters to them: *Damnatorum fatales geniturae* (VII, 26 Pr.); *Mortalis exitus varius incertusque finis* (VII, 27 Pr.). Violent deaths in Manetho, IV, 613-616; V, 189-201, 217-222; VI, 605-606. It is remarkable that the astrologers hardly envisaged the hypothesis of suicide, mentioned only once, briefly, by Ptolemy, as a misdeed of Mars (ἡ αὐτόχειρας ἑαυτῶν γινομένους, p. 426 Junctinus) and a consequence of love διὰ γυναῖκας. *Propter mulierum vel propter uxorem aut propter amoris cujusdam praeposteras cupiditates semetipsos aut alios interficient* (Firmic., III, 11, 9 Kroll). Cf. suicide by hanging, which Bardaisan thought a typical end for Germans (above, p. 340, 2).

990 Above, p. 139, 5. One may say that Bernardin of Saint-Pierre dreamed of this astrological Virgin when he imagined his Virginia in the shipwreck of the Saint-Géran. Argo collaborated in shipwrecks Ptolemy admitted it and we find it applied in a consultation about the fate of a ship going from Alexandria to Smyrna (Cod. Florent., Appendix, p. 104).

991 In Manetho (Φαίνων) ἄ'θεσιν ἢ λάεσσι δόμων τ'όροφῃσιν ἔθλιψεν (VI, 612). Cf the πτώσεις ὀρόφων by action of the Moon (III, 130). The anecdote about Simonides recalled this case to the astrologers. One may also fall from a roof, and not without Saturn as cause, as Firmicus says. Such are the gallants born under the influence of the Kid setting in the West *puellarum concubitis caeca nocte sectantes et nimio ardore poscentes, cum per incognita loca perrexerint ac super tecta ascenderint, maritorum somno insidiaturia, praeciptiti lapsu moriuntur* (Firmic., VIII, 12 Pr.)

992 The irruption of mythology is visible here. According to Manilius (V, 620 sqq.), Andromeda at the Ascendant (Perseus is to one side) produces people who do great works. Firmicus (VIII, 17, p. 222 Pruckner) distinguishes between Andromeda rising, which produces in effect the *carnifices* or *carcerum custodes*, and Andromeda setting, which causes death by wild animals or crucifixion. Cepheus, father of Andromeda, *facit ora severa*, the "mine of the Catos" (Manil., IV, 450 sqq.) an assertion repeated by Firmicus (VIII, 15, p. 221 Pruckner). The chapter on mutilations is developed by others with the aid of the zodiacal melothesia (above, chapter 10). A head would be cut off with the Gorgon, the arms with Gemini, the feet with Pisces, etc. (cf. Ps. Ptol., *Centiloq.*, 73).

993 Cf. Firmicus, III, 26, p. 206 Pruckner *Damnatorum fatales geniturae*. Firmicus explains a completely different system based on the position of the *locus Necessitatis*, the Lot of Necessity, and on its relationships with the planets, the places, the domiciles, etc., with which he distinguishes the sorts of penalties, the pardons and rehabilitations, the just and unjust sentences. Manetho (IV, 478-490) also sets to one side the criminals whose violent deaths are the result of their crimes, but fatal nevertheless (πικρῆς μοίρης ὑπ'ἀνάγκη). As the cross resembles a balance, one is thus crucified *jussu imperatoris*, by virtue of the presence of Mars at 18° (Horoscope) of Libra (Firmic., VIII, 25 Pruckner).

994 Whether in quality and quantity, Ptolemy says. There was a riddle which the scholiast is very proud to explain. One cannot die twice, he says (κατὰ τὸ ποῖον ἢ κατὰ τὸ πόσον). However, he had heard of an individual, thrown into water at a king's order, who saved himself by swimming ashore, and was then beheaded.

995 Above, pp. 34, 1; 383, 4.

996 S. Empir., *Adv. Astrol.*, p. 353. One finds the same predictions of violent death presaged by the Ascendant in Firmicus. For example: *Undecima pars Sagitarii si in horoscopo fuerint inventa, homines faciet qui in hostili bello percussi crudeliter pereant* (VIII, 27); *Undecima pars Aquarii si in horoscopo fuerint inventa, homines faciet qui in aquosis vel humidis locis infauste moriuntur* (VIII, 29 Pr.). The number eleven is not

deadly in itself, for it is fortunate in other signs. It must indicate the degree corresponding to the arrow of Sagittarius and the urn of Aquarius.

997 Above, p. 249, 2.

998 Firmic., VIII, 5-18, pp. 217-225 Pruckner. I do not know if the titles of the chapters *Clara sydera cum Ariete*, (etc.) *orientia occidentiaque* are truly from Firmicus. He was the sort of man who would believe that the constellations which rose with a sign would also set with it. The logical rule of the system was found in the middle of Chapter IV: *Et quia jam satis superque diximus quid in ortu hae stellae faciant, in sequenti loco dicendum est quid in occasu constitutae decernant. Sicut enim contrariae sunt lumini tenebrae, sic vitae mors. Vita igitur erit in ortu, mors autem in occasu reperietur. Ortus itaque si est in horoscopo (sicut frequentur diximus), occasus erit diametro horoscopo, hoc est in septimo ab horoscopo loco.*

999 For example, *semper enim in occasu Mars positus violentae mortis discrimen indicit; sed ipsa mors, sicut frequenter diximus, pro signorum qualitate perficitur* (Firmic., IV, 19, 16 Kroll). Only, Firmicus requires as preliminary condition that Mars be *dominus geniturae*.

1000 Cf. above, p. 415, 2, the rule τὸ ὑπο γῆν ἀτεθητέον.

1001 Bardesan. ap. Euseb., *Praep. Evang.*, VI, 10, 32-33.

1002 Remember here that the combinations of the signs and planets vary infinitely, depending on whether the sign is considered as a zodiacal type or as planetary domain, as a whole (οἶκος – ὕψωμα), or in parts (ὅρια – δεκανοί), or as corresponding, by position, to one of the twelve places, etc.

1003 A proposition universally admitted in astrology, recaptured by Firmicus in his fourth book: *omnis enim substantia humani corporis ad istius pertinet numinis potestatem* (IV, 1, Kroll, etc.). Cf. above, pp. 288; 293, 1.

1004 Firmicus, who compiled and put everything in everything else, gives us an embarrassment of choices life, conditions of life, death, resurrected, so to speak, in every chapter. In the chapters consecrated to contacts and separations of the Moon (IV, 2-16 Kroll), there is a violent death if the Moon *deficiens et minuta lumine Saturno jungatur* (2, 2); a violent death for the parents with Mars (4, 1 and 5); a violent death, of the subject or of the parents, with Venus and Mars (6, 3); by separations of Saturn to Mars (9, 4-5); of Jupiter to Mars (10, 4); of Jupiter to Saturn (10, 11); of Mars to the Sun, 11, 1; of Mars to Mercury (11, 4-5); of Mars to Saturn (11, 7); of the Sun to Mars (12, 9-10); of Venus to Mars (13, 12); of Mercury to Saturn (14, 4); of Mercury to Mars, (14, 7-12); of Mars *ad nullam* (15, 4) the prognosis varies depending on whether the chart is diurnal or nocturnal, depending on the phases of the Moon, the aspects of the separations, see above, pp. 245 sqq. [The modern term of separation has been used in place of “defluxion” in the French. Separation is now considered to be a movement made by the swiftest planet away from the slower one but not the other way round. The list of planetary pairs above implies the term was used somewhat differently in the past. The list and its grammar have been left as in the original, since changing it might be imposing the modern definition in error. However scrutiny of the entire text suggests grammatical or other errors are not impossible here. KM].

1005 Bardaisan cites hanging as caused by the blockade of the Moon and the Ascendant μεσολαμβουμένας ὑπὸ Κρόνου περὶ Ἀρεως (Euseb., *Pr. Ev.*, VI, 10, 34).

1006 One may wonder if the chapters *Περὶ χρόνων ζωῆς* and *Περὶ ποιότητος θανάτης* were not outlined separately to mask the imperfections in his system, which charge Mars and Saturn, sometimes with natural deaths, sometimes with violent deaths in general. A faith in ruses does not rule out sincerity.

1007 *Περὶ μορφῆς περὶ κράσεως σωματικῆς* (*Tetrab.*, III, 11, pp. 244-245 Junctinus, with commentary, pp. 247-258). Cf. Anon., pp. 134-136.

1008 See above (p. 132, 1) the two surveys of the twelve signs in Manilius and, in Hephaestion (I, 1), the enumeration of types realized by the signs and the decans. Cf. the metoscopic and physiognomic portraits already mentioned (above, pp. 132, 1; 313, 1; 385, 1).

1009 Ptolemy, to break more neatly with the older method, avoided mentioning the Ascendant. He said παρατηρητέον οὖν καθόλου μὲν τὸν ἀνατολικὸν ὀρίζοντα, τοὺς ἔποντας, ἢ τὴν οἰκοδεσποτίαν αὐτοῦ λαμβάνοντας τῶν πλανομένων καθ'ὃν εἰρήκαμὲν τρόπον ἐπὶ μέρους δὲ καὶ τὴν σελήνην ὡσαύτως (*Tetrab.*, III, 11, p. 244 Junctinus). A series of planetary portraits follows.

1010 Their phases influenced the quantity, the force and the size of the bodies. An analysis of the four phases ἐὼι μὲν ὄντες καὶ φάσιν ποιησάμενοι μεγαλοποιουσι τὰ σώματα, στηρίζοντες δὲ τὸ πρῶτον ἰχθυρά καὶ εὐτόνα, προηγούμενοι δὲ ἀσύμμετρα, τὸ δὲ δεύτερον στηρίζοντες ἀσθενέστερα, δύνοντες δὲ ἄδοξα μὲν παντελῶς οἰστικά δὲ κακουχιῶν (*ibid.*, p. 245 J.). Note here *προηγούμενοι* in the sense of *ἀναποδίζοντες* (cf. above, pp. 117, 1; 418, 2).

1011 See above, p. 152, Fig. 15.

1012 Τῶν ἐν τῶν τῶ ζωδιακῶ καὶ τῶν ἐκτός (*Tetrab.*, I. c.). He states the principle, without giving examples this time. It was a means, for him, of diminishing the importance of the signs, by taking their exclusive privileges from them.

1013 Proclus knew a theory which reserved action on the body to the *signs*, action on the soul to the *planet* ἀναλόγως σώμασι μὲν τὰ τῶν ζωδίων (*Anal. sacr.*, V, 2, p. 177 Pitra). Cf. above, p. 149-150, the physiological characters of the signs.

1014 This last is not badly imagined, but look at what is in another concurrent theory. A person is large or small depending on whether the oecodespot of the geniture is at its apogee or perigee; fat or thin, depending on how close (in latitude, πλάτος) it is to the ecliptic, etc. (Ps.-Ptol., *Centiloq.*, 52-53).

1015 Ἄπερ ἅπαντα συνεφορῶνται καὶ συνεπικρίνοντας προσήκει τὴν ἐπὶ τῆς κράσεως συναγομένην ἰδιοτροπίαν περὶ τε τὰς μορφώσεις καὶ τὰς κράσεις τῶν σωμάτων καταστοχάζεσθαι (*Tetrab.*, I. c.).

1016 *Tetrab.*, III, 12 *Περὶ σινῶν καὶ παθῶν σωματικῶν* (pp. 258-259, 262, 265-266 Junctinus, which in fact is Chapter 11, with commentary, pp. 258-332) Cf. Anon., pp. 136-142; Maneth., VI, 548-629 (σίνη καὶ σώματα); Firmicus, VII, 7 Pr. (*Eunuchorum hermaphroditorumque geniturae*) and VII, 8 (*Corpore vitiatorum geniturae variae*). Firmicus (II, 30, 11 Kroll) recommended that the astrologer be discreet with this chapter on moral infirmities, *ne, quod homini malus stellarum decrevit cursus, non dicere sed exprobrare videaris*. St. Augustine (*Civ. Dei*, V, 5) knew a theory according to which *fata valetudinis in conceptu sunt, aliarum vero rerum in ortu esse dicuntur*.

1017 This is not what Ptolemy is talking about. He marks out the places when he says: ἀποβλέπειν δεῖ πρὸς τὰ τοῦ ὀρίζοντος δύο κέντρα, τουτέστι ἀνατολικὸν καὶ τὸ δυτικόν, μάλιστα δὲ πρὸς τὸ δύνον αὐτὸ καὶ πρὸς τὸ ἡγούμενον ὃ ἐστὶν ἀσύνδετον τῷ ἀνατολικῷ κέντρῳ. Ptolemy, the scholiast says, sought, 1), σίνος ἢ πάθος ἔξει τὸ σῶμα; 2) εἴπα ποῖον μέρος; 3) καὶ τὴν αἰτίαν ἐπὶ τούτοις. In detail, the scholiast admires the “exquisite observations” of his author τὰ θεορήματα τῆς ἐξαιρέτου παρατηρήσεως.

1018 Ptolemy, an unrepentant genethliologist, is here picking up resources which also furnish the concurrent system of *elections*. We will see later (Chapter 15) an ingenious theory which derives infirmities from the birth chart and the maladies from the present state of the sky.

1019 Another adds Capricorn, διὰ τὴν ἄκανθαν (*Cod. Florent.*, p. 147).

1020 There is another maximum within the maximum. It is when the planets are, at the same time *ἔωοι μὲν τῷ ἡλίῳ, τῇ δὲ σελήνῃ ἐσπέριοι* (p. 259 Junctinus). This is a sort of “idioprosopia” (cf. above, p. 242). The attack is also more energetic when the Moon is off course, οὐσῇ δὲ αὐτῇ ἀποκρουστικῇ αὐτοὶ ἀνατολικοὶ ὄντες ἐπιφέρονται, etc.

1021 Blindness is an infirmity which much concerned the astrologers. In the zodiacal system, that of Manilius, it was Cancer which produced it (Manil., IV, 530-534; Firmic., VIII, 20). The true reason must be that the crab was thought to have no eyes. Nebulous reasons – or the position of Cancer among the signs οὐ βλέποντα (above, p. 161) – were invoked after the fact. The partisans of the planetary systems used the same sources as Ptolemy. See the σίνος ὀφθαλμῶν in Manetho (II, 354; III, 275; V, 252 sqq.) and blindness (VI, 548-553). It is always the two luminaries, the Sun and the Moon which represent the eyes (cf. Anon. p. 139), Mars and Saturn, their attackers. Oculists must also have been numerous, to judge from the magnifying glasses recovered up to the present. [These are probably burning glasses of quartz. True magnifying lenses, such as were used to make eyeglasses, for example, were not developed until the High Middle Ages. LJN]

1022 Cf., in Manetho, the conditions which makes people born as eunuchs (I, 121-126; VI, 270-275), hermaphrodites (I, 127-128; VI, 276-280), sterile in individuals (IV, 582-585; V, 326-331; VI, 260-304), the lame and amputees (I, 129-138), those with dropsy, with phthisis, splenetics (I, 139-156), lepers (V, 246-251), epileptics (VI, 609), etc.; to a grand reinforcement of aspects, of planets, lodged in others' houses, tithing (δεκατεύοντες) from the Moon, etc.

1023 The zodiac here became (for the sake of the cause) a hospital or museum of pathology. One may well understand the compassion of Manilius for all these infirmities (above, p. 151). Ptolemy only glanced at the topic; but the tables of the consulting astrologers give lists of signs with impetigo (ἀλφώδῃ – λειχηνώδῃ), squamous signs (λεπιδωτά), fistulous signs (συριγγώδῃ), leprous signs (λεπρώδῃ), signs for pediculosis (φθειροποιά), feverish signs (διάπυρα), convulsive signs (σπασικά), ophthalmic signs (σινωπικά ὀφθαλμῶν, the longest list, (ϛ, Ϟ, π, ϟ, Ϡ, ϡ), etc. See the Anecdota of Ludwich, pp. 105-110. There are also sterile signs (στειρώδῃ - ἄγονα); others, ὀλιγόνα, γπολύγονα, πολύσπερμα. The διφυή, δίμορφα, δίχρωμα, ἀμφίβια, must promote androgyny. Finally, those who believe moerogenesis localize illnesses in the degrees of the

signs. Thus, the Ascendant in the *venter Arietis* (♈ 23°) *strumaticum faciet, exulcerata macularum labe possessum, vel certe elephantiaca contagione maculatum* (Firmic., VIII, 19). The quadrants of the zodiac also have their influence, whence the “seasonal” diseases. Epilepsy is also a “disease of the soul” (see below, p. 434, 1) caused by the Moon and Mercury Sagittarius and Gemini figure here as domiciles of these planets and causes of the physical illnesses (above, p. 429, 4, the theory of Proclus).

1024 The same in Manetho (V, 256-259). The astrologers appropriated the popular *ζεῦ σῶνσον ἀγαθὸς σωτήρ φαεσίμβροτος οὐράνιος Ζεὺς* (*ibid.*, 256).

1025 This was the medicine preferred by Venus, that is, by the pious sex. We will meet again the taste of women for “revelations and oracles of the gods.” Mothers, then as now, took their sick children to places of pilgrimage ἄχρι κὲν ἵζηνται μακάρων ἱεροῖς παρὰ βωμοῖς (Manetho, II, 367).

1026 The scholiast assures us that strabismus, for example, is often full of agreement (μετὰ χάριτος). This is the logic of lovers, which Lucretius knew so well.

1027 Cf. above, p. 400, 1.

1028 *Περὶ ποιότητος ψυχῆς* (*Tetrab.*, III, 13, pp. 525-529 Junctinus, which in fact III, 14 and the comment, pp. 533-607). Cf. Anon., pp. 142-144. It was in Chapter 10 that Ptolemy affirmed that τὰ τοῦ σώματος πρὸς τὴν ψυχὴν *προϋπῶντα κατὰ φύσιν* (p. 244 Junctinus).

1029 He announces, moreover, that the subject is complicated πολυτροποτάτου δὲ ὄντος τοῦ περὶ τὰς ψυχικὰς ὁρμὰς εἰδούς, εἰκότως ἂν τὴν τουαύτην ἐπίσκεψιν οὐχ ἀπλῶς εὐδ'ὼς ἔτυχε διὰ ποιούμεθα, διὰ πλειόνων δὲ περὶ ποικίλων παρατηρήσεων (p. 525 Junctinus). Here, as always, is something to intimidate the profane.

1030 *Περὶ παθῶν ψυχικῶν* *Tetrab.*, III, 14 pp. 607-608 Junctinus, with commentary pp. 610-512. Cf. Anon., pp. 144-145.

1031 Epilepsy figures here as *ἐπιληψία* and as *ἱερὰ νόσος* among the παθὴ σωματικά. The various sorts of madness (μανία – δαιμονιοπληξία – θεοφορία – ἐξαγορία – ὑγροκέφαλοι, etc.) also preoccupied Manetho (I, 229-238; VI, 572-573, 595-603) madness or epilepsy (II, 498-499); prophetic madness (IV, 216 sqq.; VI, 472 sqq., 569 sqq.); prophets and necromancers (IV, 545-559; VI, 491-493); delirious and mutilated Galli (IV, 221; VI, 295-299, 534-540). The author described the religious madness of the *κάτοχοι* or Egyptian recluses, who chained themselves up, wear rags, had hair like horses' manes, and who mutilated themselves with potsherds, with a tone of disdain rather than of pity. He considered the pythonesses and other trance channelers to be victims. Firmicus, who knew the *cinaedi* in the temples (VIII, 16 Pr.), also knew that Venus, at the ninth place (concerned with religions), *faciet eum qui sic habuerit Venerem assidua cujusdam daemonis interpellatione pulsari; faciet autem in templis manere sordido et sic semper intercedere et qui nunquam tondeant comam*, etc.

1032 Ptolemy saved the irregularities of love, adultery and incest for another chapter, that of unions (Περὶ συναρμογῶν, below, p. 447), legal and illegal. He speaks here only of the animal instincts, of prostitution and of the vices contrary to nature. The others hardly looked any closer. Cf. Firmicus *Incestorum natalia seu geniturae* (VII, 14 Pruckner) – *Paediconum natalia seu geniturae* (VII, 15) – *Cinaedorum impurorum steriliumque geniturae* (VII, 16), a subject to which the author returns at every opportunity, about singers employed in the temples (*ibid.*), of theater people, etc. (VIII, 20-21; 23-25; 27; 29) even Virgo and Libra create, in certain cases, *cinaedi* and *prostitutae*! This is an obsession. The *publici cinaedi* excited the indignation of even a Martial *Tanquam parva foret sexus injuria nostri | Foedandos populo prostituuisse mares*, etc. (Martial, IX, 8). Manetho (I, 29-33; III, 383-396; IV, 311, 354-358, 584-592; V, 211-216, 318; VI, 583-585, 592) is no less copious than Firmicus, and he uses expressions which we dare not cite, even in Greek. He does not disdain puns; he calls those contemporaries living with adulterers [μοιχείας] ἐν αἷς ἄβρις οὐ Κύπρις ἄρχει (IV, 495). Earlier Manilius knew the perversions produced by Taurus (IV, 518), and especially, for the feminine sex, the Pleiades (V, 151).

1033 One encounters all sorts of combinations in the authors. Bardaisan (ap. Euseb., *Praep. Ev.*, VI, 10, 20 cf. above, p. 340, 2) asks if the women of the Geleans prostituted themselves to all comers, ἔλαχον ἐν Αἰγοκέρωτι καὶ Ὑδροχόῳ κακοδαιμονοῦσαν (in the twelfth place) τὴν Κύπριν; if, for the shameless Bactrians, Ἀφροδίτῃ μεσουρανεῖ μετὰ Διὸς καὶ ἐν ἰδίοις ὁρίοις (*ibid.*, 21); if all the *pathici* have Φωσφόρον μεθ' Ἡρμοῦ ἐν οἴκοις Κρόνου καὶ ὁρίοις Ἄρεος δύνοντα in the charts (*ibid.*, 27).

1034¹ As a specimen of the style of our author, look at the result of the interference of η, α, and ψ ὁ μὲν τοῦ ἡ προσγενόμενος ἐπὶ τὸ ἀσελγέστερον καὶ ἀκαρθαρτότερον ἢ καὶ ὀνειδιστικότερον ἐκάστω τῶν ἐκκειμένων πέφυκε συνεργεῖν. Ὁ δὲ τοῦ α πρὸς τὸ εὐσηχημονέστερον καὶ αἰδημονέστερον καὶ φυλακτικώτερον ὁ δὲ τοῦ ψ

πρὸς τὸ περιβοητότερον καὶ τὸ τῶν ἡθῶν εὐκίνητότερον καὶ πολυτροπότερον καὶ εὐπροσκοπώτερον (p. 608 Junctinus). By this expedient, Ptolemy returns to the tradition with which he broke in crossing Saturn off the list of assailants. Bringing to the equation the proverb *turpe senilis amor*, “an elderly lover is a sad sight,” the tradition is nearly unanimous in attributing “disgraceful” loves to Saturn (τὸ αἰσχρὸν, Anon., p. 158), “indecent” (διὰ τὸ πρεσβυτικὸν καὶ ῥυπαρὸν τῆς φύσεως τοῦ ἀστέρος *Cod. Florent.*, p. 149). Saturnians otherwise were “brainy,” as today. It was, in view of the affinity of Saturn with the brain (above, p. 323), the same idea. Ptolemy is quite capable of substituting, by theory, the cold of Saturn for the heat of the Sun (cf. above, p. 358, 6).

1035 *Tetrab.*, IV, 1. *Περὶ τύχης κτητικῆς*, pp. 614-615 Junctinus, with commentary, pp. 615-666. Cf. Anon., pp. 146-147; Manetho, VI, 630-682 (Περὶ κτήσεως). Ptolemy, who rejects the system of the κλήρος, taking care to announce that he did not admit more than one way to calculate the position τοῦ καλουμένου κλήρου τῆς Τύχης – for him, the lunar Ascendant – and for the diurnal and nocturnal genitures (cf. above, pp. 288, 1; 296, 2).

1036 One sees the Latin *Saturnus* (a *satis*) reappear here as the god of humidity, although Ptolemy always makes him very dry. Note the affinity of wealth and the bank with priesthood, a reminder that deposits were made in the temples.

1037 Διὰ φίλων, ἢ γυναικείων δωρεῶν. Let us hope, for the sake of morality, that dowry falls into this category.

1038 The scholiast (Anon., p. 147) announced that the centers work more quickly than the ἐπαναφοραί. It is necessary not to forget the coefficient of the “phase” of the planet: εἰ μὲν γὰρ ἑῶσι ὥσι, ταχύτερον δρῶσιν, εἰ δὲ ἐσπέραιοι βραδύτερον καὶ περὶ τοὺς ἐσχάτους χρόνους. It is a general principle, already seen several times (cf. above, p. 309, 5; 361; 372, 1). Wealth from the collaboration of Saturn and Jupiter is found also in Manetho (III, 234-243 the same, later, γῆρας ἐ ὄλβω, III, 136). See the ample casuistry, loss of inheritances, black misery, etc., from conflicts of the planets, especially Mars, with the Moon (VI, 630-682). Calculating the chances of an inheritance is an indirect preview of the death of a third person, of the *de cuius*, in solidarity with the heritor.

1039 *Περὶ τύχης ἀξιωματικῆς* (*Tetrab.*, IV, 2, pp. 666 and 672 Junctinus, with commentary, pp. 666-707). Cf. Anon., pp. 147-150.

1040 For an author in the second century, the *κοσμοκράτορες* are evidently the Roman emperors.

1041 See Chapter 16, and, provisionally, the predictions made to the young Octavian by the astrologer Theagenes (Suet., *Aug.*, 94) and about the infant Tiberius by the astrologer Scribonius (Suet., *Tib.*, 14 above, p. 396, 2).

1042 Leo ἀρχικὸν καὶ βασιλικὸν ζώδιον (Anon., p. 36). As domicile of the Sun, it corresponds to the heart (above, p. 323, 3), just as Aries does to the head.

1043 See above, p. 139, 2.

1044 Assuming births to be equally distributed throughout the 360° of the zodiac, those born under Leo represent 1/12 of the human race, those under the degree of Regulus, 1/360. In place of the Ascendant falling upon Regulus, the concurrent system of the solar sign required the star to coincide with the solar longitude, a measurement infinitely less precise, in view of the length of the Sun's diameter and the relative slowness of its movement. In the book of Firmicus, a mass of debris of all sorts, one finds royal horoscopes, to the degree, in Leo. The second degree *reges faciet et potentes ... In hac parte est limpida stella de qua superius diximus* (VIII, 23 Pr.). – *In Leonis parte secunda stella reperitur, in qua qui nati fuerint, reges erunt potentes, duplex possidentes regnum* (VIII, 31). I do not know if he wanted to speak of Sirius παρατέλλων, which he placed at the first degree (VIII, 10), or of Regulus, which would be, if it is the “heart” of the Lion, at the ninth degree (VIII, 3). Further on, the eighteenth degree of Leo at the Ascendant *dominos faciet ac principes et qui in populos habeant potestatem*. However, with Firmicus one must renounce understanding.

1045 See above, p. 373, 2. The bas-relief is 1.75 meters high by 2.40 meters wide. [Cf. the discussion in Otto Neugebauer and H. B. van Hoesen, *Greek Horoscopes* (Philadelphia American Philosophical Society, 1959).] LJN.

1046 Firmicus (VIII, 25 Pr.) did not notice, for he distorted the prediction by adding *regem faciet qui, multis superstitibus relictis, ferro moriatur*, which is the opposite of the biography of Augustus.

1047 *Inter Tauri cornua si quis habuerit horoscopum, rex erit vel dux magnus, terribilis*, etc. (Firmic., VIII, 20). Perhaps they were thinking of the horned helmets of barbarian chiefs, which, as symbols, represented the same idea. Firmicus nevertheless put royal Ascendants at 1° Sagittarius (VIII, 27) and 1° Capricorn (VIII, 28).

Concerning Capricorn and Augustus and Tiberius, see above, p. 373, 2. Firmicus again met *reges, imperatores*, proconsuls, superior judges, royal treasurers, provincial priests, in the chapter *De actibus* (IV, 21 Kroll. Cf. below, p. 442). In the *Anecdota* of Ludwich (p. 107), there are three royal signs Aries, Leo, and Sagittarius, the three signs of the τρίγωνον βασιλικόν.

1048 Manil., IV, 547-552. On Aries, head or Midheaven of the universe and a royal sign, see above, pp. 131, 1; 185, 3; 196, 1-2; 197; 261; 319.

1049 One of the authors hiding under the name of Manetho declared that he would abstain from treating these questions for fear of the anger of kings *μαντοσύνησι γὰρ ἂν τοίαις χόλος ἐκ βασιλῆων* | “Ἔσπεται κ.τ.λ. (VI, 732-737). This did not keep the supposed Manetho from multiplying the royal charts. Royalty by ☾ and ☽ at the centers, in signs of sex convenient to each one (I, 26-28); by ☾ at Midheaven in the nighttime and ☽ ἐπικέντρος in a masculine sign (I, 277-280); by ♃ in the house of ♂, soldier-kings (II, 210-212), by ♃ in Leo, house of the ☽ (II, 347-352); by ☽ κέντρον τυχῶν in Leo (II, 389); by ☽ in ♈, ♏, ♐, ♑ ζωιδίοις ἰδίοισιν (IV, 96-99); by planets ἐν συνόδῳ (V, 35-38). Charts of queens by ☾ and day time Ascendant, plus ☽ and ♀ at MC (I, 281-382); by ☾ at nocturnal Midheaven (βασιλῆας for βασιλίσσας, II, 393). To judge from the titles of the chapters which are new to us, this dangerous subject hardly frightened Dorotheus of Sidon (ap. Engelbrecht, p. 32). Firmicus also knew of royal genitures, and even imperial ones, indicated by an exceptionally favorable position of the Lot of Fortune. It made *imperatores quorum imperium per totius orbis spatia dirigatur et quorum tanta potestas sit, ut ad deorum numen accedant* (IV, 7, 10 Kroll), by the Sun (III, 7), by Mercury (IV, 21, 9), etc. He lavished them. As for the Byzantine compilers, they made everything easy. One reads in the *Cod. Parisinus*, no. 2419 (ap. Engelbr., p. 19), titles such as these *Περὶ τοῦ Θανάτου βασιλέως – Περὶ βασιλέων καὶ ἀρχόντων πῶς ἔστιν γινῶναι τὸ μῆκος τῆς ἀρχῆς αὐτῶν*, that is, of consultations of *salute principes*, a subject positively forbidden by the imperial laws. The author of the *Καρπός* or *Centiloquium* even gave a very simple means to know if the son of a king (or an emperor) would succeed his father. See if his Ascendant is in accord (συμφωνεῖ) with the Ascendant of the proclamation (ἀναγόρευσις) of the founder of the dynasty (30). It also said (36) that the kings of a state with Mars dominant in its chart would generally die by the sword – a clear enough allusion to the Roman emperors – or that the heads of state are menaced by death when the planet which dispenses royalty (ἐπικρατήτωρ τῆς βασιλείας) falls into a “climacteric place” (31).

1050 In Ps.-Stephen of Alexandria (Usener, p. 23 above, p. 370-371), it was Saturn which ruled the destiny of the caliphs as occupying the Midheaven in the chart of the Arab empire, τὸν ἐξουσιαστικὸν καὶ βασιλικὸν τόπον. An eclipse in Leo (a universal presage) menaced the reigning monarch. The astrologer Leon (in *Hermes*, VIII [1874], pp. 173-176) considered it a benefit of Providence that there had not been any eclipses “in the whole of the happy reign [of Theophilus, according to K. Krumbacher, *G. d. Byz. Lit.*, 2d ed., p. 621]. The same for an eclipse in Aries (Cf. Albohazen Haly, VIII, 16).

1051 Satraps and generals by ☽ at Midheaven and ♂ (Manetho, V, 39-49); judges by ♀ (V, 40); quasi-royal genitures (III, 315-319); friends of kings, sophists and rhetors (IV, 571-576). Ministers and royal treasurers by separation of the Moon between ♀ and ♃ (Firmic., IV, 14, 5 Kroll); triumphators by influence of Aquila with ♂ and ♀ (Firmic., VIII, 16 Pruckner); Administrators and experts by ♀ (Anon., p. 148).

1052 Ptolemy slides over this subject rapidly, but others insist upon it in more detail. See Manetho, IV, 601-607 and VI, 684-732 (περὶ δουλείας τύχης); Firmicus *Servorum seu captivorum geniturae* (VII, 3 Pruckner); *Dominorum numerus in servis* (VII, 4) *Libertinorum et liberorum geniturae* (VII, 5). The question of slaves has already come up in connection with the exposure of infants (p. 402). There are many questions connected with slavery, and especially in connection with the chances of becoming a slave. It depended on whether one was born a slave or captured or sold by one's own father, whether one finds a good master or a bad one, or if one passes from one master to another, etc. Firmicus knew of *felices eunuchi quibus regni tuitio credatur ... sed postea offenso principe mala et infelici morte moriuntur* (VIII, 20). They are found throughout the scale of social conditions. Thanks to Jupiter, a slave might have an artless mistress rather than being the slave of a slave, or might be freed, etc.

1053 *Περὶ πράξεων ποιότητος* (*Tetrab.*, IV, 3, pp. 707-710 Junctinus, with commentary, pp. 708-730). Cf. Anon., pp. 150-152; Paul. Alex., *Περὶ πράξεως* (O 4-P 2); Firmic., IV, 21 Kroll (*De actibus*), a chapter from which the compiler has detached the professions listed by him in the seventh book; Maneth., VI, 338-540 (*Περὶ ἔργων καὶ πράξεων*).

1054 Also Firmicus, in the chapter *De actibus* (IV, 21 Kroll) was even more preoccupied with dignities than professions.

1055 Porphry calls the culminating planet ὥσπερ ἐπ'ἀκροπόλει τῆς γενέσεως, ἐπιτυραννοῦντα τῆς πράξεως (*Isagog.*, p. 192). The mistress planet is ὁ τὸ πράσσειν παρέχων ὡσαύτις εἴποι τυπωδῶς (Ptol., p. 709 J.).

1056 When the text of Ptolemy is obscure, the scholiast delays without clarifying. The obscurity lies in the case, always annoying, where no planet is found at either oriental phase or at the meridian. In that case one must use the mistress of the culminating point, τὸν κύριον αὐτοῦ [μεσουρανήματος?] παραληπτέον, πρὸς ἐπιτηδεύσεις μέντοι τὰς κατὰ καιροῦς ἄπρακτοι τὸ ὥς ἐπίπαν οἱ τοιοῦτοι γίνονται (p. 707 Junctinus).

1057 The scholiast announced that, before Ptolemy, οἱ πρὸ αὐτοῦ πάντες ἀπλῶς πάντα τῷ μεσουρανήματι ἔλεγον κύριον εἶναι τῆς πράξεως (Anon., p. 151). As for consideration of the *phases*, which was not within reach of average astrology, it was probably Ptolemy who introduced the subject. Paul of Alexandria, after Firmicus (IV, 21 Kroll), accepted the restriction to three planets. However, he follows a completely different system on what concerns the position. The planets are effective in nine τόποι (the centers, their ἐπαναφοραί, and the sixth place). Without the τόποι, one turns to the κλήρος Τύχης and it was only if one found this empty, that one consulted τὰ λοιπά, οἷον τὸν τὴν συναφὴν ἔχοντα τῆς σελήνης ἢ τοῦ ἡλίου ἢ τὸν ἑὸν ἀνατολικόν (Schol. Paul. Alex., P2). Ptolemy, enemy of the “places,” must have taken what is here at the end, placed it at the beginning and abandoned the rest.

1058 This is the simplest planetary method, corresponding to the zodiacal method which derived all the aptitudes from a single sign. It was known to the general public in the time of Horace, who classed himself, as poet, among the *virī Mercuriales* (Hor., *Od.*, II, 17). Later, so little did not make one a poet. Rather, it took a geniture like the one attributed to Ps.-Manetho (VI, 738-750). The work of Ptolemy consisted, here as everywhere, of isolating and classifying, by genres and by varieties, the predictions which were confused and given as a group according to each sign. There were planets in various positions, combinations of planets, the Moon in contact and separation, etc. It was a variety of classification by the *causes*, which one found in Manetho and Firmicus. Ptolemy has adopted, in general, a classification by *effects*. He tried to root each category of effects in a category of causes as restrained as possible, having a master planet as center of energy. When the details become too tangled, as in this case, he returns to a traditional classification by *causes*. See the decrees of the three planets, with associations of every sort, in Firmicus (IV, 21 Kroll); and monographs in the same author *Literarum expertium geniturae* (VII, 21 Pruckner) – *Gladiatorum vel athletarum geniturae* (VII, 22) – *Causidicorum seu oratorum geniturae* (VII, 23) – *Medicorum Podaliriorum geniturae* (VII, 24) – *Calliopicorum musicorum geniturae* (VII, 25).

1059 This is the system explained by Manilius in the whole of his fifth book and reproduced, with additions, in the *Sphaera Barbarica* of Firmicus (VIII, 5-17 and 31, pp. 216-223 and 243-344 Pruckner). One can understand that the Charioteer makes coach-drivers; the Goat, agitated people, with goat-like voices; the Hare, runners; and other similar naive identifications. The *professions* proper are not distinguished, but confused with temperaments, maladies, rank, fortune, death, etc. It was this perpetual “repetition” from which Ptolemy tried to escape. The same system, confined to the interior of the zodiac, but applied degree by degree, formed the *myriogenesis* (Firmic., VII, 18-30, pp. 223-243 Pruckner), the speciality of the *Sphaera Barbarica*.

1060 He concedes to them the power to “vary” the professions καὶ τῶν ζωδίων δὲ ἐν οἷς ὥσιν οἱ τὸ πράσσειν παρέχοντες αἱ κατ'εἶδος ἰδιοτροπίαι συμβάλλονται τι πρὸς τὸ ποικίλον τῶν πράξεων (p. 710 J.). The scholiast admires this trustingly. Basically, however, the ποικίλον is improper, for the rubrics drawn from the signs are often more general and uniform than the others.

1061 No doubt because these professions use many draft animals and pack animals.

1062 The other authors were interested more in piling up substantives than Ptolemy was. The malefic planets make people take up hard or disgusting professions, such as the metal-workers, the undertakers and embalmers or coffin-makers (Maneth., I, 75-82; IV, 263-270; VI, 494-498, 528-531). It was not far from the undertaker to the physician *in vertice Urnae [Aquarii] qui nati fuerit, medici erunt*. However, if Saturn intervenes slightly, *pollinctores erunt et funerarii et vespillones* (Firmic., VIII, 29 Pruckner). Mercury in the equinoctial signs (especially Libra) is a godsend, making inspectors of public weights (Firmic., IV, 21, 9 Kroll). Diviners, especially astrologers, had very diverse reputations, classed sometimes among the worst charlatans, sometimes beside the highest priests (Maneth., I, 293; II, 202, sqq.; IV, 211; V, 260 sqq.; VI, 472-475). It was perhaps a facetious astrologer who assimilated his clientele to a herd of cattle by assimilating the astrologer to Boötes the Herdsman (Firmic., VIII, 25 Pr.). In general, artists, sculptors, painters, musicians and actors are treated well. One finds lively sorties against vagabonds, prowlers, ὄρνεα γῆς πόλιος πάσης ἀπόλιστα γένεθλα (Maneth., IV, 282), against the παμπαιεῖς (IV, 310 sqq.), the joking aretalogists βομβηδὸν ζῶντας, ἀλήμονας ἢ χθονὸς αἰεὶ (IV, 449), the mutilated Galli (VI, 534-540. Cf. above, p. 434, 3), the μάχλοι (*lenones*) in twenty places, and also against the tax collectors, τελωντάς τε βιαίους – δεινούς τε χρεαρπάγας ἐργολάβους τε (IV,

329 sqq.) and other monopolists sometimes “lynched” by the ordinary people: *ob interceptam annonam vel male dispositam seu cupiditatis fraudulentia subtractam grave pulsatum insanientis invidia populi dissipabit, ita ut populari manu laceratis artubus metuenda ceteris acerbae mortis exempla demonstret* (Firmic., VIII, 11 Pruckner). Firmicus is haunted by a sort of piety toward hierodules, the sacred prostitutes found in some temples, *aliis in templis ignobilia decernit officia – ministeria facit exercere servilia* (III, 13, 8 Kroll, etc.).

1063 *Tetrab.*, IV, 4, pp. 730-731, 740-741 Junctinus, with commentary, pp. 732-765. Cf. Anon., pp. 152-158; Maneth., VI, 112-221, and the chapters of Firmicus, *Uxorem maritorumque numerus* (VII, 17 Pruckner).– *Conjugatorum ad invicem affectus* (VII, 18).– *Sponsalium seu nuptiarum tempora* (VII, 19).– *Uxorum suarum interfectorum geniturae* (VII, 20).

1064 See the analysis of the scholiast. Ptolemy sought 1) εἰ γαμήσει εἴτε καὶ μή; 2) καὶ εἰ γαμήσει, πότερον ταχέως ἢ βραδέως; 3) πότερον μία μόνη συνοικήσουσιν ἢ πλείοσι; fourth, ὅποια ἔσται ἡ γαμετὴ ἢ ὁ ἀνὴρ; 5) πότερον διαμένουσιν ἢ διαλυθήσονται; 6) εἰ διαμένουσι πότερον ἀλλήλοις ἀγαπῶντες ἢ στασιάζοντες.

1065 The genethliologists wanted no doubt to compare the birth charts and find there a harmonious or discordant relationship (cf. above, p. 167, 1), but with freedom of choice, genethliology made no sense. Even today, among the Parsis, one compares Ascendants (the birth chart) “to know if the stars of the future spouses are in harmony; the union depends greatly upon the response Among the Hindus, because of possible deaths of the couple, the Ascendant is of still greater importance, since it predicts which of the two will become widow or widower” (D. Menant, *Les Parsis*, I, p. 159; cf. the reference above, p. 341, 2).

1066 For example, Saturn in any aspect with Venus produces sterility, and the bride – always old in this case – is never παρθενική νύμφη, a virgin bride (Maneth., III, 278 sqq.).

1067 This is from comparative genethliology, already mentioned above (167, 1; 176, 2; 448, 1) and applied further on (p. 453) to friendship. Ptolemy pruned here, among other things, the influence of the signs. According to the scholiast (Anon., p. 52), the Moon in the “human” signs indicates a mutual affection, beginning a process of reasoning which might be extended to other signs. It is, in effect, for cold people, the amorous, the brutal, etc. The whole zodiacal psychology is susceptible to being asked once more for a contribution. In the system of *elections* (above, Chapter 13), even Libra (what a thing to trust!) μοιχείαν ἐπιφέρει καταρχαί (Ludwich, p. 86). Adultery is perhaps considered as a compensation.

1068 See the products of σ, ϝ, and ἥ in Manetho (IV, 294-316). Mars and Venus were enough to explain adultery, which is a mixture of pleasure and fear (*Cod. Florent.*, p. 149). This person was a good student of the Stoics.

1069 The chapter is so confused that I cannot believe the text is in a good state. There is no doubt that glosses here have introduced the σπάδοντας καὶ αὐλικούς ἢ στεῖρας καὶ ἀτρήτους, the ἀποκόπους ἢ τριβάδας, the individuals πανταχόθεν ἑαυτοῖς τὰς ἡδονὰς ποιούμενους ... πρὸς ἄρρεας καὶ θελείας, and finally, a supplement to the ignoble aftermaths of the illnesses of the body and soul which it is necessary to leave to the preceding chapters. However, the actual text is the one upon which the scholiast comments.

1070 The rule, or rather one of the following rules, is that Saturn with Venus foretells incest with parents and others of the older generation (πρὸς πρεσβυτέρους); Mars with Venus, incest with a partner of the same age: ἐρεῖς οὖν ἀπὸ Κρόνου, ὡς ἐφημεν, τὸ πρεσβυτικὸν ὄνομα, οἷον ὅτι θεῖω ἢ πατρὶ ἢ πρῶω, ἀπὸ δὲ Ἄρεος, ὅτι ἀδελφοῖς ἢ ἀνεψίοις ἢ συγγενέσι (Anon., p. 157). There is another method of judging the age, from the phase of Jupiter or of Mars compared with that of Venus. If Venus is ὁμοιοσχήμων ὁμήλικας σημαίνει εἰ δὲ δυτικωτέρα πρεσβυτέραις [to be completed by εἰ δὲ ἀνατολικωτέρα νεοτέραις] (Anon., p. 156). The scholiast explains that there are ὁμελικές of all ages and attach the various sorts of incest to these degrees (νέοι – ἀκμῖοι – γέροντες). Ptolemy also makes the Sun and Moon with the signs (Ἥ, Ὑ). One knows in this way if there will be an increase in incest, (δυσὶν ἀδελφαῖς ἢ συγγενέσιν or δυσὶν ἀδελφοῖς ἢ συγγενέσιν) and of what sorts. The Moon in certain conditions ποιεῖ τοὺς μὲν ἄρρηνας μντράσιν ἢ μητέρων μητρυαῖς ἢ συνέρξεσθαι, τὰς δὲ θελείας υἱὸς ἢ υἱῶν ἀδελφοῖς ἢ θυγατέρων ἀνδράσιν; the Sun τοὺς μὲν ἄρρηνας τράσιν ἢ θυγατέρων ἀδελφαῖς ἢ γυναιξὶν υἱῶν, τὰς δὲ θελείας πατράσιν ἢ πατέρων ἀδελφοῖς ἢ πατρώοις (*Tetrab.*, p. 741 J.). In short, there were a number of various means as always separated or combined. Cf., in Manetho, the works of σ, ϝ and ἥ. (IV, 294-316) incest between fathers and daughters, sons and mothers (VI, 154-176), caused by the ☾ at MC and ♀ at IMC (VI, 115-121), complicated by rape with σ at IMC or Descendant. (VI, 176-179). The case of Oedipus is considered (VI, 166) and that of Jocasta (V, 204). The falsifier permitted himself a pleasantry for which he would have paid dearly if he had written, as he pretended, under Ptolemy Philadelphus. On incest provoked by Saturn, he wrote ἔνθα δὲ μοι, βασιλεῦ, τῷ σχήματι γίγνεο μάρτυς | γνωρίζων γενεῇ τοὺς Ἀρσινόης ὕμεναίους (Maneth., V, 207-208). Sotades, ordered thrown into the sea in a lead box by Philadelphus, had said no more. Firmicus spread little bits on incest throughout. For example, III, 6, 28-29 (even lucrative incest!) and IV, 6, 3

Kroll; VI, 26 and VIII, 30 Pruckner. In the “birth chart of Oedipus” (VI, 26 Pr.), the principal actor is Saturn in Pisces (a sign of Venus). The Ancient Near Eastern astrologers would have put, no doubt, fewer malefic planets in this chapter. Incest was not repugnant to their morals and especially not to oriental theogonies. Cf. the prodigious incest of Isis and Osiris before their birth in the body of their mother (Plut., *Is. et Osir.*, 11). The Greeks themselves did not have a completely easy conscience on the subject of the *ἱερὸς γάμος* of Zeus and Hera. The epithet *ἱερὸς* announced that it was not an example for human beings to imitate. The example was given every month, according to the (Stoic?) exegesis, which assimilated τὰ Θεογάμια ἐτέλουν τότε φυσικῶς εἶναι πρῶτον οἰόμεναι γάμος Σελήνης οὔσης πρὸς Ἡλίου σύνοδον (Schol. Hesiod., *Opp.*, 784). On this subject, rejuvenated by the discovery of a fragment of Pherecydes of Syros, see H. Weil, *Revue des Études grecques*, X [1897], pp. 1-9.

1071 *Tetrab.*, IV, 5, Περὶ τέκνων, p. 765 Junctinus, with commentary, pp. 766-781. Cf. Anon., pp. 158-160, Maneth., VI, 225-304, Paul. Alex., Περὶ τέκνων, (O2-O3): Firmic., VII, 9 Pruckner (*Filiorum cum patribus dissidentium geniturae*; VII, 12 (*Adoptivorum filiorum geniturae*). The subject has already been treated in part, from another point of view, in the prognoses preceding birth (above, pp. 392-394) and in those which concerned fertility or sterility.

1072 Perhaps he remembered here the dissenting system of the *octotopos*, which placed not “sons” but “marriage” at the Midheaven, with Venus (above, p. 277). Manetho adopted the system of Ptolemy as well as that of Paul of Alexandria, who added καὶ τὸν κληρὸν τῶν τέκνων. With the four τόποι δοτικοί, σπερματικοί (IV, V, X, XI), one gains a foothold in the four triangles.

1073 In consequence – in the name of symmetry – the Sun itself is classed at the head of the sterilizing stars, the Moon at the head of the fertile ones. The astrologers maintained the equality of the two camps, each formed of three planets, by making Mercury go back and forth. Mercury was fertile as *ἀνατολικός* (or *ἑώος*), sterile as *δυτικός* (*ἑσπέριος*). Among the Arabs, the *caput Draconis Lunae*, the Head of the Dragon of the Moon (the ascending node), is in the fertile group, and the *Cauda*, the tail, (the descending node) in the other (Junctinus, p. 769).

1074 Analysis of the signs in Paul of Alexandria τὸ σπανότεκνον (♄, ♀, ♀, ♀), στερωδές, παντελῶς ἄτεκνον (♄, ♀, ♀, ♀), πολύτεκνον (♄, ♀, ♀, ♀). Cf. the *Anecdota* of Ludwich (pp. 105-110) and above, p. 150.

1075 The scholiast thus drew up the list of questions resolved by Ptolemy: 1) εἰ ἔξει τέκνα; 2) καὶ ὅποσα; 3) πότερον ἔδοξα ἢ ἄδοξα; 4) εἴτα ἐπισινῇ ἢ ἀσινῇ; 5) καὶ μόνιμα ἢ οὐ; 6) καὶ ἡ φίλα ἢ ἐχθρὰ τὰ τικόμενα (Anon., p. 158). He forgot sex for the moment and returned to it later.

1076 *Tetrab.*, IV, 6 (*Περὶ φίλων καὶ ἐχθρῶν*), pp. 781-785 Junctinus, with commentary, pp. 783-800. Cf. Anon., pp. 160-162.

1077 Cf. above, pp. 158, 175-176.

1078 Cf. the *De amicitia* of Cicero, summarizing many treatises Περὶ φιλίας.

1079 He began by proposing a concurrent distinction, from the point of view of stability. Durable friendships constitute *συμπάθεια*, the others, *συναστρία*. It was, then, a durable friendship which Horace supposed between he and Maecenas when he said *Utrumque nostrum incredibili modo Consentit astrum* (Hor., *Od.*, II, 17), and it was, rather, an enemy of astrology who put *συμπάθεια* above *συναστρία*. Persius (*Sat.*, V, 45-51) appealed to signs and to planets to explain the affection which connected him with Cornutus.

1080 When two peoples' Ascendants are both in the seventeenth degree it produces unshakable friendships. On *ἐναλλαγή*, see above, pp. 241, 1. Ptolemy here completely discards the influence of the ζῶδια, p. 176, 2). The scholiast (p. 161) uses the word ζῶδια as Ptolemy ordinarily does, in the sense of τόποι or twelfths of the birth chart. In general, the real presence produces *συμπάθεια*. aspects produce *συναστρία*, graduated according to the nature of the aspects. Trine produces the strongest, as the diameter does the strongest antipathy. Cf. above (p. 178, 1), the rule which evaluates the energy of the aspects in the half with the real presence.

1081 *Περὶ δούλων*, pp. 785-786 Junctinus. There are only five lines on this subject, and two lines in the scholiast (Anon., p. 160).

1082 Ptolemy, who did not want to count the places ὑπὸ γῆν, must have proceeded κατὰ διάμετρον when he consented to return there.

1083 I admit to not being very sure of the meaning of the expression καὶ μάλισθ' ὅτε οἱ τοῦ δωδεκατημορίου κυριεύσαντες (to what title? and does it work with the *place* or the *sign*?) ἤτοι συμφώνως τοῖς ἀύθεντικοῖς τῆς γενέσως τόποις ἢ ἐναντίους ποιῶνται τοὺς συστηματισμούς. Cardanus (p. 475) was content to translate

αὐθεντικοῖς with *praecipuis*, Junctinus, with *locis dominii et potestatis eorum* (which would speak of their domains or dignities, contrary to the text τῆς γενέσεως). The translation of Melanchthon, *cum dominatore nativitatis*, is no more acceptable. This adjective seems to me, in astrological language, a ἄπαξ εἰρημένον.

1084 Cf. above, p. 411.

1085 *Περὶ ξενιτείας* (*Tetrab.*, IV, 7, pp. 800-801 Junctinus, with commentary, pp. 802-811. Cf. Anon., pp. 162-163.

1086 More exactly, when, being at the Descendant or at the ninth place (in its own terrain as an occidental planet, above, pp. 104, 201), τοῖς φωσὶ διάμετρον ἢ τετράγωνον ἔχη στάσιν (p. 800 J.). The direction of the voyages is indicated by the quadrant in which the luminaries were found. As Ptolemy did not want the two underground quadrants, he taught that the oriental quadrant drew toward the East and South; the occidental quadrant, to the West and the North.

1087 Mars and Saturn ἐπιλαβόντες τὰ φῶτα καὶ μάλιστα εἴ διαμηκίσωσιν ἀλλήλους (p. 801 J.).

1088 There are remarks which do not hinder finding ingenious reasons. Suppose, for example, a shipwreck. The shipwrecked sailors will have plenty of time to be drowned, if the cause is Saturn, because the action of Saturn is slow. With Mars, whose action is violent, but quick, they may be saved.

1089 The reason escapes me. As a general rule, *signa tropica peregrinationibus praesunt et omnino mobilibus* (Censorin., fr. 3, 9. Cf. above, p. 153, 1).

1090 See above, pp. 422-427.

1091 *Tetrab.*, IV, 9, pp. 821-824 Junctinus, with brief commentary, pp. 827-830). Anon., pp. 176-180.

1092 Fr. Böll (*op. cit.*, p. 123) remarks that the division of life into four ages (quadrants of the circle), familiar to Ptolemy, is replaced here by a seven-fold division; that the φῶτα are no longer part of the πέντε, but confused in the series of the ἑπτὰ πλανώμενοι; finally, that this chapter is exploited by the authors who follow systems different from that of Ptolemy. However, the similarity in style persuaded him to consider the chapter as an addition, not an interpolation. Style, in six pages encumbered with technical terms, is a very suspect criterion.

1093 Cf. Hephaestion, III, 2 (Ὅπως χρή πῆξαι καθολικὰς καταρχάς) and 5 (καθολικῶν καταρχῶν καὶ παρατηρήσεων). Do not confuse these general prognostics for individual use with the καθολικὰ or καθ' ὅλον ἀποτελέσματα of Ptolemy (above, Chapter 11). This last corresponds, at least for meteorology, with the κοσμικαὶ καταρχαί (cf. *Cod. Florent.*, p. 129). *Electiones* does not literally translate καταρχαί but is used to mean the same thing. Καταρχαί means “beginnings,” *initia - actionum auspicia*. I translate it with close literal equivalents, e.g., “initiatives,” in the literal sense, opportunities or choosing a moment in the usual sense. [I use the traditional English term, which is “elections,” in the sense of choosing, or electing, to do something. LJJN].

1094 *Annus* is a circle or a cycle of any sort, the lunar month as much as the solar year, which *vocatur annus, quod ut parvi circuli annuli* (Varr., *L. Latina*, VI, 8).

1095 Proclus in Hesiod., *Opp.*, ap. Salmas., p. 826. In the view of the Orphics, Hesiod was a disciple of Orpheus (cf. Lobeck *Aglaophamus*, pp. 412 sqq.).

1096 Hesiod., *Opp.*, 765, 769.

1097 Hesiod., *Opp.*, 771; 803-805; this last passage was translated in an opposite sense by Virgil (Virg., *Georg.*, I, 277). In Greek calendars, one generally consecrated the first of the month to Apollo; the second to the heros; the third, to Athena; the fourth, to Aphrodite; the sixth, to Artemis, etc. (cf. A. Mommsen, *Heortologie*, Leipzig, 1864). The Academy, with or without a reason based on historical fact, celebrated the anniversary of the birthday of Plato on the seventh of Thargelion, day and month of Apollo. This system of divine *dies natales*, whether imported from Egypt or not (cf. Plut., *Is. et Osir.*, 12), was adopted by hellenized Jews, with the patriarchs taking the place of the gods and heroes. Thus, the first of the month was the anniversary of Adam, the second, of Eve; the third, the birthday of Cain, the fourth, of Abel, etc. (Salmas., p. 386). The choice of the *dies natalis*, equivalent of the birth chart, is a meeting point with astrology. Nevertheless, the public holidays and the ἀποφράδες do not belong to astrology, which replaced them with ephemerides of ἔμπρακτοι καὶ ἄπρακτοι ἡμέραι.

1098 For example, the nineteenth is “better in the afternoon” (v. 810); the twenty-fourth is “excellent at first light, poor in the afternoon” (v. 820-821). Cf. the *dies fissi, intercisi*, of the Romans. These are some of the fine points which “few people know” (παυροὶ δ' αὖτε ἴσασιν, vv. 814, 820, 824). The references ἡματος ἐκ πλείου (c. 778), πλέω ἡματι (v. 792) seems to indicate not the middle of the day, but the longer day of year (?). The text

of Hesiod, mutilated and interpolated, does not allow us to reconstruct his ephemeris with certainty. There were days without any special notation, μετὰδουπτοι, ἀκήριοι, οὐ τι φέρουσαι (v. 823). The characteristic days are the first, second, fourth, fifth, seventh, eighth, ninth, eleventh, twelfth, thirteenth, fourteenth, fifteenth, sixteenth, eighteenth, twentieth, twenty-fourth, twenty-fifth, twenty-seventh or twenty-ninth (τρισεινάς) and the thirtieth. Hesiod divided the month into three groups of ten days each (*decades*), and the characteristics attributed to the unity, the dyad, the tetrad, etc., were reproduced a little closer, with nuances, in the following decades. All the fives (5, 15, 25) are χαλεπαὶ καὶ αἰναί (v. 802). The fours (4, 14, 24) are favorable for marriage and the procreation or birth of girls; the sixes (6, 16, 26) favorable to the procreation of boys (ἀνδρογόνος δ' ἄγαθη – ἐσθλὴ δ' ἀνδρογόνος, vv. 782, 788). The sevens (7, 27) favorable to agriculture; the nines (9, 19), excellent for planting and begetting. The other days are designated separately, the first, second, eighth, eleventh (good), twelfth (better than eleventh), thirteenth (bad for sowing, good for planting), eighteenth, twentieth (a day on which intelligent people are conceived), the twenty-seventh or twenty-ninth (τρισεινάς must signify 3 X 9 or 9 in the third decade), and the thirtieth. One may have already the preoccupation with the sexes and the moment of conception. Saumaise (*De ann. clim.*, pp. 825-834) notes that Hesiod does not say a word about the influence of the Moon. However, he comes close to paradox in maintaining that μήν did not completely replace σελήν. Ps.-Plutarch, commenting upon Hesiod (ad v. 778), assures us that the thirteenth is good for planting, because “the light of the Moon is never more abundant than on this day.” In effect, this would often be the day of the Full Moon (cf. above, p. 47, 1). In the Athenian calendar, the thirteenth was an unlucky day. One found only ceremonies belonging to the chthonic cults. The feast of the Chytres on the thirteenth of Anthesterion, the arrhephoria on the thirteenth of Skirophorion (?), a sacrifice to Nephthys and Osiris on the thirteenth of Boedromion (cf. A. Mommsen, *Heortologie*, p. 295). This, no doubt, is the origin of the present day superstition about the number thirteen. It did not exist among the Romans. We know that the Ides, consecrated to Jupiter, fell on the thirteenth, eight months on the twelfth. Vegetius, who required an odd number of feet for the size of his moats, allowed sizes of *novem aut undecim aut tredecim pedibus* (III, 8). The fear of the number thirteen comes perhaps from the thirteenth month of the lunisolar calendars. These months had no religious festivals, and as such they were abandoned by the gods and consequently left to the evil spirits. The Spartans, who had a lunar oracle (Cic., *Divin.*, I, 43; Plut., *Agis*, 9; *Cleom.*, 7), supposedly were not at Marathon because they had to wait for the Full Moon before setting out on a campaign (Herod., VI, 106). The proverb Λακωνικὰς Σελήνας (Paroemigr. Gr., I, p. 274) assumed that this reason served them often as an excuse. The observance of the days of the month must have been combined with all sorts of other superstitions. See, in the *Greek Papyri* of the *Brit. Museum*, *Pap. CXXI*, containing an Ὀμηρομαντρία, and, following, the indication of the days of the months and fractions of days favorable for consultations (*Catalogue*, p. 89). The days of abstinence are the third, sixth, ninth, sixteenth, seventeenth, twenty-fifth. One finds in all the astrological compilations list ἐμπράκτων καὶ ἀπράκτων ἡμερῶν, rooted in the degree of simplicity of the Hesiodic ephemeris.

1099 See above, pp. 90-92. The lunar elections of the Germans *non esse fas Germanos superare, si ante novam Lunam proelio contendissent* (Caesar, *B. G.*, I, 50), a superstition identical to that which prevented the Spartans from arriving at Marathon on time. *Certis diebus, cum aut incohatur Luna aut impletur (coeunt Germani); nam agendis rebus hoc auspicatissimum initium credunt* (Tac., *Germ.*, 11). These are universal ideas, perhaps even today.

1100 See, for Mesopotamia, the table of favorable and unfavorable days in the twelve months of the years, and of the “ancients” (Lenormant, *La divination chez les Chaldéens*, p. 40; cf. Epping, p. 5. These are probably the *Babylonii numeri* of Horace (*Od.*, I, 11, 2). For Egypt, H. Brugsch, *Thesaur. Inscr. Aeg.*, I, pp. 33-54, a table of the thirty days of the months, with the “stones which fill the eye of the Moon;” F. Chabas, *Calendriers des jours fastes et néfastes de l'année égyptienne* (Paris, 1868); G. Maspero, *Histoire ancienne des peuples de l'Orient classique*, Tome I, *Les Origines* [Paris, 1895], pp. 210-212. *La Croyance aux jours heureux ou malheureux chez les Egyptiens* (*Débats*, 23 Mars 1898).

1101 There was no lack of people in antiquity who maintained that the Egyptians had never had any gods other than the planets, signs, decans, horoscopes and other chronocrators (ap. Euseb., *Pr. Ev.*, III, 4).

1102 Cf. Häbler, *op. cit.*, p. 10; Maspero, *loc. cit.* Dating the eighteen days of the feasts of Typhon, *si quid nascitur, non amplius quam eos dies vivit* (Schol. *Germ.*, p. 408 Eyssenhartd). The text of Herodotus (II, 82), above, p. 62, 3. [Typhon = Set. LJN].

1103 One may believe that the Hesiodic division – later, Athenian and Greek in general – of the month into “weeks” of ten days came from Egypt, where the decades had the thirty-six decans as chronocrators. At the end of the Empire, twenty-four days of the year considered dangerous had taken or re-taken the name of *dies Aegyptiaci*. Likewise, it was the Egyptian Gnostics who ballooned the hierarchy of chronocrators of all sorts, of the day of the month, of the year, of the daytime and the nighttime, etc. Cf., among the Peratics, the ἀρχων

δωδεκαώρου νυκτερινῆς, Soclas or Osiris and the ἄρχων δωδεκαώρου ἡμερινῆς, Euno or Isis, who had Sirius for a sign. (*Philosophem.*, V, 2, p. 195 Cruice).

1104 Cf. the almanacs (ἀλμενιχικά) indicating the κραταιοὶ ἡγεμόνες (Euseb., Praep. Ev., III, 4, 1).

1105 Αἱ μὲν γὰρ ἀρχαὶ παντὸς πράγματος ἀπὸ Σελήνης λαμβάνονται, τὰ δὲ τέλη ἀπὸ τοῦ οἰκοδεσπότης αὐτῆς (*Cod. Florent.*, p. 138).

1106 There was a combination of the movements of the Moon with the signs, which returned a little closer to the calculation of the days of the lunar zodiac into twenty-eight mansions. This was an early system (cf. above, pp. 55-56; 153, 1) which, neglected by the Greeks, came back in Arab astrology. The rapid revolution of the nodes hardly allowed fixed points of attachment for the twenty-eight stations. If one fixed them, they immediately became purely artificial. See as a specimen, in Haly (VII, Ch. 101) or in Ciruelo (I, 6), the distribution *De viginti octo mansionibus lune in circulo signorum*, with the Arabic names of the mansions. The point of departure of the first lunar mansion (*alnath*, i.e., *Cornua Arietis*) is fixed by Haly at the beginning of Aries, by Ciruelo at the ninth degree. Each one to his own temperament. The first, *aerea calida et humida*; the second, *igneae colerica et sicca*; the third, *aquea frigida humida flegmatica pluvialis*, and so on. All of which transmits *vetustissimorum astrologorum traditione*. Haly (*op. cit.*, Ch. 100) assures us that the Arabs borrowed the system of the twenty-eight lunar mansions from the Hindus, who took it “from the books of Dorotheus.” Dorotheus is, in effect, cited at each lunar mansion as author responsible for a special prediction. [Cf. Pingree’s text and translation of *Dorotheus* (Leipzig Teubner, 1967). L.JN.]

1107 Ἐπισκοπτέον οὖν καὶ τὰ ἐν καταρχῇ πραττόμενα πάντα ὥς ἐπὶ γενέσεως (Hephaist., III, 5).

1108 The astrologers did not all have a good conscience about this difference. Otherwise, they would have tried to hide it and to root their doctrines in a facade of unity. One rarely finds genethliology and elections distinguished and opposed. Rather, they were associated. Cf. Ἀλόγων γενέσεις καὶ καταρχας (Hephaist., III, 3) ἢ ἐπὶ γενέσεως ἢ ἐπὶ οἷας δήποτε γενομένης καταρχῆς (Paul. Alex. E2). Combining elections with genethliology achieved confusion. For example, the manual of Hephaestion bears the name, in certain manuscripts, *Περὶ καταρχῶν*. Its first half is a summary of Ptolemy, while the second half is on *elections*. This title belongs to certain works (Alexandrian?) of which we possess extracts or analyses *Maximi et Ammonis carminum de actionum auspiciis reliquiae – accedunt Anecdota astrologica*, rec. A. Ludwich, Lips., 1877. The poem of Maximus (610 verses) treats twelve subjects, beginning with γενέσις and stopping at Περὶ κλοπῆς. Ammon is reduced to nineteen verses. A summary in prose of Maximus’ poem, pp. 79-96. Dorotheus of Sidon seems to have been the special apostle of the *elections*. The citations of Dorotheus scattered throughout the authors, especially the Arabs (cf. above, p. 463, 2), permit us to reconstitute a good part of his work. [The introduction to Pingree’s text and edition for Teubner includes a history of the text – briefly, Classical Greek to Middle Persian to Classical Arabic. L.JN].

1109 There was already a first difficulty in the “actual” condition. Given the speed with which the sky moves, what is “actual” enough to be the basis for calculation? We have commented upon this above, and also upon the length of time during which the prediction was good. Logically, there ought to be only instantaneous causes and effects, but as impulses, the effects prolonged their consequences. Haly (I, 7) cites Hermes, the Persians, Babylonians, Uvellius (Vettius Valens?) and even Ptolemy on this subject.

1110 It is a question, at every turn, of the *μαθηματικοὶ πίνακες* or *κανόνες* at the disposal of the astrologers. We know those of Petosiris (*Sat.*, VI, 581) or of Thrasyllus from Juvenal (VI, 579). The physician Crinas of Massilia doubtless did not study the birth charts of his patients when he treated them *ad siderum motus ex ephemeride mathematica cibos dando horasque observando* (Plin., XXIX, 9). There was a table of lucky and unlucky days at the door of Trimalchio’s dining room (Petron., *Satyr.*, 30).

1111 Maximus asked the Muse to teach him *Μήνην* ἡερόφοιτον, ὅπως ἀνδρεσσιν ἕκαστα | σημαίνει σκολιπὸν ἐπιστείχουσα κέλευθον (p. 3 Ludwich). Hephaestion began by treating Περὶ ἐπιτηδείων ζωδίων καὶ Σελήνης ἐπιτερήσεων εἰς καταχὴν (III, 1, p. 25 Englebrecht).

1112 It is often necessary to distinguish between the different parts of a sign, first or last degrees, etc. (cf. above, pp. 132, 1; 177, 2) and, moreover, παρατηρετέον δὲ τὸν κλῆρον τῆς Τυχῆς ἐν πάσῃ καταρχῇ (Hephaest., III, 2).

1113 The phases of the Moon and its relationships with the planets are discussed briefly in the appropriate chapters of Maximus and of Ammon. Sometimes they are omitted. These positions only modify the prediction. However, the modifications may go so far as to change the opportunity into an untimely occasion. Hephaestion (III, 5) expands upon this casuistry, where he uses planets, centers, and places within the signs.

1114 We find it among the Arabs, who must have had predecessors in Greece. For example, Zahel, *De electionibus* (= Περὶ καταρχῶν), p. 107 Pruckner, indicated the manner – that is, the moment – one might choose to beget boys or girls. Likewise, Albohazen Haly (VII, 30, *De jacendo cum muliere ut habeat filium*).

1115 Magic is replaced by prayer in civilizing and moralizing religions. The pious Firmicus, concerning an unfortunate conjunction, writes *Unde orare debemus et summis precibus postulare, ne quando Luna se Mercurio ista radiatione conjungat* (IV, 16, 9 Kroll). His professional fatalism, sometimes strongly affirmed, is very weak stuff.

1116 Only two verses remain of the chapter *Περὶ γενέσεως* by Maximus. We can see there only that he distinguished between diurnal and nocturnal genitures. What follows is drawn from the prose analysis (pp. 79-80), which is not the clearest. The remark which ends it is bizarre. It is advice to a practitioner on the subject of his honoraria, if I am not mistaken. “If you inspect someone’s chart and you want to ask him to be generous (αἰτήσασθαι παρ’ἐκείνου χάριν), when you see his Moon in diametric opposition to itself, appeal to his generosity and you will not ask in vain.” – no doubt because the client would avoid danger in abstaining from the advice of the astrologer. On the tricks of the trade, see below, p. 471, 1.

1117 This is how I interpret the summary text ἡ Σελήνη ἀποκαταστατική καὶ εἰς τὰ ἐαυτῆς τετράγωνα τὰ κατὰ τὴν γένεσιν ἐλθοῦσα ἄπρακτος καὶ ἐπιβλαβὴς γίνεται (p. 80 Ludwich). A tropical revolution does not bring the Moon back to the same point in the zodiac.

1118 We read on p. 89 Ludwich [Ὁ ὥροσκόπος ἢ] ἡ Σελήνη ἐν Ταύρῳ κτλ. The substitution of the Ascendant for the Moon would have an even more immediate effect on genethliology. This reading, declared suspect by Ludwich, should be rejected without hesitation. It is an unintelligible gloss.

1119 Look at the list of Maximus’ chapters: I. Περὶ γενέσεως. – II. Περὶ κήσεως δούλων. – III. Περὶ πλοῦ καὶ ἐμπορίας. – IV. Περὶ ὁδοιπορίας. – V. Περὶ γάμου. – VI. Περὶ νόσων. – VII. Περὶ τομῆς καὶ χειρουργίας. – VIII. Περὶ δραπειῶν. – IX. Περὶ παίδων ὁ τεχνῶν διδασκαλίας. – X. Περὶ γεωργίας. – XI. Περὶ τῶν ἐν δεσμοῖς. – XII. Περὶ κλοπῆς. The chapter on looking for runaway slaves and stolen objects is very circumstantial. They must have been the subjects of many consultations. The list of chapters is much longer in the third book of Hephaestion (1-37) ap. Engelbrecht, pp. 25-26). The chapter Περὶ γεωργίας is a fantasy and contains nothing newer than Hesiod. The astrologer adds here and there a συμφέρει δὲ καὶ γεωμετρεῖν which made him believe that surveying never succeeded at any time. Cf. the facetious consultation of the astrologer Aristophanes by the peasant Calligenes, λαβὼν ψηφίδας ὑπὲρ πῖνακός τε πυκάζων, promises a good harvest if all goes well, and concludes by saying “the only things to fear are the grasshoppers!” (Agath. Scholast. in *Anthol. Gr.*, XI, 265). A fragment of agricultural καταρχαί in Pliny: *adjecit his Attius in Praxidico ut sereretur cum luna esset in Ariete, Geminis, Leone, Libra, Aquario: Zoroastres sole Scorpionis duodecim partes transgresso, cum luna esset in Tauro* (Plin., XVII, 290). This false Zoroaster was a refined symbolist. It was necessary for him to harness Taurus to the sting (i.e., the plowshare) of Scorpio. I do not know to what epoch he belongs, and I do not claim for astrology the strange superstition, based upon an oracle of Bakis, which made the Tithoreans hide a clod of earth in the tomb of Zethos and of Amphion, ἐπειδὴν τὸν ἐν οὐρανῷ ταῦρον ὁ ἥλιος διεξίη, a talisman which gave them a good harvest at the expense of the Thebans (Pausan., IX, 17, 4). For medicine, cf. above, Chapter 15. The list of “elections” is interminable among the Arabs, who, in fact, understood and practiced only elections. They went so far as to subject God Himself to the yoke of opportunities, saying that He refused nothing to whomever asked *hora qua Luna cum capite Draconis Jovi conjungitur* (Albumasar, in *Marg. philos.*, VII, 10) a rare moment, moreover, and hard to seize.

1120 A distinction affected perhaps by impediments previewed in the calendar of the Roman pontiffs, where the interdiction is motivated in another fashion made clear by Varro: *quia feriis tergere veteres fossas liceret, novas facere jus non esset, ideo magis viduis quam virginibus idoneas esse ferias ad nubendum* (Macrob., *Sat.*, I, 15, 21). To the chapter on marriage, a mass of “questions” about the procreation of babies of this or that sex, of fertility, of sterility, etc., was attached.

1121 I have no intention of exploiting this inexhaustible mine. See the chapters in the *Cod. Parisin.*, 2419 (fifteenth century) of which Engelbrecht has published the titles (pp. 15-20), those of the astrologer Palchus (ap. Cumont, *op. cit.*) and the first fruits of the general inventory of the astrological materials in the *Codices Florentini* cataloged by A. Olivieri (Brussels, 1898). See notably the curious consultations, verified after the fact, on the subject of missing ships (appendix, pp. 102-104). They are dated 475 and 480 BCE. The oracles also responded to questions of this sort, notably the oracle of Dodona. One questioner wanted to know if a woman were pregnant; another, if he would have children; another, if he had lost a certain object or if it had been stolen, etc. Cf. Bouché-Leclercq, *Hist. de la Divination*, II, pp. 318-320, and the inscriptions of Dodona, brought together by Carpanos and O. Hoffman (ap. Collitz, *Sammlung d. gr. Dial.-Inscr.*, II, 2, Goetting., 1890).

1122 I borrow the reasoning of the Renaissance astrologers (cf. *Margarita philosophica*, fol. z), who pushed it even farther and connected the *Interrogationes* with the individual *elections* (above, Chapter 14). They said that the positions of the stars which suggested the question are themselves in a certain relationship with the consultant's horoscope (*constellationem interrogationis proportionabilem fieri nataliciæ constellationi affirmant*). One thus understands how they produced, at the same moment, different effects on different people. Strictly speaking, it was the state of the sky at the moment of the suggestion, and not at the moment of the consultation, which the astrologer set out to interpret (*cur non magis observant constellationem et tempus quo quæsitores desiderium tale concepit, quam constellationem et horam quo proposita est quæstio?*). The astrologer Ciruelo (*Astrol. Christ.*, IV, 1) denied a relationship with the birth chart and declares the *interrogationum iudicia* – *penitus damnanda, quia vana, quia falsa, quia periculosa et nociva hominibus*. The danger came from the possible intrusion of the third into private life and especially of consultations about death (variety or date). It is to the category of *Interrogationes* which geomancy belongs, a divinatory method of Arab origin and with a Greek (Byzantine?) name, a combination of astrology, of arithmetic and of lottery which prospered in the Middle Ages. Its name was mentioned in the verse of Dante (*Purgator.*, XIX, 4). It has recently drawn the attention of M. Paul Meyer (*Traité en vers provençaux sur l'astrologie et la géomancie* in *Romania* XXVI [1897], pp. 225-275) and of M. P. Tannery (*C.-R. de l'Acad. des Inscr.*, 15 Oct. 1897). It consists essentially of speculating upon the dots drawn or "thrown" upon sand (or earth, whence the name *geomancy*) by the instinctive movements of the consultant's hand, who was preoccupied, almost possessed, as it were, by the question. These dots must be interpreted as images of the constellations – which seems to be the case envisioned by Dante – or sown in the framework of a chart of twelve "places" or "houses," and submitted to various arithmetical operations (cf. above, Chapter 15). The spirit of the method is that, *dum homo ex desiderio inquirendi futura puncta signat, jam ex constellatione nativitatis suæ ad hoc pervenit ut vis coeli manum suam dirigat, quo nec plura nec pauciora puncta faciet quam ad iudicium intentum sufficiant* (Reisch, *Margar. philos.*, VII, 2, 24). It is divination by the instinctive acts of a person (cf. *Hist. de la Divination*, I, p. 153-165), parked in an astrological framework. [For more detailed accounts of this kind of geomancy, see Emilie Savage-Smith and M.B. Smith, *Islamic Geomancy and a Thirteenth-Century Divinatory Device* (Malibu, CA Undena, 1980) and Emilie Savage-Smith, "Geomancy," in *The Oxford Encyclopedia of the Modern Islamic World*, ed. J.L. Esposito (New York Oxford University Press, 1995), pp. 53-55. While of Arabian origin, it was also popular in Renaissance Europe, popularized in part by Heinrich Cornelius Agrippa von Nettesheim, *De Occulta Philosophia Libri Tres*. LNJ].

1123 Sealed messages (especially official consultations), or, something which amounts to the same thing, messages posed mentally in the form "Will I succeed in doing what I am thinking of?" See the chapters of *Cod. Parisin.* 2419 *Περὶ προγνώσεως τοῦ ἐρωτῶντος οἷον περὶ τίνος ἐρωτᾷ* (fol. 116r). – *Περὶ τοῦ εἰπεῖν τί ἐστὶ τὸ ἐρωτῶμενον* (fol. 117 r). – *Περὶ τοῦ γινῶμαι τὸν συντυγχάνοντά σοι καὶ διὰ ποῖα κεφάλαια θέτει ἐρωτᾶν* (fol. 117 v.). – *Ανακρίσεις ἐκ τῆς τῶν ἀστέρων συνκράσεως περὶ οὗ τις ἐρωτᾶν βούλει* – *Εἰ ὠφέλιμος ἔσται ὁ ἐρωτῶν σε ἢ οὐ*. – *Περὶ τοῦ γινῶμαι τὸν σκόπον τοῦ ἐρωτῶντος καὶ περὶ τί θέλει ἐρωτᾶν* (fol. 118 r). We can see that the subject took hold of the astrologers' hearts. They were especially interested in knowing why a client consulted them, what was his secret intent, and if it might be used to their profit. This supposes that the astrologer believed in his art, which was the most frequent case. Albohazen Haly (I, 17) used a very simple method. His cabinet was, I suppose, oriented and the planets distributed among the cardinal points in the fashion indicated by him in the preceding chapter. He then let the client sit down wherever he liked and gives an account of the intentions of the client according to the place chosen. It was once again an instinctive act treated by astrological method.

1124 Dorotheus Sidon. ap. Engelbrecht, p. 34. When dealing with a theft, the thief is represented by the Occident, the object stolen by the Ascendant, the victim by the Midheaven, and the place where one found the stolen object, the Lower Midheaven (Palchus, in *Cod. Florent.*, pp. 94 sqq.). [It is still a common practice for modern psychics and diviners to draw information out of their clients, unwittingly. Cf. Myriam Ruthchild, *Psychotechnics A Scientific Approach to the Psychic* (Pomeroy, Ohio: Lee Jacobs Productions, 1981), an excellent how-to book. LNJ].

1125 Maxim., v. 320-438, pp. 26-35, Ludwich.

1126 An extract from an otherwise unknown Demetrius Δημητρίου περὶ δραπέτευόντων (*Codic. Florent.*, Appendix, pp. 104-106). It may be from late antiquity and preserve ancient traditions. Another (*ibid.*, pp. 97-99) studied the same situation, with even more detail and precision, using different methods. They consisted of identifying the fugitive with the Moon and the master with the Midheaven. The former could tell if the fugitive was fleeing alone or in a couple, man and woman, if it was a eunuch or a hermaphrodite, what he had stolen and what he would do with it, etc.

1127 An author of medical predictions looked to see if a certain planet ἰδιοθρονεῖ ἢ οὐ· ἢ μὲν γὰρ εἴη εἰς ἴδιον τρίγωνον ἢ οἶκον κτλ. (*Cod. Florent.*, p. 124).

1128 See, in the *Cod. Florentini*, pp. 124-128), a series of prognoses based upon the hypothesis that the Ascendant represents the physician and the Descendant, the illness. The patient is at Midheaven and the medication (θεραπεία) is at Lower Midheaven. The same proceeding is applicable ἐπὶ πολεμούντων καὶ πλεόντων. Looking for stolen objects – a slave's flight was a theft – was a perpetual topic for consultation. In the twelfth century, Pope Alexander III punished *clericum qui bono zelo et ex simplicitate per astrolabii inspectionem furtum cuiusdam ecclesiae inquisivit* (G. Reisch, *Marg. philos.*, VII, 2, 14) with an interdict.

1129 A principle which Serapion declared universal, without exception, in matters of opportunities: Ἐπὶ πασῶν τῶν καταρχῶν τῶν ἤδη ἀρχὴν ἐσχηκότων καὶ τὴν μελλόντων λαβεῖν, δεήσει πρῶτον συνορᾶν τὸν πολεύοντον καὶ διέποντα καὶ τὸν τῆς ὥρας [Ascendant] τῆς καταρχῆς κύριον ἐν ὁποίῳ τόποις τετεύχασι (*Cod. Florent.*, pp. 99).

1130 Cf. above, p. 489. Censorinus made it a universal cycle, but according to the usage of the *genethliaci*. This is a contradiction in terms.

1131 See the Egyptian myth which supposedly explained the poor fit of the 365 day solar year and the 355 day lunar year with the supposed original year of 360 days. Seb (Kronos) and Netpe (Rhea), having procreated five babies (planets?) whom Rhea could not bring into the world, neither in the course of a month nor in the course of a year, because she was bewitched by the Sun. Thot (Hermes) played dice with the Moon and won five days from it, during which Rhea could give birth. It is these five days, which were subtracted from the 360 of the 'original' lunar year, created the present one, since it was the Moon which lost them. Added to the 'original' solar year, the five days (ἐπαγόμενοι) gave us the present solar year (Plut., *Is. et Osir.*, 12. Cf. Lepsius, *Einleit. zur Chronol. d. Aegypter*, pp. 91-92). There is, in all cosmologies, an accident which upsets the original established order and which explains the disagreement between the ideal and reality. Certain innovators long dreamed of re-establishing the accord by the dividing the zodiac into 365°. It is of this which a fragment of Censorinus seems to speak *circuli signiferi partes CCCLX ... sed compensatio in quinque partes creditur adplicari, ut sint omnes signiferi partes CCCLXV* (Censorin., fr. 3, 5, p. 57 Hultsch).

1132 This is the opinion of Lepsius (*op. cit.*, pp. 116-117 cf. above, pp. 222, 1; 234, 2). The five epagomenal days formed a half decade which closed with five hours taken from the following year. In the Egyptian calendar in the Louvre (ap. Brugsch, *Thesaur.*, I, pp. 182-184), the decades give place to predictions concerning the acts of a local god, *Su* or *Soped*, which produced different effects in different decades. [The *nundinae* are the cycle of 9 days between market days in Rome and neighboring towns in ancient Latium. LJN]

1133 The study of India's astrology reveals many combinations whose origins may be debated. The Hindus, among whom we find the zodiac with its Greek names, have a hierarchy of simultaneous Time Lords, each sign or month being dominated first, as a whole sign or month by the planet which has its οἶκος there; second, in one half, by the Sun, in the other, by the Moon, the position of the luminaries alternating each month; third, by the three decans of the sign, each Time Lord controlling a third of a sign; fourth, by the planets in a nine part cycle, in a special order, sometimes setting, sometimes rising. The week has kept its original construction (J. M. F. Guérin, *Astron. indienne*, pp. 80 sqq.). [Cf. also Pingree, 1963; Id., *Census of the Exact Sciences in Sanskrit*; Series A (Philadelphia American Philosophical Society, 1970); Id., *Jyotihsastra Astral and Mathematical Literature, History of Indian Literature*, Vol. 6, fasc. 4 (Wiesbaden Harrassowitz, 1981); and especially Yavanajataka, 1978. The commentary in Vol. II of this last is an outstanding source on astrology in general. LJN]. The week itself has not been a shelter to forgeries. I do not know if it was necessary to re-attach a tradition or to impute an Autumn fantasy, the *καταρχαὶ κατὰ Ζηνάριον* (*Cod. Florent.*, pp. 128-129) which taught the manner of finding the time tord of the day (πολεύων) and that of the hour (διέπων), by means of an annual series of seven part cycles starting with the New Moon of the summer solstice (τῆς ἐν Καρκίνῳ συνόδου) considered no doubt as the equivalent of the "rising of Sirius." The Time Lords of the days succeed one another in the order ♄, ♀, ☾, ☿, ☽, ☿, ☽; those of the hours in the order ♄, ☿, ☽, ♀, ☾, ♀, ☽, starting from the πολεύων, which always dominated the first hour. We are also interested in the signs in combinations, considering them as planetary fiefs changing from hour to hour. The sign where the διέπων was really found (κατὰ πάροδον τὴν κοσμικὴν) is assigned to Saturn; the sixth degree from that point, to Mars; the fourth degrees from the preceding, to Venus; the second degree from the preceding, to the Moon; the seventh degree, etc., to Jupiter; the fifth, to the Sun; the third, to Mercury, the order here following the series of the πολεύοντες. Let there be, the author says, 177 days taken from from the *su/nodoj* of Cancer, fourth hour. Divide by seven, and two remains. The πολεύων of this second hour is ♀, and the διέπων of the fourth hour is ☽. Since ☽ is actually in ♄, this sign is assigned to ♄, and the other planets by the confusion mentioned above, were lodged, ♀ in ♄, ♀ in ♄, ☾ in ♄, ☿ in ♄, ☽ in ♄ and ☽ in ♄. It is useless to try to understand this: the planets and signs are a hand of cards that one shuffles *ad libitum*. Here, we learn something about the level of intelligence of the system's authors. They determine the position of the Ascendant from that of the Sun, by assuming there must be as many signs between the two as there are hours (30° per hour, rather than 15°, and ignoring the

ἀναφοράι). Thus, if the Sun is in ♊, the Ascendant of the fourth hour is in ♎! [For the history of the week, cf. F. H. Colson, *The Week* (Cambridge Cambridge U. Press, 1926) and Eviatar Zerubavel, *The Seven Day Circle* (New York Free Press; London Collier Macmillan, 1985) LJN].

1134 A distinction is already made by Letronne (*Oeuvres choisies*, 2e série. I, pp. 232 and 452) who insists upon the purely lunar origin of the Ancient Near Eastern week, a simple period of seven days.

1135 One cannot overestimate the perfections of the number seven (*qui numerus rerum omnium fere nodus est*, Macr., *S. Scipionis*, I, 5) and the part which it plays in the harmony of the universe. Varro (ap. Gell., III, 10) makes a copious dissertation upon the subject in *primo libro qui inscribitur Hebdomades*. Philo (*De opif. mundi*, 30-43) puts all his Pythagorean science to work glorifying this great cosmic arcanum, which one encounters in the sky (seven circles, planets, stars in the regulating groups, the Bear and the Pleiades, etc.), in the human soul and in the human body (cf. above, p. 324, 2 and all the commentators upon the *Timaeus*). The astronomical origin of the week is in the phases of the Moon, always known, rather than from the more recent notion of the seven planets and their time rulerships. Aristides of Samos (ap. Gell., III, 10), Philo (*Leg. allegor.*, I, 4), Macrobius (*S. Scip.*, I, 5, 48 sqq.) insisted upon the division of the month into four groups of seven, even though it was only roughly accurate and decidedly too short for the synodic month (Anon., p. 81). The Roman *nundinum* (a cycle of eight days) was, no doubt, a measure of the same sort, but too long (the Calends, Nones, Ides and *nundinae* marked originally the four phases of the moon in the Roman month). Thus the hebdomadary or nundinal series ended by becoming independent of the months, which had their own reason for being, and the hebdomad was from then on based upon the number of the planets.

1136 We do not know of a Mesopotamian week (cf. above, p. 41, 1). However, considering the Hebrews as inheritors of Mesopotamian traditions, we may believe that the days were, among the Mesopotamians, counted in groups of seven and were forerunners of the planetary time rulerships. Letronne (*Oeuvres*, 2e series, I, p. 493) objected in vain that the Mesopotamians only counted five planets proper. This is playing with words. A passage in the prophet Amos – perhaps the most ancient text in the Bible (eighth century BCE), which M. A. Carrière brought to my attention – tells us that the Israelites, or some of them, adored, in the desert, the planet Saturn (*Kaiwan* – cf. above *Kaimonou* and *Kaiwan*, pp. 41 and 196, 2 – which the Vulgate translates *imaginem idolorum vestrorum, sidus dei vestri*. (Amos, V, 26). [Amos 526, Rheims-Douay, reads “But you carried a tabernacle for your Moloch, and the image of your idols, the star of your god, which you made to yourselves.” See the discussion of this passage in Amos in Ness, *Written in the Stars*, 2000, p. 138, n. 8 and the works cited there. LJN]. This cult would have been associated or confused, in Egypt, with that of Set-Typhon (above, p. 483, 3); but considered as a planetary cult, they must have brought it from Mesopotamia. The day of rest (Shabbat) remained the day of Saturn, a planet which the rabbis of the Middle Ages called “sabbatical.” [That is, Shabbatai. Cf. Robert R. Stieglitz, “The Hebrew Names of the Seven Planets,” *Journal of Near Eastern Studies* 40 (1981) pp. 135-137. For the Mesopotamian order of the planets, cf. Brown, 1999. LJN].

1137 The system of ὅρια, which came to us as Egyptian (above, pp. 206 sqq.), may well have been an adaptation of an ephemeris of this sort, indicating the distribution of divine patronages throughout the ideal year of 360 days.

1138 They are themselves symbols of stars and, as such, were portrayed most often with a disk (Brugsch, *Thes.*, I, pp. 55 sqq.). Cf. the tables of hours drawn in the tombs of Ramesses VI and Ramesses IX (*ibid.*, pp. 185 sqq.). Saumaise did not say from which author he borrowed the Greco-Egyptian list of the twelve hours, which, without distinction between day or night, are:

I Λαμπή	IV Φηνού	VII Πρόκα	X Πορφυρά
II Ἀλεξίδι	V Ἑρέβη	VIII Πάνφη	XI Πανφούτ
III Τερψιθί	VI Διαυγής	IX Λοιτία	XII Τύρφη

This must be a fabrication of the late period, filled with gibberish words.

1139 Κατὰ τὴν τάξιν τῶν κύκλων καθ' ἣν οἱ Αἰγύπιοι αὐτὴν νομίζουσι (Dio Cass., XXXVII, 19). These “Egyptians” do not date to the time of the Pharaohs.

1140 Following Paul of Alexandria (H3-K), who, like Dio Cassius, associated the religious and astronomical traditions by calling the stars *gods* (Περὶ τοῦ γινῶναι ἐκάστην ἡμέραν τίνος τῶν θεῶν ἐστίν). He explains that the Time Lord of the day is the πολεύων, that of the hour, the διέπτων, and that the system is very useful πρὸς τὸ ἀδιαπτῶτως τὴν καταρχὴν ποιέσθαι.

1141 The series of 168 hours or 7 days is the product of the two factors, 7 (planets) and 24 (hours). There could not have been fewer because 168 is the smallest product of 7 and 24, their main numbers.

1142 This is the moment to explain, if necessary, this agreement, whose secret is very simple. One day of twenty-four hours contains three planetary series, plus three extra ($24 = (7 \times 3) + 3$). Therefore, the rank of the planet advanced each day for three unities in the series, exactly like the rank of the first πρόσωπον of each sign, the decans being distributed at the rate of three per sign. **MMMMM**

1143 Letronne does not seem to have weighed these reasons. He rejects, without discussion, both of the explanations of the week given by Dio Cassius, the good with the bad, and he concludes that the week “derives from the correspondance established between the planets and the decans of the Zodiac” (*op. cit.*, p. 232).

1144 The proportion 4/3, which is called ἐπίτριτος in arithmetic, gives us a musical interval, the fourth. It is *is numerus vocatur epitritus, deque eo nascitur symphonia quae appellatur* διὰ τεσσάρων (Macrob., Somn. Scip., II, 1, 15). *Similiter cum astrologis et musicis est disputatio communis de sympathia stellarum et symphoniarum, in quadratis et trigonis, diatessaron et diapente* (Vitruv., I, 1). This is the scale of the seven planets a continuous series of fourths produced the week. However, if this were the genesis of the week, Saturn ought to be the first day of the week and not the last.

1145 That is, from the astrologers in general, who are the “Chaldaeans” for others. John Lydus attributed the invention of the week to the Mesopotamian Chaldaeans and the Egyptians of fantasy (above, p. 52 in note). Do not forget that the actual order of the week presupposes the “Chaldaean” order of the planets, which is also “Egyptian” and no less Hellenic for that (above, pp. 64, 1; 107-109; 479).

1146 Dio Cass., XXXVII, 18. [**Hipparchus**’ exact dates are unknown, beyond second century BCE. LJN].

1147 See the *Fasti Sabini*, between 19 BCE and 4 CE (*C.I.L.*, I, p. 302). It is the official statement of a usage which was already popular. [On the different orders of the planets, see Beck, 1988. LJN].

1148 Tibullus (I, 3, 18) knew *Saturni sacrum diem* and Hyginus (*Astron.*, IV, 2) knew very well that the hourly rulerships or the astrological week started over *octavo quoque die*. It is to the fame of the week, and of the Jewish observation of the Sabbath, the day of Saturn, that one must attribute the diffusion of the belief that an ass or ass’ head was venerated by the Jews in the Jerusalem Temple and, later, also by the Christians. This is an historical problem concerning which the baroque elucidations collected by Étienne Morin (*Dissert. octo.*, Genév., 1683, 2e ed., Dordraci, 1700, *Diss.*, VII, pp. 285-355) and the hypotheses suggested in our days by the graffito of a crucified man with an ass’ head found on the Palatine (the Christ of the Sethian Gnostics, according to Wünsch), must pass as desperate cases. One cannot take the so-called evidence seriously the heavily bearded Moses, “seated upon an ass” that Antiochus Epiphanes had seen in the Temple (Diod. XXXIV, 1), or the donkey (*cillum*) that Pompey found, we are told, in the same place (*Flor.*, I, 40) and which was, according to Tacitus (*Hist.*, V, 4), a votive image. Certain people affirmed that the Jews sacrificed human victims to this idol (Joseph., *C. Apion*, 7-8), or at least, cut a stranger into pieces once every seven years (Suidas, s.v., Δαμόκριτας). The Gnostics believed that the High Priest Zacharias had seen a man with the head of an ass appear in the sanctuary (Epiph., *Haeres.*, 26, 12). Since there is no effect without a cause, the cause of this persistent belief is, it seems to me, sufficiently explained by the association of two ideas. The first was Jews worshipping Saturn, while the second was the ass as an animal dedicated to Saturn or symbol of Saturn. I do not assume that the attribution of the ass to Saturn was the main reason for the identification of Saturn, the Chaldaean *Kaiwan* (above, p. 478, 1) or the Canaanite Baal, with the Egyptian Set-Typhon, an ass-headed god (cf. Wünsch, *Sethianische Verfluchungstafeln* [Leipzig, 1898], pp. 8 sqq.), or with Sabaoth, a god in the form of an ass or a hog, who occupied the *seventh* heaven (Epiph., *Haeres.*, 26, 10). I claim only that it is the astrological association of the ass and the planet Saturn (above, p. 318, 1), easily vulgarized, which took popular prejudice into account. This association was justified in the eyes of the astrologers, always looking for “natural” affinities, by the “natural” assonance ὄνος Κρόνος. This play on words thus had an historical importance. This is not surprising when one thinks of the place still played in the modern world by the celebrated phrase which is the *immobile saxum* of Christian Rome *Tu es Petrus, et super hanc petram aedificabo Ecclesiam meam* (Matth., XVI, 18) [“... thou art Peter, and upon this rock I will build my church,” Rheims-Douay Version. LJN]. [For larger collections of Gnostic texts than were available in Bouché-Leclercq’s day, see now Bentley Layton, *The Gnostic Scriptures A New Translation with Annotations and Introductions* (Garden City Doubleday & Co., 1987) and *The Nag Hammadi Library in English*, ed. James Robinson (San Francisco Harper & Row, 1981). Université Laval, in Quebec, Canada, is currently engaged in a critical edition of the Coptic texts of the Nag Hammadi papyri, the largest collection of Gnostic works, and comparable projects are also being done by the Berliner Arbeitskreis and the Claremont Graduate School. UNESCO has published a collection of photographs of the original papyri. LJN].

1149 Io. Lyd., *Mens.*, II, 3-11 (pp. 14-27 ed. Bonn.) This author assures us that the Pythagoreans consecrated the first day of the week to Apollo Ἑβδόμημιος (see above p. 459), who, as the One, otherwise, the unique star, the Sun, occupied the first day. I do not know if Lydus (or perhaps his abbreviator) really agreed himself. Who

would say that the Pythagoreans, like the Christians, had replaced the *dies Saturni* with the *dies Solis*? People who research origins missed an opportunity to claim the invention of the week for Greece. One need only cite the legend of the tripod thrown into the sea and brought back by the seven Sages, one after another. When they first brought it back, it was consecrated to Apollo. (Porphyr. ap Cyrill., *C. Iulian.*, I, 28 A.)

1150 Calculating the opportunities hour by hour continued among the Arab astrologers. Cf., among others, Albohazen Haly (VII, ch. 100), who declared the “hour of Mars” improper for anything.

1151 Paul. Alex., 13. See, in Ausonius, *De nominibus septem dierum* (pp. 550-552 Toll.), the amusing refutation of the aphorism *demi de corpore oportet | Ungues Mercurio, barbam Jove, Cypride crines*. Why, Ausonius says, does Mercury not love the crooked claws of thieves, Jupiter, their beards, Venus, their hair? Sooner Monday and Thursday for the scissors and the razor *Mavors imberbes et calvos, Luna, adamasti... Sol et Saturnus nil obstant unguibus*. As the week passed through the centuries, adapting itself to various religions, the same associations of ideas came up several times. A pagan gambler might hope for the “throw of Venus” sooner on Friday, the day of Venus but Venus implied no such thing to a good Christian. I do not know if the fear of Friday, still so common, began with fear of the demon of luxury and was strengthened by the death of Jesus, placed on Friday by tradition, or with horror at the Muslim Friday. We are told that the Gnostics fasted on the days of Mercury and Venus, Wednesday and Friday, to protect themselves from φιλαργυρία τι καὶ φιληδονία (Clem. Alex., *Strom.*, VII, p. 316). Given the opinion that the Christians had of the pagan gods, it would have been possible to fast all week long. One may see that St. Justin, speaking of the Passion, avoids saying “Friday” but τῇ πρὸ τῆς Κρονικῆς ἡμέρᾳ. Constantine declared the festal day to be *dies Solis* (Cod. Theod., II, 8, 1, ad ann. 321). The Church sought to eliminate the pagan names of the days of the week, but without success. Sunday in Romance languages is called the Lord's Day (*dies dominica*; “Dimanche” in French), but in Germanic languages is still called by the name of the Sun (*Sonntag* - Sunday).

1152 On the *dies Aegyptiaci*, see the calendars of the Late Empire (C.I.L., I, pp. 374-411). These days are distributed in different ways, depending on the calendars. There are twenty-five (three in January) in the *Fasti Philocaliani*, as many as *dies legitimi senatus*, a fact unexplained. The anonymous person who wrote the *Versus de diebus Aegyptiaci* (in *Poet. lat. min.*, V, pp. 354-356 Baehrens) gives a mnemonic but no explanation. He simplifies the system by reducing the total to twenty-four days and distributing them two to each month. Saumaise (pp. 815-819) did not doubt that these days had an astrological origin, but only because they were called “Egyptian.” St. Augustine (*Expos. Epist. ad Galatas*) relates that scruples prevented him from beginning anything, *aut aedificorum aut ejusmodi quorumlibet operum, diebus quos Aegyptiacos vocant* (cf. above Chapter 16).

1153 The author of the *Καρπος* (*Centiloq.*, 6) declares that τότε ὀφέλει ἡ ἐπιλογὴ τῶν ἡμερῶν καὶ τῶν ὥροσκόπων, ὅτε ἐστὶν ὁ καιρὸς εὐθετος ἀπὸ τοῦ γενεθλίου. Εἰ γὰρ ἐναντίος ἐστίν, οὐ λυσιτελήσει, εἰ τάχα καὶ πρὸς ἀγαθὴν ἀφορᾷ ἔκβασιν.

1154 At least in what concerns the Moon *nam et primus dies et tertius eadem simili ratione decernit, septimus etiam et undecimus per Lunam totius vitae substantiam demonstrat. – (Lunam) et primo natalis die tractantes genituram et tertio rursus die diligenter debemus inspicere*, etc. (Firmic., IV, 1, 7 and 10 Kroll). He recommends seeing if *per vacuum currens tertio natalis die a Marte vel Saturno pulsata*, etc. (IV, 8, 1 Kroll). He has said the rest further above: *in omnibus genituris cursum Lunae te servare conveniet, nec tantum eodem die quo natus homo prima vestigia lucis ingreditur, sed diligenti ratione perquirere etiam tertio die debemus. Nam et tertio die, sicuti primo, omnia simili ratione decernit* (III, 14, 10 Kroll). He points out how Albinus had suffered persecution from Mars, because *tertio die Luna in Leone constituta de diametro se plena lumine Martis radiis impegit; et hic enim dies, id est tertius, plurimum in modum in genituris operatur* (Firmic., II, 29, 16 Kroll). In the same way, Manetho says that what decides whether a baby will be reared, is the sign in which the Moon enters on the third day (ὃ ἐνὶ δὴ κείνῃ *τρίτῃ* ἐπιβίβεται ἡ ὥ. VI, 108-111). Whence comes this modification of the fundamental doctrine of genethliology, which considers only the precise moment of birth? Firmicus gives as reason that *eo die nato homini primum immulgentur alimenta nutricia* (III, 14, 10), which fits well with the sort of prediction drawn by Manilius, but not with the *totius vitae substantia* of Firmicus himself. It is probably a bit of debris from a general system, which established the “master of the geniture” (above, p. 406, 2) depending on the sign the Moon must occupy after the one it occupied at the time of birth. Now, the Moon takes two and one half days to pass through one sign and would be in the following sign on the third day. This system must itself have been a restriction and an adaptation of a method recommended by Ptolemy for meteorological predictions (τὴν δὲ σελήνην τηρντέον ἐν ταῖς πρότριων ἡμερῶν ἢ μετὰ τρεῖς ἡμέρας *παρόδοις* τῶν τε συνόδων καὶ πανσελήνων καὶ διχοτόμων (*Tetrab.*, II, 13, p. 102 Junct. Cf. II, 12, p. 101; Io. Lyd., *Ostent.*, 9). Since one is no longer occupied with intrauterine life, one left to one side the three days before the birth and recommended observing the three days after.

1155 S. Augustine, without clearly distinguishing the two methods, correctly sensed that they superimposed two varieties of fate. *Jam illud quis ferat, quod in eligendis diebus nova quaedam suis actibus fata moliuntur.* He knew that there was a contradiction and that this fate born from free choice contradicted the other, that of genethliology (*Civ. Dei*, V, 7).

1156 *Quae vocatur dodecaeteris ex annis vertentibus duodecim. Huic anno Chaldaico nomen est, quem genethliaci non ad solis lunaeque cursus sed ad observationes alias habent adcommodatum, quod in eo dicunt tempestates frugumque proventus ac sterilitates, item morbos salubritatesque circumire* (Censor., 18, 6-7). Censorinus, speaking of tropical years (*vertentes*) which are not regulated by the course of the Sun and of the “genethliacs” who predict the weather, has the air of speaking of things which he knows well. Letronne (op. cit., p. 498) imagines a period regulated by the revolution of Jupiter. This hypothesis is still-born. Jupiter is not a universal star-regulator, and, what is more, it does not work here with the planets. In astrology, all duodecimal constructions are regulated by the signs.

1157 Manil., III, 510-513. The explanation of the systems continues to v. 559.

1158 Above, p. 404. *Primus erit signi qui Sol effulserit annus* (Manil., III, 514).

1159 *Luna dabit menses, peragit quod menstrua cursum.* (Manil., III, 517).

1160 *Tutelaque suae primas horoscopus horas | Adserit atque dies, traditque sequentibus astris* (Manil., III, 518-519).

1161 This system, relatively simple, appears very neatly in the text of Manilius, when one reads it after having re-read, back to back, the commentaries of Scaliger (pp. 256-260) and Saumaise (pp. 244-248). While in complete disagreement, both insist on bringing the planets into the purely zodiacal system of Manilius. Their presuppositions take them into all kinds of different theories. These are the νεφαληγέρται. The table of the dodecatemoria drawn up by Scaliger (p. 256), with its discontinuous series – a negation of the very principle of the system – must be rejected. The continuous series is necessary and it is necessary that there be one series for the years, another for the months. There was a perfection to this method which threatened to disorganize the workings *Alii in diurna genitura a Sole (sumunt exordium), in nocturna a Luna, et habet rationem* (Firmic., II, 27, 4). This, it is true, appropriate for a mixture of zodiacal and planetary lordships, such as Firmicus loves. One rediscovers the duodecimal cycle in the farthest part of the Far East, Korea. See the *Guide pour rendre propice l'étoile qui garde chaque homme*, etc. (trad. Hong-Tyong-Ou and H. Chevalier, *Ann. Mus. Guimet*, XXVI, 2 [1897], pp. 79-123). [Astronomy and astrology in China and neighboring countries such as Korea is a large and complex topic. Joseph Needham, et al., *Science and Civilization in China*, 18 vols. (Cambridge University Press) is a pioneering reference work. Vol. 6 deals with astral sciences. Ho Peng Yoke, 2003, is a specialized work. Sun Xiaochun in Selin, 2000, pp. 423–454 is a useful short introduction, as is the article on pp. 90-94 in Clive Ruggles, ed., *Ancient Astronomy: An Encyclopedia of Cosmologies and Myth* (Santa Barbara, California : ABC Clío, 2005) .LJN].

1162 The perpetual time lord is the “genethliac sign.” It represents the part played in the system by genethliology. I do not know if Manilius recognized that he had already introduced elections in the birth chart conceived as the cycle of the ᾠθλα (above, p. 297). Of the twelfth compartment, he says *Hac in parte dies et momenta dabuntur* for money-making operations (Manil., III, 154).

1163 *Quod nunc illa nimis properant, nunc illa morantur* (III, 556). *Difficile est in idem tempus concurrere cuncta, | Unius ut signi pariter sit mensis et annus* (III, 548-549). The second system is that of Paul of Alexandria *Περὶ ἐνιαυτοῦ καὶ μηνὸς καὶ ἡμέρας* (Q1). Paul, however, took the professional point of view and taught the manner of calculating in which year, month, day and hour of his own individual cycle. This is not theory but practice. Moreover, he added, to the zodiacal system, the consideration of the master planets (κύριοι) of the signs, a perfection which achieved mixing up the question. The chronocratoria or lordships counting from the Ascendant are also indicated in Firmicus: *Annum autem facillimis rationibus invenimus; nam ab horoscopo semper sumit exordium, et primus annus erit in quo est horoscopus constitutus, secundus in secundo signo, tertius in tertio, et sic ceteri per ordinem* (II, 27, 3 Kroll). I leave to those commenting upon Manilius the need to explain a passage with which neither Scaliger nor Saumaise were able to cope: *Venit omnis ad astrum | Hora die bis, mense dies semel, unus in anno | Mensis, et exactis bis sex jam mensibus annus* (III, 545-547). One understands very well that the hour “rejoins its star” twice a day (twelve signs for twenty-four hours). The same is true for the month once a year and the year once in the dodecaeteris, the cycle of twelve years. However, what does it mean that “the day rejoins its star once a month?” Scaliger (pp. 261-262), hobbled by his planets, wanted the encounter to be on the same day of the week (day of birth, beginning with the hour of birth) with the same sign (the rising sign) which could not to take place at the end of twelve weeks. He concludes that Manilius was fooled. Saumaise (p. 248) believed that he meant the same day of the Moon, a very simple thing, and fumes at Scaliger. He forgot the “star” here means a sign of the

zodiac and that the Moon returns to the same sign of the zodiac in twenty-seven days, seven hours, forty-three minutes, and not in a month, that is, a twelfth of a solar year, as Manilius taught. There is an error here which we must blame on Manilius, or, in any case, explain without recourse to the week, which is not involved here.

1164 These are the time lords which the Arab authors and the Renaissance astrologers called the *fridariae* or *ferdariae planetarum*, a Persian or Arabic word, for which Saumaise volunteered to find a Greek origin *vox depravata ex Graeco περιοδάριον quae μικραν περιόδον significat* (p. 237). The meaning of the word is very well-defined by Haly or his translator *Est autem Fridaria seu χρονοκράτεια certus quidam annorum terminus et notus, in quo planeta gubernans vitam nati dat et infert et bonum vel malum pro sui natura* (VI, chapter iv).

1165 *De temporum domino* (Firm., II, 26 Kroll). – *De distributione temporum* (II, 27). – *De anni divisione* (II, 28). – *De annis climacteris* (IV, 20). – *Temporis divisio chronocratori debita* (VI, 33) Pruckner) and the series of *Decreta [Saturni, Jovis, etc.] cum temporum dominus fuerit* (VI, 34-40 Pr.).

1166 *In singulari libro quem de domino geniturae et chronocratore ad Marinum nostrum scripsimus* (IV, 20, 2 Kroll). He repeats, concerning the chronocratoria, his eternal refrain *omnia enim quae nobis proveniunt bona vel mala ista temporum ratione colligimus. Fines etiam vitae sic inveniuntur et omnis geniturae substantia et totum quod stellarum ordo decreverit* (II, 27, 2). Firmicus is, in astrology, the terror of anyone who wants to understand. Right in the beginning, he confused the *chronocrator* with the *dominus geniturae*, or rather it is impossible to know how and from what he distinguishes them, in the face of expressions such as these *quaerendus dominus geniturae, ut per hoc invento vitae spatio et a chronocratore diviso ...* (IV, 20, 2) – *an temporum et geniturae dominum benivolae stellae ... respiciant ...* (IV, 20, 4) – *si temporum etiam et dominum geniturae viderint* (IV, 20, 5). He evidently hovers between two different systems, and, for more security, follows both. Moreover, it was hard to recognize him in the reigning battle of words. The partisans of Ptolemy called the initial chronocrator αφέτης, αφετικός αστήρ (τῶν χρόνων, ἐτῶν, etc.) or οἰκοδεσπότης ἀφέσεως (cf. Salmas., pp. 266 sqq. 279) and since everyone constantly uses the insupportable all-purpose synonyms οἰκοδεσπότης and κύριος, we do not know where to put the χρονοκράτωρ καθολικός (= ὁ καθόλου οἰκοδεσπότης) and the chronocrators κυκλικοί, μερικοί, etc. (cf. Salmas., p. 287).

1167 Firmic., II, 27, 3 Kroll. See the texts cited above (pp. 489, 6; 490, 2).

1168 *Chronocratorem dixerunt Graeci temporum dominum, sed initium temporum in diurnis genituris Sol accipit et ceteris dividit, in nocturnis Luna; nec aliam rationem, admittas quia haec ab omnibus probatur* (Firmicus, II, 26, 1 Kroll; id., IV, 1, 8). Firmicus wanted to suppress the other systems.

1169 The Arabs added the Head (daytime horoscope) or the Tail (nocturnal) of the Dragon as an eighth planet, with a period (*ferdaria* or *fridaria*) of some sort, three years, for example, for the Head, and two years for the Tail, years perhaps representing as many months.

1170 See above, p. 410.

1171 *Sed quicumque decennium sortitus fuerit, licet sit totius temporis dominus, omnibus tamen stellis totam decennii substantiam dividit, a se incipiens et postea illis tradens qui sunt per ordinem positi quicumque in themate secundus fuerit inventus* (Firmic., II, 26, 4 Kroll). The order is the same as the order of the signs of the zodiac. These last were replaced by the places, so that there was no confusion with the zodiacal methods which here are rivals.

1172 The technical expressions are, for the planet which emits ὁ παραδιδούς - *tradens*; for the one which receives ὁ παραλαβών - *suscipiens* (or *sequens*). Cf. Manil., III, 519 (*traditque sequentibus astris*; id., 542, in speaking of the signs). One also says *deputare, deferre, dividere*, on the one hand; *accipere*, on the other.

1173 It was to this perpetual chronocrator that the astrologers reserved the title καθολικός καθ' ὅλος, given to the leader of the cycle. The diurnal or nocturnal quality of a chart has a predominant influence over all predictions ' (*quod quale sit et ubi proficiat in libris posterioribus explicamus*, Firm., IV, 1, 8 Kroll), because the planets always carry out their sympathetic acts from the side of their αἵρεσις. However, the astrologers occupied with *elections* do not push the analysis so far as to personify the genethliac αἵρεσις in one of the two luminaries considered to be perpetual chronocrator. This last (Sun for daytime horoscopes, Moon for nocturnal ones) remains implied and anonymous.

1174 *In libris apotelesmatum dicemus ... quid quaeque stella suscipiens tempus ab alia decernit* (Firm., II, 27, 2). He kept his promise (VI, 33-40 Pruckner).

1175 This is the system applied to the ἀπόρροιαι of the Moon for which one considers the planet which the Moon leaves as well as the one it approaches (above, p. 246). Simple transmission from planet to planet gives 49 combinations (7 X 7). Double transmission gives 49 X 7 = 343.

1176 *Respice itaque quatenus sit in genitura positus, et an diurna sit genitura, an vero nocturna, et an geniturae cardines teneat et quid ex signi natura vel ex loci potestate decernat ... et an sit primis an in secundis cardinalibus constitutus, an vero in pigris atque dejectis* (Firmic., VI, 34-35 Pr.). The same goes for the planets which “receive” their power from the general chronocrator: οἱ δὲ παραλαβόντες ἀπ’ αὐτοῦ συγκρινέσθωσαν οἰκείως ἢ ἄλλοτριῶς συσχηματιζόμενοι (Valens ap Salmas., p. 281), which views the sympathy or antipathy (here, of position) of the predecessor to the successor. The whole was done without prejudicing the softenings and aggravations coming from the collaboration of the planets which are not actually chronocrators.

1177 *Si enim in genitura ab ipso [Saturno] decreta fuerint, tunc exsequitur quicquid ante decreverat Omnes enim stellae, quicquid in genitura decreverint, sive illud sit prosperum, sive malum, cum temporum dominium nactae fuerint penitus exsequuntur* (Firm., loc. cit.).

1178 Jupiter, being general chronocrator, *gloriam ac laetitia pro geniturae mensura decernit, praesertim si ipse geniturae dominus fuerit* (Firm., *ibid.*). The meaning of the action depends greatly on the αἴρεσις of the planets and the genitures.

1179 See the systems extracted from Valens by Saumaise (pp. 219-242, 278-282), who confused everything rather than distinguish anything. He probably thought it was all compatible with the doctrines of Ptolemy. Notably, he confused the length of life allotted by the planets (above, p. 410) with the fiefdoms of the same planets (Salmas., p. 253). Add to this an obsession with the climacteric periods and one will understand Saumaise's state of mind and that of his readers. This whirlwind is dizzying. Moreover, Saumaise worked quickly. He sometimes cited (p. 224) Firmicus, lib. III, cap. xxx, rather than II, xxx, because he hated the text of Pruckner (p. 38), and because, in Pruckner, a typographical error transformed the heading to p. 39, in (liber) tertius rather than secundus. Several errors in the numerals added to the difficulty of following the calculations (v.g. from 166 subtract 52 X 3 *supererunt dies quatuor*, etc. [p. 115]; 120 [p. 116] rather than 220 [p. 105]; 102 for 182 in a text of Clement [p. 640]; 280 [p. 635] for 288 [p. 639]; 274 [p. 643] for 273 [p. 635].

1180 I must leave Saumaise here (p. 287), head to head with Valens. I have no desire to study how these sevenths, pushed as far as fractions of the hour, must be unequal, in such a way that the Sun, for example, in dividing its period of 10 years, 9 months, kept for itself 2 months, 23 days, 22 hours, 4 minutes, and gave to Mercury 2 months, 28 days, 8 hours, 4 minutes, and to the Moon, 3 months, 8 days, 14 hours, 4 minutes. The general lordship of the Sun being here 19 years, of which 1/12 is 19 months and 1/7 of 19 months must be 2 months (30 days long), 21 days and about 10 hours.

1181 Firmic., II, 28 Kroll = II, 31 Pruckner. I have taken the numbers of Pruckner, whose sum amounted to 365. Those of Sittl (II, 26) give 355 and those of Kroll, 361.

1182 This is what Valens said or wanted to say τὰς λεπτομερεῖς ἡμέρας καὶ σταλαγμαίας ὥρας ἀπὸ τῆς ἐκάστου ἀστέρος περιόδου τὸ δωδέκατον λαβόντες εὐρίσκομεν (ap. Salmas., p. 253). The days “chopped into bits” and the hours dispensed “drop by drop” are fractions of some sort.

1183 Valens (ap. Salmas., p. 225) multiplied the ἰδία περίοδος by 2 and added half of the said period to the product. Thus, for Saturn, (30 X 2) + 30/2 = 75. Only, Valens also adds another 1/3 (30/3) [sic, LJN] to arrive at 85. Why? Again, Valens and Firmicus do not agree on these figures, as shown in the comparative table drawn up by Saumaise (p. 228). Which one needs to be corrected? Saumaise adds *Quod alii quaerant. Mihi nunc non vacat* (p. 229). I will say no more voluntarily.

1184 *Περὶ χρόνων διαίρεσεως* (Tetrab., IV, 9, pp. 821-824 Junctinus, with commentary pp. 827-856). Cf. Anon., pp. 176-180. On the problematic authenticity of this extra chapter, see above, p. 456, 6.

1185 Firmic., III, 1, 11-15 Kroll. Cf. above, p. 187, 1.

1186 Firmicus translated χρονοκρατορίαν by *temporum principatum, potestatem, dominandi tempus* or *tempus* alone, using elsewhere the technical terms *tradere, accipere*. The author of the system repudiated the legend of the Golden Age. This is the mark of Posidonius the scientist.

1187 The system is, in addition, attached to the system – natural, as we know – of the οἶκοι and the complete ladder of the aspects between the house of the Moon (☾) and one of the houses of the associated planets. These are the diametric aspect with ♄, trine with ♊, square with ♈, sextile with ♎, [Venus missing in BL.KM]. aspects classed in order (also decreasing) of lengths of arc. Truly, *quid subtilius?* I do not want to begin a new and interminable career in pursuit of speculations on the origin and destiny of the universe, divided between the astrologers, the haruspices and the eastern theologians. Nor do I want to speculate on the cycles incorporated into some “great year.” The cycles ruled by the numbers seven and twelve bear the stamp of astrology, original or added after the fact. See a system, supposedly Etruscan, of twelve thousand years distributed among the twelve astral mansions (*Hist. de la Divin.*, IV, p. 98), a system which is found in the

Zoroastrian cosmogony of the *Oulama-i-Islam* (E. Blocket, in *Rev. Hist. Rel.*, XXXVII [1898], pp. 40 sqq.). Each millennium is ruled by a sign of the zodiac. Gayomart was born under Taurus, Adam and Eve under Cancer (which is also the rising sign of the universe in the *Thema Mundi*), etc. Earlier, one may have looked for some place not penetrated by the astrological monomania. In the thirteenth century, Joachim of Fiore taught that the world had in the past been under the law of the Father, was now under the Son, and would in the future be under the Holy Spirit, periods which are subdivided into seven subperiods. These successive revelations are in themselves as the light of the Stars, of the Sun and of the Moon. With or without outside influence, these ideas push themselves in the brains of mystics.

1188 Ptolemy says it. He alleges τὸ τῶν τροφῶν ἐπίπαν ὕδατῶδες (p. 822 J.).

1189 On the Solonian, Hippocratic, Platonic and Pythagorean hebdomads, unconscious rudiments of astrology, see above, pp. 287; 324-325; 477, 2; 509, 528. Compare also the innumerable repetitions scattered in the texts of Cicero and of his commentator, Macrobius, of Philo, of Censorinus, of Theon of Smyrna, of Servius, of Proclus and *tutti quanti*.

1190 He says that having examined the rules of genethliology this far, over all and in detail the λοιπὸν ἂν εἴη προσθῆναι κατὰ τὸν αὐτὸν τρόπον ὅσα καὶ περὶ τὰς τῶν χρόνων διαρέσεις ὀφείλει θεωρηθῆναι, φυσικῶς καὶ ὁκολούθως ταῖς ἐπὶ μέρους ἐκτεθεμέσαις πραγματείαις (p. 821 Junct.). The same method, always also “natural” (φυσικῶς)!

1191 On the periodic figures and their sum of 129, cf. above, pp. 410, 493.

1192 Ἡ γὰρ σύνοδος καὶ ἡ πανσέληνος ἐν τῇ αὐτῇ μοίρᾳ συμβήσεται διὰ τεσσάρων ἐνιαυτῶν (Anon., p. 166.). The four year period does not arrive with the mathematical precision which the scholiast claims, nor does the eight year period.

1193 Διὰ τὸ διφυῆς αὐτοῦ καὶ μεμεριμένον (Anon., *ibid.*). – *Videlicet dimidios annos minoris suae periodi; medietas enim ejus est* (Hermes, *De revol. nativ.*, p. 215 Wolf.).

1194 Logic requires this, however, and others have obeyed it: *Quidam vero dixerunt quod Saturnus septimam aetatem gubernet per annos triginta, quos si natus transierit, iterum gubernatur a Luna – deinde a Mercurio, et ordinatim, sicut praediximus, ab aliis gubernatur planetis* (Hermes, *De revol. nativ.*, p. 216 Wolf). The honest astrologer believed himself obliged to announce that this life which appeared to start over is no more than a transfer weakened by the previous one. *Non enim lactabitur, neque lacte nutrietur*. Did he know, perhaps, of the African goddess *Nutrix Saturni* (C.I.L., viii, 8245-8247)? The haruspices meditated on the same problem and resolved it differently. For them, the old person who passed twelve periods of seven years (eighty-four years) did not count any more. He lost his mind and the gods paid no more attention to him (Censorin., 14, 6; cf. above, p. 403, 2). Another solution is in the Korean guide (cf. above, p. 489, 6). A cycle of 54 years (6 X 9), beginning at the age of ten years, ends at sixty-four completed years and starts over at sixty-five years. “At sixty-five years, the influence of the stars is the same as at eleven years ... One may go on to one hundred years” (*Guide*, p. 91). There are distinct series for the two sexes!

1195 The ἀφότης is the planet which was found genuinely (σωματικῶς – κατὰ συμπαρουσίαν) or by aspect (συσχηματισθεῖς – κατὰ ἀκτῖνα) in the aphetic place. If there is none in the right place, one uses the first which is found, in the same conditions, in advance of the place (τῷ τὴν ἔγγιστα προήγησιν ἐπιλαβόντι). One even gives a second or collaborator in the proprietary planet of the ὅρια where the aphetic place was found: Δεύτερον δὲ ἀφήτην καὶ ὥσπερ συνοικοδεσποτοῦντα ληψόμεθα τῶν ὁρίων τὸν κύριον ἀφ’ ὧν ἄρχεται ὁ κύριος (Anon., p. 167).

1196 Ptolemy accumulated here τὰς λοιπὰς καὶ κατὰ μέρος τοῦ βίου διαγωγὰς.

1197 The classifications sometimes conform to, or nearly so, sometimes diverge from, extracts from Valens and others by Saumaise (pp. 120-126), who mixed and brewed every text to rediscover his “climacterics” and the blunders of Scaliger. The defect of Ptolemy's system is that Intelligence is not represented (it needs Mercury, as sixth ἀφότης, an objection which Cardanus, p. 500, anticipates so well that he cannot be refuted), and especially that the ψυχικά are devolved upon the Moon, often declared to be the author and governor of the physical life. Cf. below, p. 521, 1.

1198 τὸ γὰρ καθόλου κινεῖ τὸ μερικὸν καὶ μετατρέπτει (Anon., p. 166.). The astrologers were much preoccupied with avoiding ridiculous mistakes in speaking with clients. Ptolemy only speaks here of nationality. One should not tell an Italian that he will marry his sister, like an Egyptian, or his mother, like a Persian. Others go into more detail. See the chapter *De his quae oportet praescire astrologum* (Hermes, *Revol. nativ.*, I, 9, pp. 216-217) Wolf). The astrologer must know the age, the social rank, the qualities (notably the gender) and the fortune of a client. Without this, he might be fooled into applying a true prediction poorly, saying, for example,

that an individual had been struck or had found a treasure, when he had simply been cut or received a deposit (*Centiloq.*, 59). One must perfect the art of justifying blunders. Has one told an orphan that he will lose his parents? The prediction is *morientur aliqui senes in domo sua*; told a eunuch that he will have children? *sed facit aliquando filium adoptivum*; the same, to a celibate man, *idem habebit sine nuptiis, in aliquam concubinam*. A poor man without a penny who is told that he will “acquire an inheritance” must understand that he will acquire that of another. If the individual for whom one consults was dead (a trap set for the astrologer), the predictions apply to his survivors. A facetious glossator has written here *caeco visus eripi non potest!*

1199 Since Ptolemy uses the word χρονοκράτωρ as little as possible, replacing it with ἀφότης, for the general chronocrators, one sees return, for all the particular chronocrators, the banal and overly common title οἰκοδεσπότης or κύριος or ἐπικρατήτωρ ἐνιαύσιος – μηνιαίος, ἡμερήσιος). Finally, one may not even reserve the title of χρονοκράτωρ καθολικός for the ἀφότης alone. There is, in each of the five series, it seems, καθολικοὶ χρονοκράτορες τρεῖς· ὁ ὑπαντήτωρ καὶ ὁ ὀριοκράτωρ (Anon., p. 173). See above, *Salmas.*, pp. 298 sqq.).

1200 There is a major quarrel here among the astrologers. The text of Ptolemy has twenty-eight days (ἡμέρας κη'), the lunar sidereal month. Cardanus (p. 503) corrected this, which he called a gloss, and put in thirty days. On this assumption, however, Ptolemy, who further on counts 2 ½° (i.e., 2 ½ days) per sign, contradicted himself. Saumaise (p. 294) accuses Cardanus of not understanding the goal of the system. With months of 28 days, each solar year begins in a different lunar month, which increased the variety. Those who hold for the 28 day months correct the number as follows ἡμέρας β' ἥμισυ (2 ½) and put in 2 1/3 (*trientem*, Junctinus, p. 826; *tertiam*, Pruckner, p. 73; δύο καὶ τρεῖς *trientem*, Proclus, *Paraphr.*, p. 290 Allatus) per sign. The Egyptian origin of all the systems of chronocratoria pleads in favor of the 30 days. In Egypt, the memory of the lunar month of 28 days was preserved only in the 28 years in Osiris' life (Plut., *De Is. et Osir.*, 42) and the 28 “fingers” or inches of the Egyptian ell (H. Brugsch, *Thes. Inscr. Aegypt.*, I, p. 117).

1201 This complex idea is encountered, with a nuance to be determined, in the Gospels, where we often find the remark “this was done so that the prophecy might be fulfilled.” The Messiah consciously and voluntarily follows the predetermined stages of his existence.

1202 The anniversary is the moment when, the solar year being completed, the Sun returns to the position it occupied at the moment of birth. The sidereal or tropical year mattered little to astrologers, who used the usual calendar.

1203 See *Hermetis philosophi de Revolutionibus nativitatem* (ed. Vuolfius, Basil., 1559, pp. 217-279). I suppose that these are the renewals and controls of the horoscope which the annotator of Paul of Alexandria (R4v.) called ἀντιγενέσεις. Apart from this problematic reference from the late period, I find not a trace of the system in the Greek texts published at present.

1204 The author is evidently an Arab, accustomed to polygamy (*augebuntur filii et uxores ejus*, p. 328^a, ll. 19. – *contristabitur propter mulieres proprias*, p. 238^b, ll. 27). Wolf thought that the work, translated into Latin *incerto interprete* had itself been translated from Greek. This is doubtful. In any case, the Arab was responsible for the Persian terminology introduced into the work v.g., *dominus anni*, *qui Persice dicitur Salchodac* (p. 219^a), and the *Ferdariae* or “periodic chronocratoria” – different from the ἰδία περίοδοι of the Greeks – for the seven planets and the Head and Tail of the Dragon. One also finds there the calculations *secundum opiniones Indorum* (pp. 260-263). We say, to give an idea of this jumble, that the method of the “annual revolutions” consists essentially of comparing, from 18 points of view (*significationes*), the birth chart with the annual chart, in taking as “aphetic place” or annual Ascendant the place where the annual chronocrator was found. Of the 18 *significationes*, there were 5 for the body, 8 for the soul (is it an avatar of the number 13?) the rest, for the *motus et operationes* resulting from the collaboration of the soul with the body (p. 219). There is to be considered the *dominus anni*, the *divisor* or *dispositor*, the *particeps* or *divisor*; 7 relationships of character between the *divisor* and the *particeps*; six general modes of transmission, subdivided into twenty-four particular modes, of one divisor to another, in the current of the year. All the nuances of the infinite combinations between the houses, the ὅρια, the aspects, the dignities, etc. I suppose that the author himself understood this. However, I am not sure. Cf. The καίροι δ'ἐπὶ τὰ τρόπων imputed to Ptolemy (*Centiloq.*, 81), who would have some kind of relationship with the method described above.

1205 Hermes, *De revol. nativ.*, I, 4 (*Quantum antiqui utebantur Revolutionibus*), p. 213 Wolf. Cf. Hesiod (above, pp. 460, 1; 466, 1) and St. Augustine *unde etiam illud a nonnullis praedicatur, quod quidam sapiens horam elegit qua cum uxore concumberet, unde filium mirabilem gigneret* (Aug., *Civ. Dei*, V, 5.).

1206 Plato's wise men have become astrologers among the Neoplatonists, directing the fertilization of the human race according to the state of the sky δεῖ τοῖνυν τοὺς τῶν γάμων κυρίου τὸν καῖρον αὐτῶν θηρᾶν, κατὰ μὲν τὴν ἀπλανῆ, διὰ τε τῶν ὠροσκόπων καὶ τῶν τοῦτοις παρανατελλόντων ἀστέρων καὶ δεκανῶν. They did triage, ἐν τε ταῖς σπορίμοις ὥραις καὶ ταῖς ἀποκυητικαῖς, on those who are destined to command or to obey,

etc. (Proclus in *Anal. Sacr.*, V, 2, pp. 173-176 Pitra). This is the punishment of the enemies of human liberty, which comes completely naturally to lunatics. One wonders if Plato has been spared this punishment.

1207 Cf. above, p. 122, 1. The ἀναβιβάζων (*caput Draconis*) is noted in the chart of Proclus (Marin., Vit. Procl., 35), born in 410. I do not know if the practice is older.

1208 See the treatise *De Nativitatibus secundum Omar* (pp. 118-141 Pruckner), lib. III, p. 141. The author often cites Dorotheus of Sidon, who probably is responsible for the system. The evolution of the embryo by planetary stages seems to be given here as physiological evolution. The descending system is presupposed by the numbers which Proclus gave (in *Anal. Sacr.*, V, 2, p. 174 Pitra) for the periods during which the planets killed the embryo, in the cases where they are badly disposed, (below, p. 510, 4). However, only the five planets, the φῶτα, take part. According to this theory, there must have been two cycles of five planets for ten months. They must have been arranged in such a way that the babies were born in the seventh month in the lordship of Jupiter or in the ninth, in that of Venus (two favorable planets), rather than have Mars impede parturition in the eighth. The Moon and the Sun are the general chronocrators, whose interference embraces the whole period. The Sun activates the development when it is in αὔξησις from ♄ to ☿, it relents when in μείωσις, from ☿ to ♄. On the seven-fold steps and the Pythagorean rhythm of intrauterine life according to Hippocrates, Strato, Diocles, Varro, and others, see Censorin., *De die nat.*, 6-12; Macrobi., *Somn. Scip.*, I, 6, 62-67; Vindiciani, *Gynaecia*, pp. 446-455 V. Rose, etc. Faith in the virtue of mystical numbers takes the place of difficult observations.

1209 At least, the learned Ciruelo observes, (I, 3) if one does not live in a country under the patronage of Saturn. I do not know where this doctor learned that babies born at ten months *propter Martem sunt aliis robustiores*, and that the baby born in the eleventh month (*unus inter multa milia*), under the Sun, *miraculo erit, nedum in nativitate, sed etiam in vitae qualitate*.

1210 Anon., *Hermippus*, I, 14, pp. 21-22 Kroll.

1211 Καὶ πρῶτον μὲν ὁ τῶν ἀλλῶν πρῶτος καὶ τὸν τόπον ἐπέχων τοῦ σπέρματος ἄρχει δὲ οὗτος καὶ τοῦ πρώτου μηνὸς (*ibid.*).

1212 Καὶ ἐννάτη ἡ σελήνη, καθ' ἣν τελεσφορεῖται καὶ πρὸς φῶς ἐξείσιν. Ἐντεῦθεν αὕτη παραλαβοῦσα τὴν πρώτην ἐφορᾷ ἡλικίαν, ἄρχουσα καὶ τοῦ πρώτου ἐνιαυτοῦ (*ibid.*). The author avoids the term *χρονοκράτωρ* and uses vague expressions for life in the womb, οἰκείαν δύναμιν ἐπιβάλλει, τὴν ἑαυτῆς ἐνίησι δύναμιν. For conscious life, the ordinary term is ἐφορᾷ. The system of intrauterine Time Lords allowed the pious to make their prayers for a happy issue to the proper quarter. We have already spoken of the σπόριμον τρίγωνον of Proclus (above, p. 383, 1). Here, Proclus knew at what moment to approach which planet Κρατεῖ δὲ παρ' Αἰγυπτίους λόγος, ὅτι τῶν πέντε πλανητῶν ἕκαστος, ἐν ταῖς σποραῖς κακωθεὶς, φθείρει τὰ σπέρματα· καὶ ὁ μὲν Κρόνος, ἐν τῷ πρώτῳ μηνὶ τῆς σελλήσεως· ὁ δὲ Ζεὺς, ἐν ἐξήκοντα ἡμέραις· ὁ δὲ Ἄρης ἐν ἐνενήκοντα· ἡ δὲ Ἀφροδίτη, ἐν εἴκοσι καὶ ἐκατόν· ὁ δὲ Ἑρμῆς, ἐν παντήκοντα καὶ ἐκατόν (cf. above, p. 509, 2). However, as the causes are fatal, prayer is not enough to prevent the effects. Magic was necessary.

1213 The natural series of numbers from 7 to 13 evidently represented, for our author, the distances of the planets and the lengths of their periods (κατὰ λόγον τοῦ διαστήματος καὶ τῆς περιόδου). In this way he accommodates the tones of the Pythagorean lyre. Also, no doubt, he wanted the seventh tone to be the octave, and as the octave is the double of the tonic, he pretended that the thirteen years of Saturn are the double of the Moon's seven years (ὥς τῇ μὲν πρώτῃ ... ἔτη ἑπτὰ ἀπονενεμῆσθαι τῇ δὲ τελευταίᾳ δις εἶναι τοσαῦτα).

1214 An extract in the *Cod. Parisin.* 2419 Omont, fol. 132 v. (cf. Engelbrecht, p. 19).

1215 A date restored, in place of 22 March, which was a Sunday, by F. Cumont (op. cit., p. 9, 4). It is also necessary to rectify the hour, for the Sun marked the second hour. Finally, the *Angelicanus* added unacceptable positions for the Head ☊ and Tail ☉ of the Dragon.

1216 That is, that there was more than one title to the property, Aries as a whole to the οἶκος, and the 21°-26° of Aries as ὄρια (above, p. 244).

1217 That is, in the eleventh place (above, p. 284).

1218 Interference from a local opportunity, affecting "catholic" apotelesmatica (above, pp. 368-371).

1219 The fifth place (Jupiter with Ἀγαθὴ Τύχη) and the eleventh places (Venus with Ἀγαθὸς δαίμων) are the ἐπαναφοραί.

1220 In the proper sense of the word (δεσπότης τοῦ οἴκου), ♄ having ♄ and ♀ as οἶκοι.

1221 Ἐν πάθει τῶν ἐκλειπτικῶν ἐκπεπτωκότα it is, in effect, a neighbor of a node of the lunar orbit, the place of eclipses.

1222 I adapt the text here, which is altered by the repetition of useless words and the suppression of indispensable ones. The favorable witness of the Alexandrians was indicated at the head of the document. (ἄκλοπος ὢν καὶ φιλαλήθης καὶ μαρτυρηθείς ὑπὸ τῆς πόλεως). One knows that Mars is occidental and nocturnal by αἶρεσις, while the Ascendant is always diurnal and oriental. Palchos here takes his ease with his principles. Mars must have been very weak, since it was oriental in spite of itself and it was in Cancer, its ταπεινῶμα. No doubt, being feeble, it was all the more perfidious!

1223 In our document (ap. Fr. Cumont, *op. cit.* [see the Bibliography], pp. 8-9, and *Cod. Florent.*, pp. 107-108) the number of “the year of Diocletian” has disappeared. I add the year 484 from Krumbacher (*Gesch. d. Byz. lit.*, 2d ed., p. 922). Finally the title (Καταρχή Λεοντίου στεφθέντος ἐν Ἀντιοχείᾳ) is inexact, if Leontius was “crowned” at Tarsus before entering Antioch (Krumbacher, *ibid.*). I leave complete responsibility to my astrologer. The Δαιμων is the κληρος Δαίμονος, related to the κληρος Τύχης (above, p. 295). The ὕψωμα γεννήσεως is an entity new to me. The “birth” here must be, not that of the “chart” (γένεσις) – of which there is no question – but the birth of a new reign. As the house of honors is the tenth place, at the superior culmination (above, pp. 129, 1; 284; 371; 440, 2; 441, 1-2); cf. 443, 1), I believe willingly that the ὕψωμα is here the equivalent and the interpretation of μεσουράνημα.

1224 I admit that I am confused here and cannot see any other possible explanation if one maintains the position of the Moon (♄ 7°) given in the text. [“Good Fortune relative to Saturn and to Jupiter” appears to be in trine to Saturn and conjunction with Jupiter, a benefic.KM]. The author seems to try hard to enclose allusions to astrological places which are not realized in verbs with current meanings. The Moon cannot be in the fifth place (Ἀγαθὴ Τύχη) and in the twelfth place (Κακὸς Δαίμων) at the same time. Moreover, ἀγαθοτυχεῖν πρὸς Κρόνῳ καὶ Δίῳ cannot indicate the same position relative to the two planets, one of which is beside the Moon and the other in the fifth sign behind. The Sun, Jupiter, Mars and the Ascendant, being in Cancer, are also in a house of the Moon. However, if the Moon is there also, how can it be ταπεινουμένη καὶ κακοδαιμονοῦσα? Moreover, how could the astrologer not know that it is in its own house? The chart would be a little more intelligible if one placed the Moon in Scorpio, which is, by position, in the fifth place, in Ἀγαθὴ Τήχη. However, the citation of Dorotheus shows that the Moon must be κέντροισι ἐνὶ πρώτοις, that is, at the Ascendant or the Midheaven. Finally, the Sun at ♄ 26°, is not still rising, so that one found it not in the first hour of Wednesday, but in the twelfth hour of Thursday night, an hour dominated by Venus. All these texts are in a pitiful state.

1225 This day being a Wednesday, the day of Mercury, Mercury was πολεύων chronocrator of the day) and διέπων (chronocrator ὥρας ἀρχομένης α').

1226 It was 23° from the Sun, its maximum elongation: *nunquam ab eo XXIII partibus remotior, ut Cidenas et Sosigenes docent* (Plin., II, 39). [Maximum elongation of Mercury can be almost 28° KM.]

1227 And in (approximately) square aspect, since there are 86° between the two. [BL here actually assumes a modern definition of a square aspect, the Greek version was easier for an astrologer to spot.KM].

1228 This is ἀκτινοβολία (above, p. 248), expressed here by the phrase ἐπεμβόλει γὰρ αὐτῇ ὁ ἥλιος.

1229 The σύνοδος would be produced when the Moon had passed through the 19° which separated it from the Sun, the space which the Sun passed through at the same time.

1230 Καὶ οἱ μάλιστα τὴν τοιαύτην δύναμιν τῆς τέχνης προαγαγόντης Αἰγύπτιοι συνήψαν πανταχῇ τῷ δι' ἀστονομίας προγνωστικῶ τὴν ἱατρικὴν. Οὐ γὰρ ἂν ποτε ἀποτροπιασμούς τινας καὶ φυλακτήρια καὶ θεραπείας συνίσταντο, πρὸς τὰς ἐκ τοῦ περιέχοντος ἐπιούσας ἢ παρούσας περιστάσεις καθολικὰς καὶ μερικὰς, εἴ τις αὐτοῖς ἀκίνησις καὶ ἀμετατρηψίας τῶν ἐσομένων ὑπῆρξε δόξα. (*Tetrab.*, I, 3, p. 56 Junctinus.). Cf. Anon., p. 15. Ptolemy here appealed to authorities whom he did not much value when he did not need them. The medical reputation of the Egyptians already existed in the time of Homer (*Odyss.*, IV, 229-232). Thoth was credited with writing down, *ne varietur*, the precepts of the art; or perhaps it was Isis who taught them to Horus. It is a question of a sacred book: βιβλος ἱερά, καλουμένη ἄμβρής which helped one decide if the illness could be healed or not, and this ἐκ τῆς κατακλίσεως τοῦ ἀρρώστου (Horapoll., I, 38). This account does not tell us if this grimoire was astrological or not. It is necessary, in any case, to work to join astrology with ancient medicine, invoking the same divine revelations. The papyri of the Fayyum have added new fragments of medical treatises going back to the twelfth dynasty (cf. G. Maspero, *Journal des Savants*, April 1897, February and March, 1898).

1231 Jupiter assisted by Mercury hides infirmities and cures maladies: φαρμακείαις ἢ ἱατρῶν ἀγαθῶν ἐπικουρίαις. Ὁ δὲ τῆς ♀, δια προφάσεως θεῶν καὶ χρησμῶν, τὰ μὲν σίνη τρόπον τινὰ εὐμορφα καὶ ἐπιχαρῇ

κατασκευάσει, τὰ δὲ πάθη ταῖς ἀπὸ θεῶν ἰατρείαις εὐπαρηγόρητα (*Tetrab.*, III, 11, p. 266 Junctinus cf. above, p. 432). The scholiast warned that it was a question about incubation practiced in temples (cf. *Hist. de la Div.*, III, pp. 271-307).

1232 Diodorus (I, 82) assures us that Egyptian physicians, paid by the state, had their place in an official Codex (τοῖς ἐκ τῆς ἱερᾶς βίβλου νόμοις ... ἀκολουθήσαντες: cf. above, p. 517, 1), upon pain of death. When was Egypt centralized to this degree? This "Sacred Book" had perhaps been imagined by the people who invented Nechepso and Petosiris. The Hermeticists possessed one of their own fabrication (above, pp. 230, 3; 316, 4-5).

1233 We are dealing with a sculptured ceiling discovered in 1829 in the tomb of a Ramesses (IV according to Champollion and Ideler – IX according to Lepsius). There are twenty-four tables of the twenty-four hours of the day and night (one per half month), and, at the foot of the collection, a human figure whose members are lined up with seven vertical lines, each one indicating an advance of one hour in the rising time of the constellations. The members take the place of numbers of order to designate the lines, which succeeded one another in the following order VII, left elbow; VI, left ear; V, left eye; IV (the middle line), heart; III, right eye; II, right ear; I, right elbow. (See on the question R. Lepsius, *Einleit. zur Chronol. der Aegypter*, pp.109-110). [See now Neugebauer, and Parker, 1969. LJJN].XXXXXX

1234 *Pythagoras, aegyptiae scientiae gravis auctor, scribit singula nostri corporis membra caelestes sibi potestates vindicasse: unde fit ut aut contrariis quibus vincuntur, aut propriis quibus placantur, conemur.* This still passed for Pythagoras. However, Democritus was given responsibility for the most inept prescriptions *certanas [febres] Saturni filias affirmavit antiquitas: in quarum curatione Democritus inquit pollutione opus esse, ut sunt caedis culpaе et menstruae mulieris*, etc. The same for the *epilempsin, quam ieran noson appellavere* (Theodor. Priscian., pp. 250-251 Rose). Pliny never tired of the magical studies or botano-magical studies of Pythagoras (XXIV, 156-159; XXV, 13; XXX, 9) and Democritus (*ibid.*). He refused to believe that the books which Democritus supposedly found in the tomb of Dardanus were apocryphal (XXX, 9). He thought that he had proven himself to be a critical mind by saying that the physician Cleemporos had not wanted to publish a treatise of which he himself was the author under the name of Pythagoras (*quod fecisse Cleemporum, cum alia suo et nomine ederet, quis credat?* XXXIV, 159). A. Gellius (X, 12) protested against the credulity of Pliny. Columella (VII, 5) cites a certain Bolos of Mendes as author of the *ὑπομνήματα* attributed to Democritus. Nothing mattered: Democritus became a great teacher of magic. Pliny knew at least that medicine had been magic before it became astrology (XXX, 2, cf. above, 37, 1). The astrologers also claimed Hippocrates as one of their own. Because of the influence of the seasons on the body, he found astronomy very useful for medicine (οὐκ ἐλάχιστον μέρος συμβάλλεται ἀστρονομίῃ ἐς ἱητρικὴν ἀλλὰ πάνυ πλεῖστον. *De aer. aq. locis*, c. 2).

1235 Asclepias is the usual confidant of the Egyptian Hermes.

1236 E. Riess (*Nechepsonis et Petosiridis fragmenta magica* [Bonnae, 1890]) remarks that the citations of iatromathematical prescriptions are always given under the name of Nechepso. When Galen cites ὁ βασιλεὺς Νεχεψῶς ἔγραψεν ἐν τῇ τεσσαρεσκαίδεκάτῃ βίβλῳ (Galen, c. XII, p. 207 Kuhn), one wonders if the fourteenth book is the fourteenth of the whole work of Nechepso and Petosiris or the fourteenth of the section on iatromathematics. The question, resolved in the first sense by Riess, does not matter much to us, for the pens have worked in the shelter of these signatures. The falsifiers even tried to restore the whole to unity by making Petosiris the master and Nechepso the disciple (see below), or going back directly to Hermes Trismegistus. [See also *De Nechepsonis - Petosiridis Isagoge quaestiones selectae*, ed. C. Darmstadt (Leipzig B. G. Teubner, 1916), an alternative selection of the fragments. LJJN].

1237 N. Pruckner assures us that he published Firmicus and his treatises on *elections* or *initiatives* (καταρχαί) out of pity for the ill, who were being killed by physicians ignorant of astrology. He cites the case of a hernia operated upon by a surgeon *Tauro ascendente, cujus domini Venus et Luna eo tempore infortunati erant*. Five days later, the patient was dead, as he, Pruckner, had foreseen (*Praef.*). Cardanus (p. 380) tells how, having daily increasing amounts urine at the age of thirty-six, as a result of a saturnine climacteric, he would have died if he had listened to people ignorant of astrology who wanted to treat a problem caused by the cold of Saturn with cooling medicines.

1238 See above, pp. 91; 109; 288; 293, 1; 427. In general, ἡ σελήνη δηλοῖ τὰ τοῦ σώματος, and in particular, the ὑγρότητες τῶν σωμάτων growing until the Full Moon (Ps.-Ptol., *Centiloq.*, 61 and 56) (Αὕτη γὰρ, ὡς πολλάκις εἰρήκαμεν, τοῦ πάντος σώματός ἐστι κυρία (Anon., p. 140). *Gentiles credebant ex Sole habere spiritum, ex Luna corpus* (attributed to St. Luke, Theodor. Priscian. Adit. p. 463 V. Rose). All the same, the entry of the Sun indicating the seasons was something the astrologers disdained and left to ordinary medicine.

1239 See Maxim., VI, *Περὶ νόσων*, v. 141-275 (pp. 15-23 Ludw.), and the analysis (pp. 87-89). See the precept, under the most general form, both theory and practice: ἐξετάζειν οὖν δεῖ τὴν ἡμέραν καὶ τὴν ὥραν τῆς κατακλίσεως, καὶ συνορᾶν τὸν κόσμον, πῶς διακρίνεται; χωρὶς γὰρ τῆς κοσμικῆς συμπαθείας τοῖς ἀνθρώποις οὐδὲν ἐπιγίνεται (Herm. Trism. ap. Ideler, I, pp. 396 and 440).

1240 This is, so to speak, a principle of common sense in learned astrology. Nevertheless, Maximus seems to have no very clear ideas and he even denies the rule by saying that the sick person who took to his bed in the first day of Gemini would be sick a long time while the one who fell ill on the second day would recover in three days. No doubt it was a matter of degree, of sex, of full or empty degrees, in some system (cf. above, p. 235). Moreover, he placed chronic illnesses – at least those which did not pass at once – in Virgo or Libra, the βραδυανάφορα signs par excellence.

1241 It is necessary to say that Saturn and Mars are less spiteful when they are in their αἵρεσις, the first in the East, the other in the West: Τὰ τοῦ ἀνατολικοῦ ἀρρώστου οὐ βλάπτει τοσοῦτον ὁ Κρόνος ὥσπερ οὐδὲ ὁ Ἄρης τὸν δυτικόν (Ps.-Ptolem., *Centiloq.*, 92). What language! One may moreover interpret it as “for a sick Oriental,” etc.

1242 See above, p. 255.

1243 Maxim., VII, *Περὶ τομῆς καὶ χειρουργίας*, v. 276-319 (pp. 23-26 Ludw.) and analysis (pp. 89-90).

1244 Our versifier did not notice that Capricorn already counts as a *tropical* sign. They are bad by definition when one seeks a sure and stable result. In genethliology, the Moon in a tropical or equinoctial sign produces infirmities (Anon., p. 141). One can understand that it would not be good in elections.

1245 Μὴ ἄψη μορίου σιδήρῳ τῆς Σελήνης ἐπεχούσης τό ζῶδιον ὃ κυριεύει τοῦ μορίου ἐκείνου (Ps.-Ptolemy, *Centiloq.*, 20). The zodiacal melothesia was much used during the Middle Ages, no doubt following ancient traditions of which one finds traces. The general rule was that the Moon or Ascendant of the moment be in a sign sympathetic to the sick organ. There were pectoral signs (♊, ♋), intestinal signs, etc. The watery signs favored purges. The terrestrial signs stopped stomach flu, etc. All took into account the aspects, domiciles, and all the forms of collaboration.

1246 Δεῖ οὖν κενῶσαι τὴν γαστέρα ταχέως (p. 87 Ludw.).

1247 Ἀμβλύνεται ἡ τοῦ καθαρσίου ἐνέργεια, τῆς Σελήνης συνοδευσούσης τῷ Δίῳ (Ps.-Ptolem., *Centiloq.*, 19).

1248 A precept found in a Hermeticist of the late era who is cited several times by the Arabs (*Centum Aphorismi*, 74, p. 842 Junctinus). According to the *Centiloquium* (21), the purgative is voided when the Moon is in Scorpio or Pisces. Καὶ τοῦ κυρίου τοῦ ὠροσκόπου συνάπτοντος ἄστρῳ ὑπὲρ γῆν ὄντι. The Moon is above the horizon and attracts the humors to be evacuated.

1249 Ἰατρομαθητικά Ἡρμοῦ τοῦ Τρισημέστου πρὸς Ἄμμωνα Αἰγύπτιον and Ἡρμοῦ τοῦ Τρισημέστου περὶ κατακλίσεως νοσοῦντων *Περιγνωστικά* ἐκ τῆς μαθηματικῆς ἐπιστήμης πρὸς Ἄμμωνα Αἰγύπτιον. The two redactions are in Ideler, *Physici et medici graeci minores* (Berlin., 1841, t. I, pp. 387-396 and 430-440. Cf. the analogous texts, *Περὶ κατακλίσεως*, in the *Appendix* of the *Codices Florentini* (pp. 118-124).

1250 Note that the author distinguishes between waxing and waning on the one hand and, on the other, the additive movement (in the sense of the proper motion of the planets) and the subtractive one (in the sense of the daily motion of the sky). Remember that the Moon waxes and advances from the New Moon to the First Quarter, waxes and moves retrograde from the First Quarter to the Full Moon, wanes and moves retrograde from the Full Moon to the Last Quarter, and finally wanes and advances from Last Quarter to the New Moon.

1251 Herm. Trismeg., ap. Ideler, I, pp. 433-434.

1252 See above, p. 472 sqq., 474, 2.

1253 *Cod. Florent.*, pp. 124-125.

1254 The astrologers had to accommodate, in their fashion, a large amount of older superstitions about hygiene. It is not the pure astrological tradition which gives, for example, the advice not to put on new clothes when the Moon is in a “solid” sign – especially Leo – or at a New or Full Moon (*Centiloq.*, 22; *C. Aphorism.*, 82).

1255 Κλίμαξ, from κλίνω, because the profile of a staircase is oblique. Pliny translates it as *scansili annorum lege occidua quam climacteras apellant* (VII, 161).

1256 Saumaise was inspired here by the theories of Ptolemy (below, pp. 415-419 and 501-505) and especially by his scholiast, who distinguished the ἀναίρεσις or the climacteric of death, on the one hand, from,

on the other, the bad **passengers** (παροδικοί ἀνηδΐαι). He reserved the name of *κλιμακτῆρες* for the crises πλεῖστα κακά (Anon., Cf. Salmas., p. 483. Ptolemy (*Tetrab.*, III, 12, p. 344 Junctinus) did not say more than a word in passing about the climacterics or other annoying encounters in the path of life (the quadrant of the zodiac), τὰς τε ἀναιρετικὰς καὶ τὰς κλιμακτηρικὰς καὶ τὰς ἄλλως παροκιδᾶς – κλιμακτηρικὰς μεγάλους καὶ ἐπιφαλεῖς clearly showing that he knew the subject.

1257 A. Gellius said, in effect, following Varro: *pericula quoque vitae fortunarumque hominum, quae climacteras Chaldaei apellant, gravissimos quosque fieri septenarios* (Gell., III, 10, 9). Valens has series of climacterics looking at the body, the soul, enterprises, etc., with different points of departure (κληροί), according to the system of the διαίρεσις χρόνων (above, p. 502). I no longer believe that the climacterics looked at health, the way the critical periods of the physicians did. That is why I have avoided speaking of it in the other chapters.

1258 One begins to understand the power of mystical theories when one sees Hippocrates persuaded that only odd numbered days are active, and that the seventh day is more than the others: *unde apparet, ut in morbis dies septimi suspecti sunt et κρίσιμοι dicuntur, ita per omnem vitam septimum quemque annum periculosum et velut κρίσιμον esse et climactericum vocitari* (Censorin., *De die nat.*, 14, 9). Hippocrates found a way to distinguish seven seasons in the year: two beginning at the rising and setting of the Pleiades; two beginning with the morning and evening risings of Arcturus; one beginning with the rising of Sirius; two others beginning at the winter solstice and the spring equinox. One still encounters today in popular sayings and even in the books of medicine traces of the mystical tyranny of numbers, especially seven. More than one contemporary still believes, like Régnier, that “Nature changes| From seven years in seven years our temperature” *Sat.*, V, v. 109-110).

1259 Ἀνδροκλᾶς (Scaliger, p. 266; ἀνδροκλάστης, Vett. Valens, *ibid.*) or ἄνδροκλᾶς (Salmas., pp. 97-98) from ἄνδρα κλάω. *Itaque primum climactera annum quadragensimum et nonnum esse prodiderunt, ultimum autem octogensimum et unum; medium vero ex utroque permixtum anno tertio et sexigesimo, vel quem hebdomades novem vel septem enneades conficiunt.* It is an eclectic system, marvelously arranged. Since the septenary computation was applied to the body, the nine-fold one was used for the soul (*plerique duos istos numeros subtiliter dicreverunt, dicentes septenarium ad corpus, novenarium ad animam pertinere*: this is proved by the number of the Muses), the sixty-third year menaced both (Censorin., *De die nat.*, 14, 13-15). The seven-fold and nine-fold cycles earlier than 49 years are no longer climacterics. The dangerous period ran from 49 to 81 years, having as stages the products of 7 and of 9. Firmicus himself knew that this was a system independent of his genethialogy and even of the chronocratoria which he said had been explained in a special treatise: *Sane extra ceteros climacteras etiam septimi et noni per omne vitae tempus multiplicata ratione currentes naturali quadam et latenti ratione variis hominem periculorum discriminibus semper afficiunt, unde LXIII annus, quia utriusque numeri summam periter excipit, androclas appellatus est. – Hac ex causa ab Aegyptiis androclas appellatus est quia omnem viri substantiam (that is to say, body and soul?) frangat ac debilitet* (Firmic., IV, 20, 3 Kroll). Nevertheless, Firmicus wanted the astrologer to determine, at this fearful moment (no doubt at the beginning of the sixty-third year) three positions. One is that of the Moon (from the techniques of universal elections), another is the position of the chronocrator (genethiological elections) and the last is the position of the “master of the chart” (genethialogy or natal astrology). That is, the astrologer should use three methods which, for this mind incapable of analysis, were one: *inspicere debemus an tempore ipso quo periculi discrimen immineat, et Lunam et temporum et geniturae dominum benivolae stellae aequa radiatione respiciant.*

1260 Since the basic works of astrological literature are pseudepigraphal, I attach no importance to the citation which Valens makes to a κλιμακτῆρων ἀναγραφὴ by Critodemus (cf. Salmas., pp. 461-462). Critodemus was one of the oldest Greek astrologers. His signature was a good way to “age” new ideas and methods. Petosiris is the authority generally invoked. Valens analyzed his account in a special chapter *Περὶ κλιμακτῆρων* (Cod. Paris., 330A, fol. 16 recto), distinct from *Περὶ κλιμακτῆρος ἑβδομῆδικῆς καὶ ἑννεαδικῆς ἀγωγῆς* (fol. 11 verso-12r.). Petosiris accepted the arithmetical climacterics, notably the famous *androclas*, which he may even have invented.

1261 Saumaise repeats in vain: *alius igitur λόγος κλιμακτερικός, alius τῶν ἐτῶν τῆς ζωῆς* (p. 97) and cites at every turn the professor of climacterics, Vettius Valens. I believe that his distinction is no more than confusion and that it is well and truly drowned in the jumble of his authors. I assume that even the name κλιμακτῆρ comes from the method of Petosiris (above, pp. 412-413). It shuts the length of life into the western quadrant of the circle of geniture. This quadrant is considered a decline (ἀπόκλιμα), a descent from the Midheaven to the Descendant, a descent working by climacteric stopping places. This is what, it seems to me, the author who gave Pliny his strange definition of the climacterics wanted to say (Plin., VII, 161). One thus learns that the word κλιμακτῆρ is, as Saumaise wished, exclusively astrological. In the banal sense of “staircase” it covers all systems of stages.

1262 Whether in taking the shortest periods of a planet, or in adopting as divisor the sum of the ὅρια of that planet in the collaborating sign or signs and as dividing the total length of life, or dividing separately the contribution of the planet and that of sign, and intercalating between the two a particularly dangerous climacteric, etc. However, let us pass on. It is useless to bring owls to Athens.

1263 See the table of signs classed by climacteric series in Saumaise (p. 174). He leaves the need to untangle the calculations of Valens to those mathematicians who wish to do so. Likewise, to the mathematicians he gave the chore of checking to see if the divisions and multiplications of 365 (the number of days in the year) by 52 1/7 (the number of seven-fold cycles in the year) or by 40 (number of nine-fold cycles in the year), with addition of 5 1/4 days, really gave the indicated results. Saumaise himself endorsed it. He himself sometimes wrote: If I subtract 3 X 52 from 166, *supererunt dies quattuor* (p. 115). He also posed the same question with 220 days (p. 105) and 120 (p. 116). In Valens, the climacterics invade all the rest of astrology. Much as there are climacteric *signs*, there are also climacteric *places*, whether places fixed upon the circle of geniture (all the bad *places*, and not just the sixth, *locum vitiorum et valetudinum*, uncovered by Nechepso *ut remedia valetudinum inveniret*. Firmic., VIII, 3 Pruckner), whether the moving places or κληροί, considered as points of duodecimal divisions of the circle. (See in Saumaise, p. 203, the κληρικοὶ κλιμακτήρες of the κληρος Τύχης, the Lot of Fortune). One thus gains climacterics looking at the body (beginning with the κληρος Τύχης), the soul (of the κληρος Δαίμονος), etc. Naturally, one imagines planetary climacterics, scanning the effects of the planets on the different steps, with special dangers for each of them (see the table in Saumaise, p. 448 and 450), a system attributed to Critodemus (cf. pp. 447, 462). The cycles of the seven planets, from ἡ to ♄, are arranged according to the numbers 3, 9, 7, 19, 5, 8 and 13. Their sum is 63 (ἀνδροκλής). They ran on down until the limit of the length of life, a limit different for each planet.

1264 The ordinary formula in Hephaestion is: εἰσὶ δὲ οἱ τοῦ θεοῦ κλιμακτῆρες ἔτος (the numbers follow). I do not think it useful to draw up a table of climacterics predestined by the decans, according to Hephaestion. Nor is it useful to seek the reasons for these arcana, the residue of every sort of superstition, and more magical in origin than astrological. If I have counted right, the number of climacterics per decan varies from 6 to 13. The sun's number, 348, divided by 36, gives an average per decan of 9 2/3 per month of 29 days. This average is surpassed in the southern hemisphere (from ♊ to ♎), the minimum being in Leo (northern hemisphere).

1265 Plin., *Epist.*, II, 20.

1266 The physician Crinias of Marseilles apparently did this, with many benefits (cf. above, p. 464, 2 and below, 564) *arte geminata, ut cautior religiosiorque, ad siderum motus ex Ephemeride mathematica cibos dando horasque observando* (Pliny, XXIX, 9).

1267 It is here especially that Tertullian's words apply: *magi et astrologi ab oriente venerunt: scimus magiae et astrologiae inter se societatem* (Tert., *De Idol.*, 9). The astrologers evidently found iatromathematics ready made. They could only accommodate their system to it. Pliny, analyzing the causes of the incredible success of magic (*fraudentissima artium in toto terrarum orbe plurimisque saeculis valuit*), explains that it had caught the human mind in a triple chain, held by medicine, religion, and divination in the form of astrology. It began with medicine, then was added to the religions, and finally it was mixed with all *mathematicas artes, nullo non avido futura de sese sciendi atque ea e caelo verissime peti credente. Ita possessis hominum sensibus triplici vinculo in tantum fastigi adolevit ut hodieque etiam in magna parte gentium praevaleret et in Oriente regum regibus imperet* (Plin., XXX, 2). Pliny's phrase applies even today, and literally, to the astrology practiced in the Orient, just as religious and as magical as ever. Psellus, distinguishing γοητεία, or the art of evoking demons, from μαγεία, said that the latter includes, among other things, all of astronomy (astrology) (pp. 40-41, ed. Boissonade). We know that "magi" and "chaldaean" were synonymous, which led to the equation of "magicians" and "astrologers."

1268 Firmicus (VIII, 3 Pruckner, cf. above, p. 531, 1) affirms that the divine Nechepso had examined the sixth place in its correspondence with the zodiac, and the decans, as well. *Per ipsos decanos omnia vitia valetudinesque collegit ostendens quam valetudinem quis decanus efficeret*. However, he had done so with a willful obscurity which left much to be done by the good Firmicus. We are told, on the other hand, that king Nechepso had written a book "containing fourteen treatments [or a fourteenth book containing the treatments. Cf. above, p. 520, 1] of the whole body and every ill, by sign, by means of stones and plants" (Harpocr., in *Revue de Philologie*, II, pp. 71 and 75, ed. Ch. Graux).

1269 There was even a star corresponding to each organ, which made it sick: ἑκάστων οὖν τῶν ζωδίων ὑπάρχει τὸ ἴδιον μέρος καὶ ἀποτελεῖ περὶ αὐτὸ πάθος τι (Herm., *Anal. Sacr.*, V, 2, p. 285 Pitra). But how? Did the star molest the organ it was supposed to protect? Or did its own illnesses have repercussions on its client, via sympathy? Trismegistus stopped at this last part. He taught that an organ is infirm because, at the moment of conception or of birth, its celestial patron had been assailed by the ray of a malefic planet (τοῦ δεσπότητος)

αὐτοῦ ἀστέρος κακωθέντος, ap. Ideler, I, pp. 387 and 430. Natal astrology gives an explanation for the infirmities (σὶνῃ - *vitia*). For the diagnosis and treatment of the illnesses (νόσοι - *morbi* - *valetudines*), Trismegistus followed the system of elections. This is an ingenious combination of the two methods and, from the astrological point of view, a very reasonable one.

1270 There were both allopathic and homeopathic physicians in the ancient world, *secundum physicos qui morbos aut a contrariis aut a similibus asserunt posse depelli* (Serv., *Ecl.*, X, 65). Cf. below, p. 519, 1 and the footnote there.

1271 Firmicus thought that Nechepso had based his therapy upon a struggle against the causes of illnesses: *quia natura alia natura vincitur et quia deum frequenter alius deus vincit, ex contrariis naturis et ex contrariis potestatibus omnium aegritudinem medelas divinae rationis magisteriis invenit*. It is a pharmacopeia revealed by the superior gods, of the *secreta quae divini veteres cum maxima trepidatione dixerunt* (Firm., *loc. cit.*), collected παρὰ θείας φωνῆς (Harpocr., *loc. cit.*). It took an “earthquake” to make the gods fight with the gods. Harpocraton understood, to the contrary, that Nechepso had chosen – and chosen very well – the stones and plants according their effluvia (*ibid.*, pp. 75-76). Sympathy united the three elements: the star, the organ to be healed and the remedy.

1272 Herm. in *Anal. Sacr.*, V, 2, p. 284 Pitra.

1273 Τροχίσκον ἡλιακόν (p. 71 Graux). It is a question at every moment of pills or lozenges in the Hermetic pharmacopia (*Anal. Sacr.*, V, 2, pp. 279-282 Pitra). However, I do not know what this special remedy, admired by Nechepso, was (Τὸν ὑπ’αὐτοῦ θαυμαζόμενον).

1274 The fragment of Harpocraton ends here. The rest is borrowed from the Hermetics (*Anal. Sacr.*, V, 2, p. 284 Pitra) – σκόπει δε λαμβάβνειν ἐκάστην τούτων κατὰ μίαν τῶν τῆς ἐβδομάδος ἡμέρων ἣτις ἐστὶ τοῦ ἀστέρος ἐκείνου οὗ ἐστὶ καὶ ἡ βοτάνη: there follows a table of days and hours (the ὥρα α’ alone). Πρὸς δὲ τούτοις ἔστω μὲν σελήνη πανσέληνος, ἥ ὅτε διέρχεται τὸ ζῶδιον τοῦ πλανητοῦ τῆς ἡμέρας (*ibid.*). All the systems of universal chronocratories may be used, as well as the week. Another Hermeticist required that the Sun be in the decan, or at least in the sign to which the plant belongs. Moreover, the Moon must be in trine with the Sun and the ascendant, and the day and hour must have the oecodespot of the said sign for chronocrator (*ibid.*, p. 292). In return for this, all will go well!

1275 *Anal. Sacr.*, V, 2, pp. 284-290 Pitra. Cf. the description of even more complicated phylacteries with prayers and magical formulae, attributed to Harpocraton of Alexandria (Περὶ φυσικῶν δυνάμεων ζῶων τε φυτῶν τε καὶ λίθων. *ibid.*, pp. 292-299). The falsifiers were given their hearts' desire. Again, we have a series of four books, also Hermetic, called *Κυρανίδες*, or *Cyranides*, named after their supposed author, Cyranus, a king of Persia. Summarized by Harpocraton, it studies stones, plants, fish, birds in groups of twenty-four, the whole according to divine revelations (see above, p. 316, 2). We are no longer dealing with an astrological medicine, which administered the remedies at an opportune time, but with a magical pharmacopia. These phylacteries work by their own power, without any need to calculate a proper moment, whether for preparation or for application. [Cf. Armand Delatte, ed., *Textes latins et vieux français relatifs aux Cyranides*, (Lieges/Paris, 1942) and Dimitris Kaimakis, ed., *Die Kyraniden* (Meisenheim am Glan: Hain, 1976). LJN.].

1276 Medicinal magic is only naïve. However, no judgement is too severe for another kind of magic, with its maledictions, curses, bewitchings, and other things that torturers dream of – of ambushes and crimes *planned* if not carried out – which combined stupidity and cowardice in equal proportions.

1277 See the fragments reunited by E. Riess, *op. cit.*, pp. 382-387. A letter of Petosiris to Nechepso: Latin text (fr. 37), Greek (fr. 38-39). One even finds (fr. 40) an Ὅργανον ἀστρονομικὸν Πτεοσίρεως πρὸς Νεχεψῶ βασιλέα Ἀσσυρίων (sic).

1278 See my *Histoire de la Divination*, I, pp. 258-265; P. Tannery, *Notice sur des fragments d'onomastomancie arithmetique* (Not. et Extr. des mss., XXXI [1886], pp. 231-160), a study of a supposed letter of Pythagoras to Telauges and other fragments. The arithmeticians were parvenus at rooting the illness in a struggle between the patient and the first day of his illness. This last was also designated by the numeric value of the adjectives πρώτη, δευτέρα, τρίτη, etc. (Tannery, p. 258). Converting letters into numbers, at a time when the letters were also numerals, *gematria*, was a very simple operation. If the Jews used it more than anyone else in their Kabbalah, it is because they had a revealed book upon which to work. They believed they were doing what our modern mathematicians do, discovering new truths by using mechanical formulae. This was how they learned that Satan, whose name adds up to 359 (=365 - 6), is powerless for six days in the year. Cf. *Rev. Hist. Rel.*, XXXVIII [1898], p. 92. The Christians, especially the Gnostics, also excelled in these researches. Thus, when Abraham circumcised 318 members of his household (Gen. XVIII, 23), he announced Jesus on the cross. IH = 18 + T (the Cross) = 300 (*Barnab. Epist.*, 9). When Jesus Christ said: “I am the

Alpha (A) and the Omega (Ω)" (Rev. I, 18), it is as if He said: I am the Dove (περιστερά = 801 = A + Ω. *Philosophum.*, VI, 5, p. 322 Cruice). The astrologers could not leave this resource alone. [Kabbalah has a complicated history, mostly revealed since Bouché-Leclercq's day. Some basic works include Gershom G. Scholem, *Major Trends in Jewish Mysticism* (NY: Schocken Books, 1946; repr. from 3rd rev. ed. 1961, 1974) and Gershom G. Scholem, *Kabbalah* (Jerusalem: Keter, 1974, pb. 1977), a collection of his articles from the *Encyclopedia Judaica*, ed. Cecil Roth and Geoffrey Wigoder (Jerusalem: Keter, 1971). For Christian Kabbalah, see Joseph Leon Blau, *The Christian Interpretation of the Cabala in the Renaissance* (Port Washington, NY: Kennikat Pr., 1944, 1965) and Catherine Swietlicki, *Spanish Christian Cabala; The Works of Luis de Leon, Santa Teresa de Jesus and San Juan de la Cruz* (Columbia, MO: U. of MO, 1986). L.JN.].

1279 Berthelot, *Collection des anciens alchimistes grecs*, I, Introduction [Paris: 1888], p. 86, according to Papyrus V of Leiden. Cf. A. Dieterich, *Papyrus magica Musei Lugdunensis Batavi* (Jahrb. f. kl. phil. Suppl., XVI [1888], pp. 747-829, pp. 813-814).

1280 M. Berthelot gives, reproduced by photogravure, two circle of Petosiris (pp. 88 and 90). The first, drawn from ms. 2419 of the *Bibl. Nat.*, fol. 32, was composed by a circle divided into four quadrants by diameters in the forms of bands. The upper semicircle is attributed to life; the medium (μέση) in the middle, the larger to the left, the smaller to the right. Death is graduated in the same way in the lower semicircle. [Fig. 44] The numbers from one to twenty-nine are distributed in a mystical order in the quadrants, and in a column upon the vertical diameter. Two rectangular tables, one above the circle, the other below it, held the calculation of the days of the Moon. The other circle, drawn from the same ms. (fol. 156), is divided into eight sectors constituting a sort of compass rose, oriented, the Ascendant on top (ὑπέργειος), the Descendant on the bottom (ὑπόγειος). On the meridian line (μεσόμενος) the North is on the left, the South, on the right. The horizontal diameter is called ὁμοίωσις καὶ θανάτου. However, the sectors below this line are not called ὑπόγεια, but ὑπέργεια τοῦ Νότου and those below ὑπέργεια τοῦ βορρᾶ. This is a strange caprice, as useful as unintelligible. Perhaps it is a copyist's error. The numerals one through thirty are distributed, always in a mystical mood, on the limb of the sectors and on the vertical diameter. Opposite the numerals, on the outer edge of the circle, the prognoses are inscribed: in the Northeast quadrant (μεγάλη ζωή); οὗτοι ἀριθμοὶ ταχέως σώζουσιν. In the Southeast quadrant (μικρά ζωή): οὗτοι ἐν τῇ ἑπτὰ ἡμερῶν σώζουσιν. Likewise, in the lower semicircle, in the Northwest quadrant (μέγας θάνατος): οὗτοι ταχέως ἀναίρουσιν, and in the Southwest quadrant (μικρὸς θάνατος): οὗτοι ἐν τῇ ἑπτὰ ἡμερῶν ἀναίρουσιν. The two circles above (figs. 44 and 45) are not paleographical facsimiles. I believed I ought to correct, in figure 45, the arcanum mentioned above, in writing ὑπόγειος, ὑπόγεια (μέρη) below the horizon line.

1281 Cf. the fragments already cited by Riess (fr. 37-42).

1282 One succeeds just as well with the names Δαβίδ (David) and Γολιάθ (Goliath) (Riess, fr. 40). Homer or the Bible, as one chooses.

1283 It did not work here solely with a quantity, for one could not divide it by 29 or 30, but the numerical value of the *name* of the quantity. The table of these numerals, entitled *Dies lunae cum numeris suis*, is missing from the manuscript (Riess, p. 383).

1284 *Si numerus lunae fuerit in υπογείω et numerus hominis in υπέργειο*. Ὑπόγειον means the lower semicircle, what the circle of Petosiris calls ὑπέργειος τοῦ Νοτοῦ.

1285 In the Book of Enoch, the history of the world is subdivided into ten weeks. The number ten represents perhaps a reminiscence of the decad or the decan ending up in this detritus. On the role of the universal harmony, see above, p. 9. [This reference is to Ethiopic (or First) Enoch, newly published for the first time in Bouché-Leclercq's day. An English translation may be found in James H. Charlesworth, 1983, while Knibb, 1978, discusses its history and sources. Other, similar, works have also been published since 1898, such as Second or Slavonic Enoch and Third or Hebrew Enoch have also been published. English translations are also in Charlesworth, *op. cit.* L.JN.].

1286 Tannery, *op. cit.*, pp. 259-260, following ms. 3419, fol. 33. Note that the day on which the patient takes to his bed does not enter into the count, which begins on the following day.

1287 The compiler does not use the name *decans*, but the number thirty-six is enough to make them recognizable, even though thirty-six is also the Pythagorean τετρακτύς. Likewise, the bizarre date of 18 May disguises the principle, which must start with the beginning of the Egyptian year. In a similar Hermetic work (ms. 2327, fol. 293; M. Berthelot, *op. cit.*, p. 87), the point of departure is the rising of Sothis. These texts, moreover, do not offer any guarantee. From copyist to copyist, the alterations have been completely confused. Moreover, it is possible that there has been an adaptation, and that 18 May has been chosen as representing

the entry of the Sun into Gemini and the beginning of Summer according to Eudoxus (P. Tannery, p. 248; M. Berthelot, p. 91, 2).

1288 The calculation is given as “verified.” Ψῆφος δόκιμος περὶ ἀρρώστων καὶ ἄλλων τινῶν. (P. Tannery, *op. cit.*, pp.258-259, following ms. 2419, fol. 33; M. Berthelot, *op. cit.*, pp. 91-92). I suppose that this is the table announced as a table τοῦ πρεσβυτέρου ἡμῶν Θρασύλλου ἐτέροις τρόποις πεπραγματευμένην καὶ δεδοκιμασμένην ὑπὸ τῶν πρὸ ἡμῶν ἀνθρώπων καὶ τῶν κατ’ἐμὲ ἀκμασάντων (Tannery, p. 255). The same method was revealed to people by Hermes Trismegistus followed by “Petosiris and Pythagoras” (*Cod. Florent.*, p. 128). The year began on 25 Epiphi in the Alexandrian calendar (19 July), a date explained above, p. 367, 1). The remainder of the division is reported on the table where 7 represents life; 0, danger; 9, death. It is a glorification of the seven-fold cycle at the expense of the nine-fold one.

1289 It seems that the geomancers gave to a combination which reproduced the pattern of the stars of Virgo with Θ Pegasī the name κλήρος Τύχης or Lot of Fortune. Dante makes an allusion to this: *Quando i geomanti lor maggior Fortuna | Veggiono in oriente*, etc. (*Purgat.*, XIX, 4 sqq.). [“and the geomancer sees His Greater Fortune up the east ascend...”, tr. By H. F. Cary; on Arabian geomancy or the “science of the sand,” cf. Toufic Fahd, *La Divination Arabe* (Brill, Leiden, 1966) and E. Savage-Smith and M.B. Smith, *Islamic Geomancy and a Thirteenth-Century Divinatory Device* (Malibu, CA: Undena, 1980). According to John Michael Greer, of Seattle, Wash., USA, Therese Charmasson's *Recherches sur une Technique Divinatoire: Geomancie de l'Occident Medieval* (Geneva: Librairie Droz, 1980) is the best academic work of Arabian geomancy in the Western world. LJN.].

1290 Cic., *Divin.*, II, 42. Eudoxus could hardly have known more than the rudiments of sidereal divination (cf. above, p. 62,3). However, Anchialus, Cassander, and Scylax, contemporaries of Panaetius and “eminent astronomers of that era” (second century BCE) were dealing with Hellenized astrology.

1291 Hipparchus – *quo nemo magis adprobaverit cognationem cum homine siderum animasque nostras esse partem caeli* (Plin., *H. Nat.*, II, 95). Hipparchus, too, was later enrolled among the authors of astrological works (cf. above, pp. 162, 1; 331, 4).

1292 Panaetius, *qui unus e Stoicis astrologorum praedicta rejecit*. (Cic., *Divin.*, II, 42). He can hardly have had more confidence in other sorts of divination.

1293 *Quibus (astrologis) etiam Diogenes Stoicus concedit aliquid, ut praedicere possint dumtaxat qualis quisque natura et ad quam quisque maxime rem aptus futurus sit; cetera quae profiteantur negat ullo modo posse sciri* (Cic., *Divin.*, II, 43). What Diogenes kept from astrology was more than enough to regenerate the rest. One may notice that nearly all the Stoics were Asians, and more open, therefore, to the influence of eastern ideas. Zeno was from Citium, Chrysippus from Soli or Tarsus, Cleanthes from Assos, Antipater from Tarsus, Posidonius from Apamea, etc. However, it seems that, in compensation, Hellenic rationalism had been accepted without a mixture of faith by some Near Easterners. No astrologer claimed “Seleucus the Chaldaean,” astronomer, physician and geographer of the second century BCE, and his theory of the tides (Strabo, III, p. 174) betrayed no astrological connection. Cf. S. Ruge, *Der Chaldäer Seleukos*, Dresden, 1865. [See also F. Cumont, “La patrie de Séleucus de Séleucie.” *Syria* 8 (1927): pp. 83-84. LJN.].

1294 The witnesses concerning Posidonius, *fatalium siderum assertor* (Aug., *Civ. Dei*, V, 2), *magnus astrologus idemque philosophus* (*ibid.*, V, 5), – τῶν καθ’ἡμᾶς φιλοσόφων πολυμαθέστατος (Strab., XVI, p. 753), ὁ ἐπιστημονικώτατος τῶν Στωϊκῶν (Galen, *De Hippocr. et Plat.*, VIII, 1), are much dispersed. On Posidonius as source for the *De divinatione* of Cicero, see the dissertations of Schiche (Jenae, 1875) and of Hartfelder (Freib.: Br., 1878). On Posidonius as principle source for the *Tetrabiblos* of Ptolemy, see the profound study of Fr. Böll [see bibliography]. Posidonius also commented upon Plato's *Timaeus*, the book which philosophical fans of astrology kept beside their beds. [On Carneades and astrology, see Dom Emmanuel Amand de Mendieta, *Fatalisme et liberté dans l'antiquité grecque; Recherches sur la survivance de l'argumentation anti-fataliste de Carnéade chez les philosophes grecs et les theologiens Chrétiens des quatre premiers siècles* (Louvain: Diss., 1945). LJN.].

1295 *Non habeo denique nauci ... de circo astrologos* (Cic., *Divin.*, I, 58). Cf. the *superstitiosi vates impudentesque harioli* of Ennius (*ibid.*). We cited above (p. 467, 3) a passage of Attius, who was affected by astrological doctrines. See above (p. 189,1) for the strange story of the discovery of the apocryphal books of Numa. The legend of the twelve young people helping Numa to strangle Picus and Faunus (p. 363, 3), probably indicated tentative attempts to convert the deposits of religious tradition to the astrological faith. I vaguely suspect some astrological suggestion in the sudden fervor which the Romans showed for Saturn in 217 BCE, at the approach of Hannibal, at the instruction of the Sibylline Oracles (Liv., XXII, 1). It was to the chief of the planets the seven days of Saturnalia were dedicated, and to *Lua Saturni*, a sterile and sterilizing goddess (Serv., *Aen.*, 139) – whereas *Saturnus* is the god of sowing – not very fitting for a malefic star.

- 1296 Cat., *Re rust.*, I, 5, 4.
- 1297 Val. Max., *Epit.*, I, 3, 3.
- 1298 ... καὶ λέγεται διάγραμμα Χαλδαϊκὸν ἐν τοῖς κόλποις αὐτοῦ φονευθέντος εὐρεθῆναι (Plut., *Marius*, 42).
- 1299 Cf. A. Bouché-Leclercq, art. "Haruspices" (*Dict. des Antiq.*, of Daremberg and Saglio, II, 2 [1896], pp. 17-33. [Also Lawrence, 1979 and Koch-Westenholz, 2000]. L.JN.].
- 1300 We know nothing reliable about Manilius Antiochus, who was brought to Rome as a slave at the time of Sulla and whom Pliny called *conditorem astrologiae* (Pliny, XXXV, 199). He should not be confused with the poet of the *Astronomica*, who lived a century later.
- 1301 Plut., *Sull.*, 37. Plutarch cites the *Memoirs* of Sulla.
- 1302 Cic., *Divin.*, II, 47.
- 1303 In his *Memoirs*, Sulla said that "the Chaldaeans had told him that he would die after a glorious life, at the height of prosperity." (Plut., *Sull.*, 37). According to Domaszewski (below, p. 554, 2), the legions which used the bull for an ensign got this symbol from Julius Caesar, and that Caesar had given it to them because the zodiacal sign of Taurus is the astrological "house" of the planet Venus – the latter evidently assimilated to the mother goddess of Julius.
- 1304 *Deinde est hominum generi prosperus et salutaris ille fulgor, qui dicitur Jovis, tum rutilus horribilisque terris, quem Martium dicitis* (Cic., *Rep.*, VI, 17). These are correct definitions of the planetary influences.
- 1305 Cf. A. Swoboda, *Quaestiones Nigidianae* (Diss. phil. Vindob., II [1890], pp. 1-63), Suet., *Aug.*, 94, and above, pp. 162, 1; 185, 2; 363. In *Pharsalia*, Figulus gives an astrological consultation (I, 683 sqq.). [Cf. William H. Stahl, *Roman Science; Origins, Development and Influence to the Later Middle Ages* (Madison, WI: University of Wisconsin Press, 1962), for the importance of Aratus and Plato's *Timaeus* for science education. L.JN.].
- 1306 *Ipse animam patris esse voluit* (Serv., *Ecl.*, IX, 47) – *quod sidus Caesaris putatum est, Augusto persuadente* (Serv., *Aen.*, VIII, 681.) – *Julium sidus* (Hor., *Od.*, I, 12, 47). The text from the *Memoirs* of Augustus is in Pliny, II, 94.
- 1307 Consider the tragic role – or comic, if it suits one – played *in contione* by the haruspex Volcatius (Serv., *Ecl.*, IX, 57).
- 1308 Cf. Virg., *Ecl.*, IV, 4: *Ultima Cumaevi venit jam carminis aetas: | Magnus ab integro saeculorum nascitur ordo*.
- 1309 After citing the passage from the *Memoirs* of Augustus mentioned above, Pliny adds: *haec ille in publicum. Interiore gaudio sibi illum (cometen) natum seque in eo nasci interpretatus est* (Pliny, II, 94).
- 1310 Suet., *Aug.*, 94. The young Octavian and Agrippa had already consulted the "mathematician Theagenes" in Apollonia, before the death of Caesar (Suet., *I. c.*). On Capricorn as the horoscope of the "conception" of Augustus, see above, pp. 146, 1; 369, 1; 373, 2; 439, 3. Astrology gave support to the imperial regime by making it easier to accept the idea that the emperors were predestined – from all eternity – to be emperors. Cf. Fr. Cumont, "L'éternité des empereurs romains," (in *Rev. d'Hist. et Litt. rel.*, I [1896], pp. 435-452).
- 1311 Can anyone imagine consulting an astrologer about the lightning bolt which took the C from the name CAESAR on the pedestal of a statue of Augustus? Would they ever have made the same response as the haruspices? *Responsum est centum solos dies posthac victurum, quem numerum C littera notaret, futurumque ut inter deos referretur, quod AESAR, id est reliqua pars e Caesaris nomine, Etrusca lingua deus vocaretur* (Suet., *Aug.*, 97). Even the interpretation of comets, considered as "thunderbolts," belonged as much to the haruspices as to the astrologers. Cf. above, pp. 362-364.
- 1312 See above, pp. 368-369. In the legend of Hercules, the Tarutius or Carutius who married Acca Laurentia is called Tuscus, that is, Etruscan (Macr., *Sat.*, I, 10, 17).
- 1313 On the gods of the hepatic temple, see the article "Haruspices," p. 23. Polyaeus (IV, 20) calls Χαλδαῖος μάντις and Strabo (XVI, p. 739) classes, among the Chaldaean mathematici, the haruspex Sudines, who consulted the livers of victims for the benefit of Attalus. The concurrence worked to the detriment of haruspicy.
- 1314 We know how Virgil, rather clumsy in the role of a flatterer, offers to have Augustus replace Libra: *Qua locus Erigone inter Chelasque | sequentes Panditur* (Georg., I, 33 sqq.). Lucan voluntarily put Nero in the place

of the Sun. He recommends that Nero place himself in the center of the celestial vault in any case so that his weight does not disturb the equilibrium of the universe (Phars., I, 45-59). The formula *astra petes serus; serus, lentus, tardus sidera pete*, became part of literary courtesy and entered the list of well-turned phrases. Vitruvius could not write a treatise of architecture without mixing in astronomy and Aeneas calls Helenus *interpres divum* – *qui sidera sentis* a declaration of faith in astrology (cf. above, p. 36, 2).

1315 (Virg., *Aen.*, III, 360). In the *Thebaid* of Statius (III, 558), Amphiaraus and Melampus speak ill of their art, including *astrorumque vices numerataque semita lunae*. Propertius (V, 1, 109) disdains Calchas, who did not know astrology. Later, Nonnus has a scene with a “spirit” astrologer, Astraeos, who gives a standard consultation to Demeter, with figures, celestial sphere, etc. (Dionys., VI, 15-102). Cf. the lesson in astronomy which the Sun gives to his son Phaethon (id., XXXVIII, 222-226, and Ovid., *Met.*, II, 63 sqq.).

1316 Hor., *Od.*, II, 17, from the year 26 BCE.

1317 **trying** to foresee her death (*Od.*, I, 11, 2). It is the behavior, not of a skeptic, but rather of a believer who regretted being too curious on his own behalf. Horace mixed astrological ideas with popular ideas about spirits: *scit Genius, natale comes qui temperat* (*Epist.*, II, 2, 187). One would like to see an allusion to the astrological οἰκοί in the expression *aerías tentasse domos* of *Od.*, I, 28. This would be too meticulous about the words and to multiply useless conjectures.

1318 Propert., V, 1. The association of Capricorn with the western sea, noted by Horace and Propertius, was part of a system of chorography explained earlier in Chapter Eleven. Propertius thought his readers could understand some expressions which were truly enigmatic to the profane. *Obliquae signa iterata rotae* (v. 82) are the signs of the zodiac grouped six by six into *βλέποντα, ἀκούοντα, ὁμόζωνα, ἰσανάφορα*, etc. *Ab zonis quinque petenda fides* (v. 108) – if one replaces zonis with stellis – signifies that, to foresee death, it is necessary to consider the zones or climes, which modify.

1319 Ovid., *Ibis*, 207-216.

1320 An imitation of Virgil, who had described the prodigies which took place at the death of Caesar (*Georg.*, I, 463-488) and that they were good for some. The author of the *Consolatio ad Liviam* (*Poet. Min.*, ed. Baehrens, I, pp. 104-121) assured his audience that the death of Drusus, *Sidera quin etiam caelo fugisse feruntur, | Lucifer et solitas destituisse vias: | Lucifer in toto nulli comparuit orbe, | Et venit stella non praeunte die* (v. 405-408). Venus, the star of the Caesars, was in mourning. As a Stoic, Seneca believed in astrology: *Fata nos ducunt, et quantum cuique reste, prima nascentium hora disposuit* (*Sen.*, *De Provid.*, 5); *Ex horum [quinque siderum] levissimis motibus fortunae populorum dependent*, etc. (*Senec.*, *Consol. ad Marc.*, 18). His tragedies are infested with tirades in which the sky takes a part, in the form of descriptions, invocations and explanations of every sort. In *Thyestes* (844-866), the chorus, describing the world which is disordered and the Sun which goes backwards in the sky, lists the twelve signs of the zodiac from the Ram to the *ultima sidera Pisces*. *Hercules Oetaeus* (v. 61 sqq.) describes the catasterisms caused by Juno. *Hercules Furens* (v. 945 sqq.) believed he saw the sky grow dark and the celestial Lion shake his mane. Regaining his senses, he asks where he is, *sub ortu Solis an sub cardine glacialis Ursae* (v. 1139). Then he imagined that, because of him, *astra transversos agunt | Obliqua cursus* (v. 1332-1333). Lucan did not avoid this sort of pedantry. His Caesar was said to be constantly occupied with astronomy (Phars., X, 185) and the sage Achoreus regales him with a dissertation on the sources of the Nile which begins with more or less orthodox remarks on the specific properties of the planets. In revenge, the author of the *Suasoriae* (Seneca the Elder?) puts a sally against the astrologers and their observations on each of the seven planets in the mouth of Alexander. Again, this is a way of speaking about them and showed that one understood their art (*Senec.*, *Suasor.*, 4. Cf. above, p. 284, 4). Perseus, imitator of Horace, listing the astrological affinities which connect him with Cornutus, cites Libra, Gemini, Saturn, Jupiter and concludes: *Nescio quod est, certe est, quod me tibi temperat, astrum* (*Pers.*, *Sat.*, V, 45-51). Also Quintilian wanted his students to learn astronomy in order to understand the poets, *qui (ut alia omittam) totiens ortu occasusque signorum in declarandis temporibus utuntur* (*Quintil.*, *Inst.*, I, 4, 4). Astrology is no doubt envisioned in the preterite clause: *ut alia omittam*. Cf. the statistics of Fr. Harder (*Astrognostische Bemerkungen zu den röm. Dichtern.*, Progr., Berlin, 1893), who found, in the Latin poets from Plautus to Claudian (without counting the *Aratea*, the *Fasti* of Ovid, or Manilius), the Bear mentioned in 270 passages; the Dog, sixty-five times; Venus, 132 times, etc.

1321 The first four books of the poem were composed under Augustus; the fifth – which should not have been the last – (cf. V, 1 sqq.), under Tiberius.

1322 Tacitus, *Ann.*, VI, 21; Dio Cass., LVI, 11; LVII, 19. Cf. Suet., *Tiber.*, 14.

1323 Dio Cass., LVII, 19. One cannot know how far to trust a work of imagination which created and multiplied clichéd facts, in support of one leading idea, perhaps containing a bit of truth. According to Suetonius

(Galba, 4), it was Augustus who had said to the infant Galba, when he grabbed his chin: Καὶ σύ, τέκνον, τῆς ἀρχῆς ἡμῶν παρατρῶξῃ. *Sed et Tiberius, cum comperisset imperatorum eum, verum in senecta, "Vivat sane, ait, quando id ad nos nihil pertinet."* Dio Cassius assures us that, while on Rhodes, Tiberius, aided by Thrasyllus, knew his destiny perfectly well, and those of L. and C. Caesar as well – πάντα καὶ τὰ ἐαυτῷ καὶ ἐκείνοις πεπρωμένα ἀκριβῶς ἠπίστατο (Dio Cass., LVI, 11). As this idea developed, it drew logically on the vast reservoir of information which permitted Tiberius, once emperor, to suppress all those to whom ὑπερογκόν τι καὶ εὐέλπι πρὸς δυναστείαν ἐνῖδε (LVII, 19). Juvenal (*Sat.*, X, 94) magnified the number of astrologers in the black cabinet. He represents Tiberius walled up in Capri *cum grege Chaldaeo*. Tiberius was superstitious, but pretended to have a strong mind. Dio Cassius tells how, having dreamed of giving money to a certain person, he perceived that this was a dream sent by magic and put the person to death (LVII, 15). To believe in magic did not seem to be a weakness of mind to him. In thinking of the defiant attitude always adopted officially towards astrologers by Agrippa, Augustus and Tiberius, one hesitates to admit that the seven niches in Agrippa's Pantheon were occupied by the images of the seven planet gods and that the legions displayed astrological ensigns. Taurus distinguished the legions created by Caesar, Capricorn, those of Augustus. Scorpio, the sign of Tiberius' nativity, distinguished the praetorian cohorts, which he installed permanently on the Viminal. This is the seductive, if fragile, thesis of A. von Domaszewski, *Die Thierbilder der Signa* (*Arch.-Epigr. Mittheil.*, XV [1892], pp. 182-193, and XVII, 1 [1894], p. 34). One finds the bricks of the XXII *Primigenia* (formed under Claudius, by doubling the XII *Dejotariana*), marked sometimes with Capricorn, sometimes with Leo (R. Cagnat, *Rev. Epigr.*, 1897, n^o. 148).

1324 Tac., *Ann.*, IV, 58. The oracles could only be *vera obscuris tegere*, and it was a victory for the astrologers that they were put on the same footing. Tacitus hints most clearly elsewhere what he thought of faith in astrology: *ceterum plurimum mortalium non eximitur quin primo cujusque ortu ventura destinentur, sed quaedam secus quam dicta sint cadere, fallaciis ignara dicentium; ita corrumpi fidem artis, cujus clara documenta et antiqua aetas et nostra tulerit.* (Tac., *Ann.*, VI, 22).

1325 Suet., *Calig.*, 57.

1326 Suet., *Nero*, 40.

1327 Tac., *Ann.*, XIV, 9 – to which Agrippina replied: *occidat, inquit, dum imperet*. The astrologer consulted was a son of Thrasyllus the confidant of Tiberius (Tac., *Ann.*, VI, 22). Cf. Th.-H. Martin, "Rech. sur les quatre personnages appelés Thrasyllus" (*Annali di scienze matem. e fisiche di Tortolini*, VIII [1857], pp. 428 sqq.).

1328 Tac., *Ann.*, XII, 68. An application of the methods of καταρχαί or elections.

1329 Suet., *Nero*, 36. A combination of astrology and haruspicy.

1330 Tac., *Hist.*, I, 22.

1331 Tac., *ibid.*, Tacitus here shows a stronger aversion to astrologers than in *Annals*. He calls Ptolemy *sceleris instigator*. – Οἱ περὶ (᾽Οθωνα) ὄντες αἰ μάντις καὶ Χαλδαῖοι, εἰς τὰ μάλιστα δὲ Πτολεμαῖος ἰσχυριζόμενος τῷ προειπεῖν πολλάκις, ὥς οὐκ ἀποκτενεῖ Νέρων αὐτόν, ἀλλὰ τεθνήσκει πρότερος. See also Plut., *Galba*, 23. Suetonius (*Otho*, 4) did not know of Ptolemy and replaced him with Seleucus, the one who, according to Tacitus (*Hist.*, II, 78), became the staff astrologer of Vespasian – *qui mox rerum dominus Seleucum quemdam mathematicum rectorem et praescium palam habuerit*.

1332 Dio Cass., LXVI, 9. The βάρβιλλος of Dio must be the *Balbillus* of Suetonius. It would be a surprising coincidence if there were, in the same era, in the same place and in sight, two astrologers were with nearly identical names.

1333 Suet., *Titus*, 9.

1334 Dio Cass., LXVII, 15.

1335 Suet., *Vespas.*, 14; *Domit.*, 10.

1336 Dio Cass., *ibid.*

1337 Marcus Aurelius wrote to L. Verus on the subject of Avidius Cassius: *Si ei divinitus debetur imperium, non poterimus interficere etiamsi velimus. Scis enim proavi tui dictum: "Successorum suum nullus occidit"* (Vulcat. Gallic., *Avid. Cass.*, 2). This is the eternal argument against divination in general – either it is uncertain or useless – which astrology resisted. One cannot know anything of the future, save that it is cannot be escaped, and no one wants to know it, save to escape it.

1338 Suet., *Domitian*, 15. This edifying story, increasing the glory of Providence and of astrology, is also told by Dio Cassius (LXVII, 16) with slight variations. The astrologer is anonymous. It was to Domitian himself

that he predicted “where and how he would die.” He is burned alive and the rain put out the fire. Dio Cassius (loc. cit.) also tells us that a certain Larginius Proclus had “predicted publicly in Germany that Domitian would die on the day on which he genuinely died.” The emperor delayed his punishment in order to have the pleasure of proving to him that he was wrong, and he was saved by the death of Domitian. One cannot say that this was an astrologer. It must have been the *haruspex ex Germania missum, qui consultus de fulgure mutationem rerum praedixerat* (Suet., *Domit.*, 14).

1339 Suet., *Domit.*, 14 and 16.

1340 Spartian., *Helius*, 3. *Hadrian*, 16. This was the era in which the “paradoxographers” flourished, among them Phlegon of Tralles, freed by Hadrian and perhaps a pseudonym for Hadrian himself – *nam et Phlegontis libri Hadriani esse ducuntur* (Spart., *Hadr.*, 16). The leading mysticator would be Hadrian himself. We are told, moreover, that his great-uncle Aelius Hadrianus was a distinguished astrologer, who predicted the empire for him, a prediction confirmed later *a mathematico quodam* (Spartian., *Hadr.*, 2). The chroniclers have answers for everything. Hadrian “knew the chart” of Aelius Verus and knew that he would die young. Why did he adopt him? Answer: *ut suae satisfacerent voluptati et, ut quidam dicunt, juri jurando* (Spart., *Helius*, 3).

1341 Capitolin., *M. Anton. Phil.*, 19. There are still people who believe these odious follies. Since Faustina gave birth to twins, one sees astrologers fond enough of routine to predict the same destiny to two babies, one of whom died at age four, the other becoming the emperor Commodus (Lamprid., *Commod.*, 1). It is a new version of the well-known argument of twins.

1342 Some attribute the miracle of the Thundering Legion to Julianus “the Chaldaean” (Suidas, s.v. Ἀρνούρις). One also reads *per Chaldaeos et magos Antoninum Marcum id egisse, ut Marcomanni P. R. semper devoti essent atque amici, idque factum carminibus* (Lamprid., *Heliog.*, 9). Civilization declines and superstition grows before our eyes.

1343 was quaestor, *omnia ei dixit quae postea facta sunt* (Spart., *Sever.*, 2). This motif was often repeated. The empire was promised to the infant Pertinax by astrologers (Capitolin., *Pertin.*, 1). Didius Julianus followed the advice of the “magi” blindly (Spartian., *Did. Julian.*, 7). The “mathematicians” found that the young Diademenus, son of Macrinus, had the same horoscope as Antoninus Pius (Lamprid., *Anton. Diad.*, 5).

1344 Consider Pescennius Niger, who could only die *juxta aqua*, without falling, alive or dead, into the hands of a rival. *Quod quidam dicunt ipsum Severum de mathesi, qua callebat, dixisse.*

1345 Dio Cass., LXXVI, 11.

1346 Dio Cass., LXVIII, 2. According to the historians, Caracalla, in this way, claimed to tell who his friends were in his entourage and who were his enemies.

1347 *Matheseos peritus, et ita quidem ut ex ejus jussu mathematici publice proposuerint Romae ac sint professi ut docerunt* (Lamprid., *Alex. Sever.*, 27). The claim seems unlikely to be true, given the existing laws (see [below](#)), maintained and interpreted by the great jurisconsults of the era. It must be admitted that, among other chimerical ideas, Al. Severus may have had that of an official astrology, supervised and harmless. He was interested in astronomy. However, there was no astronomy separate from divination, and there were also official diviners already, the *haruspices* – *rethoribus grammaticis medicis haruspibus mathematicis mechanicis architectis salaria instituit et auditoria decrevit et discipulos cum annonis pauperum filios, modo ingenuos, dari jussit* (Lamprid., *Al. Sever.*, 44). Cf. in an inscription from Milan, a certain M. Valerius, *sacerdos, studiosus astrologiae* (C.I.L., V, 5893).

1348 Lamprid., *Al. Sever.*, 62.

1349 Capitolin., *Gordiani tres*, 20. Note the “old books,” a fundamental of the faith, and also for a rational faith in any observational science.

1350 Ἀγρίππας – καὶ τοὺς ἀστρολόγους, καὶ τοὺς γόητας ἐκ τῆς πόλεως ἐχήλασεν (Dio Cass., XLIX, 43, ad ann. 33 a. Chr.). Already astrologers and magicians were the same to the police.

1351 Τοῖς μάντεσιν ἀπηγορεύθη μήτε καταμόνας τινί, μήτε περὶ θάνατον, μηδ’ ἄν ἄλλοι συμπαρῶσιν οἱ, χρᾶν (Dio Cass., LVI, 25). Dio adds that Augustus was not himself afraid since he had published his own horoscope. This is a naive idea. Augustus worried about legacy hunters and impatient sons: *Filius ante diem patrios inquirat in annos* (Ovid., *Met.*, I, 148) – *motus | Astrologorum ignoro; funus promittere patris | Nec volo, nec possum* (Juven., *Sat.*, III, 42-44). *Consulto icterica lento de funere matris* (id. VI, 565 – *Nota mathematicis genesis tua: sed grave tardas | Exspectare colus* (id. XIV, 248).

1352 Tac. *Ann.*, II, 27-32. According to Ulpian (*in Mos. et Rom. leg. collat.*, XV, 2, 1), the Senatus Consultum of 17 C included the phrase *ut mathematicis, Chaldaeis, ariolis et ceteris qui simile inceptum fecerint, aqua et*

igni interdicatur, omniaque bona eorum publicentur. Tiberius enforced it with a certain discretion (Suet., *Tiber.*, 36).

1353 Tac., *Ann.*, III, 22.

1354 Tac., *Ann.*, XII, 22 ad ann., 49 CE.

1355 Tac., *Ann.*, XII, 52 (ad ann., 52 CE). Seneca (*De mort. Claud.*, 3, assures us that the astrologers predicted the exact moment of Claudius' death: *illus, ex quo principus est, omnibus annis, omnibus mensibus efferunt*. They avenged themselves, especially, when they had the chance to ingratiate themselves with Agrippina. Seneca, who was also avenging himself, added: *Et tamen non est mirum si errant: horam ejus nemo novit. Nemo enim illum unquam natum putavit*. The astrologers were replaced at court by their rivals, and not just the haruspices, either. It was a "metoscopist," a fortune-teller specializing in facial features, brought in by Narcissus to examine Britannicus, who affirmed *illum quidem nullo modo, ceterum Titum, qui tunc prope astabat, utique imperaturum* (Suet., *Tit.*, 2).

1356 Tac., *Ann.*, XVI, 14, ad ann., 66 CE.

1357 Suet., Vitell., 14. Tacitus (*Hist.*, II, 62) simply said: *pulsi Italia mathematici*. One may see here legend being grafted onto history. Dio Cassius (LXV, 1) no longer speaks of the Calends of October – Vitellius died on 24 December – and he assures us that the astrologers had predicted the exact day of his death: ἀντιπαρήγγειλαν ἀπαλλαγῆναι ἐκ τοῦ βίου ἐντὸς τῆς ἡμέρας ἐν ᾗ ἐτελεύτησε.

1358 Dio Cass., LXVI, 9.

1359 Οὗτος καὶ τοὺς φιλοσόφους καὶ μαθηματικοὺς ἐφυγάδευσεν ἀπὸ Ῥώμης (Suidas, s.v. Δομετιανός).

1360 Juven., VI, 553-581. St. Augustine had forgotten his Juvenal when he wrote: *quis enim consulat quando sedeat, quando deambulet, quando vel quid prandeat?* (*Civ. Dei*, V, 3). The Arabs excelled at this sort of consultation. Albohazen Haly omitted none of the minutia of private life.

1361 Anthol. Palat., XI, 164. Cf. 159, 160, 161. Lucillus wanted the astrologers to defend themselves, not against the animals of the zodiac, but against wild animals in the Circus: καὶ τί ποιεῖ ταῦρος, καὶ τι λέων δύναται (*ibid.*, 160). See the astrologer Diophanes in Apuleius (*Metam.*, II, 12), who caused a furor in Corinth (*miris totam civitatem responsis turbulentat, et arcana fatorum stipibus emerendis indicit in vulgus*). In a moment of distraction, he admitted that he had almost died in a shipwreck which he had failed to predict – after which a rich client took back the one hundred drachmas which he had just handed over in payment for a consultation, to the laughter of the onlookers.

1362 See the bibliography. Nechepso is a name in the lists of the Egyptian historian Manetho (twenty-sixth dynasty) and Petosiris was a very common name, found in Aristophanes (ap. Athen., III, p. 114 C) and found again in the papyri, born by a number of people (*Pap. of the Brit. Mus.*, I, pp. 46, 154). E. Riess is persuaded that the book appeared about 80 BCE because Nechepso and Petosiris were known to Nigidius Figulus but not known to Posidonius. Fr. Böll, op. cit., disagrees. Pliny is the first author who cites Petosiris, earlier than Manilius, who is the first to invoke the authority of the kings of the nations: *Quas secut Euphrates, in quas et Nilus inundat* (Manil., I, 44). There were no doubts anywhere – save in Cicero, *Divin.*, I, 1, in a general way – about these "Egyptians" who thus had a very late victory over the "Chaldaeans." The Alexandrian coins struck with astrological signs (dating to the reign of Antoninus Pius (cf. above, p. 191, 2), at the beginning of a new Sothic period), and especially the astrological papyri, testify to the popularity of astrology in Antonine Egypt.

1363 Pliny, XXIX, 9. Yet Ptolemy presented astrology as a disinterested science, and took pains to say that it did not lead to fame or fortune: εἰ δὲ μὴ πρὸς πλοῦτον ἢ δόξαν ἢ τὰ τοιαῦτα συνεργεῖ, προξωρήσει περὶ πάσης φιλοσοφίας τὸ αὐτὸ τοῦτο φάσκειν (*Tetrab.*, I, 3). It is necessary to distinguish, in fact, in every science, those practitioners who cultivate it and those who exploit it. Cf. Firmic., II, 30, 2 Kroll (below, p. 568, 1).

1364 Plin., II, 22.

1365 Plin., II, 28. It is an adaptation, already noticed by Horace (see above, p. 551, 4), of the Roman belief in the individual's guardian spirit or genius, a relic of animism and a prototype of the guardian angel of Christian demonology.

1366 The Τετράβιβλος [σύνταξις], the Bible of the astrologers (dedicated, like the Μεγάλη σύνταξις or *Almagest*, to brother Syrus, πρὸς Σῦρον ἀδελφόν) is probably the last work of the illustrious astronomer. It is the capitulation of science. [The classic account of Ptolemy's life and work is Böll, *Studien über Claudius Ptolemäus*, 1894. For a more contemporary evaluation, see Taub, 1993. L.J.N.].

1367 *Praeterea interdicta est mathematicorum callida impostura et opinatae artis persuasio* (Ulpian., in *Mos. et Rom. leg. coll.*, XV, 2, 1).

1368 *Sed fuit quaesitum, utrum scientia huiusmodi hominum puniatur, an exercitio et professio. Et quidem apud veteres dicebatur, professionem eorum, non notitiam, esse prohibitam. Postea variatum. – Saepissime denique interdictum est fere ab omnibus principibus, ne quis omnino huiusmodi ineptiis se immisceret*, etc. (*ibid.*, XV, 2, 2-3). Cf. Paul., Sent., V, 21, *De vaticinatoribus et mathematicis*. Paul taught that *non tantum divinatione quis, sed ipsa scientia ejusque libris melius fecerit abstinere*. The imperial legists slid down a slope which led them to allow misdemeanors of opinion.

1369 Spartian., Sever., 4.

1370 Cod. Justin., I, 18, 2, under the title *De maleficis et ceteris similibus*, which is also found in the Theodosian Code, IX, 16. The expression *Chaldaei ac magi* became ἑν διὰ δυοῖν. John of Antioch said that Diocletian burned the books of chemistry in Egypt, τὰ περὶ χημείας ἀργύρον καὶ χρύσου τοῖς παλαίοις αὐτῶν γεγραμμένα βιβλία (*Fr. Hist. Graec.*, IV, p. 601). Dio Cassius (LXXV, 13) assures us that S. Severus collected all βιβλία ἀπόρρητον τι ἔχοντα which he could find in Egypt and locked them in the tomb of Alexander.⁷

1371 *Mathematicorum – Chaldaei ac magi* (Cod. Theod., IX, 16, 4, ad ann., 357). Edicts aimed solely at astrologers (*ibid.*, IX, 16, 8, ad ann., 365?; 12, ad ann., 409).

1372 Already Manilius, in an enormous fit of adulation, found that the emperor was more brilliant than the stars and would become more powerful than them after death: *uno vincuntur in astro | Augusto, sidus nostro quod contigit orbi, | Caesar nunc terris, post caelo maximus auctor* (Manil., I, 384-386 Jacob).

1373 Firmic., II, 30, 3-6 Kroll. Firmicus recommends gently remonstrating with indiscreet clients, but not denouncing them – *ne mortis ipsius causa exstitisse videaris, quod alienum est a proposito sacerdotis* (II, 30, 8). For him, the astrologer is a priest *antistes Solis ac Lunae ceterorum deorum, per quos terrena omnia gubernantur*, and he ought to be an example of all the virtues, beginning with a disdain for *ignobilis pecuniae* (II, 30, 2).

1374 Firmic., I, 10, 13-14 Kroll.

1375 *Opinantur quidam fatum vinci principis potestate vel fieri* (Amm. Marc., XXVIII, 4, 24).

1376 The questions given above (p. 440, 2) show that the jurists were not fighting chimeras.

1377 See the oath formulas in Vettius Valens of Antioch (ap. Fabric.-Harles, *Bibl. Gr.*, IV, p. 147). Firmicus himself recommends that his book not be read by just anyone. He wanted Mavortius to have them swear an oath, like the disciples of Orpheus, Plato, and Porphyry the Pythagorean (VII, *Praef.*).

1378 Because of the risk, astrologers could, no doubt, charge higher fees for instruction. Vettius Valens says that having paid heavily for his knowledge, “he was entombed with greedy masters” (διδασκάλοις φιλαργύροις περιπεσόντες).XXXX

1379 Liban., *Orat.*, XIV, *Pro Aristophane*. Aristophanes was accused of having helped Parnasius μάντιν τῶν περὶ τῶν ἄστων ἔχόντων τὴν τέχνην, ἐροῦντά τι τούτων ὑπὲρ ὧν οὐ νόμος μανθάνειν.

1380 An oracle in Greek hexameters (Amm. Marc., XXI, 2, 2), in the style of the oracles of Apollo. Even the place of death (Ἀσίδος αἰῆς) is given.

1381 Amm. Marc., XXIX, 1, 5-2, 13. The historian calls Heliodorus *fatorum per genituras interpretem*. He was not the Heliodorus who wrote a commentary on the work of Paul of Alexandria (Fabric.-Harles, *Bibl. Gr.*, IV, pp. 140 sqq.). [See now *Heliodori, ut dicitur, in Paulum Alexandrinum commentarium*, ed. A. Boer, *Interpretationes astronomicas addiderunt* O. Neugebauer and D. Pingree (Leipzig: Teubner, 1962) LJJN.].

1382 See below, p. 514.

1383 It is good to remember that Firmicus Maternus dedicated his book to a high official of the empire; that, later, Ausonius spoke very freely about the astrology which allowed his grandfather to predict his future greatness (Auson., *Parentalia*, IV, 17 sqq.); that St. Augustine had known personally the proconsul Vindicianus (*Conf.*, VII, 6), an astrologer disillusioned but never persecuted. The Romans clung to their repressive laws, whether against astrologers, magicians or Christians, but applied them only when it seemed appropriate.

1384 Amm. Marc., XXVIII, 4, 24. He himself believed in astrology from authentic sources. He calls Mesopotamian *regio altrix philosophiae veteris, ut memorant ipsi [Chaldaei], apud quos veridica vaticinandi fides eluxit* (XXIII, 6, 25), and he said of the Alexandrians of his day: *scientiam callent quae fatorum vias ostendit* (XXII, 16, 17). Re-read the passage in Juvenal already cited (p. 562).

1385 This filiation has been established, with great scholarship, by Fr. Böll (*Studien über Claudius Ptolemäus*, p. 182). He cites, among the assailants, Carneades and Clitomachus as the first line. From Carneades came Panaetius, Cicero, Philo, and, via Cicero, St. Augustine; from Clitomachus, Favorinus, Sextus Empiricus, and, via Sextus, the author of the *Philosophumena*. Another vein – shared by Bardaisan, Origen, and the author of the pseudo-Clementine *Recognitions* – led, via Bardaisan, to Diodorus of Tarsus; via Origen, to St. Ambrose, St. Gregory of Nyssa, and Procopius of Gaza; via the author of the *Recognitions*, to Caesarius. [Cf., for a general overview, Amand, 1945; on the *Clementine Recognitions*, see Frederick Stanley Jones, *Pseudo-clementine 'Recognitions' 1.27-71 Early Jewish Christian Perspectives on the Nature and History of Christianity (Clement of Rome)* (Vanderbilt University, Doctoral Dissertation, 1989). L.JN.].

1386 Cic., *Divin.*, II, 43.

1387 This argument is found in many places, especially in Ptolemy (*Tetrab.*, I, 2) who does not regard it as a negligible one. His example, moreover, proved victoriously that one can combine faith in astrology with a scientific conception of the universe. See above, chapter 3, and notably (p. 74, 3) the concessions made by Geminus. However, the astrologers would not accept them – *quod gratis affirmatur, gratis negatur* – and sent him back to the Stoics.

1388 The learned Ciruelo rallied to this proposition (*Astrol. Christiana*, fol. A), judging it useless to admit another active property *quam vocant influentiam, ad penetrandum, ut aiunt, multa quae lux sua virtute non potest penetrare*. He preferred to assume *nullum esse corpus a luce intransibile*. (This was written nearly four centuries before the discovery of X-rays and other forms of radiation.) Since each celestial body has its specific action, it is not true, according to Ciruelo, that all got their light from the Sun. With the polarization of light by reflection at various angles, modern Ciruelos will marvel and reconstruct the theory of “aspects.”

1389 See above, p. 81.

1390 The objection is made by Favorinus (ap. Gell., XIV, 1, 11-13). However, the doubt about the number of the planets goes back much earlier, to Artemidorus (of Ephesus?) according to Seneca (*Q. Nat.*, VII, 13: cf. above, p. 14, 2). It is pointless to add that the Platonists would not agree to this doctrine which was so subversive to the harmony of the spheres. Dercyllides (ap. Theon. Smyrn., p. 200 Hiller) maintains ὡς οὐ πλείους οὐδὲ ἐλάττονες τῶν ζ' οἱ πλανῶμενοι· καὶ τοῦτο δῆλον ἐκ μακρᾶς τηρήσεως. The astrologers always had the philosophers on their side. Moreover, today, now that the number of planets has increased, our astrologers have found a way to repair the breach made in Pythagorean mysticism. They add other hypothetical planets to Uranus and Neptune, Vulcan between ♄ and ☉, Juno between ♂ and ♃, Pluto beyond Neptune [Pluto had not been discovered in Bouché-Leclercq's day. L.JN.]. This makes twelve planets, which the Mesopotamians had seen, back when people had better eyesight, and which they had housed in the twelve signs. Or one can subtract the two luminaries and claim we now possess a full set of seven (Fomalhaut, *Manuel d'Astrologie*, p. 316-317).

1391 *Quid est porro aliud quod errorem incutiat peritis natalium quam quod paucis nos sideribus assignant?* (Senec., *Q. Nat.*, II, 32). Ptolemy knew the objection. He responds to some attacks saying it is impossible to embrace everything, and everyone had his own opinion. This was even a way to explain events which were not calculated. The mistakes were the fault of the astrologers, not of astrology, in which Seneca, a good Stoic, believed or had believed: *Videbis quinque sidera diversas agentia vices et in contrarium praecipiti mundo nitentia: ex horum levissimis motibus fortunae populorum dependent, et maxima ac minima perinde formantur prout aequum iniquumve sidus incessit.* (Senec., *Consol. ad Marc.*, 18). Cf. above, p. 552, 3.

1392 If there was action from the stars, it is for us some sort of a ἀκατάληπτον (S. Empir., *Adv. Astrol.*, 95, p. 353). This is a fundamental objection, which one brought out when the others failed. Ptolemy did his best to refute it, using vague analogies and side issues (*Tetrab.*, I, 2).

1393 Χαλδαίων ἔξομεν τηρήσεις ... Παραδούσας ἐξ ἀμυθήτων χρόνον – καὶ ὅλων κοσμικῶν περιόδων καὶ καταστάσεων ἦσαν ἱστορίαι. Proclus, in *Anal. sacr.*, V, 2, p. 77 Pitra), an argument invoked by Proclus against the precession of the equinoxes, which were unknown to the Chaldaeans. (*In Tim.*, p. 77 F). Sextus Empiricus made the reasonable observation that the experience could not be longer than one of these periods, seeing that the ἀποκατάστασις interrupted τὸ συνεχὲς τῆς ἱστορικῆς παραδόσεως. One granted to him also that experience could not last through an entire “great year” since it lasted 9977 years. However, he ruins his reasoning by requiring the astrologers to have observed several identical charts. It would be as if one wanted the same individual to be born several times. There is no horoscope which is identical with another.

1394 Cic., *Divin.*, II, 46. Cf. I, 19. Cicero adds: *Videsne me non ea dicere, quae Carneades, sed ea quae princeps Stoicorum Panaetius dixerit?*

1395 One may cite the claims of Berossus and of his personal disciples, Critodemus and Epigenes: *Epigenes apud Babylonios DCCXX M annorum observationes siderum coctilibus laterculis inscriptas docet, gravis auctor in primis; qui minimum, Berosus et Critodemus, CCXC M ex quo adpareret aeternus litterarum usus* (Plin., VII, 193. Cf. above, pp. 37, 2 and 39, 1). According to Diodorus (II, 31), the Mesopotamians claimed to have begun observations 473, 000 years before Alexander. Panaetius could not prove they had not, he just did not believe them. In the same way, Favorinus protested *disciplinum istam Chaldaeorum tantae vetustatis non esse quantae videri volunt*, and cries out against charlatanism (ap. Gell., XIV, 1, 2. Cf. 1, 17). If one counts the voices, the skeptics win. Firmicus believed in both experience and revelation: *nobis fidem suam astrologia responsionum apotelematumque divinis ac manifestissimis auctoritatibus comprobavit* (I, 3, 1 Kroll). In the fourth century CE, Palchos (ap. Fr. Cumont, op. cit., p. 6) is convinced that the astrologers have made observations “in every clime and on nearly every day”: ἐν ὅποίῳ κλίματι, καὶ ἀπεγράψαντο τὸ ποιητικὸν τῆς ἐνεργείας αὐτῶν σχέδον πρὸς ἡμέραν. For those who believe his words, the argument is irresistible!

1396 Manilius liked to believe that astrology had been revealed by the reigning gods *quis enim, nolentibus, | Cepisset furto mundum quo cuncta reguntur* (I, 26 sqq.). At the bottom of this tradition is the idea that the future is the secret of the gods and that it is sacrilege to investigate it, a sacrilege and a curse (Stat., *Theb.*, III, 563). It is a tradition common to many peoples and perpetuated in Christianity by attributing the invention of astrology and other arcana to the fallen angels. Consider the tree of the knowledge of good and evil and the arts invented by the sons of Cain in Genesis. In the *Ethiopic Book of Enoch*, the arts and sciences were revealed by the rebel angels, fathers of the Giants or Titans, notably ἀστρολογία by Rakiel and ἀστεροσκοπία by Sathiel. There was an idea that the future was a secret of the gods and that it was a sacrilege to reveal it, a sacrilege and a curse: *quid crastina volveret aetas | Scire nefas homini* (Stat., *Theb.*, III, 563). [See now “Enoch, 1 (Ethiopic Apocalypse of),” translated by E. Isaac, in *The Old Testament Pseudepigrapha*, ed. James H. Charlesworth (Garden City, NY: Doubleday, 1983. I), pp. 5-90. L.J.N.].

1397 Let us put some order into this jumble of legends, far-fetched in every sense and with little clear connection to astronomy and astrology. Atlas knew the sky well, since he carried it, whether as a god (Hesiod., *Theog.*, 507; Hygin., *Fab.*, 150, etc.) or as a mountain. The euhemerists changed him into an astronomer, as they had Prometheus, Cepheus, and others (Cic., *Tusc.*, V, 3; Virg., *Aen.*, I, 741; Plin., VII, 203). He allowed himself to be transported voluntarily to the shores of Mesopotamia, Egypt, Phrygia, or Phoenicia, by his mother Libya (*Libyae filius*. Pliny, *I. c.*; ὁ Λιβύς, Euseb., *Praep. Ev.*, X, 6; Tzetz. ad Lycophr., 482-483), his children or his disciples. Hermes was his grandson by Maia. Hercules was his student, doubtless by substituting the “pillars of Hercules” for the pillars of Atlas (Herodotus, ap. Clem., *Strom.*, I, 15 p. 132 Sylb.). Hercules the scholar (again a Stoic invention: see Heraclit., *Alleg. Homer.*, ch. 33) gives one a laugh. We are told that he burned himself to replace the Sun on the day of an eclipse (*Hercules astrologus dictus, quod eo die se flammis iniecit, quo futura erat obscuratio solis*. Fest., *Epit.*, s.v.). For those who believed, following Herodotus (II, 2), that the Phrygians were the most ancient of ethnic groups, Atlas was a Phrygian astronomer (Clem., loc. cit.). St. Augustine did not doubt the existence of *Atlans ille magnus astrologus*, whom he made a contemporary of Moses (*Civ. Dei*, XVIII, 40). Prometheus, inventor of every science, became (in a euhemerist fiction inconvenient to Aeschylus) an astronomer, with the Caucasus for his observatory. Since he was the neighbor of Assyria, *hic primus astrologiam Assyriis indicavit* (Serv., *Ecl.*, VI, 42). Assyria or Chaldaea, it makes little difference. Chiron, already praised by Homer as the teacher of Achilles, could not help being a savant, a physician, an astronomer (*Schol. Ap. Rhod.*, IV, 816). Euripides – who did not know about Mesopotamian astrology – credited Hippo, the daughter of Chiron, with knowing the art of “predicting the future from the rising of the stars” (ἢ πρῶτα μὲν τὰ θεῖα προυμαντεύσατο χρησμοῖσι σαφέσιν ἀστέρων ἐπ’ ἄντολαῖς; cf. above, p. 37, 1), that is, by regulating the calendar (which included the cycle of lucky and unlucky days) and of predicting the times. Some say that Chiron had predicted rain and storms for the wedding day of Thetis and Peleus (*Fr. Hist. Gr.*, IV, p. 505, and also that he had taught medicine to Asklepios and astrology to Hercules (*Schol. German. Arat.*, ad v. 291, p. 410 Eyssenhardt). The god Pan, who resembles Chiron, is sometimes substituted for him (Tzetz. ad Lycophr., 482-483). As for Orpheus, his seven-stringed lyre is a symbol of the planetary system (Ps.-Lucian., *Astrol.*, 10). Eumolpus, Musaeus, Linus (Diog. L., *Prooem.*, 3) were all astronomers. To increase the conviction, ingenious euhemerists changed most of the epic heroes into astronomers and astrologers. Atreus and Thyestes (cf. Hygin., *Fab.*, 258), Bellerophon, Daedalus, Icarus, Pasiphae (in love with Taurus), Endymion, Phaethon, were astronomers. Apollo Didymos is one of the two Gemini (Δίδυμοι). The Pythia of Delphi represents Virgo. The oracle of Ammon is Aries. The adultery of Ares and Aphrodite in the Iliad is the conjunction of Mars and Venus, etc. (Ps.-Lucian, op. cit.; cf. above, p. 59, 2). The Greeks also collected or invented Mesopotamian and Egyptian legends. Thoth, whom the falsifiers made into Hermes Trismegistus, author of thousands of books, was already known to Plato (*Phaedr.*, p. 174). Arnobius hesitated between him and Atlas: *quando siderum motus aut ratio coepta est genethliaca sciri? Non post Theutin Aegyptium aut post Atlantem, ut quidam ferunt, bajulum caeli?* (Arnob., II, 69). “Wise Mesopotamians,” Egyptians, gods and men, are cited higgledy-piggledy in one papyrus (*Not. et Extr.*, XVIII, 2, p. 236). The Book of Nechepso opened with

a night-time revelation, brought by “a voice from the sky” (Riess, op. cit., p. 333), and Firmicus never passes up a chance to remind us that the information of Petosiris is divine (I, 3; IV, 22). The Babylonian Venus was school-teacher of Hermes (Hygin., *Astron.*, II, 42) and Bel *inventor disciplinae sideralis* (Mart. Cap., VI, 701). [On the Mesopotamian Hermes, see Kevin van Bladel, “Sources of the Legend of Hermes in Arabic,” in Lucentini, et al., *Hermetism from Late Antiquity to Humanism* (Turnhout: Brepols, 2003), pp. 285-293 and Kevin van Bladel, *Hermes Arabicus (Hermes Trismegistus)* (New Haven: Doctoral Dissertation, Yale University: 2004). Cf. F. E. Peters, “Hermes and Harran: The Roots of Arabic-Islamic Occultism,” in Michel M. Mazzaoui, and Vera B. Moreen, *Intellectual Studies on Islam, : essays written in honor of Martin B. Dickson, professor of Persian studies, Princeton University* (Salt Lake City, Utah : University of Utah Press, c1990), pp. 185-215, Martin Plessner, “Hermes Trismegistus and Arab Science,” *Studia Islamica* 2 (1954): 45-59 and *ibid.*, “Hirmes,” *Encyclopedia of Islam*, 2d ed. (Leiden: Brill, 1971), and Seyyed Hossein Nasr, “Hermes and Hermetic Writings in the Islamic World” in Seyyed Hossein Nasr, *Islamic Life and Thought* (Albany: SUNY Pr., 1981), pp. 102-119, and finally, the classic survey, “Inventaire de la littérature hermétique arabe,” by Louis Massignon, Vol. I, pp. 389 ff, in André Marie Jean Festugière, *La Revelation d'Hermès Trismegiste*, 4 vols. (Paris: Lecoffre, 1949-1954). L.JN.].

1398 It was Hercules of Tyre whom Nonnus called ἀστροχίτων (XL, 408, 579), πρόμος ἄστροων (*ibid.*, 367), Sun, universal God, etc. (369-410). This Hercules taught a course of history to Bacchus and made him a gift of his robe with constellations on it, the legendary vestment of the astrologers (577 sqq.). [Cf. Hajjar, Yousseff, *La triade d'Héliopolis-Baalbek; Iconographie, Théologie, Culte, et Sanctuaires* (Montréal: Université de Montréal, 1985) and *La triade d'Héliopolis-Baalbek; Son culte et sa diffusion à travers les textes littéraires et les documents iconographiques et épigraphiques*, 2 Vols. (Leiden: E. J. Brill, 1977) for archaeological evidence a god robed with the planets. L.JN.].

1399 The Carians had their partisans, doubtless those scholars who discovered their role in the origins of Greek civilization alongside that of the Phoenicians: εἰσι δὲ οἱ Κάραι τὴν δι' ἁστέρων πρόγνωσιν ἐπινενοηκέναι λέγουσιν (Clem. Al., *Strom.*, I, 16. Euseb., *Praep. Ev.*, X, 6, 2). It worked well for astrology. In exchange, one left astronomy to the Mesopotamians: Κάρεις (ἐχεῦρον) τὴν διὰ τῶν ἄστροων πρόγνωσιν – ἀστρονομεῖν βαβυλώνιοι (Tatian., *Adv. Graec.*, 1). [The Carians of Classical Antiquity were indeed partly descended from the Bronze Age Hittites, and hence were indeed among the ancestors of Greek Civilization. See <http://en.wikipedia.org/wiki/Carians>. L.JN.].

1400 Alexander Polyhistor seems to have compiled the Egypto-Judaic astrology legends in his *Περὶ Ἰουδαίων*. Abraham, after inventing astronomy (καὶ τὴν ἀστρολογίαν καὶ Χαλδαϊκὴν), went to Phoenicia, then to Egypt, where he taught in Heliopolis. Here, we find a syncretistic suture. Abraham got his science from the patriarch Enoch, who is the same as the Atlas of the Greeks (Euseb., *Praep. Ev.*, IX, 17). Since that time, Abraham the astronomer has been a part of tradition among the Jews and Christians (Joseph., *Ant. Jud.*, I, 8, 2; Euseb., *Pr. Ev.*, IX, 16; Cyrill., *Adv. Julian.*, I, p. 17; *Glaphyr. in Genes.*, III, p. 71). The orthodox held only that he had not been an astrologer. Moreover, the patriarch Enoch, who, as author of an astronomical description of the sky, scandalized St. Athanasius not at all (ap. Pitra, *Anal. sacr.*, V, 1, p. 25). Going back yet further, Seth, son of Adam, of whom the Gnostic Σηθιανοὶ were said to be disciples (*Philosophum.*, V, 3 and X, 3). A Byzantine astrological treatise (Cod. Paris., no. 2419, fol. 1 v.) began with these words: ὁ Σῆθ [corrupted into Σωθῆρ] ἐφεῦρε τὸ μάθημα. [See also, Ness, 2000, the chapter “Jewish Astrology,” and the references there. Louis Ginzberg, *The Legends of the Jews*, tr. Harold Szold, 7 Volumes (Philadelphia: Jewish Publication Society of America, 1909-28; reprint, 1968) can be used as a useful guide to astrological lore in rabbinic literature. L.JN.].

1401 The revelation went from the gods to βασιλεῖς θεοφιλεῖς (Ps.-Lucian, *Astrol.*, 1; Manil., I, 45) [*Natura regales animos primum dignata movere* – or to the *sacerdotes delecti* (*ibid.*, 47). During the Middle Ages, Ptolemy himself became a king, a member of the Ptolemaic dynasty.

1402 Firmicus used the following argument. The one who wants something the most, wants it the least. Now, it was more difficult to invent astronomy than astrology. Thus, the latter is more certain than the former in its results: *Quid difficilius putes esse cursus siderum invenire – an inventis stellarum cursibus definire postea quid per omnem terrarum tractum mixtura ipsarum radiatioque perficiat? Qui enim ad consentiendum ipsa rationis veritate compelleris, quod cursus hos siderum – invenimus, consentias necesse est quod invento stellarum cursu facile postea officia ipsarum potestatemque videamus* (Firmic., I, 4, 11-12 Kroll). This sophistry must have seemed conclusive to simple minds.

1403 The apocryphal, pseudepigraphical, or anonymous book, is – I say once again – the necessary vehicle of mystical doctrines. It allows the authors to hide their origins. The Orphics, the Neo-Pythagoreans, the Sibyllists and other dealers in charms and prophecies set examples for the astrologers who hid under the names of Petosiris and Nechepso, and for Manetho – a Manetho who follows Petosiris and draws his teachings

ἐξ ἱερῶν ἀδύτων ... δόγματα ἐξ ἱεροῦ (Manetho, *Apotel.*, IV, 9 and 12). Ptolemy himself, wishing to rectify a bit of astrological practice (cf., *ῥοια*), thought himself obliged to say that he had found his corrections in an ancient book, mutilated and barely legible (above, pp. 206-207). The Jews were also addicted to apocryphal literature, going as far as books by antediluvian writers, such as Enoch, Seth, perhaps even Adam (cf. Augustine, *C. Dei*, XVIII, 38). [See also Charlesworth, 1983. LJN.]. The ability to believe is limitless. Are we not told that the great Newton believed that astronomy came from the centaur Chiron? (Lewis, *Astron. of the Ancients*, p. 73).

1404 Sextus Empiricus (p. 354) mocks – and with good reason! – the absolutely imaginary relationships established between the stars and zodiacal figures, and between these figures and “the habits and appearance of human beings,” between the celestial Lion and courage, between Virgo and pale skin, and the double absurdities, such as the Bull being a female sign. All of it was perfectly ridiculous: ταῦτα γὰρ καὶ τὰ τοῦτοις ὅμοια γέλωτος μᾶλλον ἢ σπουδῆς ἐστὶν ἄξια. However, ridicule does not work against mystics. If need be, they boast of their “madness,” wiser than reason. If these relationships had been revealed, then they would seem absurd. They would not be absurd in reality. Later (see below) a theory arose which gave absurdity an air of rationality, which assimilated the arrangement of the stars to writing. If one asked what relationship there was between a group of stars and a Lion or a Ram, one might respond, the same as exists between language and writing, between a sign and the thing signified. More curious is that even though the precession of the equinoxes has the twelfths or “signs” of the zodiac from the groups of stars which gave them their names, the astrologers continue, none the less, to attach their predictions to fictional signs, to a Ram which is today in Pisces, to a Bull which is in Aries, etc. Ptolemy had some scruples on this point (*Tetrab.*, II, 21) and he does not take it into account in practice. Sextus Empiricus had not read Ptolemy and did not know of the precession of the equinoxes. Otherwise he would not have failed to remark upon it, as Origen did later (ap. Euseb., *Pr. Ev.*, VI, 11, 78). Moreover, he wastes his reasoning on ill-considered whims. He maintains that, if the celestial Lion has the property of engendering courage, those who were born at the same time as a terrestrial lion or who have been raised with them ought to also have leonine characters (op. cit., 100, p. 354). St. Basil (*In Hexaem. Homil.*, VI, 5-7) also mocks astrological symbolism, but to lead to a conclusion without consequences. Is it by chance, he says, that the sky has imprinted its active properties upon the animals? The response: the sky does not imprint, it attributes. What does it matter, he says, if the images are imaginary, if the effects are verified by experience? Revelation or experience, it is always the evidence of fact opposed to the reasoners.

1405 Above, p. 183, 1. [In the Renaissance, Kepler was just such a renegade astrologer. Cf. Max Caspar, *Kepler*, tr. and ed., C. Doris Hellman (London & NY: Abelard-Schuman, 1959) and Angus Armitage, *John Kepler* (London: Faber, 1966). Kenneth G. Negus has compiled an interesting anthology of Kepler's thoughts on astrology, *Kepler's Astrology: Excerpts* (Princeton, Eucopia, 1987). LJN.].

1406 See how one slips into an absurd affirmation, alongside and under the cover of another which is only half as bad. Firmicus assures us that Mars tempers its fires when near Saturn. Agreed; it is found in alignment with the frigid current coming from Saturn. However, Firmicus admits, as a natural thing, that the effect is the same even when Mars is found in “the house” of an absent Saturn *ecce cum ad Saturnum, cum etiam ad ejus venerit domum, ignes ejus natura alieni frigoris temperantur* (I, 4, 7 Kroll). Still, let us assume, along with the astrologers, that the domiciles or exaltations were chosen because their temperaments are similar to those of their planets. However, this loophole does not work for the *ῥοια*, which each planet possesses in each sign. We are up to our necks in absurdity.

1407 (*Chaldaei dicunt*) *omnes omnium ortus, quicumque gignantur in omni terra quae incolatur, eosdem esse eademque omnibus qui eodem statu caeli et stellarum nati sint, accidere necesse esse. – Volunt enim illi omnes eodem tempore ortos, qui ubique sint nati, eadem conditione nasci, eadem conditione nasci* (Cic., *Divin.*, II, 44).

1408 *Procedat, inquit (Favorinus), haec sane disciplina, sed sub ea modo inclinatione caeli sub qua tunc Chaldaei fuerunt; non enim potest inquit, ratio Chaldaeorum observationis manere, si quis ea uti velit sub diversis caeli regionibus* (Gell., XIV, 1, 8). For those Chaldaeans who had reason, Sextus says in his turn, it is necessary that πᾶσι τοῖς κατὰ τὴν οἰκουμένην τὰ οὐράνια παρατηροῦσιν ἕκαστον τοῦ ζωδιακοῦ δωδεκατημόριον ἰσοχρόνως ἐφαίνετο (83, p. 351).

1409 W. A. I., III, 51, 2, trans., Lenormant. Cf. above, p. 49. [Cf. also Hunger, 1992 and Parpola, 1970. LJN.].

1410 Herod., VII, 37. Cf. Curt., IV, 10, 6; above, p. 339, 1.

1411 See Fr. Böll (op. cit., p. 181 sqq.) on the question. He attributes the offensive arguments to Carneades, Clitomachus, and Panaetius and the responses, especially the perfecting of the astrological tool kit, to Posidonius. [Cf. Amand, 1945. LJN.].

1412 Cic., *Divin.*, II, 47. The argument is repeated to satiety: by Favorinus: *quid esset – quod homines utriusque sexus, omnium aetatum, diversis stellarum motibus in vitam editi, regionibus sub quibus geniti sunt longe distantibus, tamen isti, aut hiantibus terris aut labentibus tectis aut oppidorum oppugnationibus aut eadem in navi fluctu obruti, eodem genere mortis eodemque ictu temporis universi simul interirent* (ap. Gell., XIV, 1, 27); by Sextus Empiricus (*Adv. Astrol.*, 91-93, p. 353: above, p. 425), who asked if all the barbarians killed at Marathon had been born under the point of Sagittarius' arrow, and if all the heroes returning from Troy who drowned in the gulf of Euboea were born under Aquarius' urn; by Bardaisan (above, p. 435, 2); by Gregory of Nyssa (*De fato*, p. 165 and 169), etc. Calvin attacked the astrologers of his day (ap. Junctinus, op. cit., p. 3). The astrologers tried to reason with the scholars. They did not have recourse to faith or popular opinion, which wished to explain shipwrecks by the presence onboard of a criminal pursued by the vengeance of the gods. Antiphon said this was a common phenomenon (*De caed. Herod.*, 82).

1413 Ptolemy, explaining why he treats “catholic” astrology before genethliology, says that he does so because the fate of a group always is stronger than the fate of the individuals in it, and that one cannot judge the latter without looking at the former (Ptol., *Tetrab.*, II, Prooem.). Cf. above, p. 503, 3.

1414 The objection drawn from ethnic groups was the basic argument of Carneades, who especially concentrated on morality. He showed that morals varied from one ethnic group to another, and that an action, considered a crime in Greece, might be authorized, even recommended, by the νόμιμα βαρβαρικά (cf. Fr. Böll, op. cit.).

1415 S. Emp., op. cit., p. 355. The argument is repeated, in order to refute it, by Firmicus Maternus *si stellarum mixturis mores hominibus coloresque tribuuntur – cur omnes in Aethiopia nigri, in Germania candidi, in Thracia rubei procreantur* (Firmic., I, 2 Kroll). Firmicus responds by appealing to the physical influences of the zones or terrestrial climes, influences of which tend to produce uniform types, as opposed to the influence of the stars, which produce the varieties of individuals (I, 10: above, p. 337, 3). Firmicus either did not know or did not accept astrological geography, which gives a less banal response.

1416 Ptol., *Tetrab.*, IV, 9, p. 821 Junctinus.

1417 It goes back – save, to be sure, for the contribution of the evolutionists – to Hippocrates, whose treatise *Περὶ ἀέρων, ὑδατων, τόπων*, brought it to all cultivated people (cf. Böll, op. cit., p. 215). Polybius summarizes the theory of the environment very well and uses the very word τὸ περιέχον – ὃ συνεξομοιοῦσθαι πεφύκαμεν πάντες ἄνθρωποι κατ’ἀνάγκην: οὐ γὰρ δι’ ἄλλην, διὰ δὲ ταύτην τὴν αἰτίαν κατὰ τὰς ἐθνικὰς καὶ τὰς ὁλοσχερεῖς διαστάσεις πλείστων ἀλλήλων διαφέρομεν ἥθεσι τε καὶ μορφαῖς καὶ χρώμασιν, ἔτι δὲ τῶν ἐπιτηδεύματων τοῖς πλείστοις (Polyb., IV, 21). Cf. Posidonius ap. Strab., I, p. 102 and Galen, *De plac. Hipp. et Plat.*, p. 441 ed. Kühn. In holding to this doctrine, the astrologers reduced the argument of Panaetius (Cic., *Divin.*, II, 46) to nothing. The most difficult was to put the unity back into their system in making the stars depending on the “dissimilarity” attached to places.

1418 Cf. Fr. Böll, op. cit., pp. 184 sqq. We still have the arguments of Bardaisan [probably from his disciple Philip] in Eusebius (*Praep. Ev.*, VI, 10), in the *Recognitiones Clementinae*, IX, 12-32 (in J. B. Cotelerii, *Patres Apostolici*, Tom. I [ed. 2^a Amstel. 1724], pp. 581-586), and even a Syriac translation of his book in the *Spicilegium Syriacum* of W. Cureton (London, 1855). Cf. A. Hilgenfeld, *Bardesan der letzte Gnostiker*. Leipzig, 1864. Bardaisan did not oppose astrology because of fatalism. He believed that spirits resided in the planets who were charged with managing the universe. Origen (ap. Euseb., VI, 11) added nothing to the argument of Bardaisan. He weakened it, rather, in suggesting the explanation that the stars were signs and not causes (see below, p. 600). [See now *The Book of the Laws of Countries: Dialogue on Fate of Bardaisan of Edessa*, tr. and ed., H. J. W. Drijvers (Assen: Van Gorcum, 1965) and H. J. W. Drijvers, *Bardaisan of Edessa* (Assen: Van Gorcum, 1966). L.JN.].

1419 Πάντα σχεδὸν τὰ μέρη τῆς γῆς τὸ τῶν Ἰουδαίων ἐπενεμήθη γένος, ἀνατολικοὶ δυτικοί, προσαρκτικοί, πάντα σχεδὸν τὰ ἔθνη μέμικται πρὸς τὴν τῶν Ἰουδαίων συνοίκησιν. Πῶς τοίνυν οὐδεμία τῶν ἀστρων ἀνάγκη ἐ’οὔδενός αὐτῶν ἰσχυσέ τι τῶν ἐκ τοῦ ἔθνους χαρίσασθαι τὸ ἀλώβητων – ἀλλ’ ἐν τῷ ὁμοίῳ πάντως ἐστὶ ... ὑπομενούσης τὴν λώβην τῆς φύσεως Greg. Naz., *De fato*, p. 169 B. [Cf. the debate in the *Babylonian Talmud*, tractate “Shabbat,” 156a-156b, over whether or not astrology has any influence over Israel. A convenient bilingual edition is *Talmud Bavli; Hebrew-English Edition of the Babylonian Talmud*, 18 Vols., ed. & tr., I. Epstein (London: Soncino Press, 1960-) See also the discussion of the passage in Ness, 2000. L.JN.].

1420 The astrologers could supplement their resources by looking at the horoscopes of cities, thus introducing a common element in the destinies of their citizens. This is system of which Cicero says: *O vim maximam erroris! Etiamne urbis natalis dies ad vim stellarum et lunae pertinebat? Fac in puero referre ex qua adfectione caeli primum spiritum duxerit; num hoc in latere aut in caemento, ex quibus urbs effecta est, potuit valere?* (Cic., *Divin.*, II, 47). Cicero reasoned very well, no doubt. However, one may reply that taking

the auspices and other religious ceremonies went back to the foundation of the city, and that those who respected them were disarmed against astrology.

1421 Cic., *Divin.*, II, 47.

1422 Or rather, he declared that he would spare the astrologers the question: *quid de muscis aut vermiculis aut echinis, multis aliis minutissimis terra marique animantibus dicerent? an istaec quoque isdem, quibus homines, legibus nascerentur isdemque itidem exstingerentur? ut aut ranunculis quoque et culicibus nascendi fata sint de caelestium siderum motibus adtributa, aut, si id non putarent, nulla ratio videretur cur ea siderum vis in hominibus valeret, deficeret in ceteris* (Gell., XIV, 1, 31). The argument was repeated by Diodorus of Tarsus (ap. Salmas., p. 553).

1423 Sex. Empir., op. cit., p. 353 (ἄλλος δὲ ἀπόρησει καὶ περὶ τῶν ἀλόγων ζώων κ.τ.λ.). It was Sextus who resolved a poorly worded question in an absurd manner. If two beings born “in the same degree of the same sign” were not subject to different influences, they were not born different: e.g., the one a man, the other, an ass. St. Augustine, like Sextus, made an abstraction of all which was not the actual influence of the stars. No doubt having read in Cicero that the astrologers suppressed at this point the action of the generators upon the product (*seminum vi, quae ad gignendum procreandumque plurimum valeat, funditus tolli*. Cic., *Divin.*, II, 45), St. Augustine imagined that the moment of birth was the sole difference between man and animal or even plant, so that a human being and an animal could not be born at the same time, in the same place. *Sic disipiunt homines, ut existiment, cum homo nascitur, ceteros rerum ortus ita inhiberi, ut cum illo sub eadem caeli plaga nec musca nascatur* (Augustin., *C. Dei*, V, 7). He cites, as responsible for these absurdities, the astrologers who judge, at first sight if one is consulting them about an animal (below). However, there were serious astrologers, such as Ptolemy, who advised his disciples to study their client as physicians did, to avoid false predictions, and to make predictions appropriate to the client's age, nationality, and education (cf. Ptol., *Tetrab.*, I, 2; IV, 9; Herm. Phil., *De Revol. nativ.*, I, 7, and above, p. 503, 3).

1424 The pure Stoics did not go this far, for they refused all individuality to animals. Chrysippus said that the soul of a hog acted like salt to preserve the animal's meat. However, for the Pythagoreans, those alternative theoreticians of astrology, the animals are our brothers, whom we have no right to slaughter, not even to feed ourselves with their flesh.

1425 *Solent tamen homines ad temptandum peritiam mathematicorum adferre ad eos constellationes mutorum animalium, quorum ortus propter hanc explorationem domi suae diligenter observant, eosque mathematicos praeferunt ceteris qui constellationibus inspectis dicunt non esse hominem natum, sed pecus. Audent etiam dicere quale pecus, utrum aptum lanitio, an vectationi, an aratro, an custodiae domus. Nam et ad canina fata temptantur, et cum magnis admirantium clamoribus ista respondent* (Augustin., *Civ. Dei*, V, 7. St. Augustine reports too that the father of his friend Firminus collected the horoscopes of animals (Conf., VII, 6). Origen (ap. Euseb., *Pr. Ev.*, VI, 11, 1) states that in his time that people believed in the influence of the stars on animals as well as upon human beings (τῶν περὶ ἕκαστον ἄνθρωπον, τάχα δὲ καὶ ἀλόγων ζώων). Hephaestion (III, 3) assimilates the ἄλογα to ἄλογοι humans and Fabricius (ad S. Empir., p. 353) had found four birth charts of animals in a treatise on astrophysics published in Cologne in 1706. Nothing is ever lost.

1426 *Quid? qui ingenio atque animo singulares, num astro quoque uno? quod enim tempus, quo enim tempus, quo non innumerabiles nascantur? at certe similis nemo Homeri* (Cic., *Divin.*, II, 47. Likewise, Favorinus, who (like Cicero) joined the two parties in the argument, attributed above (p. 581) to Carneades: *Quod si quaedam, inquit, in hominum morte atque vita etiam diversis temporibus editorum per stellarum pares quosdam postea conventus paria nonnulla et consimilia posse dicunt optingere, cur non aliquando possint omnia quoque paria usu venire, ut existant per huiusmodi stellarum consursiones et similitudines, Socratae simul et Antisthenae et Platones multi genere, forma, ingenio, moribus, vita omni et morte pari?* (Gell., XIV, 1, 29). Sextus Empiricus knew the response of the astrologers, and he tried to deny them the right to be content with approximate calculations. The tiny differences were, they thought, the reason: οὐθεις γοῦν Ἀλεξάνδρῳ τῷ Μακεδόνι γέγονεν ἴσος, πολλῶν κατὰ τὴν οἰκουμένην συναποτεχθέντων αὐτῷ, οὐδὲ Πλάτῳ τῷ φιλοσόφῳ (88-89, p. 352). St. Basil (*In Hexaem. Homil.*, VI, 5-7) said in his turn: if the conditions in which kings are born are realized at each minute, why are kings not born each day? Vice versa, why do the sons of kings, whatever their birth charts may be, become kings in turn? There is always a hypothetical fact in these arguments which the astrologers deny. The requisite conditions are not realized at every moment, and there are no birth charts which are absolutely the same. Finally, the sons do not always rule, and, what is more, their royal chart is predetermined by that of their royal father.

1427 See above (p. 256, 1). The wheel served to explain the movement of the planets, compared to ants walking on its surface in the direction opposite to that of the wheel (Vitruv., IX 1 [4]). It was this, moreover, which furnished a response to the objection drawn from twins. This objection is everywhere, beginning with

the time of Diogenes the Stoic and perhaps Carneades. Cicero posed it (*Divin.*, II, 43. Cf. *Pers.*, Sat., VI, 17: *Geminis, horoscope, varo producis Genio*) without alluding to the response. The others refute the response as well (cf. Favorin., ap. Gell., XIV, 1, 26; S. Empir., above, p. 539). He mentions non-identical twins, and twins of different sex, an argument all the stronger, since while twins are born successively, they are conceived at the same time. *Sed quaecumque sit ortu dicunt: num quid et in conceptu? Ubi et unum esse concubitum esse manifestum est, et tanta naturae vis est, ut, cum conceperit femina, deinde alterum concipere omnino non possit: unde necesse est eadem esse in geminis momenta conceptus* (Augustine, *C. Dei*, V, 6). This was not admitted without contest. The partisans of superfluity invoked the legend of the Dioscuroi, Castor the son of Tyndareus and Pollux son of Zeus (Clem. Alex., *Protrept.*, p. 26 Potter).

1428 This is the *oestrum astrologicum* proper, the goad which made the astrologers multiply the divisions of the circle and encrust neighboring degrees with the most disparate influences. However, they escaped Charybdis only to fall prey to Scylla. The more they refined the fundamental assumptions of the problems, the more others denied that they had the resources to solve them. Manilius, with the zeal of a neophyte, repeats constantly that the smallest difference can have the greatest effects (Cf. I, 56, sqq.; II, 693, 739; III, 205 sqq.). Their enemies knew this refrain well. If the degrees were not enough, Sextus Empiricus says (op. cit., p. 354), they went to the minutes, which are impossible to observe.

1429 S. Empir., op. cit., 50-88, pp. 345-352. The arguments were repeated *ad nauseam* later and demonstrated, by dealing with astrologers and not astrology, the weaknesses of practice and not those of theory.

1430 The opening syllogism is this: the Ascendant (*horoskopos*) is the basis of the horoscope. However, it cannot be observed. Therefore the Chaldaean method does not stand up – τοῖνυν ἀσύστατος ἔστιν ἡ τῶν Χαλδαίων μέθοδος (50-54). S. Empiricus develops minor proofs unequally and in a somewhat confused way. He delays by speaking, physician that he is, about the stages of conception (55-64) and of parturition (65-67). Moreover, he mixes up the evidence, sometimes by errors of observation, sometimes of calculation of the anaphorai. He ends by showing incompetence or bad faith, in insinuating that the Chaldaeans thought each sign of the zodiac rose at the same time for all places in the same clime (83-85). He finds fault, as Cicero did earlier (*Divin.*, II, 44), with those astrologers who did not know the horizon changed when the observer moved, and that each place had its own horizon. This is a point of the first importance, he says, and in fact it is the ABC of the practice. Cf. above, p. 581.

1431 This argument was used by St. Gregory the Great in a Homily on Epiphany, an indictment against the astrologers. Saumaise (op. cit., p. 721) replied, alleging that certain infants take longer to be born than some twins, for example Jacob and Esau, born simultaneously so to speak, since Jacob was holding on to Esau's foot (*Genes.*, xxv, 25). However, trying to prove too much, the argument took an absurd turn, and to no profit. The astrologers could, if they pleased, admit to the argument and use it to explain why a powerful mind was often carried by a deformed body.

1432 Ptolemy devoted an entire chapter (*Tetrab.*, I, 2) to showing that astrological prediction is possible and to what extent: Ὅτι καταληπτικὴ ἡ δι' ἀστρονομίας γνώσις καὶ μέχρι τίνος. It is fitting that both charlatans and the most conscientious scholars may be fooled. Ἀλλ' ὁμως ἐναργὲς ἔστιν, ὅτι κἂν διερευνητικῶς τις ὡς ἐνὶ μάλιστα καὶ γνησίως τοῖς μαθήμασι προσέρχηται, πολλάκις πταίειν αὐτὸν ἐνδέχεται, δι' οὐδὲν μὲν τῶν ἐρημένων, δι' αὐτὴν δὲ τοῦ πράγματος φύσιν, καὶ τὴν πρὸς τὸ μέγεθος τῆς ἐπαγγελίας ἀσθένειαν. What more could one want? If the astrologers are ignorant, Firmicus says, *non mathesis, sed hominis fallax ac temeraria notetur inscientia* (I, 3, 8 Kroll).

1433 Origen (ap. Euseb., *Praep. Ev.*, VI, 11) says this formally. He did not contest the great degree of precision, taken as far as a second of arc (*ibid.*, VI, 11, 57-59, 73-80) and made even more difficult by the precession of the equinoxes, which dissociated the images (μορφώματα) of the zodiac and the fictional signs (νοητὰ ζῳδία).

1434 Ptolemy had already abandoned, in fact, the ascendant of conception, which he assumed would agree with that of birth (above, p. 376).

1435 *Si disciplina ista fundamento aliquo veritatis nixa est, centesimo usque abhinc saeculo vel magis primo caeli atque mundi exordio atque inde jam deinceps, continua significatione, quotiens generis auctores ejusdem hominis nascerentur, stellae istae praemonstrare debuerint qualis qualique fato futurus sit quisquis hodie natus est. Quo autem, inquit, pacto credi potest, uniuscujusque stellarum formae et positionis sortem atque fortunam uni omnino homini certam destinatumque esse si vitae fortunarumque ejusdem hominis indicia in tam brevibus intervallis – tam saepe ac tam multipliciter eadem ipsa, non eadem stellarum facie denotantur? Quod si id fieri potest eaque diversitas atque varietas admittitur per omnes antiquitatis gradus ad significanda eorum hominum*

qui post nascentur exordia, imparilitas haec turbat observationem omnisque ratio disciplinae confunditur (Gell., XIV, 1, 20-22).

1436 Text cited above, p. 544, 2. This is a concession which Cicero a little later called a variety of *praevaricatio* (Cic., *Divin.*, II, 43). Diogenes refused nothing to the astrologers which he had allowed to the physiognomists.

1437 Τοίνυν οὐκ ἔστι πρὸς τὰς τῶν ἀστέρων κινήσεις διοικεῖσθαι τὸν βίον· ἢ εἴπερ ἐστὶν εὖλογον, ἡμῖν πάντως ἀκατάληπτον. S. Emp., 95, p. 353. Likewise, Porphyry (below, p. 601). Cf. above (p. 574, 1 and 578, 3) the response of Firmicus.

1438 Favorin. ap. Gell., XIV, 1, 23. Likewise, Sextus Empiricus admitted that the stars, in agitating the atmosphere and thus modifying its composition, might make “robust bodies and fierce morals.” However, he protests, that the air has nothing to do with the details of life, with debts, with prison, the number of children, the condition of the poor and of kings. Those whom he attacked doubtless responded by saying that he was arbitrarily limiting the effects of temperament and of habits.

1439 *Ac si, inquit, potuisse praedici adfirmant, Pyrrhusne rex an M'. Curius proelio victurus esset, cur tandem non de alea quoque ac de calculis et alveolo audent dicere, quisnam ibi ludentium vincat? An videlicet magna sciunt, parva nesciunt, et minora majoribus inperceptiora sunt?* (Gell., XIV, 1, 24). The predictable response from the astrologers was not so bad. All is written on high, but one can decipher the large letters more easily than the small ones. Favorinus counters it by saying: *Volo, inquit, mihi respondeant, quid in hac totius mundi contemplatione, praestantis naturae operibus, in tam parvis ac brevibus negotiis fortunisque hominum magnum putent?* (*ibid.*, 25). However, by this count, the “thinking reed” is too small for God to be concerned with. The argument affects all religions.

1440 See above, pp. 471-474, the questions resolved by elections. The predictions most in demand were for the winner of the chariot race at the Circus. One wanted to foresee – that was the job of astrology – and also to help some drivers and hinder others, by means of magical formulae destined to “break” the legs of the horses of a certain driver or of his competitors.

1441 It was far too complicated for anyone but Sextus to have said it. One distinguished between ἀνάγκη, εἰμαρμένη, τύχη, αὐτόματον and προαίρεσις as causes. See the texts in Diels, *Doxogr. gr.*, pp. 324-326.

1442 The only grievance which Sextus Empiricus had against the astrologers, beyond the antipathy which he felt for dogmatism, was that they burdened the lives of the superstitious with fears – ποικίλως μὲν ἐπηρεάζοντες τῷ βίῳ, μεγάλην δ' ἡμῖν ἐπιτευχίζοντες δεισιδαιμονίαν, μηδὲν ἐπιτρέποντες κατὰ τὸν ὀρθὸν λόγον ἐνεργεῖν (p. 338). It was the grievance which Cicero developed vigorously against all forms of divination (Cic., *Divin.*, II, 72), and which Pliny summarized in a word, about the various forms of superstition: *etiam sine his immensa vitae ambage circa auguria* (Pliny, X, 137). Ptolemy responded with a Stoic paradox, in maintaining that even if one could not see the future, foreknowledge could allow one peace of mind (above, p. 33).

1443 *Nec refert, scelus unde cadit; scelus esse fatendum | Hoc quoque fatale est, sic ipsum expendere fatum* (Manil., IV, 107-118). He condemns the vices of our species no less energetically: *At quanta est scelerum moles per saecula cuncta, | Atque onus invidiae non excusabile terris!* (II, 592-593). He writes: *Solvite, mortales, animos curasque levate*, because *Fata regunt orbem, certa stant omnia lege* (II, 12-14), as if he addressed people born anxious and pessimistic, who did not wish to torment themselves. Cf. *conscia fati sidera* (I, 1). Manilius also turned to fatalism to console the poor. Destiny, at least according to him, could not be bribed by the gold of the rich (IV, 89 sqq.). Ps.-Manetho shows mortals entwined Μοιρῶν ἀρήρηκτοῖσι μίτροις θεσμοῖσι τ' Ἀνάγκης (I, 7).

1444 See the whole of chapter I, 3 in Tetrabiblos, where Ptolemy, after showing that it was possible (ὅτι καταληπτική) to foresee the future, also proves that it is useful (ὅτι καὶ ὠφέλιμος). He attacks the argument aimed at divination in general, that if the future is conditional, prediction is impossible, and if the future is determined, it is useless (above, p. 556, 8). The candid Firmicus expects the need for prayers to escape from fatal conjunctions (IV, 16, 9 Kroll. Cf. above, 466, 2). The author of the Hermippus concedes that it would be better to ignore the future if it could not be modified: βέλτιον δὲ ἢν ὅλως μηδὲ γένεσθαι [σεμεῖον], εἰ μηδεμία τις ἀναβολὴ μηδὲ φυγὴ τοῦ κακοῦ ἐντεῦθεν ἐμελλεν ἔσεσθαι (II, 11, p. 49 Kroll).

1445 One could lie under labels of every origin. Arnobius thought it easy to teach about international monotheism: *sed ne nobis fidem habere nolitis, Aegyptios, Persas, Indos, Chaldaeos, Armenios interroget omnesque illos alios, etc.* (Arnobius, IV, 13). There were oracles of Apollo, of Zoroaster, of the χρησμοὶ Περσικοί, honoring the Incarnation and the Trinity. The Trinity, especially, which the Neo-Platonists and the Christians disputed, was found to have been proclaimed by Apollo of Delphi, by Hermes Trismegistus, by ancient papyri found ἐν ταῖς σύριγγι ταῖς Αἰγυπτίαις (cf. Pitra, *Anal. Sacr.*, V, 2, pp. 302-308).

1446 There were, he says, three Julians, the Χαλδαῖος φιλόσοφος, πατήρ τοῦ κληθέντος Θεουργοῦ Ἰουλιανοῦ (Suidas, s.v.); the Theurgist, also called the Chaldaean, and a third, Julian of Laodicea, the astrologer, under whose name we find a treatise on military astrology cited. [Cf. Hans Lewy, *Chaldaean Oracles and Theurgy: Mysticism, Magic and Platonism in the Later Roman Empire*, Nouv. ed., par Michel Tardieu (Paris : Etudes augustiniennes, 1978) and Sarah Iles Johnston, *HEKATE SOTEIRA; A Study of Hekate's Roles in the Chaldaean Oracles and Related Literature* (Atlanta, GA: Scholars Press, 1990). LJN.].

1447 See Lobeck, *Aglaophamus*, pp. 98-111, and 225-226. The texts are reunited – following Opsopœus (Paris, 1559) and Cory, *Ancient Fragments* London, 1832 – by G. Wolff, *Porphyrîi de philosophia ex oraculis haurienda* (Berolin., 1886); the extract *Πρόκλου ἐκ τῆς Χαλδαϊκῆς φιλοσοφίας* (in Pitra's *Anecdota Sacra*, V, 2 [Romae, 1888], pp. 192-195, republished as an unedited text, with commentary by A. Jahn, Hal. Sax., 1891); G. Kroll, *De oraculis chaldaicis* (Bresl. Philol. Abhand., VII, 1 [1894], pp. 1-76). The book of Julian, commented upon by Porphyry, and earlier by Iamblichus, who wrote at least twenty-eight books upon the Χαλδικὴ τελειοτάτη θεολογία, and later still (a commentary in 280 leaves, the fruit of five years of work) by Proclus, who often cites the “divine oracles” or “the Theurgist” in his commentary on *Timaeus*, as the ultimate authority. The name “theurgists” (οἱ ἐπὶ Μάρκου Θεοθργοί, Proclus, *In Cratyl.*, 77, 1) does not appear before Porphyry, who may have invented it (Kroll, op. cit.). The “Chaldaeans” took into account – and this was a master stroke – the oracles of Apollo praising the Chaldaeans and the Jews (cf. Porphyry ap. Euseb., Praep. Ev., VIII, 10: *Μοῦνοι Χαλδαῖοι σοφίαν λάξον ἢ δ’ ἄρ’ Ἑβραῖοι κ.τ.λ.*). On the other hand, certain oracles, whether or not in Julian's collection, discredited all divination from other sources, here including even astrology (cf. Psellus, 1128^a ap. Kroll, p. 64).

1448 Proclus would gladly have reduced all of human knowledge to the *Chaldaean Oracles* and *Timaeus*. In this, he remained faithful to the Platonic tradition, accustomed to look for wisdom among the barbarians; cf. above, 35, 1). One hears only of οἱ Χαλδαῖοι, οἱ Ἀσσύριοι, οἱ Βάρβαροι, and of Θεοπαράδοτος σοφία or μυσταγογία. The Greco-Roman world no longer wanted its own civilization; aging, it wanted only ideas it thought older than itself.

1449 Philo (*De migr. Abr.*, 32) called the astrologers “atheists,” because they made the stars into primary causes, and not secondary. It was perhaps he, and through him, Genesis, which gave the Neo-Platonists the idea of the stars as signs, for he cites (*De opif. mundi*, 19), the words of Moses saying that the stars γεγόνασιν εἰς σημεῖα (Genes., I, 14. Cf. below, p. 610, 2).

1450 Ὅτι ἡ τῶν ἄστρον φορὰ σεμεῖναι περὶ ἕκαστον τὰ ἐσόμενα, ἀλλ’ οὐκ αὐτὴ πάντα ποιεῖ, ὡς τοῖς πολλοῖς δοξάζεται (Plotin., *Ennead.*, II, 3).

1451 Ἀνάγνωσις φυσικῶν γραμμάτων (*Ibid.*, III, 4, 6).

1452 This physics was transposed rather than suppressed. The qualification of “mirrors” for the stars might be taken literally, for the Chaldaean “theurgist” returned to the Stoic vocabulary, all the while protesting that they were only using them as metaphors. He taught that “the divine” is fire, light, life-giving warmth, warm spirit or breath which “lightens” (κουφίζει) and draws on high all which it fills so well that the soul filled with fire arrives to rejoin and see God (Procl., op. cit.). From this came moral exhortations like this one: τῷ θερμῷ προσδράμωμεν, τὰ ψυχῶν ἐκφύγοντες· πῦρ γενώμεθα (*ibid.*). Moreover, the human imagination was able to refrain from identifying, but not comparing, God with light. Cf. Joh., I, 4, 9; VIII, 12; Ep. John, I, 5 (*Deus lux est; God is light*), and the Trinity of Dante, a three-colored light in eternal “circulation” (*Paradiso*, ch. XXXIII, 115 sqq.). [For a recent account of Hellenistic Jews and their reactions to astrology, see Ness, 2000. LJN.].

1453 Οἱ κανόνες τῆς γενεθλιαλογίας εἰσὶν ἀναρίθμητοι καὶ ἀκατάληπτοι· ἀλλὰ καὶ ἀδύνητος εἰς γνῶσιν ἡ μαθηματικὴ ἐπιστήμη κ.τ.λ. (Porphyg. Ep. ad Aneb., 40; Cf. Porphyg. ap. Philopon., *De mundi creat.*, IV, 20: below, p. 603, 2).

1454 See the extract Πορφυρίου περὶ τοῦ ἐφ’ ἡμῖν in Stobaeus (Ecl., II, 39-42) [II, pp. 103-107 Meinecke]). He admits that Plato borrowed the canvas of his myth from the Egyptians (τῶν παρ’ Αἰγυπτίοις σοφῶν τούς βίους ἐκ τῶν ὠροσκόπων σημειουμένων), but that he did not agree with it in detail. These Egyptian sages are, of course, Nechepso and Petosiris, Hermes Trismegistus, Tat, Asklepios, etc., all the phantoms made to speak by the inventor of apocryphal books. Porphyry even finds the doctrine of the two existences in Homer!

1455 Ἦδη οὖν ἡ μὲν ἐλομένη κυνὸς βίον ἔρχεται ἐπὶ τὸνδε τὸν ὠροσκόπων, ἡ δὲ ἀνθρώπου κατὰ τὴν παράκλησιν τῆς στιγμῆς ἐπὶ τόνδε· φέρει δ’ αὐτὴν ἡ Δίκη κατὰ τῆς ἡθοποιίας ιδιότητα ἐπὶ τὴν μοῖραν τῆς περιφορᾶς ἡ βίον ἔχει γεγραμμένον πρόσφορον ταῖς αὐτῆς προθυμίαις. Ἡ δὲ Δίκη Τύχη λέγεται, αἰτία οὕσα ἄδηλος ἀνθρωπίνῳ λογίσμῳ – Αἰτία τοίνυν ἐλομένων ἢ γυναικὸς ἢ ἀνδρὸς βίον ἢ ἄλλου τινὸς ζῶου ἐκ τῆς εἰς τῆς ὠροσκόπων φορᾶς· αἰτία δὲ καὶ τῆς ἐνεχθείσης εἰς τὸνδε τὸν ὠροσκόπον τὸ ἐλέσθαι τὸν δεῦτερον βίον, ὃν γεγραμμένον δεῖκνυε ἡ κατὰ τὸν ὠροσκόπον τεταγμένη διακόσμησις τῶν ἀστέρων (*ibid.*, 42. The same theory

is explained by Proclus (in *Anal. Sacr.*, V, 2, pp. 97 sqq., 137, 173 Pitra), who wanted to see the leaders of the state to pay attention to the moment of σπορά, to capture souls of good quality.

1456 Εἰ μὴ τις τὴν μὲν κατὰ τὴν σπορὰν ὠροσκοπίαν τοῦ ἀνθρώπου ἢ κυνὸς ἐλέσθαι ὠροσκοπίαν τοῦ δευτέρου βίου, καὶ ἐπὶ τῷ προαιρεθέντι ἐνδεικνύει τὴν αἵρεσιν (*Ibid.*, 2). Life within the womb is the intermediary between the two existences.

1457 Iamblichus, the “inspired Syrian,” the “divine,” is a pure theologian.

1458 One may remark that, with the stars as causes, one had to take the trouble to understand that the actual positions of the stars were the cause of an event in the far-off future, which came to pass when positions were completely different. All the more reason, if the cause was in πῶς γὰρ τὰ πρὸ τῆς γενέσεως ἐκ τῆς γενέσεως γίνοιτο κ.τ.λ. (Sallust., *De Diis*, p. 262 Gale). [Cf. Sallustius, *Concerning the Gods and the Universe*, ed. with prolegomena and tr., Arthur Darby Nock, English and Greek texts (Chicago, Ill.: Ares Publishers, 1996). Another translation may be found in an appendix to Gilbert Murray, *Five Stages of Greek Religion*, 1st AMS ed. (New York: Columbia University Press, 1925. Repr., New York : AMS Press, 1978), pp. 241-267. L.J.N.]. It is not irrefutable, for one can go backwards from the effect to the cause, and the system of elections escapes completely. However, we are not charged with liquidating all these quarrels.

1459 Firmic., I, 7, 14-22 Kroll. Plato had, some said, died by φθειρίσις. Firmicus is quite capable of having confused φθειρίσις with gangrene and Plato with Plotinus. He already held a grudge against Porphyry for saying that astrology was unreasonable οὐ μόνον ἀνθρώποις, ἀλλὰ καὶ δαιμόνων τισὶ καὶ θρῶν, μᾶλλον δὲ πᾶσιν ἀπλῶς (ap. Joh. Philopon., *De mundi creat.*, IV, 20). Iamblichus, no doubt, conceals Porphyry. As for Firmicus, he wanted complete determinism, without place for little liberties of detail (in *minoribus partibus*, I, 8, 4 Kroll). The εἰμαρμένη or predestination which only determined the length of life was not enough for him (I, 8, 2 Kroll). He wanted *fatalis necessitas lex* (I, 8, 1), ἀνάγκη. One is not pious or religious – like Socrates – at this price. He took trouble to show that this fatalism has nothing to do with morality, that it had burned Pythagoras alive, executed the innocent Socrates, delivered Rome to the ignoble Sulla, etc. This did not keep him from admitting that the stars are themselves intelligent gods (*habent enim stellae proprium sensum divinamque prudentiam*, I, 5, 7 sqq.) and executed the orders of the Supreme Being. Nonetheless, one can obtain from them or from the “gods” in general, the favor of resisting the fateful impulse, with prayer and the support of the laws: *invocemus suppliciter deos – ut confirmata animi nostri divinitate ex aliqua parte stellarum violenti decreto et earum potestatibus resistamus. – Nam quod ad leges pertinet – eas recte prudentissima constituit antiquitas; animo enim laboranti per eas opem tulit, ut per ipsas vis divinae mentis pernicio corporis vitia purgaret* (I, 6). This is gibberish; but one can hardly expect anything else from Firmicus.

1460 See above, p. 568, 1. Cf. Firmicus, VIII, 5 Pruckner.

1461 There were as many spirits (δαίμονες) in the world of the Neo-Pythagoreans and the Neo-Platonists as microbes in the world of modern science. Animism, hylozoism, pandemonism, and many other aspects of the same idea, are very old and always reborn anew. For want of an orthodox doctrine of demonology, one did not know what to believe. One gave a little space on earth to the mortal spirits, pans and satyrs, fauns, fairies, etc. The space between the earth and the Moon was the home of the demi-gods, heroes, manes, spirits available (*Quodque patet terras inter lunaeque meatus | Semidei Manes habitant, etc.* Lucan., *Pharsal.*, IX, 6 sqq.). Between the Moon and the Sun, the more divine spirits, the Lares, lived, and so on out to the Empyrean. Depending on whether one wished to raise or downgrade a given method of divination, one raised or lowered the signs which it interpreted and sent the spirits there. The system summarized by Martianus Cappella (II, 150 sqq.) place, en bloc, *intra Solis meatum usque lunarem globum secundae beatitudinis numina supparisque potentiae, per quae tamen vaticinia somniaque ac prodigia componuntur. Haec aruspicio exta fissiculant admonentia quaedam vocesque transmittunt augurisque loquuntur ominibus. Plerumque enim quaerentes admonent vel sideris cursu vel fulminis jaculo vel ostentaria novitate*. One must realize that this gave astrology control over all other modes of divination. The moon in particular was able to speed or slow the passage of revelatory signs. Hephaestion of Thebes has a chapter Ἐν ποίαις ἡμέραις τῆς Σελήνης ἀληθεῖς οἱ ὄνειροι (III, 24, ap. Engelbrecht, p. 26. Ammon (v. 7, p. 53 Ludwich) assures us that καὶ χρησοὶ καὶ ὄνειροι ψεύδοντ' ἐν τροπικοῖσι. Apollo himself had to become an astrologer in order to keep his clients: ἐρωτηθεὶς ὁ Απόλλων τί τέχεται ἡ γυνή, ἐκ τῶν ἄστων εἶπεν ὅτι θῆλυ, ἐκ τοῦ σπορίμου ἐπιγνούς χρόνου (Euseb., *Pr. Ev.*, VI, 1). He put genethialogy in the first rank of the divinatory methods, *quae instantium saeculorum generanda denuntiat* (Mart. Cap., IX, 894). Cf. the *De Astrologia* by Ps.-Lucian already cited, where all the diviners without exception are re-interpreted as astrologers. Likewise, in the sixteenth century, Pomponacius suppressed all divination independent of astrology, saying that the prophets ‘sybils’ and others did not possess the faculty of prophesy except by virtue of their charts (*De Incant.*, ch. XII).

1462 Maneth., I, 196-207. Cf. Firmic., I, 2, 9 Kroll: *Quid invocas, arator, deos?*

1463 Firmic., I, 5-6, etc. *Hac ratione immortalis animus in nobis caducam terreni corporis fragilitatem confidentia suae majestatis exornat. – Quare nunc cum sumus cum stellis quadam cognatione conjuncti, etc.* (I, 5, 12 Kroll). Firmicus only dilutes what others have said better on the common parentage of our souls with the stars: *et hoc argumentum divinitatis suae; quod illum divina delectant, nec ut alienis interest, sed ut suis. Secure spectat occasus siderum atque ortus. – Curiosus spectator excutit singula et quaerit. Quidni quaerat? Scit illa ad se pertinere* (Senec., Q. Nat., Praef. 10). Even better are the verses of Manilius: *Quis dubitat post haec hominem conjungere caelo? – Quis caelum possit nisi caeli munere nosse | Et reperire deum, nisi qui pars ipse deorum est?* (Manil., II, 105, 115-116), a verse which Goethe wrote in the register atop Brocken, 4 September 1784 (Ellis, *Noct. Manil.*, p. viii) at a time when he was interested in astrology. In January 1784, he had entertained the court of Weimar with a *Ballet des Planètes* (*Planetentanz*). The ideal “mathematician” of Firmicus *cotidie de diis vel cum diis loquitur* (II, 30, 1 Kroll).

1464 Cf. Ad. Lods, *Le livre de Hénoc*, Greek fragments discovered at Akhmim in Egypt, etc. Paris, 1892. R. H. Charles and W. R. Morfill, *The Book of the Secrets of Enoch*, translated from the Slavonic, Oxford, 1896. We have said above (p. 578, 1) that Enoch was supposed to be the inventor of astrology, and it mattered little that this meant astronomy. For, in saying that astrology had been invented by the evil angels (ap. Clem. Alex., *Ecl. proph.*, p. 1002 Potter; Tertull., *Apolog.*, 35; *De cultu foemin.*, I, 2) one makes it the invention of beings more intelligent than human beings. The Book of Enoch (or the “Initiated,” who, following Genesis, 5: 23-24, lived for 365 years and was transported into the sky without dying [“And all the days of Enoch were three hundred and sixty-five years. And he walked with God, and was seen no more: because God took him.” Gen. 5: 23-24, Rheims-Douay version]), was probably written in Aramaic or in Hebrew, and by good fortune translated into Greek. At present, we know only the Ethiopic version, edited and translated by Dillmann in 1851-1853. A part of the Greek version has been rediscovered in Egypt, in the excavations to 1886-1887, and published by MM. Bouriant and Lods. The Slavonic book is complete and gives a rather different text. Here, Enoch returns to the earth for one month, tells his sons what he has seen and passes on to them the 366 books which had been dictated to him in the sky by the angel Vretil (Uriel). To show what a hold these sorts of pious dreams had on some minds, it is enough to say that Tertullian seriously discussed the ways Enoch’s book might have survived the Flood, and that, in 1836, Rev. E. Murray was still reasoning like Tertullian (Lods, op. cit., pp. v-vi). [Fragments from Qumran verify that the Ethiopic Book of Enoch was indeed composed in Aramaic. Slavonic Enoch seems to be a separate work, composed at a different date, although with similar themes. Modern English translations of both Ethiopic and Slavonic Enoch with discussion of origins, sources, etc., may be found in Charlesworth, 1983. A discussion of astrology in Ethiopic Enoch is found in Ness, 2000. LJN.].

1465 Confirmed by a curious passage in Revelation (2: 28) where *dabo illi stellam matutinam* must mean “I give Paradise to you.” [“.... And I will give him the morning star,” Rheims-Douay Version, LJN.]. Cf. Jesus saying to himself: *Ego sum stella splendida et matutina* (Rev., 22: 16) [“.... I am the root and stock of David, the bright and morning star.” Rheims-Douay Version, LJN.]. In the Middle Ages, the Virgin Mary became *Stella maris* (a pun on Maria) and *matutina*. [See Bruce J. Malina, *The Genre and Message of Revelation: Star Visions and Sky Journeys* (1995) for a recent analysis of astrological symbolism in Revelation. Franz Böll, *Aus der Offenbarung Johannes; Hellenistischen Studien zum Weltbild der Apokalypse*, Stoicheia I (Leipzig: 1914; repr. Amsterdam, 1967) is an older analysis. LJN.].

1466 2 Cor., 12: 2-4. He believed firmly in his vision, but he did not know if he had been transported in his body or in spirit (*sive in corpore, sive extra corpus nescio, Deus scit*) [“whether in the body, or out of the body, I know not: God knoweth.” Rheims-Douay Version, LJN.].

1467 Coloss., 1: 20.

1468 Ephes., 6: 12. Cf. 3: 10.

1469 Luke, 10: 18. It goes without saying that there are more orthodox interpretations for all these passages. There are reminiscences and allusions of all sorts. One recognizes in the golden candlestick, the symbolic menorah or candelabrum of seven branches in the Temple of Jerusalem; between the four animals which surround the Lamb, and the four cardinal points, etc. [Both Josephus and Philo mention astrological interpretations of the furniture of the Temple of Jerusalem. See Flavius Josephus, *Jewish War*, 5.217 = Flavius Josephus, *Complete Works*, tr. H. St. John Thackeray, Loeb Classical Library, Vol. III (London: Heinemann, 1926-63), pp. 266-67, and Philo Judaeus, *Questions and Answers on Exodus*, 75, 112-14 = Philo Judaeus, *Philo*, tr. Ralph Marcus, Loeb Classical Library (London: Heinemann, 1969), pp. 124, 162-65. Cf. Ness, 2000, the chapter “Jewish Astrology,” passim, also the works of Molina and of Böll, mentioned above. LJN.].

1470 *Mulier amicta sola, et luna sub pedibus ejus, et in capite ejus corona stellarum duodecim* (Rev., 12: 1) [“And a great sign appeared in heaven: A woman clothed with the sun, and the moon under her feet, and on

her head a crown of twelve stars," Rheims-Douay Version, LJN.], a motif used in Christian iconography for the Virgin Mary.

1471 The Visionary enumerates them (Rev. 21), and one need not hesitate to imagine them as references to astrological lapidary, where each stone is attributed to a planet, a sign of the Zodiac, or a decan (above, p. 316).

1472 Rev., XXIII. The visionary was thinking of the twelve months and not of the twelve tribes of Israel. The number of the Elect ($12 \times 12,000 = 144,000$) is evidently a multiple of the twelve tribes. This arbitrary figure, as the tree of astrological science, forms the frontispiece of Ciruelo's *Astrologia Christiana*.

1473 $\alpha 1 + \beta 2 + \rho 100 + \alpha 1 + \sigma 200 + \alpha 1 + \xi 60 = 365$. Rather than admit that he had gotten the 365 heavens from the 365 days of the year, Basilides assures us that there are 365 days because there are 365 heavens. Cf. E. Amélineau, *Essai sur le Gnosticisme égyptien*, Thèse Doct., Paris, 1887. [Much more is now known about Gnostics than in Bouché-Leclercq's day. For an introduction, see Rudolph, 1984. LJN.].

1474 *Philosophumena*, V, 2, pp. 197 sqq. Cruice.

1475 The author of the *Philosophumena* protests especially against the adulteration of Christianity with astrology: ταύτην τὴν διδασκίαν παρὰ τῶν ἀστρολόγων εἰληφότες ἐπηρεάζουσι Χριστόν – Ταύτην τὴν σύστασιν καὶ τὴν διαφορὰν τῶν ἄστρον Χαλδαϊκὴν ὑπάρχουσαν πρὸς ἐπισπασάμενοι ... ὡς Χριστοῦ λόγου κατήγγειλαν κ.τ.λ. (V, 2, 13). One group believed in the influences generated by the stars (V, 2, 15) and they called themselves fatalists (=Περάται. V, 2, 16). Their adaptation of the catasterisms was a series of tours de force. The two Bears are symbols of Creation, Ursa Major, Creation before Christ, Ursa Minor, after. Sirius, the Dog, that is, the generator (κύων = γεννῶν), is the Word, and Draco, the Dragon, the devil. The anonymous constellation, Ἐνγόνασιν, is Adam on his knees, confessing his sin, holding out one hand to the Lyre (instrument of the Word), the other towards the Crown, which will be given to him if he is faithful to the Lyre/Word. Meanwhile, Ophiuchus "holds back the Serpent," as indicated by his name, that is, he prevents the Dragon from stealing the Crown (IV, 6, 3-4; V, 2, 16), and so on. Nothing is impossible for people who, finding in the Bible the verse, "sept fois le juste tombe et se relève" (Prov., 24: 16) ["For a just man shall fall seven times, and shall rise again...." Rheims-Douay Version, LJN.], say it refers to the rising and setting of the seven planets. The Stoics of earlier times were completely out-done. Using analogous procedures, the Jewish scholars, Talmudists and Kabbalists, drew up tables of correspondences between the winds, the seasons, the planets, the signs of the zodiac, the 28 lunar mansions, the angels, the patriarchs, the letters of the alphabet, etc. (Cf. Cl. Duret, *Trésor de l'histoire des langues de cest Vnivers*, Coligny, 1613, pp. 206-216). Mysticism is an ocean without shores.

1476 There are more than a hundred texts which could be cited. It was the general opinion among the Christians, which they got from the Jews. It goes back at least to the Book of Enoch: ἤδη δὲ καὶ Ἐνώχ φασιν τοὺς παραβάντας ἀγγέλους διδάξαι τοὺς ἀνθρώπους ἀστρονομίαν καὶ ἄλλας τέχνας (Clem. Alex., p. 1002 Potter) and which fit very well with the Greek legends about Prometheus and the Titans. Moreover, since the gods of the Gentiles were demons, it also translated the whole tradition which made divination originate in the teaching of the gods (cf. below, pp. 575-578).

1477 *Fiant luminaria in firmamento caeli et dividant diem ac noctem, et sint in signa et tempora, et dies et annos* (Genes., 1: 45 [sic].) ["... And God said: Let there be lights made in the firmament of heaven, to divide the day and the night, and let them be for signs, and for seasons, and for days and years." Gen. 1:14, Rheims-Douay Version, LJN.]. (Cf. Psalm 135: 7-9). ["Who made the great lights: for his mercy endureth for ever. The sun to rule the day: for his mercy endureth for ever. The moon and the stars to rule the night: for his mercy endureth for ever." Psalm 135: 7-9, Rheims-Douay Version. LJN.]. It is evident the stars here are no more than indicators of time. However, these texts nevertheless motivated the concessions of Philo and of Origen.

1478 IV Kings, 20: 8-11 [Sic! II Kings in Protestant Bibles.].

1479 Matth., II, 1-12.

1480 Matth., 27: 45; Mark, 15: 33; Luke, 23: 44. Cf. the astrological tradition that eclipses coincided with the death of important people (below, p. 369, 1, and Virgil, *Georg.*, 466). The Christian tradition maintained a distinction between the miracle and an eclipse: the darkness covered the whole earth, lasted three hours, while an eclipse of the Sun can be seen in only a few places and lasts no more than a few minutes.

1481 Matth., 24: 29; Mark, 13: 24-25; Luke, 21: 25.

1482 These Magi – whom legend later turned into kings – were Arab magicians (Justin., *Dial. Tryph.*, 77-78; Tertull., *Adv. Marc.*, III, 13), or Magi from Persia (Clem. Alex., *Strom.*, I, p. 359 Potter; Basil., *Homil.*, XXV, p. 510), from Persia or Mesopotamia (Io. Chrys., *Homil.*, VI and VII. Diod. Tars., ap. Phot., cod. 223). St.

Jerome admits frankly that they were genuine astrologers, *philosophi Chaldaeorum* (Hieron., *In Daniel.*, 2) and even *docti a daemonibus* (Hieron., *In Isaiam*, 19). *Chaldaeorum profecto sapientes viri* (Chalcid., *In Tim.*, 125). Celsus also calls them “Chaldaeans” and Origen (C. Cels., I, 58) does not say otherwise. On the question of the Magi as kings, see J. Car. Thilo, *Eusebii Alexandrini oratio περὶ ἀστρονόμων (praemissa de magis et stella quaestione) e Cod. Reg. Par. primum edita*. Progr. Halae 1834. The royalty of the Magi was invented (towards the fourth century), as were the cradle, the ox and ass, to show the fulfilment of prophecies (cf. Is., 1: 3; 33: 16; 49: 7; 60: 3 and 6; Psalm., 62: 10. Habak., 3: 2). The Venerable Bede is the first to give their names.

1483 Ἐπειδὴ γὰρ περὶ ταῦτα τὴν τέχνην εἶχον ἐκεῖθεν αὐτοὺς εἵλκυσε (Io. Chrys., *Homil. III in Epist. ad Titum*).

1484 Ignat., *Epist. ad Ephes.*, 19. Tertullian debates and rejects energetically these founders of Christian astrology: *Sed magi et astrologi ab Oriente venerunt. Scimus magiae et astrologiae inter se societatem. Primi igitur stellarum interpretes natum Christum annuntiaverunt, primi muneraverunt. Quid tum? Ideo nunc et mathematicis patrocinabitur illorum magorum religio? De Christo scilicet est mathesis hodie; stellas Christi, non Saturni et Martis et cujusque eodem ordine mortuorum observat et praedicat. Et enim scientia ista usque ad Evangelium fuit concessa, ut Christo edito nemo exinde nativitatem alicujus de caelo interpretetur* (Tertull., *De Idolol.*, 9).

1485 Ξένος ἀστήρ, καταλύων τὴν παλαιὰν ἀστροθεσίαν – ἵνα μεταθῇ τοὺς εἰς τὸν Χριστὸν πιστεύσαντας ἀπὸ τῆς εἰμαρμένης εἰς τὴν ἐκείνου προνοίαν – Μέχρι τοῦ βαπτίσματος οὐκ ἡ εἰμαρμένης, φασίν, ἀληθῆς, μετὰ δὲ τοῦτο οὐκέτι ἀληθεύουσιν οἱ ἀστρολόγοι (Clem. Alex., *Excerpt. ex Theodoto*, 68-78). The theurgists, finding that their charms failed against baptism, said as much to their disciples: οὐ γὰρ ὑφ'εἰμαρτὴν ἀγέλην πίπτουσι θεουργοί (an oracle cited by Io. Lyd., *Mens.*, II, 9, p. 23 ed. Bonn. Cf. Iamblich., *De Myster.*, p. 223, 9; Procl., *In Alcibiad.*, p. 517, 36), and Arnobius railed en bloc against all these vain people: *ab sciolis nonnullis et plurimum sibi androgantibus dicitur deo esse se gnatos nec fati obnoxios legibus* (II, 62).

1486 Ἰδοὺ, φησι [ὁ ἀστρολόγος], καὶ τοῦ Χριστοῦ γεννηθέντος ἀστήρ ἐφάνη, ὅπερ ἐστὶ σημεῖον τοῦ τὴν ἀστρολογίαν εἶναι βεβαίον· πῶς οὖν, εἰ κατ'εἰκὲν ἐτέχθη τὸν νόμον, ἀστρολογίαν ἔλυσε καὶ εἰμαρμένην ἀνέῤἥκε, καὶ δαίμονας ἐπεστόμισε κ.τ.λ. (Io. Chrys., *Homil. VI in Matth.*).

1487 St. Basil declares the star *μηδενὶ τῶν συνήθων παραπλήσιον*, and escapes from the grip of astrology: καὶ μηδεὶς ἐλκέτω τὴν τῆς ἀστρολογίας παρασκευὴν εἰς τὴν τοῦ ἀστέρος ἀνατολήν· οἱ μὲν γὰρ τὴν γένεσιν προσάγοντες *ἐκ τῶν ἡδὴ ὄντων ἀστέρων* τὸν τοιόνδε σχηματισμὸν αἴτιον εἶναι τῶν κατὰ βίον συμπτωμάτων ἐκαστῷ τίθενται (Basil., *Hom.*, XXV, p. 510). – οὐ γὰρ δὴ τοῦτο ἀστρονομίας ἔργον ἐστίν, ἀπὸ τῶν ἄστρων εἰδέναι τοὺς πικτομένους ἀλλ'ἀπὸ τῆς ὥρας τῶν πικτομένων προαναφωνεῖν τὰ μέλλοντα ἔσσεσθαι, ὥς φασιν (Io. Chrys., *loc. cit.*). The doctrine already suggested by the Gnostics (cf. ξένος ἀστήρ, above, p. 612, 2), common to St. Gregory Nazianzus, Diodorus of Tarsus, St. John Chrysostom and the whole school of Antioch. The same was true for the author of the *Hermippus*: ἀστέρα τινὰ ξένον οἶμα τοῦ συνήθους (I, 9, 51). Diodorus of Tarsus says: δύναμιν τινα θειοτέραν. Cf. the angel appearing to the shepherds in St. Luke (2: 9 sq.). These teachers thought to respond to the objection by saying: it is a prodigy. They forgot that prodigies are the divinatory signs par excellence, of the same origin, and that, in the most systematized methods, there remained a place for prodigies – comets and meteorites in astrology. Some thought that the star of the Magi had returned when a nova was seen in Cassiopeia in 1572, and Theodore Bezae concluded that the Second Coming of Christ was approaching (F. Hofer, *Hist. de l'astronomie*, p. 329).

1488 The star was foreseen much earlier in the Messianic tradition (E. Renan, *Vie de Jésus*, 19th ed., p. 251). It is quite curious to find a celestial guide also coming from the East in Roman legend. *Varro ait hanc stellam Luciferi, quae Veneris dicitur, ab Aenea, donec ad Laurentum agrum veniret, semper visam, et postquam pervenit, videri desiisse* (Serv., *Aen.*, II, 801). Aeneas was led to a spot determined by a star which, although a known planet, was nonetheless miraculous.

1489 The condition is οὐχ ὅτι ἐφάνη [ὁ ἐπὶ τῆς τοῦ Θεοῦ Λόγου γενέσεως ἀστήρ] καὶ τοὺς μάγους συνεφειλκύσατο, τὴν γένεσιν ἀπετέλεσεν, ἀλλὰ τοῦαντίον *τελουμένην ἐσήμανεν*, οἷονεῖ τις κῆρυξ καὶ προαγγελεὺς τοῦ τοσοῦδε καλοῦ γεγονῶς (*Hermippus*, I, 8, 48). It is the argument against astrology used by John Chrysostom (above, p. 612, 3) and by St. Augustine, but turned in favor of it. Augustine attacked the partisans of the Ascendant-star, agent of birth and cause of Fate, even for Christ: *Hic jam erubescat stultitia sacrilega et quaedam, ut ita dicam, indocta doctrina, quae ideo putat Christum sub stellarum decreto esse natum, quia scriptum est in Evangelio, quando natus est, stellam ejus magos in oriente vidisse. Quod verum non esset, nec si homines sub decreto ejusmodi nascerentur. Nunc autem tantum abhorret a vero, sub stellato fato natum esse Christum, ut nullum hominem ita nasci credat quisquis recte credit in Christum. – Hinc enim potius Christus non sub dominatu ejus [stellae], sed dominus ejus apparuit; quia illa non in caelo sidereas vias tenuit, sed hominibus quaerentibus Christum viam usque ad locum in quo natus fuerat demonstravit. Unde*

non ipsa Christum fecit mirabiliter vivere, sed ipsam fecit Christus mirabiliter apparere (Aug., *Serm. CXCIX*, t. V, 633 Bened.).

1490 Origen., *In Genes. comm.*, ap. Euseb., *Praep. Ev.*, VI, 11. Origen had but one goal: to show that predestination or astrological fatalism (εἰμαρμένη) did not exist, but only divine foreknowledge (πρόγνωσις τοῦ θεοῦ), which was not contrary to human liberty, seeing that divine foreknowledge was not the cause, but the sign, recording knowledge – anticipating our concern, simultaneous for God – of our acts. One can add nothing to the arguments upon which he builds this fundamental thesis, if this is no more wise to believe than it is to try to demonstrate. He meant to prove: 1) ὅτι οἱ ἀστέρες οὐκ εἰσὶ ποιητικοὶ τῶν ἐν ἀνθρώποις, σημαντικοὶ δὲ μόνον; 2) ὅτι ἄνθρωποι τὴν περὶ τούτων γνῶσιν ἀκριβῶς ἔχειν οὐ δύναται, ἀλλὰ δυνάμεσιν ἀνθρώπων κρείττωσι τὰ σημεῖα ἐκκεῖται (*ibid.*, VI, 11, 30). Note the concession implied in ἀκριβῶς. In short, he accepted astrology, not as γενεθλιαλογική but as ἀστεροσκοπική (VI, 11, 71), the deciphering of a symbolic writing of which the stars are the characters.

1491 Origen uses the famous text upon which, the whole doctrine had hung since Philo, *Genes.*, I, 14 (above, p. 600, 1; 610, 2). However, he did not stop there. Like a true Neo-Platonist, which he basically was, he admitted that the stars are not simple mirrors, but intelligent instruments of the divinity. It was not to inert bodies that the Psalmist said: *Laudate eum, sol et luna*. [“Praise ye him, O sun and moon,” Psalm 148:3, Rheims-Douay Version. L.J.N.]. Origen even asked if they had sinned, noting that Job said: *Et stellae non sunt munda in conspectu ejus*. [“the heavens are not pure in his sight,” Job 15:15, Rheims-Douay Version. The Vulgate says “stars,” *stellae*, while the Hebrew Masoretic text says מַיִם, *shemayim*, heavens or sky. L.J.N.]. He also asked if they did not have a part in the Redemption. St. Pamphilus (*Apol. pro Origene*, 9) affirmed that this opinion is not heretical. It only became so later, with the Priscillianists. Origen had faith in astrology, and since his time it has remained compatible with Catholic orthodoxy. The learned Huet, who was expert in it, vouched for it. If Origen, he says, believed that the stars revealed the future, *in eadem esset causa ac Apotelematici omnes et hodierni astrologiae patroni, quorum sententia, integra modo servetur humani libertas arbitrii, haereseos nota immunis est* (P. Danielis Huetii, *Origenianorum*, lib. II, 2 Quaest. VII, *De astris*, in *Patrol. Migne, Origen. Opp.*, t. VII, p. 973-989).

1492 Ἐλοδορεῖτο ὡς μαθηματικὴν ἀσκούμενος (Socrates, *Hist. Eccl.*, II, 9) – διεβάλλετο ἀσκεῖσθαι τῆς ἀστρονομίας ὃ μέρος ἀποτελεσματικὸν καλοῦσι (Sozom., *H. Eccl.*, III, 6).

1493 St. Athanasius, commenting upon a passage in Job (9:9) with a text slightly different from the one in the Vulgate, where God is said ποιῶν Πλειάδα καὶ Ἑσπερον (Orion in the Vulgate [“Who maketh Arcturus, and Orion, and Hyades, and the inner parts of the south.” Job 9: 9, Rheims-Douay Version.

. וְיַחַדְרֵי תִּמְן . עַשְׂר־עַשׂ, כִּסִּיל וְיָמָה; וְיַחַדְרֵי תִּמְן . “Who maketh the Bear, Orion, and the Pleiades, and the chambers of the south,” according to the 1917 translation of the Jewish Publication Society, with Hebrew text. L.J.N.]) finds the reason for this pairing in the fact that the Pleiades (in Taurus) are the house of the planet Hesperos (Venus): Εἴ τις δύναται ἀκούετω τίς ἐστὶν ἡ Πλειάς; καὶ τίνος οἶκος ἐστὶ καὶ τίνος χώριον [perhaps ὄριον?]; ὁ γὰρ Ἑσπερος οἶκον ἔχει τὸ ἄστρον τῶν Πλειάδων, καὶ οὐκ εἰκὴ ταῦτα εἰληπταὶ τὰ ὀνόματα (Athanas., ap. Pitra, *Anal. sacra*, V, 1, p. 25: text seen above, p. 191, 2). The freedom of spirit which Athanasius often shows is surprising. Speaking of the pagan gods, he does not mention the mystical explanation, current and even part of the faith since St. Paul (cf. I Cor., X, 19-21), “that the gods of the nations are demons.” He is content with rational explanations, also orthodox, that they are natural forces or inert (ἀψυχα) idols or deified human beings (Athanas., *Orat. contra gentes*, 29).

1494 Euseb. Alex., op. cit., ed. Thilo, p. 19.

1495 Cf. above, p. 466, 2; 598, 1, the recourse to prayer to deflect or combat the celestial wills. This was the danger which Pope Gregory the Great pointed out: *Quae tamen ... spondent posse mutari, si illis quae adversantur sideribus supplicetur*, where *illa generatur impietas ut Sol ... adoretur, quod nonnulli etiam Christiani se religiose facere putant, etc.* (Leo Magn., *Serm. in nativ. Dom.*, 3-4).

1496 We still have the *Κατὰ εἰμαρμένης* of Gregory of Nyssa. The treatise of the same name by Diodorus of Tarsus is lost, save for some fragments (ap. Phot., *Cod.*, CCXXIII). St. Basil (*In Hexaem. Hom. VI*) was indignant. He called astrology a pernicious (βλάβη) illness of which minds must be cured.

1497 They admitted the celestial signs in the gospels and other meteorological presages. One wonders if it were not to discredit the *thema mundi* of the so-called “Egyptians” that St. John Chrysostom (*De mundi Creat.*, Opp. VI, p. 449) maintained that God created the Moon full (πανσέληνος). It could not be full if it were in Cancer when the Sun was in Leo (above, p. 187, Fig. 23).

1498 Ephraem., *Carm. Nisib.* (in Syriac), LXXXII, 16. The same and also against the astrologers: *si genus humanum ad varios actus nascendi necessitate premeretur, cur aut laudem mereantur boni, aut mali percipiant*

ultionem? (Isid., *Orig.*, III, 70, 40). However, even the theologians, here disguised as moralists, did not find it absurd – once God was put outside the chain of causes – that the liberty of Adam had produced for his descendants a *neccssitas peccandi* joined to responsibility, not just the Fall, but also the *culpa*. [for a modern edition, with Syriac text and German translation, see Ephraem Syrus, *Des heiligen Ephraem der Syrers Carmina Nisibena* I, II, ed. and tr., Edmund Beck, *Corpus Scriptorum Christianorum Orientalium*, Vols. 218-219, *Scriptores Syri*, Tomes 102-103 (Louvain: 1961-63). L.JN.].

1499 Cf. the memoir of Letronne, *Des opinions cosmographiques des Pères de l'Église*, 1835 (*Oeuvres choisies*, I, pp. 382-414). While on the pagan side, minds as mediocre as Macrobius' (for example) admitted that the earth was a sphere and that the antipodes existed, Lactantius could not mock this doctrine enough, which was inept and absurd in his view (*Inst. Div.*, III, 24). Diodorus refuted it and Augustine defended the possibility that one might believe it. The general opinion of the Fathers was that sky was a hollow hemisphere placed upon the earth, teaching that God *statuit caelum quasi fornicem et extendit ipsum quasi tabernaculum* (Psalm 103: 3 ["Who coverest the higher rooms thereof with water. Who makest the clouds thy chariot: who walkest upon the wings of the winds." Psalm 103: 3, Rheims-Douay Version. L.JN.]. At the center of the terrestrial disk was the ὀμφαλὸς τῆς γῆς, the navel of the world, no longer at Delphi but Jerusalem, or more exactly, at Golgotha. God had said by the prophet: *Ista est Jerusalem: in medio gentium posui eam, et in circuitu ejus terras* (Ezek., 5: 5) ["... This is Jerusalem, I have set her in the midst of the nations, and the countries round about her.," Rheims-Douay Version. L.JN.]. Below the celestial vault, perhaps upon a horizontal foundation, are the waters or "cataracts of the sky" (Gen. 1: 6-7; 7: 11; Psalm, 77: 23; 103: 3; 148: 5). St. Augustine cut short the whole discussion by saying: *quoquo modo autem et qualeslibet aquae ibi sint, esse eas minime dubitemus: major est quippe Scripturae auctoritas quam omnis humani ingenii capacitas* (Augustine, *In Genes.*, II, 9) which is frank reasoning for a theologian. However, he grants willingly that these are "spiritual waters" (*Conf.*, XIII, 32; *Retract.*, II, 6). St. Augustine, moreover, states, like the Fathers of the third century, that Christians had a reputation for being simple-minded, people without education: *adhuc audent ipsi pauci qui remanserunt ... Christianos tanquam imperitissimos irridere*, to which Augustine responds that the numbers of Christians increases while that of the pagans decreases (Aug., *De divin. daemon.*, 14). A pessimistic pagan would not have reached the same conclusion. In revenge, the Christians put up with the prestige of pagan science, of diabolic divination, against which Augustine wrote *adversus praesumptionem et tanquam miram et magnam scientiam Paganorum* (*ibid.*, 1).

1500 *Quid est ergo Cicero timuit in praesentia futurorum, ut eam labefactare disputatione detestabiliteretur?* (Aug., *Civ. Dei*, V, 9). He detested Cicero more than the Stoics (of whom he says little) because, in denying predestination, he denies God. *Qui enim non est praescius omnium futurorum, non est utique Deus*. According to St. Augustine, God sees all eternity, even our desires. However, we are free in every case for He wills what we will and foresees that we will do it (*ibid.*, V, 10). It was in the name of this nearly unintelligible free will that he rejects astrological fatalism: *alii quidem fato se ad peccandum quaeruntur impelli. tamquam hoc decreverint sidera et caelum prius talia decernendo peccaveri* (Augustine, *De Contin.*, 14). What was important to him was to maintain the responsibility of the sinner, in order to attribute to grace alone the justification of predestination.

1501 See the special treatise *De divinatione daemonum*, which summarizes a doctrine which had long been Christian. He thus concludes that God forces the demons to tell the truth. This is why zealots fabricated oracles of Apollo in which he declares himself beaten, and teaches, like a good catechist, the dogma of the Trinity, does homage to the Virgin Mary, etc. (v. g. *Anal. sacr.*, V, pp. 307-308 Pitra).

1502 Augustine, *Conf.*, IV, 3.

1503 It was of astronomy that Augustine said: [*Ratio humana*] *astrologiam genuit, magnum religiosi argumentum, tormentumque curiosi* (Augustine, *De ordine*, II, 42).

1504 *Quod si dicuntur stellae significare potius ista quam facere, ut quasi locutio quaedam sit illa positio praedicens futura, non agens (non enim mediocriter doctorum hominum fuit ista sententia): non quidem ita solent mathematici, ut v.g. dicant "Mars ita positus homicidam significat" sed "homicidam facit"* (Augustine, *Civ. Dei*, V, 1. Cf. *Conf.*, IV, 3). He accepted at need the purely physical action of the stars upon the body: *Cum igitur non usquequaque absurde dici posset ad solas corporum differentias adflatus quosdam valere sidereos*, like that which produced the positions of the Sun and the phases of the Moon. However, he retracted part of this concession in making the remark that the postulated action did not go so far as to unify the sex of twins (*Civ. Dei*, V, 6).

1505 *Jam etiam mathematicorum fallaces divinationes et impia deliramenta rejeceram* (Augustine, *Conf.*, VII, 6). His knowledge of astronomy rendered him an immense service, in allowing him to notice the ignorance of the Manichaean bishop Faustus, which destroyed his faith in the doctrine preached by the said Faustus

(Conf., V, 5). It was precisely its scientific, neutral, character which had attracted him earlier *Ideoque illos planos* [one also reads *planetarios*], *quos mathematicos vocant, plane consulere non desistebam, quod quasi nullum eis esset sacrificium et nullae preces ad aliquem spiritum ob divinationem dirigerentur* (Aug., Conf., IV, 3). Later, he considered astrology to be a *fornicatio animae* (Aug., Opp., III, p. 63a), an epithet with which he was familiar and which he applied to all which separates Man and God, whether belief or science.

1506 *Ac per hoc si tam celeriter alter post alterum nascitur ut eadem pars horoscopi maneat, paria cuncta quaero, quae in nullis possunt geminis inveniri; gemini habere non possunt.* (Augustine, Civ. Dei, V, 2).

1507 Augustine, Civ. Dei, V, 5.

1508 Aug., Civ. Dei, V, 5-6.

1509 Augustine, Civ. Dei, V, 7. *Jam illud quis ferat, quod in eligendis diebus nova quaedam suis actibus facta moluntur? – Fecit ergo fatum quod non habebat, et ex ipsius facto coepit esse fatale quod in ejus nativitate non fuerat. – Ubi est ergo quod nascenti jam sidera decreverunt?* Cf. [above, p. 488, 1](#). Ptolemy avoids this contradiction by ignoring elections.

1510 One meant by *fatum*, he said, in contemporary language, *vim positionis siderum – quod aliqui alienant a Dei voluntate, aliqui ex illa etiam hoc pendere confirmant. Sed illi, qui sine Dei voluntate decernere opinantur sidera quid agamus – ab auribus omnium repellendi sunt, etc.* (ibid., V, 1).

1511 *His omnibus consideratis non immerito creditur, cum astrologi mirabiliter multa vera respondent, occulto instinctu fieri spirituum non bonorum, quorum cura est has falsas et noxias opiniones de astralibus fatis inserere humanis mentibus atque firmare, non horoscopi notati et inspecti aliqua arte quae nulla est* (Augustine, Civ. Dei, V, 7). St. Augustine rallied at other times to the opinion of Vindicianus. Vindicianus had studied astrology professionally before becoming a physician, and he concluded that the astrologers guessed at random and were right at random (Confess., IV, 3). He did not use rational arguments (that of the slave and the master born simultaneously and that of twins) to convince his friend Firminus. He could think only of ridiculing the astrologers – *ruminando, ne quis eorundem delirorum qui talem quaestum sequerentur, quos jam jamque invadere atque irrisos refellere cupiebam, mihi ita resisteret* (VII, 6). Maintaining that the devil intervened and often told the truth, these charlatans were still ridiculous. St. Paulinus of Nola, a friend of St. Augustine, also tried sarcasm, mocking, in a rather imprudent fashion, the astrologers who saw their calculations upset by miracles (Epist., 38). He laughed at their confusion on the day the Sun went backward, at the prophet's command, to reassure Hezekiah (he might have added the day that Joshua made the Sun stand still), and he asked them what they had done. If his faith were open to doubt, he might have feared the response of the astrologers: "We were observing the sky, according to custom, and we saw nothing of what it pleases you to believe."

1512 St. Augustine saw this especially in the Priscillianists (cf. *Ad Orosium, contra Priscillianistas et Origenistas, liber unus*), who accommodated astrology in this way. In the magic books of the Middle Ages, one finds, for example: ♄ Orphiel, ♃ Jophiel, ♂ Samael, ☉ Michael, ♀ Anael, ☿ Raphael, ☾ Gabriel, etc. (Arbatel, *De magia veterum*). [The Arbatel was also published as *De occulta philosophia. Liber quartus.*, a false addition to the genuine *De occulta philosophia. Libri tres* of Heinrich Cornelius Agrippa von Nettesheim. It was translated as Henry Cornelius Agrippa, *his Fourth book of occult philosophy* (London, Printed by J.C. for J. Harrison, 1655); There is also a modern translation, *Arbatel of magick : Tome one – Isagoge*, translated into English by Robert Turner. Gillette, N.J.: Heptangle Books, 1979. LJN.].

1513 Cf. Tertull., *Ad Scapulam*, 3. St. Augustine said that numbers of Christians feared the "Egyptian days" ([above, p. 486, 1](#)). Likewise, St. Augustine stated that many people *varios cursus lunae obeundis negotiis commendare vel cavere quosdam dies, quemadmodum plerique posteros dies* (the *dies atri* of the Roman calendar) *vel Aegyptiacos declinare consueverunt* (Ambros., *Epist.*, I, 23, ann. 383). Christians who fear Friday or the thirteenth of the month are legion in the nineteenth century.

1514 It is possible that Hephaestion of Thebes, author of a treatise on practical astrology, was Christian (Englebrecht, p. 21). The author of the *Hermippus* (a name influenced no doubt by a Ἑρμῖππος ἀστρολογικός by Athenaeus, XI, p. 478) took pains to eliminate from astrology the sole doctrine which was proscribed by Christian dogma, fatalism based upon the stars as causes rather than as signs. He is a decided partisan of free will, and submitted only the body to the influence of the stars and even this with reservations. Prudent as well, he said that the moment of death did not depend solely upon the stars. It was pointless, according to him, to seek in the stars θανάσεως ἢ δόξας ἢ γάμους, ἐτι δὲ πλούτους καὶ νίκας. (II, 4). He does not admit sex in the signs of the zodiac (I, 19), nor the theory of οἰκοὶ or the τόποι. Finally, his was an astrology sweetened and disguised by a platonizing philosophy. Even the "catholic" presages drawn from eclipses were, according to him, conditional. God made them to be warnings and would be satisfied with if the people "became wise" (II,

11, 83). One could not be more accommodating. Even though eclipses had a mechanical cause, this mattered little: God caused them nonetheless and His wisdom was no less admirable for it (*ibid.*, 85-87). Cf. [above](#), p. 348.

1515 One can find only canons dealing with specific cases, like those of the Council of Laodicea (can. 36) forbidding clerics to be addicted to astrology or fulminating against astrological fatalism, but only against fatalism. The canons of the council of Braga, in 561 CE, are like this: Can. IX. – *Si quis animas et corpora humana fatalibus stellis credit adstringi, sicut pagani et Priscillianistae dixerunt, anathema sit.* – Can. X. – *Si qui XII signa, i.e., sidera quae mathematici observare solent, per singula animae vel corporis membra dissipata credunt et nominibus Patriarcharum ascripta dicunt, sicut Priscillianus dixit, anathema sit.* – The most explicit is canon 15 of the council of Toledo, held in 400 CE: *Si quis astrologiae vel mathesi existimat esse credendum, anathema sit.* However, there is always the understanding that one anathematizes fatalist astrology. A protestation against fatalism placed at the head of a treatise on astrology was always, in the Middle Ages as in the sixteenth century, a regular passport and a sufficient safeguard. Cf. Stephan. Alexandr., ed. Usener, pp. 17-19; the *Apotelesmata Astrologiae christianae* of Ciruelo (see Bibliography), an author who put his orthodoxy under the guarantee of the Faculty of Theology of Paris, – containing, in prolegomena and an epilog, an ample refutation of the twelve books of Pico della Mirandola, *Contra astrologos* [Bonon., 1495]; the prefaces of Cardanus, *Comm. Astrol.*, Basil., 1578; the *Astrologorum defensio* put by Fr. Junctinus at the head (pp. 1-15) of his *Speculum Astrologiae*, published in 1581 *sub censura Sanctae Ecclesiae Catholicae Romanae*, with “humble supplication to the Most Reverend Inquisitors” and the certificate delivered to Origen by Huet ([above](#), p. 615, 1). J.-B. Morin dedicated his *Astrologia Gallica* [Hague-Comitis, 1661] to Jesus Christ himself, speaking highly of the catholic faith and flattering himself that he had been helped the Holy Spirit itself in the study of “the highest of the sciences.” It took one of these special insights to divine that, when Jesus said “are there not twelve hours in a day?” (John, 9: 9), he was alluding to the theory of favorable and unfavorable hours. The biographer of Morin took care to note that he was consulted by Cardinal Richelieu, by Cardinal Berulle, and that he died having taken all the sacraments of the Church. The astrologers feared the lawyers more and especially the imperial laws. Thus Cardanus (*In Ptolem. Comm.*, *Prooem.*) maintained that the laws were concerned with the *mathematici*, that is, geomancers, and not astrologers. The proof, he said, was that astrology dated to Ptolemy and the laws were earlier! The insolence of this charlatan, “a great man with flaws” (Leibniz, *Theod.*, III, 254), is marvelous. Earlier, Ciruelo (*Prolog.*, p. 47) assures us likewise that *mathematicus* meant *pro nechromante aut divinatore*. An interesting study could be made on the polemic which the Renaissance revival of astrology gave rise to in the sixteenth century, which continued, and which calmed down little by little, confronted with the indifference of the new humanists of the seventeenth century. The editors, translators, commentators of the ancient texts all complained in their prefaces of the relentlessness and bad faith of their adversaries. The most redoubtable – on this subject, at least – was Pico della Mirandola. Melanchthon affirmed in his preface that Ptolemy is an instrument of Providence and that he had refuted in advance *Cyclopicos sermones, quibus tota haec doctrina furenter deridetur*. Cardanus, Dasypodius, Junctinus, Morin, protested against these “calumnies” which the ignorant propagated and disassociated themselves from the charlatans and incompetents who usurped the name of astrologers. All were prodigious with declarations of Christian faith and claimed to continue the work of the holy Patriarchs contemporary with the “Sages” of Greece.

1516 The uselessness of so many efforts caused one more argument. Firmicus had already said that astrology was like a religion: *neque enim esset ejus vea substantia, nisi contra eam tantis argumentorum viribus niterentur* (I, 1, 3 Kroll). All which endured, endured for a reason, but this reason had little to do with love of the truth and especially possession of truth. As for the theologians, reconciled with astrology, they had more troubles with the new astronomy. Already bound by the opinions of the Fathers, they could not get past a text of the Psalmist: *Qui fundasti terram super stabilitatem suam: non inclinabatur in saeculum saeculi* (Psalm 103: 5) [“Who has founded the earth upon its own bases: it shall not be moved for ever and ever,” Psalm 103: 5, Rheims-Douay Version. LJN]. Likewise, in another era, Cleanthes had wanted to condemn Aristarchus of Samos for impiety towards the venerable Hestia or hearth of the universe (Plut., *De facie in orbe lunae*, 6). Aristotle, the human oracle, was also on the side of the theologians. Pascal himself, intimidated especially by St. Augustine, wrote in *Pensées* (XXIV, 17 bis Havet) “I find it good that I have not investigated thoroughly the opinion of Copernicus.”

