

## The Cosmos in Your Hand: A Note on Regiomontanus's Astrological Interests

### ▼ ARTICLE


▼ **ABSTRACT** Johannes Müller von Königsberg (1436–1476), better known as Regiomontanus, is widely considered as the most influential astronomer and mathematician of 15th-century Europe. He was active as an astrologer and deemed astrology to be the queen of mathematical sciences. Despite this, Regiomontanus's astrological activity has yet to be fully explored. A brief examination of Regiomontanus's manuscripts shows that his astrological interests were accompanied by interests in the arts and in methods of prognostication. This article studies an unconventional astrological–chiromantical text, whose relevance is threefold: a) it sheds new light on Regiomontanus's astrological interests; b) it enriches our knowledge of Regiomontanus's efforts to learn and understand Greek—Regiomontanus transcribed it into his own manuscript during his sojourn in Italy from 1460–1467; and c) it is the sole extant text in the Greek tradition that provides a system for prognostication from the study of a person's hand, the parts of which are considered as being under the domain of planets. The article provides an English translation of Regiomontanus's transcription, alongside a brief commentary, and studies the intellectual and historical context of that production through manuscript analysis.

▼ **KEYWORDS** 15th Century, Astrology, Astronomy, Greek, Humanism, Manuscripts, Prognostication, Regiomontanus

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### 1. Introduction

Johannes Müller von Königsberg (born 1436 in Königsberg, Bavaria; died 1476 in Rome), better known as Regiomontanus, is widely considered to be the most influen-

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tial astronomer of the 15th century.<sup>1</sup> In addition to his contributions to trigonometry and mathematical astronomy, Regiomontanus—as was common among his educated contemporaries—had an interest in astrology and was active in astrological activities such as the casting of horoscopes. He is considered responsible for establishing such successful astrological methods that they were widely used by other practitioners.<sup>2</sup> However, the astrological side of Regiomontanus's activity has yet to be explored in any great depth. Of course, as valuable studies have recently stressed, modern scholarship has long since cast astrology as a “wretched subject,” but one that nevertheless undoubtedly constituted an essential part of the cultural-political context in which scholars were immersed, in ancient, medieval, and modern times.<sup>3</sup> In his renowned inaugural lecture at the University of Padua in 1464, Regiomontanus praised astrology as the queen of sciences and as a means through which the laws of the Creator could be discovered: since God created the heavens and the stars, astrology allows for the provision of meaningful insights into the natural, human, and even divine realms.<sup>4</sup> In addition, Regiomontanus is a key figure in understanding the shift from geocentric to heliocentric astronomy.<sup>5</sup> For these reasons, a survey of Regiomontanus's astrological interests is worth the effort.

As is well known, astrology has several practical branches, among which are the so-called nativities, which are concerned with predictions about a person's life, fortune, and character.<sup>6</sup> This goal is shared by the divinatory arts. Astrological knowledge could serve as a foundation for the predictions made in some divinatory practices. Since the 3rd century in Babylon, the correspondences between the planets, the zodiac signs, and the human body, as well as the natural elements, have been an object of study in relation to healing and prognostication (*iatromathematics* and *melothesia*).<sup>7</sup> As such, divination has often been among the concerns of astrologers in ancient and medieval times, with astrological knowledge applied to medical purposes or to make prognostications from signs on the human body, plants, and so forth. Chiromancy, for instance, is a discipline that seeks to discover a person's character, future, and possible illnesses from examinations of the hand. Within this field, certain parts of the hand are considered as subject to planetary influences. Regiomontanus himself evidences such interests in his scribal activity. At least two works on chiromancy were ascribed to his authorship.<sup>8</sup> A 15th-century manuscript, currently preserved at the University Library of Erlangen, Germany and catalogued as *Erlangensis A4 1227 (89)*, contains

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1 Zinner (1990); Folkerts (1977).

2 North (1986, pp. 158–163).

3 Among others, Rutkin (2019).

4 Original title: *Oratio Johannis de Monteregio, habita Patavij in praelectione Alfragani*. First printed in *Rudimenta astronomica Alfragani* (al-Farghani, 1537). On Regiomontanus's lecture, see Swerdlow (1993); Byrne (2006); Malpangotto (2008, pp. 133–146); Goulding (2010, pp. 8–10); Rutkin (2019, p. xx, 369–373); Omodeo (2021). Regiomontanus's lecture is reprinted in Schmeidler (1972, pp. 43–53). See also Filippuzzi (1980).

5 Among others, Swerdlow (1973); Shank (2007; 2020).

6 Rutkin (2019, pp. lxxix–lxxxiv).

7 Geller (2014).

8 Craig (1916, pp. xxvi–xxvii).

several texts in Greek.<sup>9</sup> Some of these texts are astrological and divinatory and were transcribed by Regiomontanus in the 1460s, during his sojourn in Italy (1460–1467), when he worked as Cardinal Bessarion's protégé. Of these texts, one is prominent for its uniqueness: first, it combines astrology and chiromancy, as it is an application of astrological theories to the hand, providing a system for prognostication from the study of a person's palm and fingers in which the hand is read as a microcosm; second, it is the sole extant text about hand-reading in the Greek tradition.<sup>10</sup> In addition to this, Regiomontanus's activity as a Greek scribe was linked not only to his preparation of the renowned *Epitome of the Almagest* (*Epytoma Johannis de Monte Regio in Almagestum Ptolemaei*), for which a full command of Greek was needed, but also to the traditional humanist educational standards of the 1460s.<sup>11</sup>

The present article provides a study of Regiomontanus's texts in the *Erlangensis* manuscript, with a focus on the astrological–chiromantical text, providing an English translation alongside a brief commentary, and discerns the relevance of the text in the context of Regiomontanus's activities. The article proceeds as follows: Section 2 outlines the links with astrology in Regiomontanus's works, while Section 3 describes the *Erlangensis* manuscript and its content. The astrological–chiromantical text copied by Regiomontanus is studied in Sections 4, 5, and 6: Section 4 provides a brief historico-philosophical framework to approach the text, which is provided in English translation in Section 5 (the translation is based on the Greek text copied by Regiomontanus, with the original text from the *Erlangensis* manuscript supplied in the Appendix, except where indicated). Section 6 offers a commentary on the text alongside comparisons with similar texts. Section 7 explores the relevance of Regiomontanus's text for his apprenticeship in Greek, while Section 8 reconstructs the relationships between Regiomontanus and humanists that are suggested in his transcription.

## 2. Regiomontanus and Astrology

In addition to the usual activities of a 15th-century astrologer—notably, a horoscope for Leonora of Portugal, wife of Emperor Friedrich III, was commissioned from Regiomontanus by the Emperor himself—Regiomontanus made a number of contributions to the field of astrology, which were acknowledged already by his contemporaries.<sup>12</sup> John D. North has shown how Regiomontanus's methods for casting houses were influential in early modern astrological practice.<sup>13</sup> The astrological compilation entitled *Almanach of Regiomontanus Accurately Computed for 25 Years* (*Almanach*

<sup>9</sup> Thurn & Stählin (1980, pp. 24–28).

<sup>10</sup> Pack (1972a); Burnett (1987, p. 189).

<sup>11</sup> Regiomontanus (1496). A translation of the *Epitome* by Henry Zepeda is forthcoming (I was informed of this by an anonymous reviewer of this article). On Regiomontanus's studies on the Greek of the *Almagest*, see Rigo (1991); Shank (2017).

<sup>12</sup> Schmeidler (1972, pp. 2–34); Zinner (1990, p. 201).

<sup>13</sup> North (1986, pp. 26–30, pp. 158–163).

*magistri Johannis de Monte Regio ad annos xv accuratissime calculata*) is probably the most renowned of Regiomontanus's astrological works. It was popularized by Erhard Ratdolt's edition (Regiomontanus's *Almanach*, 1492), printed the same year that Columbus set sail for India.<sup>14</sup> Indeed, Columbus himself was acquainted with the works of Regiomontanus and used them on his voyages.<sup>15</sup> Moreover, the astrological directions provided by Regiomontanus in the *Tabulae directionum* quickly became popular.<sup>16</sup>

Ernst Zinner's masterful bibliographical study provides several hints about Regiomontanus's astrological interests. In summary, they were a constant companion to the astronomer from his youth at the University of Vienna, through his duties as part of Bessarion's entourage in Italy (1460–1467) and at the court of King Matthias Corvinus in Hungary (1467–1471), to his planned publications on astrological subjects for the printing house he established in Nuremberg in 1471. For instance, a survey of Regiomontanus's books in an inventory of his heritage, redacted in 1563, reveals that he owned works of astrological literature from the Arabic, Latin, and Greek traditions, including treatises by and on Al-Qabiṣī, 'Alī ibn Abī l-Rijāl, and Abū Ma'ṣar, as well as Ptolemy's *Tetrabiblos* in Greek and Latin, and Manilius's *Astronomica*.<sup>17</sup>

Further sources on Regiomontanus's astrological activity are provided by Renaissance scholars active in the field of astrology in the generation following Regiomontanus. For instance, Valentin Naibod (1523–1593) became professor of mathematics at the University of Cologne in 1550, and 10 years later printed his *Elements of Astrology* (*Enarratio elementorum astrologiae*).<sup>18</sup> His work aimed to compare al-Qabiṣī's *Introduction to Astrology* with Ptolemy's *Tetrabiblos*. While discussing the calculation of the houses, Naibod refers to contemporary and ancient astrological authorities on the matter, culminating in the claim that Regiomontanus's method is the best.<sup>19</sup>

All of this is consistent with Regiomontanus's own claims. In his Paduan lecture of 1464, as mentioned above, he extols the virtues of astrology as the queen of the mathematical sciences. Interestingly, he had planned a course centered on the Arabic scholar al-Farghani's works on the science of the stars (astronomy and astrology). The institutional setting in which this lecture took place speaks to the importance of astrology as part of an official curriculum of a 15th-century scholar. Italy in this period was the ideal place for an astronomer who did not disdain astrology. Profes-

14 Regiomontanus (1492).

15 Zinner (1990, pp. 119–125).

16 Van Brummelen (2009, pp. 261–263).

17 Zinner (1990, pp. 161–165): “*Reliquiae Bibliothecae Regiomontanae Collectae anno Domini 1563 Die 1. Junij ... 48. Alcabitij introductoria. Super Alcabitii declarationes. Item Ali Abenragel de revolutionibus annorum mundi. Item Guido de election. et num. lationib. Auxae. Geschriben und gefunden in 4°. 49. Alcabitius at Albumasar de division. Circulorum. Geschriben vnnd ungepünden in folio. 50. Albohancen Haly filius Abenragel de iudiciis astrorum. ... 59. Quadripartitum Ptolemei graece geschriben Ungepunden in fol. 60. Quadripartitum Ptolemei latine geschriben Uff perment Unnd ungepunden in 4°. ... 78: Marci Manilii astronomikon liber.*” On Regiomontanus's library, see also Kremer (2004).

18 Gaida (2017); Naibod (1560).

19 Naibod (1560, pp. 115–122, 138).

sional astrologers were thriving, and the taste for prognostication, through forms of *melothesia* and similar, spread throughout official local settings. Indeed, astrology was part of the teaching program of Italian universities, which, unlike the University of Paris, were not under the thumb of the religious authorities.<sup>20</sup> Because of this, astrology in Italy formed part of the culture of so-called high society. The situation at the University of Padua was unique because the teaching of astrology was linked to medicine and physiognomics, something that thrived thanks to the systematization of astronomy and astrology undertaken some time before by a local scholar, Pietro d'Abano (ca. 1250–ca. 1316).<sup>21</sup>

Regiomontanus's claims concerning astrology date from his scholarly sojourn in Italy, the result of an encounter with the Byzantine scholar and cardinal, Bessarion, in Vienna in 1460.<sup>22</sup> Bessarion's interest in the science of the stars had led him to undertake the project of providing a new Latin translation of the *Almagest* from Greek, a task he had given to Regiomontanus's master, the astronomer Georg Peurbach. The latter died soon after (in 1461), leaving Regiomontanus with the draft of what would become the renowned *Epitome of the Almagest*. Regiomontanus and Bessarion established a close intellectual relationship, which proved mutually beneficial. On the one hand, Regiomontanus's desire to master Greek so as to gain a full command of the *Almagest* found in Bessarion, a native Greek speaker, an enthusiastic mentor. On the other hand, since his youth in Constantinople, Bessarion had displayed a strong interest in astronomy and astrology, for which he would find a suitable interlocutor in Regiomontanus.<sup>23</sup> By the time of his encounter with Regiomontanus, Bessarion had already collected a remarkable quantity of Greek scientific manuscripts, which he put at the disposal of his protégés, and which formed the original nucleus of the renowned Marciana Library in Venice.<sup>24</sup>

### 3. Regiomontanus and the Manuscript *Erlangensis A4 1227 (89)*

The meeting with Cardinal Bessarion in Vienna in 1460 allowed Regiomontanus to benefit from Bessarion's networks and manuscripts. This is how he came into possession of the manuscript *Erlangensis A4 1277 (89)* (henceforth *E*), of which a brief description is provided in the following.<sup>25</sup>

The manuscript *E* is a paper manuscript of 284 folia + ii, with dimensions of 21.5cm × 14.5cm. The watermarks detected show that it was composed around the middle of the 15th century (the oldest is from 1434 and the most recent from 1460).

<sup>20</sup> Rutkin (2019, pp. 367–463).

<sup>21</sup> Rutkin (2019, pp. 378–383).

<sup>22</sup> On Bessarion, see Mohler (1923–1942); Fiaccadori (1994); Märkl, Kaiser, & Ricklin (2013). A critical biographical sketch is given in Tambrun-Krasker (2013). See also Mioni (1968). On Bessarion's astronomical interest, see Rigo (1991); Zorzi (2004); Bardi (2019).

<sup>23</sup> Rigo (1991).

<sup>24</sup> Labowsky (1979); Mondrain (2013).

<sup>25</sup> This is based on my examination of *E* and draws on the description provided by Thurn & Stählin (1980, pp. 24–28).

Currently preserved at the Erlangen University Library, it stems from the collection of Regiomontanus: on fols. 147 and 197 the Greek letters *IHS*—which, according to Zinner, were the usual signature of Regiomontanus as of 1458—are written in the upper margin of the paper.<sup>26</sup> Later on, *E* came into the possession of the Constantinopolitan Patriarch Cyril Lucaris, who donated it to Ludwig Camerarius. Eventually, it was part of the library of a professor in Erlangen and acquired by the Library of Erlangen after his death.<sup>27</sup> Joachim Camerarius (Bamberg 1500–Leipzig 1574), in the preface to his *Astrologica*, claimed to have found *E* among Regiomontanus's legacy and decided to publish several astrological texts from it, as well as a Latin translation. The volume was printed in Nuremberg in 1532.<sup>28</sup> According to this account, Joachim Camerarius might have owned *E* before Cyril Lucaris, or what is claimed in the notes about the donation to Lucaris should be taken with a degree of skepticism.

The codex is in half leather with a wooden cover, illustrated with a woven pattern like other books by Regiomontanus bound during his stay in Hungary, from 1467 to 1471, or in his subsequent residence, Nuremberg, from 1471 to 1476.

Three scribes penned the folia of *E*: two Byzantine scholars, Andronicus Callistus and Cosmas Ieromonachus Trapezuntius, along with Regiomontanus himself.<sup>29</sup> The labor was divided as follows: fols. 1–99v: Andronicus Callistus; fols. 100r–102v: empty; fols. 103–146v: Cosmas Ieromonachus Trapezuntius; fols. 147–208r: Regiomontanus; fol. 208v: empty; fols. 209–264v: Andronicus Callistus; fols. 265r–283v: Cosmas Ieromonachus Trapezuntius.

Like Regiomontanus, these two scribes were also scholars connected to Bessarion's circle in Italy. Andronicus Callistus (Constantinople, ?–London 1476/1487) was a humanist; from 1441 in Italy, he was active as a copyist in Bessarion's circle, he taught Greek in Bologna (1458–1459 and 1462–1466) and Florence (1473–1474), and he was in correspondence with the humanists of the time. Cosmas Ieromonachus Trapezuntius (second half of the 15th century), a monk, worked as a copyist for Bessarion in Rome and Messina.<sup>30</sup>

It is likely that the section written by Andronicus was already completed by the 1440s or 1450s, so those quires were sold or donated to Regiomontanus or Bessarion, while Cosmas evidently worked together with Regiomontanus.<sup>31</sup> This is confirmed by the watermarks on the quires used by Regiomontanus and Cosmas.<sup>32</sup>

<sup>26</sup> Zinner (1990, p. 193).

<sup>27</sup> Manuscript *E*, fols. I–II: “from the library of Ludwig Camerarius, who received this gift from Cyril Lucaris, Patriarch of Constantinople” (“E bibliotheca Ludovici Camerarii, qui hunc codicem dono acceperat a patriarcha Constantinopolitano Cyrillo Lucari”); “from the library of Reinhard, Professor in Erlangen. After his death this was acquired by the Library of Erlangen.” (“E bibliotheca Reinhardi, Prof. Erlang. Post eius mortem iure emptionis transit in Bibliothecam publ. Erlangensem.”)

<sup>28</sup> Camerarius (1532, p. 1, Latin side).

<sup>29</sup> Cammelli (1942).

<sup>30</sup> Mioni (1968).

<sup>31</sup> Harlfinger (1976, pp. 136–139).

<sup>32</sup> In both cases, this is a watermark of the Horn type, according to Piccard's watermarks catalogue. I owe this suggestion to an anonymous reviewer of this article. See Thurn & Stählin (1980, p. 26), and the analysis of the paper used in Regiomontanus's manuscripts in Kremer & Shank (2010).

As for the content, a brief outline follows, which reprises the description of *E* and the bibliography provided by Thurn and Stählin:

- 1) fols. 1r–70v: Aristotle, *Physics* (184a–267b, without 231a5–17);
- 2) fols. 72r–79v: Simplicius, *Commentary to Aristotle's Physics Book 1*;
- 3) fols. 80r–82r: Aristotle, *On Length and Shortness of Life* (464b19–467b9);
- 4) fols. 82v–85v: Aristotle, *On Youth and Old Age* (467b10–470b5);
- 5) fols. 85v–94r: Aristotle, *On Breathing* (470b6–480b30);
- 6) fols. 94r–99v: Aristotle, *On the Motions of Animals* (698a1–704b3);
- 7) fols. 103r–146v: Proclus, *On the Positions of the Planets*;
- 8) fols. 147r–159r: selection of astrological texts from various authors;<sup>33</sup>
- 9) fols. 159r–175r: a text by Hermes Trismegistus;<sup>34</sup>
- 10) fol. 175v: another text by Trismegistus on plants and the signs of the zodiac;<sup>35</sup>
- 11) fols. 175v–177v: another text on plants and the zodiac;<sup>36</sup>
- 12) fols. 177v–192r: astrological texts of various authors, later printed by Camerarius;<sup>37</sup>
- 13) fols. 192v–196r: astrological prognostications from the lines of the palm;<sup>38</sup>
- 14) fol. 196v: instructions on how to cut marble with iron;<sup>39</sup>
- 15) fols. 197r–208r: astrological texts by Astrampsychus the Egyptian;<sup>40</sup>
- 16) fols. 209r–245v: Plato, *Gorgias* (447–527e);
- 17) fols. 246r–255v: Plato, *Lysis* (203–223b);
- 18) fols. 255v–262v: Plato, *Menexenus* (234–249e);
- 19) fols. 262v–264v: Plato, *Clitophon* (406–410e);
- 20) fols. 265r–283v: Hesiod, *Works and Days*.

The following outline provides the units corresponding to the relationships between texts/authors and scribes (the former in italics) of *E*:

- A. fols. 1–99v: Aristotle, *Simplicius*: Andronicus;
- B. fols. 103–146v: *Proclus*: Cosmas;
- C. fols. 147–208r: *astrological miscellany*: Regiomontanus;
- D. fols. 209–264v: *Plato*: Andronicus;
- E. fols. 265r–283v: *Hesiod*: Cosmas.

For the purposes of exploring Regiomontanus' astrological and chiromantical interests, the unit C deserves special attention, because it is a *specimen* of his writing in Greek. It contains a selection of transcribed texts of his own choice, as well as the

33 Camerarius (1532, pp. 1–20).

34 Cumont (1911, pp. 126–174).

35 Boll (1908, p. 232).

36 Boll (1908, pp. 233–236).

37 Camerarius (1532, pp. 21–46).

38 Boll (1908, pp. 236–244).

39 Boll (1908, p. 244).

40 Hercher (1863).

astrological chiromancy that constitutes the principal focus of the present study. My examination of unit C focuses on the latter.

#### 4. Chiromancy: A Brief Historical-Philosophical Overview

Chiromancy belongs to the divinatory arts. The ancient art of divination fundamentally aims to infer causes from effects (abduction): the signs to be interpreted are considered as a manifestation of divine plans, and the practitioner has the task of deciphering them using various procedures.<sup>41</sup> Inferences in divination are generally shaped in a hypothetical form such as “If  $p$ , then  $q$ ,” where  $q$  provides conclusions that derive from the state of affairs presented in  $p$ . This formal pattern is already evident in the divinatory texts found in Mesopotamia.<sup>42</sup> The Greek tradition inherited divinatory methods from Mesopotamia. At the basis of Greek divination there is a generic sign (σημείον). The soothsayer has the task of interpreting the sign from the gods, and is considered the custodian of a wisdom that is superior to any kind of human knowledge. Accordingly, the divinatory faculty is seen as a gift from the gods. Knowledge is not possible without divine intervention, but the divinity does not speak a human language; only the sound of an oracle is human, but not its meaning. Because of this, the divinatory sign is enigmatic and obscure, and deciphering it requires an interpreter. According to Cicero, this is a kind of “natural divination” (*divinatio naturalis*), which does not require specific or technical skills.<sup>43</sup> The specific character of this type of divination consists in the transmission of divine wisdom directly to the individual, who receives it through vision, and, inspired or possessed by it, acts as a spokesman who issues a response.<sup>44</sup> In contrast, “technical divination” (*divinatio artificiosa*) is based on the analysis of visible, acoustic, and sensitive signs, which occur externally to man and can be either spontaneous (lightning, an eclipse, and so forth) or provoked (rolling of the dice and so forth).<sup>45</sup> This type of divination works according to a logic based on the hypothesis that there are relationships of analogy and correspondence between a microcosm, represented by the individual phenomenon, and a macrocosm, represented by the cosmic order. In brief, portions

41 Divinatory practices had an enduring political and religious significance in both the Greek and Roman worlds, although they were also the object of criticism and condemnation by intellectuals in those eras. Among others, see Cicero's *De divinatione*. On divination, see, among others, Beerden (2013); but also, though outdated, Bouché-Leclercq (1879–1882). An anthropological approach to divination appears in Vernant (1974). A valuable introduction with an anthology of commented texts is Luck (1985); for a semiological approach, see Manetti (1987).

42 Rochberg (2004).

43 See Cicero, *De divinatione*, 1.72, 109–110; 2.26–27.

44 The most renowned oracle of ancient Greece, that of Delphi, functioned according to this model. In a state of divine possession, the Pythia, the priestess of Apollo, gave a response that was difficult to interpret; the interpretation was entrusted to experts. The forms of oracular consultation are known to us through epigraphic inscriptions, which are collected in Parke & Wormell (1956) and Fontenrose (1978).

45 Cicero, *De divinatione*, 1.72, 109–110; 2.26–27. Cicero, like many of his contemporaries, had a skeptical attitude toward any kind of divination, and considered them as forms of superstition, to be rejected as such because they harmed the religion of the Roman state and limited the political freedom of the citizen.



of space are isolated (the regions of the sky in astrology, the surface of the liver in hepatomancy, the hand in chiromancy, and so forth) and charged with symbolic value. The identified parts mirror the general cosmic order. Thanks to this system of correspondences, it is possible to predict future events. Then a correspondence code is established between the microcosm and the macrocosm, which allows practitioners to immediately move from the sign to its meaning. Interpreting the sign requires the presence of technicians who are experts in the rules of decoding.

Chiromancy combines physiognomics and divination in studying the hand. It aims to know the character and current state of an individual, before possibly predicting future events of her/his life by reading the signs of the hand. The fundamental assumption for chiromantic inquiry is the existence of a link between physical and psychic traits.<sup>46</sup> Observing the palm, and the lines and signs manifested on it, allows the person's character to be discerned. Once the first conjecture has been carried out, a judgment can be made about that person's future. Therefore, the stages in successive order consist of: observation of the signs, interpretation of the character, and enunciation of the *omen*.

The observation and interpretation of the signs is the task of a specialist. In addition to observing the lines on the palm, the practitioner can refer, like a physician, to other physical data, such as loss of skin or the warmth of the hand. All these data, according to the Aristotelian soul-body nexus, reflect the conditions of the individual, which are related to the mixing of humors. Therefore, the lines and other precise signs of the palm correspond to a certain psychophysical condition of the person: the hand acts as a mirror of a macrocosm constituted by the psycho-physical condition of the person. On the evidence of the most ancient treatises, it seems that, in the first instance, chiromancy developed as a particular form of physiognomy, which has as its field of examination the hand and its parts. The importance assumed by the hand likely stems from Aristotle's high degree of esteem for it; he described the hand as "the organ of organs."<sup>47</sup> The Aristotelian principle of the relationship of interdependence between body and soul, in the case of chiromancy, is to be found in the *Historia animalium*: "The inner surface of the hand is the palm, which is fleshy and divided by lines; in long-lived persons by one or two lines, which go right across, in short-lived by two which do not go right across."<sup>48</sup> In this particular case, a correlation is established between the length of the lines on the hand and the circumference of the waist. This statement proved to be influential in the development of chiromancy.<sup>49</sup>

As for the chiromantic tradition in Greek and Latin, what is known about chiromancy consists of a small number of treatises, more numerous in the Latin context than in the Greek context, along with some indirect testimony in literary works or erudition. The oldest evidence of chiromancy goes back to late antiquity. Artemidorus condemns chiromancy as an unreliable form of divination, but in *Suda*

46 Aristotle, *Analytica Priora*, 2.70b.

47 Aristotle, *De anima*, 432a1–2.

48 Aristotle, *Historia Animalium*, 1.15, 493b–494a. Translation from Peck (1965).

49 See Pack (1978).

Artemidorus is remembered as the author of a chiromantic treatise, alongside Elenus and Eumolpus.<sup>50</sup> Chiromancy is not mentioned in Cicero's *De divinatione* nor in the works of Varro and Pliny. The latter comments skeptically on the Aristotelian passage (see above) of the *Historia animalium*.<sup>51</sup> Chiromancy is included by Augustine among the divinatory techniques to be condemned (*De doctrina christiana*), and it is attested around 1150 in the *Policraticus* of John of Salisbury and in the *De divisione philosophiae* of Dominicus Gundisalvi.<sup>52</sup> Contemporary to these is the oldest known Latin chiromantic text, contained in the so-called *Eadwine Psalter*.<sup>53</sup> While a fair number of texts exist in the Latin context, the Greek chiromantic tradition consists of only a single text.<sup>54</sup> It is not possible to trace the exact point at which chiromancy became part of practical astrology as included in the *melothesia*. As noted, Babylonian scholars had already established correspondences between the planets and parts of the human body, but correspondences between the zodiac and the human body are extant in Manilius's poem *Astronomicon* and in Arabic astrology.<sup>55</sup> However, the text copied by Regiomontanus in *E* is even more specific in setting such correspondences.

## 5. Translation of the Astrological Chiromancy Transcribed by Regiomontanus

This section provides an English translation of the Greek astrological–chiromantic text that Regiomontanus transcribed in *E* (fols. 192v–196r).<sup>56</sup> I have italicized technical terms.

### Prognostics from the Lines of the Palm

#### Definitions

It is necessary to define and name the part from the lines near the wrist to all the fingers as the *main part of the hand*: it is also called *palm* by many. The part immediately after the lines is called *root of the arm and hand*; of the upper parts of the palm beyond the root, that near the thumb is called *mount of the thumb*, while the part below that [is called] *mount of the hand*; the hollow between these parts, where there tend to be lines, [is called] *hollow between the mounts*.

<sup>50</sup> Artemidorus, *Oneirocriticon* 2.69; Bouché-Leclercq (1879–1882, Vol. 1, p. 267).

<sup>51</sup> Pliny the Elder, *Naturalis Historia*, 11.273–275.

<sup>52</sup> John of Salisbury, *Policraticus*, 1.12 (edited by Keats-Rohan, 1993); Dominicus Gundisalvi, *De divisione philosophiae* (see Baur, 1903, pp. 119–120).

<sup>53</sup> Burnett (1987).

<sup>54</sup> Boll (1908, pp. 236–244).

<sup>55</sup> Federici Vescovini (2018).

<sup>56</sup> The Greek text is provided in the Appendix. In this translation, I have added subtitles to sections on the basis of other manuscripts providing the chiromantic text: see Appendix.

The mount of the thumb is delimited by a line called the *line of time*, which ends in the hollow between the mounts and starts from the median palm; the median palm is the place from the base of the index finger to the root of the thumb. From this middle part, then, begins a line that follows the line of time as closely as possible; having diverged in this course at the root [of the arm], it travels along the hollow of the hand: this is called the *line of life*. The [region] between this and the line of time is called *triangle*. Those parts of these two lines (of time and of life) in which they touch each other and become one are to be called conjunctions; sometimes it is not possible to identify the conjunction, the lines being far apart from each other; at other times, quite frequently, the conjunction extends downwards, from the palm itself to the hollow of the hand.

We call the line that curves beneath the three fingers—I mean Saturn, the Sun, and Mercury—the *line of fate*; because it has been imprinted there naturally by the bending of the fingers; the [region] between this and the line of life we call the *square*. Then we name the mounts of the fingers that lie near the upper parts of the hand. The mount of the hand proper is bounded by the roots of the arm, which lie beneath the line of time, and by the line of fate; it is similar to a concavity, and indeed it is called *hollow of the hand*, since it is slightly curved. Of the three phalanges that are in each of the fingers, the one that grows out from the hand and that delimits it is the lower phalanx or root of the finger; the second [is] the middle phalanx; the third, which has the last joint of the fingers, the fingertip or fingernail; the thumb only has the lower phalanx and the middle phalanx. It is called *star* when there is a mark similar to the letter  $\nu$ ; this occurs at times by chance and is not determinative.

The bands around the hand are such, therefore, as described in [this] summary, and these are the names of the lines in it. Let us turn now to describe the places of the stars and their powers. To the Moon belongs the hollow between the mounts and the lines; to Venus, the thumb; to Mars, the palm and the line of life; to Jupiter, the index finger, that is, the so-called first finger; to Saturn, the middle finger; to the Sun or Apollo, the ring finger; to Mercury, the little finger.

It is necessary to examine the lines of the right hand, and it is also necessary that the diligent [practitioner] looks at many hands; indeed, in this way, experience in prediction may advance towards certainty.

Those born under the Moon are allotted a sign similar to the letter  $\chi$  in the square of the hand. In his youth, therefore, such a person will be poor; in middle age, he will become rich beyond expectation, such that onlookers will be astounded, but he will return to the same state in which he was in his youth; for this person will be subject to changes in the same way as this star, growing and decreasing with respect to fortune.

Those born under the Sun have thin lines on the lower phalanx, similar to scratches. Such people will be graceful, capable of imitating any action, even those that they have not learned by doing; they will never lack any of the things of this life. Close relatives, friends, and those who serve them treat them unfavorably, while those who are more distant will become their dearest friends.

Those born under Saturn are destined to be good men and women, courteous to friends, and are loyal and excellent advisers, grave in thought, not quick in under-

standing, ready to believe in facts; such people in particular suffer violence from their own children, but they will have a comfortable old age. But if someone is born under Mars, if he happens to have the two lines—that of time and that of life—joined together, then, if he is a slave, he will be freed, and if free he will be deprived of his inheritance; but if instead he has these [lines] separated and he has no line that is thin, digresses, and deviates from its course, then if he is a slave, he will never be freed, and if he is free, then he will be impoverished. Such people are brave, industrious, resolute, and constantly suffering. Because of this, there will be neither a lack nor a surplus of daily nourishment.

Those born under Mercury who have on the lower phalanx of Mercury's finger lines similar to scratches will become thieves: inclined to act in secret, reckless, unpleasant, hostile, impostors, liars; such people will have neither a quiet life nor stability, and they will find themselves living according to this star; for this [star] too, having an utterly unstable nature, causes them an evil birth.

### ***On the Line of Fate***

If someone had a line of fate that extends towards the finger of Jupiter or is even inclined towards this finger, he was born under Jupiter. But if it is straight, his birth will be better; if it is slanting, it will be less good. People who have this birth will be lucky, free from worries, careless with their possessions, charlatans, not at all bitter in themselves, and easily deceived by women.

If someone has a line of fate that heads upward towards the lower phalanx of Jupiter and stops at the edge of the palm, with its tip curved towards the lower phalanx of Venus, he will be charming, so much so that he will be shown favor by the women by whom he is sometimes thought to have been mistreated. If the line itself ends at the middle phalanx and does not go past it, this star will be propitious to him, but he will not be charming. If anyone has this same line, I mean the line of fate, at a slant, he will be easily despised by all, even the most lowly, and he will be both a conspirator and an evildoer. Whoever has this same line extending straight and with large ramifications at the root will be harmed only with difficulty by an opponent.

### ***About the Line of Life***

If the line of life is contracted, it shows that they will be long-lived; by however much it has been contracted, the longer-lived it indicates [they will be]. On the other hand, if the line of life extends to the little finger and makes itself only just visible all the way to the middle of Mercury's finger, it indicates that they will be short-lived.

If someone does not have a complete line of life, he will die without realizing it, struck down by an unexpected event. If someone has in the middle of the midline of the line of life a circle similar to the letter o, and if it is well drawn and well proportioned, this man will be rescued after being in danger of being killed by wild beasts; but if instead it is out of proportion, it is clear that he will be killed by wild beasts. If a line slants from the line of life to the finger of Jupiter and runs to the lower

phalanx of this [finger], then the destiny that belongs to him will be that of tribunals or captivity or death in youth; if [it slants] towards the finger of Saturn, [then this destiny will belong to him] in middle age; if towards the finger of Mercury or the Sun, in old age. If at the end of the line of life there are two lines, either clinging to each other or lying in parallel, he will be wounded by a sword. If someone has a line of life broken in the lower parts, he will have both health and economic prosperity towards the end of his life. If on the right hand you find a line that leads from the line of life to the line of time and joins with or crosses it, this person will be wounded, or risk being wounded. If the line of life is crossed by oblique lines, then however many cross this line, so many will be the diseases of the body that afflict this person. Such lines that are like spirals indicate nausea or illnesses; of these, those that appear and cross this line in the top part indicate diseases of the head and neck; those that cross it in the central part [indicate diseases] of the thorax and the stomach or of the back or the pelvis; [diseases] of the knees and feet are indicated by those that cross it further down. If the line of life is without defects, free from every blemish, and does not even have a cut in it, such a person has not been ill and will not get ill.

If the line of life bends towards its end, it indicates lameness. Investigate, then, the hand of the person who limps, and you will doubtless find that it has a sign of this kind: if he is not yet incapacitated, then he will lose the use of his foot.

If the line of life is larger than it should be and is broken and wavy like an arch, it means that they will suffer from sciatica.

If the line of life is intact and straight and goes downwards, being not at all crooked, likewise, also the manner of this person will be similar; if it is spiraliform or dark, they will be humble, foolish, and wicked.

If the line of life bends towards the arm, this person will love money, envy others, and be greedy.

If someone had a star between the line of life and the line of fate, he will be just and devoted. If someone has the line of life and the line of time distant from each other and no line in between to bind them, such a person will be misanthropic, shameless, a liar, unable to make progress, a cheat, idle, and vain. If he has separate lines, and moreover between them there is a kind of little staff that does not touch either of the lines but is set apart by itself, he will be a drunkard and a barfly. If the lines—I mean the lines of life and time—conjunct in the palm in the upper part of the hand and he is free, he will have good fortune and lead an irreproachable life; if he is instead a slave, he will be freed or will free himself; and this will happen more quickly if the place of conjunction is close to the finger of Jupiter, more slowly if it is towards the finger of Saturn (for the star is slow). If the lines mentioned above do not touch each other but leave an empty space between them, the opposite circumstances will apply to such a person: if he is a slave, he will never be freed; if he is free, he will be impoverished. If fine lines like a net touch upon and surround these lines [of time and life], he will move from a worse life to a better one: towards the end of his life, he will have good luck; if no line coming from the wrist touches them, this indicates rapid change: freedom for a slave, wealth for a poor man, good fortune for a rich man or sovereign; to each what is allotted [by this source] is immensely great.

If someone has a line of life shaped like a palm, he will be extremely lucky. If someone has an oblique line close to the lower parts of the lines of life and time, let him admit high hopes.

If the line of life, curved at the top, touches the line of fate, it means that there will be a great ruin. If someone has the two lines of time and fate touching one another and converging in the same way as the lines of life and time, producing a conjunction in the middle of the palm, but the line of life is missing, then this person will be condemned unexpectedly to the sudden sword or will die for lack of food.

### ***On the Line of Time***

If someone has a straight line proceeding from the line of time up to the finger of Mercury and [appearing] as if loosened [from all the other lines], he will risk being or actually be wounded by the sword. If someone had a bow-shaped line between the line of time and the line of life, toward the bottom of their course and bent towards the arm, he will be blind. If another curved line similar to a bow intersects these two lines, that of time and that of life, and the other part [stretches towards] the arm, he will lose his sight. If on the right hand there is a line leading from the line of time to the line of life and joining or even crossing it, whoever has this will be wounded or risk being wounded. If branches are found turning from the line of time towards the line of life, they indicate that there will be loss or slavery. If the line of time is directed in its upper or central part towards the line of life, such a person will live an irreproachable and sincere life. But if instead on this same line, I mean the line of time, there is something not clearly distinguishable from those that have been described in relation to the line of life, interpret the signs regarding the two lines in common, transferring [from one to the other].

### ***On the Line of Fate***

If someone has a line of fate glancing towards the line of life, this person will have the greatest fear and risk of death, but he will not suffer any harm.

If someone has a line of fate that inclines towards Saturn's finger in its upper part, tribunals and sorrows will never leave him alone.

If the line of fate has branches, it indicates that [such people] are graceful, tasteful, earnest students, cheerful, and good advisors.

If someone has a line of fate that is straight and that does not pass beyond the finger of Saturn, he will live a life as short in duration as a bird, with fatigue and pain, and in necessities he will neither have too little nor too much.

If someone has a line of fate ending in a tip at the topmost part, such a person will reduce his property.

If it is wide and obvious at the bottom and has an unbroken course, then he will regain what he has lost and be restored.

If the line of fate curves and slopes towards the finger of Venus, the person will receive money from or because of women, in which he will take great delight. If

someone has a star between [the lines] of fate and life, he will be just and reverent. If the line of fate bends toward the finger of Saturn, this person will be harmed by household members. If some branches from the line of fate run towards the finger of Jupiter, they will make [such people] highly honored. If someone has a line of fate that extends towards the finger of Jupiter or slants towards it and if it is straight, his birth will be very good; if it is slanted, his birth will still be good. For those who have this will be lucky and free from worries and cares, living without difficulty thanks to their own possessions, and they will be easily deceived by women.

## 6. Commentary

This commentary is arranged in three parts. First, I provide a general overview of the content. Then I briefly describe the available chiromantic texts so as to compare them to the Greek text. Finally, I provide a detailed description of textual passages.

The Greek chiromancy describes the parts of the palm and fingers, then three main lines. It mentions the triangle and the square formed by them without illustrating the possible meanings of these figures. It locates the mounts on the palm and establishes the relationships between the planets and the parts of the palm, lines, and fingers. The identification between gods and planets is a common feature, and it is not surprising to find that the parts of the hand and the fingers are named after the planets. The text then describes the influence of Venus in relation to the line of fate and other meanings of this line, as well as the relevance of the line of life and the line of time in relation to it. Finally, there is a paragraph on the line of fate in situations not considered hitherto. To stress the astrological character of this chiromancy, a passage sets out the relationship between the influence on a person's character and future and the identification of the planets under which someone is born. This is enough to provide an astrological reference for the settings in which signs on the hands can be read. The astrological background of this text was also noticed by the first editor, Franz Boll, who surmised that the link between the chiromantic discipline and astrology is ancient, thereby refuting the thesis of those who claimed that such a connection was only made in the 16th century.<sup>57</sup>

In Pseudo-Melampus's *On Involuntary Movements* (*Περὶ παλμῶν*), likely composed between the fourth and first centuries BCE, astrological affinities are attested between chiromancy and palmomancy (a form of divination based on all kinds of involuntary movements).<sup>58</sup> This discipline shares with chiromancy astrological references and one of the portions of space investigated (the hand), but differs in respect of the sign to be examined: palmomancy makes inferences from involuntary movements (jolts, palpitations, beats, and so forth) of the human body.<sup>59</sup> More on this below.

<sup>57</sup> Boll (1908, p. 237).

<sup>58</sup> Diels (1907, p. 10); Costanza (2009, pp. 19–28).

<sup>59</sup> Costanza (2009, pp. 5, 36–38).

In Greek chiromancy, inferences operating in the judgment on the future are based on astrological notions of planetary dominations. According to cosmic harmony, the hand is a mirror of the celestial vault. The correspondences between the planets (coinciding with the deities) and the signs on the palms are the basis for formulating judgments about a person's future. Like character, so the future will reflect those of the planet that influences the person. The identity of the influencing planets corresponds to a particular configuration of the lines and signs on the palm, and the anonymous author offers a casuistry of these particular configurations. In the text, the process of inference is implemented according to a model developed in divination. This model works in the phase of the observation of the hand and the consequent interpretation according to the Aristotelian nexus between physical and psychic traits on the hand, which goes back to the Hippocratic—and later Aristotelian—soul–body nexus. In the second phase, the model operates under the guide of astrological notions: judgment is formulated through analogy between a certain type of character and its possible consequences by excess or by default. The analogy, in the case of the Greek chiromantic text, is further supported by astrological correspondences.

Before continuing with the commentary, I will offer some words on the edited Latin texts that can be compared with *E*.<sup>60</sup> These must be divided into two categories, those with schematic structures and those with discursive structures. The *Chiromantia* of the *Eadwine Psalter* (in Latin), the *Chiromantia Sloane* (in Latin), *Dextra viri, sinistra mulieris* (in Latin), *Mayn de home, mayn de femme* (in Anglo-Norman), and *Palmistria Salomonis* (in Anglo-Norman) are structured as lists of correspondences between hand markings and related psychic traits or omens.<sup>61</sup> A prose structure, similar to that of the Greek text, is found in the *Chiromantia parva* (in Anglo-Norman), the *Chiromantia* of Pseudo-John of Seville, the *Tractatus ciromancie* of Roderigo de Mallorca (in Latin), and the anonymous *Ars chiromantiae* (in Latin).<sup>62</sup>

The *Chiromantia* of the *Eadwine Psalter* (ca. 1150) is arranged into a schematic form and describes three lines of the hand. It certainly comes from a clerical environment. The exposition attempts to follow a topographical pattern of the hand, but the result is disorderly and confusing, and no technical instructions are given for a systematic interpretation of the lines and signs of the hand; the exact interpretation of the lines remains problematic. The situation is similar in the case of the *Chiromantia Sloane*. Even more schematic are the texts of *Dextra viri, sinistra mulieris*, *Mayn de home, mayn de femme*, and *Palmistria Salomonis*, which are basically lists of sign correspondences without diagrams or descriptions of the palm.

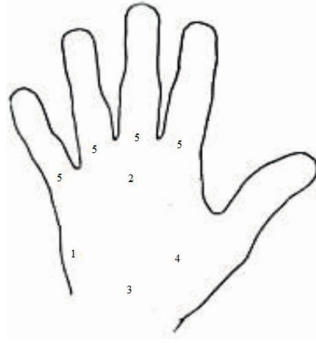
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60 I have consulted the following texts: Pack (1969; 1972a; 1972b); Pack & Hamilton (1971); Burnett (1987; 1996); and Rapisarda (2005). Pack (1972a) offers a commentary on Greek chiromantic terms, and compares the Greek text with Latin chiromancies, which, he claims, remain unpublished for the most part. My survey has not found any details that would substantively add to what Pack reported in his contribution. I must leave the discussion of the vocabulary to future and more in-depth studies on astrological–chiromantic literature. See also Burnett (1987).

61 Burnett (1987; 1996); Rapisarda (2005).

62 Rapisarda (2005); Pack (1969); Pack & Hamilton (1971); Pack (1972b).





**Figure 1.** Sections of the palm: 1 = *mount of the hand*; 2 = *middle palm*; 3 = *hollow between the mounts*; 4 = *mount of the thumb*; 5 = *mounts of the fingers*.

*Chiromantia Parva* is the first chiromancy in the West to systematically distribute predictions about lines and the triangle formed by them. It provides a description of lines and the triangle, together with a topographic description of the palm. The meaning of the prediction depends on where the sign manifests itself. The text describes itself as mysteriously bestowed by God on a praying devotee.

The *Chiromantia* of Pseudo-John from Seville describes three parts of the hand, four of the palm, and four lines. The text is anonymous, but there are ascriptions to Aristotle, Hippocrates, and Averroes, and the text bears a declaration of translation by John of Seville.

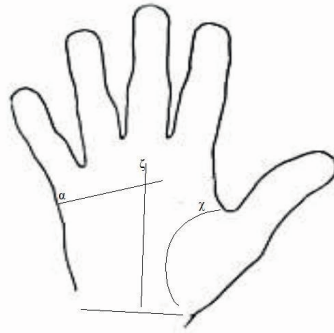
Roderigo de Mallorca drew up a chiromancy that refers to a small series of authorities from whom the theory of lunar humidity that dominates fluids would derive (Aristotle, Ptolemy, al-Farghani, Isidore of Seville, and so forth). The author concerns himself with how to classify chiromancy among the sciences. The *Ars Chiromantiae* of an anonymous author in Latin seems to be ascribable, like the *Eadwine Psalter*, to a clerical environment. The chiromantic text *Palmistry*, in Old English by John Metham (ca. 15th century), also has a discursive form.<sup>63</sup> Other comparisons have been made possible using sources of secondary literature, namely Pack's essay on the Greek chiromantic text, in which the Greek text is compared with mostly unpublished Latin chiromantic texts.<sup>64</sup>

The Greek chiromancy initially provides a concise topographic description of the hand. It circumscribes the area of the hand under examination, the *palm*, between the root of the arm and the hand and the fingers. Then it describes the parts of the palm, divided into the *mount of the thumb*, the *mount of the hand*, and the *hollow between the mounts*. Between the palm and the fingers are the *mounts of the fingers* (see Figure 1).

The mount of the thumb is bounded by the *line of time*, which starts from the *middle palm* (central band of the palm) and ends in the concavity between the mount

63 Craig (1916).

64 Pack (1972a).



**Figure 2.** Main lines of the palm:  $\alpha$  = line of fate;  $\zeta$  = line of life;  $\chi$  = line of time.

of the hand and the mount of the thumb. From the middle of the middle palm another line is born, the *line of life*, which continues along the concavity of the hand. The third main line is the so-called *line of fate*, which extends under the little finger, ring finger, and middle finger. The place where the lines of time and life join is called the *conjunction* (see Figure 2).

Each finger is composed of three phalanges, except for the thumb which has only two: the *upper phalanx*, the *median phalanx*, and the *lower phalanx*. In this paragraph of the chiromancy, a sign called the *star* is introduced, which is not topographically determinable a priori. Of this it is said only that it indicates a judgment that is not definitive.

What lies between the line of time and the line of life is called the *triangle*. The meanings of this sign are not listed. What lies between the line of life and the line of fate is called the *square*. The peculiarities of triangle and square, of the mountains and of the star are not provided. The meanings of the triangle and the square are not of secondary importance; in fact, some treatises devote entire paragraphs to these signs and to the angles of the triangle. The Anglo-Norman *Chiromantia parva*, for instance, ascribes several meanings to the triangle and describes several forms of triangles.<sup>65</sup> Similarly, Paragraphs 8–11 of Pseudo-John of Seville's *Chiromantia* are dedicated to the triangle and its angles.<sup>66</sup>

Similarly to the square, no explanations are dedicated to the triangle in the Latin manuals that it has been possible to read; it is just mentioned on occasion, as in the Greek text. In the Greek chiromancy, a sign in the shape of  $\chi$  in the square indicates a precise correlation with a birth under the influence of the Moon. Of equal importance to the triangle are the mounts, which in the Greek text are only topographically located on the hand. The meanings of the mounts are listed in the *Chiromantia* of Pseudo-John of Seville and the *Tractatus ciromancie* of Roderigo de Mallorca.<sup>67</sup>

<sup>65</sup> Rapisarda (2005, pp. 112, 114).

<sup>66</sup> Pack (1969).

<sup>67</sup> Pack (1969); Pack & Hamilton (1971).

**Table 1.** Correspondences of the parts of the hand with planets in *E* and *A*.

PARTS OF THE HAND	PLANETARY DOMAIN IN <i>E</i>	PLANETARY DOMAIN IN <i>A</i>
Thumb	Venus	Venus
Index finger	Jupiter	Mars
Palm	Mars	–
Middle finger	Saturn	Saturn
Ring finger	Sun	Sun
Little finger	Mercury	Mercury

A so-called tabular line is a line that cuts the palm in half horizontally, and can be observed in front of it with the fingers pointing upwards. While no such line is mentioned in the Greek chiromancy, the Latin treatises call it *linea mediana*, *linea tabularis*, or *linea superiore*.

The Greek chiromancy goes on by presenting the relationships between the planets and the parts of the palm, the lines, and the fingers (see Table 1). The Moon exerts its influence on the concavity between the mountains of the thumb and the hand and the lines between these mountains, Venus dominates the thumb, Mars the palm and the waistline, Jupiter the index finger, Saturn the middle, the Sun or Apollo the ring finger, and Mercury the little finger. The relationships between parts of the palm and planets are similar to those in Pseudo-Melampus's above-mentioned palmomancy text.<sup>68</sup> The planetary domains of the palmomantic text (*A*) diverge from those of *E* only in the index (in the palmomancy of Mars, in the chiromancy of Jupiter), since in *A* no planetary influence is attributed to the palm.

Planetary correspondences are not provided in the Latin texts, while planetary associations similar to those of the Greek text are present in the Old English manual, written by John Metham in the 15th century, entitled *Palmistry*:

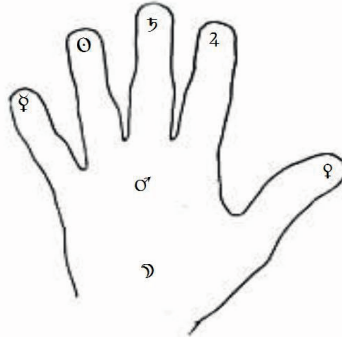
And to yche off this fyngyrrys ther ys a planete longyng: Saturne longyng to lengest fynger with hys hyl; Mercury, to the leche fyngyr with hys hylle; Venus, to the thombe with hys hylle; Jubyter, to the schewyng fyngyr with [hys] hylle; Mars, the lytyl fyngyr with hys hylle, and the tabyl lyne.

And for each of these fingers there is belonging to a planet: to Saturn belongs the middle with its mountain; to Mercury the ring finger with his mountain; to Venus the thumb with its mountain; to Jupiter the index with its mountain; to Mars the little finger with its mountain, and the tabular line.<sup>69</sup>

The relationships between Saturn and the middle finger, Venus and the thumb, and Jupiter and the index finger coincide with the Greek text, while the ring finger belongs

68 Costanza (2009, pp. 36–38).

69 Craig (1916, p. 86, ll. 17–22).



**Figure 3.** The planetary domains on the hand.

to Mercury (to the Sun or Apollo in Greek chiromancy), and the little finger (and the tabular line, absent in Greek) to Mars (to Mercury in Greek chiromancy).

Thanks to a 1972 article by Pack, we learn that other Latin manuals reveal the planetary relationships. The following passage, quoted from an unpublished Latin manual (*L*), reports planetary relations similar to those of the Greek text *E* (see Table 2):

Saturnus habet medium cum suo monte; Jubiter (sic), indicem cum suo monte; Mars, triangulum; Sol, auricularem cum suo monte; Venus, pollicem cum suo monte; Mercurius medicum cum suo monte; Luna mensalem cum quadrangulo et partes infra basim trianguli possidet.

Saturn has the middle finger with its mountain; Jupiter [has] the index with its mountain; Mars the triangle; the Sun the little finger with its mountain; Venus, the thumb with its mountain; Mercury the ring finger with its mountain; the Moon the mensal line with the square and has the parts inside the base of the triangle.<sup>70</sup>

The Moon in *E* dominates the concavity between the mountains and their lines, whereas in *L* it has the mensal line with the square and the parts within the base of the triangle.

The exposition of planetary relationships is followed by practical directions for those who intend to examine the hand. The right hand should be examined, and the greater the number of hands observed, the greater the certainty of the omen. Direct observation of the object is foundational to chiromancy, just as it is in physiognomics. Accordingly, the accumulation of data obtained from observations allows the creation of case studies, which, when grouped by shared or similar elements, can facilitate the formulation of the omen and possibly confirm its validity. In other words, the more hands are examined, the higher the possibility of observing recurrent relationships be-

<sup>70</sup> Pack (1972a, p. 376).

**Table 2.** Correspondences of the parts of the hand with planets in *E* and *L*.

PARTS OF THE HAND	PLANETARY DOMAIN IN <i>E</i>	PLANETARY DOMAIN IN <i>L</i>
Thumb	Venus	Venus
Index finger	Jupiter	Jupiter
Palm	Mars	—
Middle finger	Saturn	Saturn
Ring finger	Sun	Mercury
Little finger	Mercury	Sun

tween physical and psychic traits. In explaining this principle, *E* is very brief, unlike the *Tractatus ciromancie* of Roderigo de Mallorca and the anonymous Latin *Ars Chiro-mantiae*. Both of the latter explain in detail how the practice benefits from the accumulation of observational data.

The Greek text lists signs and lines on the palm, from which it is possible to recognize the planetary influence on the individual whose hand is being observed. The type of characters and the probable fate of the individual are analogous to that of the planet under which the person in question was born. For example, those born under the Moon are distinguished by a sign similar to the letter  $\chi$ , present in the square of the hand; they, born poor, will become rich in middle age, and then return to the state of youth, analogous to the phases of the new moon, waxing, full, and waning. According to the same analogical principle, those born under the Sun will be of good natural disposition and will never lack any of the things of this life. Those born under Saturn will be harmed by their children. Those born under Mars will be brave, hardworking, resolute, and perpetually busy. Those born under Mercury will be thieves and liars, inclined to act covertly, and will have neither quietness nor stability in life. Those born under Jupiter will be lucky, charlatans, and easily deceived by women.

In the Latin texts I have been able to consult, there are no similar passages on planetary relations or subsequently on the signs and characters corresponding to individuals born under a certain planet; this is peculiar to the Greek text.

The Latin texts only make inferences from the signs of the hand. In Greek chiromancy, conversely, the predominant approach to the investigation of the hand is an astrological one; in fact, the inferences based on observation of the lines comes after those based on the identification of the planetary influence on the relevant individual. In Greek chiromancy, the influence of astrology is much stronger and more evident than in the Latin treatises. Practical instructions concerning natural philosophy, which are useful to the fortune-teller, are absent from the Greek text. The *Tractatus ciromancie* of Roderigo de Mallorca states that the moon influences the liquids of the body and therefore also the hand, and that the fortune-teller should

know the phases of the moon and accordingly investigate on the most suitable days for observing the hand.<sup>71</sup>

Later, the Greek text continues with an explanation of the influence of Venus in relation to the line of fate and other meanings of this line, and of the relevance of the lines of life and time in relation to that of fate. It ends with a paragraph on the line of fate in situations not previously considered.

Unlike most of the examined chiromancies, which mention four main lines, only three main lines are mentioned in the Greek text, as is also the case in the oldest Latin chiromantic witnesses.

Unlike in some Latin manuals, *E* lacks any philosophical frameworks or theoretical justifications for chiromancy as a discipline. Defining and framing the scientific status and purposes of the chiromantic discipline is the purpose of the first paragraph of Pseudo-John of Seville's *Chiromantia*: chiromancy is an *ars*, a discipline based on theory combined with practice, and, above all, the observation and collection of empirical data. Observation of the signs is followed by their interpretation, from which it is possible to make inferences about the character and natural inclinations of the individual; finally there is the omen, whose limits are underlined.<sup>72</sup> The beginning of the anonymous *Ars Chiromantiae* is devoted to a theoretical justification of chiromancy. Chiromancy is not illicit, as it is a particular form of physiognomy and does not contradict free will; it does not predict inescapable events, but only sheds light on the person's inclinations. The possible omen regarding an individual's future is a consequence of the physical–psychic state highlighted by the reading of the hand.<sup>73</sup> Moreover, practical directions for practitioners of chiromancy are absent from the Greek version. By contrast, the author of *Ars Chiromantiae* suggests observing the hand, washing it, rubbing it, and choosing the appropriate season in which to read it.<sup>74</sup>

## 7. The Astrological Chiromancy and Regiomontanus's Apprenticeship in Greek

From the commentary above, it is now clear why the chiromantic text copied by Regiomontanus can be described as astrological. Let us recall from our examination of the manuscript *E* that the astrological chiromancy copied by Regiomontanus is part of a group of texts in *E*, which cover topics on astrology oriented toward prognostication, correspondences with natural and celestial realms, or simple fortune-telling. However, *E* does not contain technical texts, such as methods for casting the houses. Here is the outline of the texts copied by Regiomontanus:

1) fols. 147r–159r: selection of astrological texts from various authors;<sup>75</sup>

71 Pack & Hamilton (1971, Section 1).

72 Pack (1969, Section 1).

73 Pack (1972b, Section 1).

74 Pack (1972b, Section 2).

75 Camerarius (1532, pp. 1–20).

- 2) fols. 159r–175r: a text by Hermes Trismegistus;<sup>76</sup>
- 3) fol. 175v: another text by Trismegistus on plants and the signs of the zodiac;<sup>77</sup>
- 4) fols. 175v–177v: a text on plants and the planets;<sup>78</sup>
- 5) fols. 177v–192r: astrological texts of various authors, later printed by Camerarius;<sup>79</sup>
- 6) fols. 192v–196r: astrological prognostications from the lines of the palm;<sup>80</sup>
- 7) fol. 196v: instructions on how to cut marble with iron;<sup>81</sup>
- 8) fols. 197r–208r: fortune-telling texts by Astrampsychus the Egyptian.<sup>82</sup>

According to Zinner, Regiomontanus already had a good grasp of Greek before his encounter with Bessarion. Commenting on Regiomontanus's own notes in Greek on manuscript *Nuremberg Cent V 15* (ca. 1462, containing works of Archimedes and Greek astronomy), Zinner writes that “he had learned Greek while in Vienna and from 1454 on he wrote Greek in an awkward hand. These notes are in a very fluent, more modern hand and show considerable skill in writing.”<sup>83</sup>

Regiomontanus's scribal activity in *E* occurred at the same time as he was working on the renowned *Epitome of the Almagest*, and he had to strive to improve his knowledge of Greek in order to read its original text.<sup>84</sup> This is the same age of manuscript *Nuremberg Cent V 15*, in which, according to Zinner, Regiomontanus shows fluency in writing Greek. In light of *E*, Zinner's claim can be refined. The astrological texts Regiomontanus copied in *E* are evidence of his practice of writing in Greek (see Figure 4). This is confirmed by several Latin annotations in the margins, the slow *ductus* he adopted, and the style of his writing habits—compared to professional Greek scribes or other Latin humanists writing in Greek, such as Angelo Poliziano, Regiomontanus proved to be a scribe well-versed in Greek writing, but with a strong Latin bias. For instance, Regiomontanus's rendering of the Greek letter ε resembles the Latin *e*. Sometimes he draws it with a long horizontal dash that connects with the next letter. The horizontal indent is typical of other Greek texts penned by Latin humanists contemporaneous with Regiomontanus.<sup>85</sup>

Nevertheless, all of this speaks to Regiomontanus's interest in the astrological–chiromantical text. Regiomontanus's fame in chiromancy should have been known to his closer contemporaries; indeed, at least two Latin chiromantical texts were ascribed to him.<sup>86</sup> He had been acquainted with chiromancy since his youth in Vienna:

76 Cumont (1911, pp. 126–174).

77 Boll (1908, p. 232).

78 Boll (1908, pp. 233–236).

79 Camerarius (1532, pp. 21–46).

80 Boll (1908, pp. 236–244).

81 Boll (1908, p. 244).

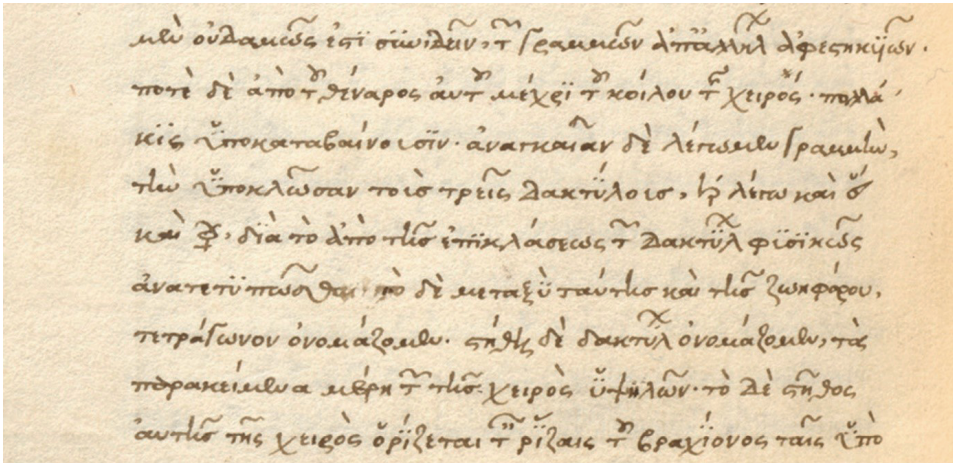
82 Hercher (1863).

83 Zinner (1990, p. 58).

84 Rigo (1991, pp. 70–75).

85 Samples in Canart & Eleuteri (1991, pp. 160–162).

86 Craig (1916, pp. xxvi–xxvii). My survey could not identify these texts in modern manuscript catalogues. See also Burnett (1996, p. 3).



**Figure 4.** Specimen of Regiomontanus's Greek handwriting. From MS A4, fol. 192v, University Library Erlangen-Nürnberg, Germany (CC PDM 1.0).

Regiomontanus's manuscript *Vindobonensis* 5203 contains a Latin text on astronomy, astrology, and palmistry.<sup>87</sup>

The manuscript *E* is Regiomontanus's personal copy. He took it with him when he later settled in Hungary (1467–1471), and then to Nuremberg (1471–1475). It was listed in the inventory of his estate upon his death. A closer inspection of the astrological chiromancy in the economy of *E* will reveal Regiomontanus's access to Bessarion's manuscripts and his contacts with Byzantine expatriates in Italy.

## 8. The Astrological Chiromancy and its Network: Regiomontanus Between Latin and Byzantine Scholars

Philological inquiries shed new light on the diffusion of the astrological–chiromantic text and place Regiomontanus's copy in the middle of a network of Latin humanists and Byzantine expatriates.<sup>88</sup>

The astrological chiromancy copied by Regiomontanus is extant in the following manuscripts:

- E** *Erlangensis* 1227 (89), fols. 192v–196r;
- P** *Parisinus graecus* 2506, fols. 188v–190v;<sup>89</sup>
- L** *Laurentianus graecus* 28.13 fols. 17r–19r;<sup>90</sup>
- J** *Laurentianus graecus* 28.16, fols. 20v–23r;<sup>91</sup>

<sup>87</sup> Zinner (1990, pp. 43, 204).

<sup>88</sup> For this section I draw upon my previous work: Bardi (2017).

<sup>89</sup> Omont (1886–1898, Vol. 2, p. 273).

<sup>90</sup> Gentile (1994, pp. 88–94).

<sup>91</sup> Turyn (1972, pp. 245–248).



**M** *Marcianus graecus* Z 336, fols. 28r–30r;<sup>92</sup>

**N** *Ambrosianus* N 284 sup., fols. 56r–60r;<sup>93</sup>

**Q** *Ambrosianus* Q 13 sup., fols. 247r–252v.<sup>94</sup>

Compared to other manuscripts containing the astrological–chiromantical text, Regiomontanus places the astrological chiromancy as an independent text for the first time in the transmission process. Regiomontanus's sources for the transcriptions he undertook in *E* were two of Bessarion's manuscripts, namely the *Marcianus graecus* Z 335 and the manuscript *M*.<sup>95</sup> Both are astrological miscellanies, the latter of which contains the chiromancy as part of a set of instructions about astronomical tables, which were popular among Byzantine scholars in the 14th and 15th centuries.<sup>96</sup>

Manuscript *P* reports the text as part of a collection of texts on physiognomics. It could well be that the chiromancy existed as part of a wider opus of physiognomy or astrology for prognostications, however it was chiefly perceived as an independent text in the 15th and 16th centuries.

In all manuscripts the text is anonymous. The oldest copy was transcribed before the year 1374 CE by Isaac Argyros (1300–1375), a Byzantine scholar active in astronomy and mathematics.<sup>97</sup> It would have been no stretch for him to make astrological predictions, which was a common practice among scholars in 14th-century Byzantium.<sup>98</sup> He could be the author of the horoscope on fol. 1r of manuscript *L*. As this casts a horoscope in favor of Emperor Manuel II (who was proclaimed emperor in 1373), it goes against Manuel II's antagonist, Andronicus IV Palaiologos, and could explain why Argyros did not mention the latter's name in the manuscript.<sup>99</sup>

The manuscript *L* provides further useful information on the reception of the astrological chiromancy. Pico della Mirandola (1470–1533), a notable figure in the scholarly community of the 15th century, borrowed the manuscript in 1493.<sup>100</sup> There is no evidence to suggest that he consulted the chiromancy properly, but his interest in astrology and his criticism of astrological practice are well known. Pico is the author of a treatise against chiromancers printed in Strasbourg in 1507.<sup>101</sup> Therefore, it is likely that the astrological chiromancy was consulted in view of the composition of his pamphlet against chiromancers.

*L* likely stems from the library of Manuel Chrysoloras, a Byzantine scholar invited to teach the Greek language in Florence by the scholar Coluccio Salutati, which he did from 1397 to 1400.<sup>102</sup> There is no evidence that Chrysoloras took this manuscript

92 Mioni (1985, pp. 77–83).

93 Martini & Bassi (1906, pp. 674–675).

94 Martini & Bassi (1906, pp. 747–751).

95 Rigo (1991, p. 75 n. 173).

96 Tihon (2009, p. 406); Bardi (2018; 2020).

97 Trapp, Walter, & Beyer (1976–1996, Entry 1285, pp. 1–12).

98 Tihon (2006).

99 Pingree (1971, p. 193).

100 Gentile (1994, pp. 88–89).

101 *De rerum praenotione*. See Pack (1978, pp. 127–130).

102 Mercati (1926, pp. 98–99); Pontani (1995, p. 374); Rollo (2002a, pp. 92, 95, 101 n. 64); Zorzi (2002, p. 108); Rollo (2002b, p. 47).

with him to Italy. Another Byzantine scholar, Demetrios Triboles, may also have owned this manuscript.<sup>103</sup> The private library of the Medici family acquired the manuscript from Triboles' collection. In fact, the Byzantine scholar John Laskaris reports that in 1491, during a trip to Greece to search for manuscripts on behalf of Lorenzo de' Medici, he found a manuscript with similar content in the library of Triboles in Arta.<sup>104</sup> After its acquisition for the Medici collection, it was borrowed by Giovanni Pico della Mirandola on October 2, 1493.<sup>105</sup> It was then discovered by Zanobi Acciaiuoli, as reported in his note on fol. 1v: "once of Pietro de' Medici, found among the book of the Earl John of Mirandola" ("Olim Petri de Medicis, repertus inter libros Comitiss Iohannis Mirandulanj"). In sum, the oldest witness to the astrological chiromancy was brought to Italy by either Manuel Chrysoloras or John Laskaris.

The manuscript *J* was transcribed by the Byzantine scholar John Abramios and one of his collaborators. Although not a renowned figure, Abramios was active in astrology, and may as such have studied and made use of the text.<sup>106</sup>

The manuscript *N* inserts the chiromancy into a selection of rhetorical and philosophical texts copied by the Byzantine scholar Michael Sophianos and the Italian humanist and collector Gian Vincenzo Pinelli, both active in 16th-century Italy.<sup>107</sup> The scribe of the chiromancy, as yet unrecognized, might have been a collaborator of theirs, and this may also suggest the interest of prominent Renaissance scholars like Pinelli in the astrological chiromancy.

## 9. Final Remarks

The study of Regiomontanus's copy of the Greek astrological–chiromantical text shows that, during the 1460s, his astrological and chiromantical interests were linked to his study of Greek and his membership of Bessarion's entourage, in close contact with Byzantine expatriates such as Bessarion himself, Andronicus Callistus, and Cosmas Ieromonachus Trapezountius. With them, he could produce a collection of astrological and divinatory materials, such as the manuscript *E*, while having access to texts on philosophy, astronomy, and poetry in the Greek tradition (for example, Plato, Proclus, and Hesiod in *E*).

The relevance of Regiomontanus's transcription of the chiromancy (and the astrological texts in *E*) is twofold. First, it is evidence that Regiomontanus's access to Bessarion's manuscripts provided him content that is not strictly mathematical or astronomical. Second, it enriches our knowledge of Regiomontanus's apprenticeship in Greek, as it shows the traits of a hand well-versed in Latin that could also write

103 Trapp, Walter, & Beyer (1976–1996, Entry 29298).

104 Trapp, Walter, & Beyer (1976–1996, Entry 14536).

105 Gentile (1994, pp. 88–89).

106 Pingree (1971).

107 Meschini (1981); Grendler (1981).

fairly fluently in Greek, but one that was less skilled than other Latin humanists, such as Angelo Poliziano.

The fact that astrological interests were part of his process of learning Greek during his Italian years is consistent with Regiomontanus's declarations in praise of astrology in his 1464 inaugural lecture. Our brief survey of the manuscripts shows that Regiomontanus's selection of texts has no parallel in the astrological tradition and is the outcome of his own personal choice. As he was not a native speaker of Greek, Regiomontanus's transcription process must have been motivated by his interest in astrological topics, even more so because the Greek chiromancy is full of technical terms that are not attested in common astrological literature.<sup>108</sup> Regiomontanus might have been advised to read the chiromancy by the Byzantine scribes with whom he was in contact, or by some humanists associated with Bessarion's circle. Although there is no evidence that Regiomontanus used the astrological–chiromantic text for his predictions, this note has shed new light on some of the astrological sources from which he could have benefited by being in close contact with Byzantine expatriates in Italy in the 1460s. Closer inspections of Bessarion's and Regiomontanus's manuscripts will further enrich our knowledge in this area and will afford a deeper and fuller assessment of Regiomontanus's astrological interests and activities.

### **Acknowledgements**

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### **Appendix: The Greek text from manuscript E<sup>109</sup>**

Προγνωστικὸν ἀπὸ τῶν ἐν τῇ παλάμῃ γραμμῶν  
[Ὅροι]

Διορίζειν χρῆ καὶ καλεῖν τὸ ἀπὸ τῶν γραμμῶν μέρος τῶν πρὸς τῷ καρπῷ μέχρι τῶν δακτύλων ὄλων ἀκρόχειρα, καλοῦσι δ' οἱ πλείστοι τοῦτο καὶ παλάμην· τὸ δὲ μετὰ τὰς γραμμὰς εὐθὺς μέρος ρίζα βραχίονος καὶ χειρὸς λέγεται, τῶν δὲ μετὰ τὴν ρίζαν ὑψηλοτέρων μερῶν τῆς παλάμης, τὸ μὲν πρὸς τῷ μεγάλῳ δακτύλῳ στήθος ἀντίχειρος ὀνομάζεται, τὸ δὲ κάτω μέρος στήθος τῆς χειρὸς, τὸ δὲ μεταξύ τούτων ὑπόκοilon,<sup>110</sup> ὅπου γραμμαὶ τινες εἰώθασιν εἶναι, μεταστήθιον· ὀρίζεται δὲ τὸ στήθος τοῦ μεγάλου δακτύλου γραμμῇ τῇ ληγούσῃ μὲν ἐπὶ τὸ μεταστήθιον, ἀρχομένη δὲ ἀπὸ τοῦ μετὰ τὸ θέναρ, ἥτις ὀνομάζεται χρονική· τὸ δὲ μετὰ τὸ θέναρ ὁ τόπος ἐστὶν ὁ ἀπὸ τοῦ τέλους τοῦ λιχανοῦ μέχρι τῆς ρίζης τοῦ ἀντίχειρος· ἀπὸ δὲ τούτου μέσου γραμμὴ τις ἀρχομένη

<sup>108</sup> Pack (1972a).

<sup>109</sup> Added text portions are within square brackets [], and variant readings are in footnotes. Additions and variants are based on other manuscripts. For further details, see Bardi (2017).

<sup>110</sup> ὑπόκοilon *om. E.*

καὶ ἐπὶ πλείστον τῆς χρονικῆς ἐφαπτομένη, κατὰ τὴν ρίζαν δι' αὐτῆς δὲ ἀπολυθεῖσα φέρεται διὰ τοῦ κοίλου τῆς χειρὸς, αὕτη προσαγορεύεται ζωφόρος· τὸ δὲ μεταξὺ ταύτης τε καὶ τῆς χρονικῆς καλεῖται τρίγωνον· τῶν δὲ δύο τούτων γραμμῶν τῆς τε χρονικῆς καὶ τῆς ζωφόρου τὰ μέρη ἐκεῖνα καθ' ἃ προσάπτονται ἀλλήλων καὶ ἐνοῦνται συναφῆ καλεῖσθω· ταύτην δὲ τὴν συναφὴν ὅτε μὲν οὐδαμῶς ἐστὶ συνιδεῖν τῶν γραμμῶν ἀπ' ἀλλήλων ἀφεστηκυσίων, ὅτε<sup>111</sup> δὲ ἀπὸ τοῦ θένταρος αὐτοῦ μέχρι τοῦ κοίλου τῆς χειρὸς πολλάκις ὑποκαταβαίνουσα· ἀναγκαίαν δὲ λέγομεν γραμμὴν τὴν ὑποκλῶσαν τοὺς τρεῖς δακτύλους, Κρόνον λέγω καὶ Ἥλιον καὶ Ἑρμῆν, διὰ τὸ ἀπὸ τῆς ἐπικλάσεως τῶν δακτύλων φυσικῶς ἀνατετυπῶσθαι· τὸ δὲ μεταξὺ ταύτης καὶ τῆς ζωφόρου τετράγωνον ὀνομάζομεν· στήθη δὲ δακτύλων ὀνομάζομεν τὰ παρακείμενα μέρη τῶν τῆς χειρὸς ὑψηλῶν· τὸ δὲ στήθος αὐτῆς τῆς χειρὸς ὀρίζεται ταῖς ρίζαις τοῦ βραχίονος ταῖς ὑπὸ τῆ χρονικῆ γραμμῆ ὑποκειμέναις καὶ τῆ ἀναγκαίᾳ, προσεικὸς κοιλία (κοιλία γὰρ λέγεται χειρὸς διὰ τὸ μικρῶς παρωγκῶσθαι)· τριῶν δὲ ὄντων ἐν τοῖς δακτύλοις φαλαγγίον ἐστὶ τὸ μὲν ἐπιπεφυκὸς τῆ χειρὶ καὶ διορίζον τὴν χεῖρα δακτυλόπους ἢ ριζοδάκτυλος· τὸ δὲ δεῦτερον μεσοδάκτυλος· τὸ δὲ τρίτον, ὅπερ ἐστὶν ὄνυχοφόρον, ἀκροδάκτυλον ἢ μετόνυχον· ὁ δὲ ἀντίχειρ δακτυλόποδα καὶ τὸν μεσοδάκτυλον ἔχει μόνον· ἀστῆρ δὲ λέγεται, ὅπου σημεῖον τῶ υ στοιχείῳ παραπλήσιον ἐστὶ· γίνεταί δὲ ὅπου ἂν τύχοι, οὐκ ἀφωρισμένως.

Ὁ μὲν οὖν τῆς χειρὸς κατάδεσμος τοιοῦτός τις ἐστίν, ὡς ἐν συντόμῳ φάναι, καὶ τὰ τῶν γραμμῶν τῶν ἐν αὐτῇ ὀνόματα ταῦτα· ἐπὶ δὲ τὸ φράζειν τοὺς τόπους τῶν ἀστέρων καὶ τὰς δυνάμεις αὐτῶν ἴωμεν· Σελήνης τὸ μεταστήθιον καὶ αἱ γραμμαὶ· Ἀφροδίτης ὁ ἀντίχειρ· τὸ δὲ μεταθέναρ καὶ ἡ ζωφόρος Ἄρεως· ὁ δὲ λιχανὸς καὶ ὁ πρῶτος λεγόμενος δάκτυλος τοῦ Διός· Κρόνου δὲ ὁ μέσος· Ἥλιου δὲ ἡ Ἀπόλλωνος ὁ παράμεσος· ὁ δὲ μικρὸς Ἑρμοῦ.

Ἐπισκέπτεσθαι μὲν οὖν χρὴ τὰς γραμμάς τῆς δεξιᾶς χειρὸς, χρὴ δὲ καὶ πολλὰς ὀραν χεῖρας τὸν σπουδαῖον, ἐντεῦθεν γὰρ ἡ πείρα τῆς προρρήσεως προβαίνει ἂν ἐπὶ τὸ ἀσφαλές.

Οἱ τῆς σεληνιακῆς γενέσεως μετεληχότες ἔξουσιν ἐν τῷ τετραγώνῳ τῆς χειρὸς σημεῖον παραπλήσιον τῷ χ στοιχείῳ· ἐν τῇ πρώτῃ οὖν ἡλικίᾳ ὁ τοιοῦτος πένης ἐστὶν, ἐν τῇ μέσῃ δὲ εὐπορήσει παρ' ἐλπίδα, ὥστε ἐκπλήττεσθαι τοὺς ὀρώντας, πάλιν τε εἰς τὸ αὐτὸ ἀναλύσει, εἰς ὃ ἦν ἐν τῇ πρώτῃ ἡλικίᾳ· ὁμοία γὰρ τῷ ἀστέρι τούτῳ πείσεται καὶ οὗτος αὐξόμενός τε καὶ κατὰ τὴν τύχην λήγων.

Οἱ δὲ τῆς τοῦ Ἥλιου γενέσεως μετεληχότες ἔξουσιν γραμμάς λεπτάς ἐπὶ τοῦ δακτυλόποδος αὐτοῦ οἶονεῖ ἀμυχάς· ἔσονται δὲ οἱ τοιοῦτοι εὐφρεῖς, μιμηταὶ παντὸς ἔργου, ἃ οὐκ ἔμαθον ταῦτα πράττοντες, οὐδέποτε δὲ λείψει τοῖς τοιούτοις οὐδὲν τῶν ἐν τῷ βίῳ τούτῳ καὶ οἱ μὲν πάνυ συνήθεις καὶ φίλοι αὐτοῖς καὶ οἱ παρ' αὐτοῖς λειτουργοῦντες ἀχαριστοῦσιν, οἱ δὲ πόρρω προσφιλέστατοι γίνονται.

Οἱ δὲ τῆς τοῦ Κρόνου γενέσεως μετεληχότες ἔσονται ἀγαθοὶ ἄνδρες τε καὶ γυναῖκες, κοινοὶ φίλοις, ἀπλοῖ τε καὶ τὰ ἄριστα συμβουλευόντες, βαρεῖς τῇ διανοίᾳ, οὐ ταχὺ συνιέντες, εὐχερῶς πιστεύοντες τοῖς πράγμασι, βλάπτονται δὲ οἱ τοιοῦτοι μάλιστα ὑπὸ τῶν ἰδίων τέκνων, γῆρας δὲ λιπαρὸν ἔξουσι.

Τῆς Ἄρεως δὲ εἰ τις ἐστὶ γενέσεως, ἐὰν μὲν ἔχη τὰς δύο γραμμάς ταύτας συνεζευγμένας, τὴν τε χρονικὴν καὶ τὴν ζωφόρον, δούλος μὲν ὦν ἐλευθερωθήσεται, ἐλεύθερος

111 ποτὲ E.

δὲ κληρονομίας ἀπολήγεται· ἐὰν δὲ ἀπεζυγμένας ἔχη ταύτας καὶ μηδεμίαν λεπτήν ἐκτρέχουσιν καὶ παρεκκλίνουσιν, δούλος μὲν ὧν οὐδέποτε ἐλευθερωθήσεται, ἐλεύθερος δὲ ἐνδεής ἔσται· ἔσονται δὲ οἱ τοιοῦτοι ἀνδρείοι ἐπίπονοι, ἄκνοι, διὰ παντός κακοπαθοῦντες· ἔνεκα δὲ ἐφημέρου τροφῆς τοῦτοις οὔτε λείπει οὔτε περισσεύει.

Οἱ δὲ ἐπὶ τοῦ τοῦ Ἑρμοῦ δακτυλόποδος γραμμὰς ἔχοντες ἀμυχαῖς παραπλησίους καὶ τῆς τοῦ Ἑρμοῦ γενέσεως ὄντες οὗτοι ἔσονται κλέπται, ὀλέθριοι, ἄκριτοι, ἀηδεῖς, ἀπροσφιλεῖς, ἐπιθέται, ψεῦστα· οἱ τοιοῦτοι οὐδὲ στάσιν ἐν βίῳ ἢ θεμέλιον ἔξουσιν οὐδέποτε, παραπλήσια πάσχοντες τῷ ἀστέρι τούτῳ καὶ γὰρ οὗτος ἀστάτῳ φύσει ἀποτόμως γένεσιν αὐτοῖς κακὴν ἐργάζεται.

[Περὶ τῆς ἀναγκαίας]

Ἐὰν δὲ τις τὴν ἀναγκαίαν γραμμὴν ἀποτείνουσιν ἔχη, ἐπὶ τὸν τοῦ Διὸς δάκτυλον ἢ καὶ ἐγκεκλιμένην ἐπ' αὐτὸν τὸν δάκτυλον, Διὸς οὗτος γενέσεως ἔστιν, ἀλλ' ἦν μὲν ὀρθῶς ἔχη, κρείττων ἢ γένεσις τούτου ἔσται, ἦν δὲ ἐγκεκλιμένη, ἥττον καλή. Οἱ οὖν ταύτης ὄντες τῆς γενέσεως ἔσονται εὐτυχεῖς, ἀμέριμοι, ἀμελεῖς διὰ τὰ ἀγαθὰ, ἀλαζόνες, οὐδὲν μικρὸν ἔχοντες ἐν ἑαυτοῖς, εὐχερῶς ἀπατώμενοι ὑπὸ τῶν γυναικῶν.

Ἦν δὲ τις τὴν ἀναγκαίαν γραμμὴν ἔχη ἄνω νεύουσιν ἐπὶ τὸν τοῦ Διὸς ρίζοδάκτυλον καὶ ἐν τοῖς τοῦ θέναρος ὀρίοις στηριζούσαν ἐπικλασθῆναι τε αὐτῆς τὸ ἄκρον ἐπὶ τὸν τῆς Ἀφροδίτης ρίζοδάκτυλον, οὗτος ἔσται ἐπαφρόδιτος, ὥστε καὶ ὑφ' ὧν ποτὲ ἔδοξεν ἠδικῆσθαι γυναικῶν, ὑπὸ τούτων εὐεργετηθῆναι· ἐὰν δὲ ἡ αὐτὴ γραμμὴ ἕως τοῦ μεσοδακτύλου στηρίξη καὶ μὴ ὑπερβαῖναι τοῦτον, ἔξει μὲν τὸνδε τὸν ἀστέρα ἀρωγόν, οὐκ ἔσται δὲ ἐπαφρόδιτος· τὴν δὲ αὐτὴν ταύτην γραμμὴν, λέγω δὴ τὴν ἀναγκαίαν, ἐὰν τις ἔχη ἐγκεκλιμένην, εὐκαταφρόνητος ἔσται πρὸς πάντων καὶ τῶν ἐλαχίστων, ἐπιβουλευόμενός τε καὶ ἀδικούμενος· ὁ δὲ τὴν αὐτὴν ταύτην γραμμὴν ἐπιτεταμένην ἔχων ὀρθὴν καὶ μὴ ἔχουσιν ὄζους μεγάλους ἀπὸ τῆς ρίζης δυσκόλως βλαβήσεται ὑπὸ ἀντιδίκου.

[Περὶ τῆς ζωφόρου]

Ἐὰν δὲ ἡ ζωφόρος γραμμὴ συσταλῆ, πολυχρονίους δηλοῖ, καὶ ὄσω ἂν συνεσταλμένη ὑπάρχη, πολυχρονιωτέρους δηλοῖ.

Ἐὰν δὲ ἡ ζωφόρος πάλιν παρεκτείνῃ ἑαυτὴν ὡς ἐπὶ τὸν μικρὸν δάκτυλον καὶ ὑποσημαίνουσιν μονὴν ποιήσῃ εἰς μέσον τὸν τοῦ Ἑρμοῦ δάκτυλον, ὀλιγοχρονίους δηλοῖ.

Ἐὰν δὲ τις μὴ ἔχη τὴν ζωφόρον τελείαν, αἰφνιδίῳ ῥοπῇ πληγῆς ἀπολείται ἀναισθητῶς.

Ἐὰν δὲ τις εἰς μέσην τὴν γαστέρα τῆς ζωφόρου ἔχη κύκλον παραπλήσιον τῷ οὐ στοιχείῳ, ἐὰν μὲν εὐγραμμον ἢ καὶ εὐρυθμον, ὁ τοιοῦτος κινδυνεύσας ὑπὸ θηρίων ἀπολεῖσθαι σωθήσεται, ἐὰν δὲ ἄρρυθμος, προφανῶς ὑπὸ θηρίων ἀπολείται.

Ἐὰν δὲ ἀπὸ τῆς ζωφόρου νεύσῃ τις γραμμὴ ἐπὶ τὸν τοῦ Διὸς δάκτυλον καὶ στηρίξη εἰς τὸν δακτυλόποδα αὐτοῦ, περὶ τὴν πρώτην ἡλικίαν στήσεται τὰ ἐπενηγεμένα αὐτῷ ἦτοι δίκαι ἢ δεσμὰ ἢ θάνατος· ἐὰν δὲ εἰς τὸν τοῦ Κρόνου, περὶ μέσην ἡλικίαν· ἐὰν δὲ εἰς τὸν τοῦ Ἑρμοῦ ἢ Ἡλίου, ἐν γῆρα.

Ἐὰν ἐπὶ τῷ τέλει τῆς ζωφόρου δύο γραμμαὶ ὦσιν δὲ ἐξεχόμεναί τε ἀλλήλων ἢ παρακείμενα, τρωθήσεται ὁ τοιοῦτος σιδήρῳ.

Ἐὰν τις τὴν ζωφόρον ἔχη διεσπασμένην εἰς τὰ κάτω μέρη, εἰς ἐσχάτην ἤξει καὶ ὑγείαν καὶ πραγμάτων εὐδαιμονίαν.

Ἐὰν ἐν τῇ δεξιᾷ χειρὶ ἀπὸ τῆς ζωφόρου γραμμὴν εὐρῆς ἐπὶ τὴν χρονικὴν φέρουσιν καὶ ταύτη συνάπτεται ἢ καὶ διαιρῆ αὐτὴν, τρωθήσεται ἢ κινδυνεύσει τρωθῆναι.

Ἐὰν ἡ ζωηφόρος γραμμὴ ὑπὸ πλαγίων γραμμῶν διαιρῆται, ὅσαι ἂν ὦσιν αἱ διαιροῦσαι τὴν τοιαύτην γραμμὴν, τοσαῦται σωματικαὶ ἀσθένειαι τὸν τοιοῦτον θλίψουσιν· αἱ δ' ἐλικοειδεῖς οὐσαι ἀηδῖαν ἢ νοσήματα δηλοῦσι· τούτων δὲ αἱ μὲν περὶ τὰ ἄνω μέρη γινόμεναι καὶ διαιροῦσαι ταύτην περὶ κεφαλὴν καὶ τράχηλον δηλοῦσι τὰ νοσήματα, αἱ δὲ περὶ τὰ μέσα, περὶ θώρακα καὶ γαστέρα ἢ νῶτα ἢ ἰσχία· αἱ δὲ περὶ τὰ κάτω τούτων, περὶ τὰ γόνατα ἢ τοὺς πόδας.

Ἐὰν ἡ ζωηφόρος χωρὶς ἐλαττώματος ἢ καὶ παντὸς σίνους ἀπολελυμένη μὴ τέ τινα ἔχη τὸ μὴν ἐν ἑαυτῇ, οὗτ' ἐνόσησεν ὁ τοιοῦτος οὔτε νοσήσει.

Ἐὰν ἡ ζωηφόρος ἐπὶ τῷ τελείῳ διακλαίουσα ὑπάρχη, χωλείαν σημαίνει. Σκόπησον οὖν τὴν τοῦ χλωῦ χεῖρα καὶ πάντως εὐρήσεις ἔχοντα τουτὶ τὸ σῆμιον· εἰ δὲ μὴ πεπῆρωται, πηρωθήσεται τὸν πόδα.

Ἐὰν ἡ ζωηφόρος ἢ μείζων τοῦ δέοντος καὶ ἐπικλᾶται ὑπάρχη τε κλαδαρὰ οἶον ἰμάς, ἰσχυακοὺς σημαίνει ἔσεσθαι.

Ἐὰν ἡ ζωηφόρος ὑγιῆς ἢ καὶ εὐθεῖα καὶ κάτω νεύη, μὴ δὲ σκαμβή τις ἢ, τοιοῦτοι φαίνοντ' ἂν δὴ καὶ οἱ τρόποι τοῦ ἀνθρώπου· ἐὰν δὲ ἐλικοειδῆς καὶ μελανοειδῆς ἢ, φαυλοὶ τε καὶ σκαιοὶ καὶ κακότροποι.

Ἐὰν ἡ ζωηφόρος ἐπὶ τὸν βραχίονα νεύη, οὗτος ἔσται φιλάργυρος, ἀλλοτριῶν ἐπιθυμῶν, αἰσχροκερδῆς.

Ἐὰν τις ἀστέρα ἔχη μεταξὺ τῆς ζωηφόρου καὶ τῆς ἀναγκαίας, ἔσται δίκαιος καὶ εὐσεβής.

Ἐὰν τις διεστῶσας ἔχη ἀπ' ἀλλήλων τὴν τε ζωηφόρον καὶ τὴν χρονικὴν καὶ μηδεμίαν αὐτῶν μεταξὺ συνδέουσα αὐτάς, ἔσται ὁ τοιοῦτος ἀπάνθρωπος, ἀναιδής, ψεύστης, ἀπρόκοπος, ἀποστερητής, ὀκνηρός, κοῦφος.

Ἐὰν δὲ διεστῶσας μὲν ἔχη τὰς γραμμάς, μεταξὺ δὲ αὐτῶν οἶον σκυτάλιον, μηδεμιᾶς αὐτῶν ἐφαπτόμενον, ἀλλὰ καθ' ἑαυτὸ ἀπολελυμένον, οἰνόφυλξ ἔσται καὶ καπηλοδύτης.

Ἐὰν δὲ ἀπὸ τοῦ θένανος τῆς χειρὸς ἐκ τῶν ἄνωθεν μερῶν συνάπτωνται αἱ γραμμαὶ ἀλλήλαις ἢ τε ζωηφόρος λέγω καὶ ἡ χρονικὴ, ἐλεύθερος μὲν ὧν εὐτυχήσει καὶ ἀνεπιληπτον βίον διάξει, δοῦλος δὲ ὧν ἐλευθερωθήσεται καὶ ἑαυτὸν ἐλευθερώσει· καὶ θάπτον δέ, ἐὰν ἐπὶ τὸν τοῦ Διὸς δάκτυλον τὴν συναφὴν ποιῶνται, βραδῖον δέ, ἐὰν ἐπὶ τὸν τοῦ Κρόνου (κάτοχος γὰρ ὁ ἀστήρ). Ἐὰν δὲ μὴ συνάπτωνται ἀλλήλαις αἱ εἰρημέναι γραμμαί, ἀλλ' ἀπολείπωσι τὸν μεταξὺ αὐτῶν τόπον καθαρὸν, τὰ ἐναντία ἔσται περὶ τὸν τοιοῦτον, δοῦλος μὲν γὰρ ὧν, οὐδέποτε ἐλευθερωθήσεται, ἐλεύθερος δὲ ἐνδεὴς ἔσται.

Ἐὰν δὲ ὡσπερ δίκτυον γραμμάς ἔχῃ λεπτὰς ἐφαπτομένας αὐτῶν καὶ περικλειούσας αὐτάς, ἔξει ἐπὶ τὰ βελτίονα βίον ἐκ χείρονος ἐπὶ τέλους δὲ τῆς ζωῆς εὐτυχήσει· εἰ μὴ τις ἀπὸ τοῦ βραχίονος εἰστρέχουσα γραμμὴ παράπτοιτο αὐτῶν, δηλοῖ γὰρ ταχεῖαν ἄμειψιν, οἰκέτη μὲν ἐλευθερίαν, πένητι δὲ πλοῦτον, πλουσίῳ δὲ ἢ βασιλεῖ εὐτυχίαν· ἐκάστω γὰρ τὸ σημαινόμενον ὑπέρμεγα ἔσται.

Ἐὰν τις ἔχη τὴν ζωηφόρον οἰονεὶ φοῖνικι παραπλησίαν, οὗτος μεγάλως εὐτυχήσει.

Ἐὰν τις πρὸς τοῖς κάτω μέρεσι τῆς ζωηφόρου καὶ τῆς χρονικῆς ἔχη πλαγίαν γραμμὴν, ἀγαθὰς ἐλπίδας προσδεχέσθω.

Ἐὰν ἡ ζωηφόρος εἰς τὸ ἄνω μέρος ἐπικαμφθεῖσα τῆς ἀναγκαίας ἄψηται, μεγάλην ζημίαν ἔσεσθαι σημαίνει.

Ἐὰν τις ἔχη τὰς δύο γραμμάς, τὴν τε χρονικὴν καὶ τὴν ἀναγκαίαν, ἀλλήλαις συναπτούσας καὶ συνδεούσας ὄνπερ τρόπον ἢ ζωηφόρος καὶ ἡ χρονικὴ, τὴν συναφὴν ἐπὶ τῷ

μέσω θέναρι ἀποτελούσας, τῆς μέντοι ζωηφόρου ἐστερημένοι ὡσι, σιδήρω αἰφνιδίω τιμηθήσεται αἰφνιδίως ἢ ἐνδεία τροφῆς ὀλεῖται.

[Περὶ τῆς χρονικῆς γραμμῆς]

Ἐάν τις ἀπὸ τῆς χρονικῆς γραμμῆς εὐθείαν ἔχη γραμμὴν προσιοῦσαν ἐπὶ τὸν τοῦ Ἑρμοῦ δάκτυλον καὶ οἰονεὶ ἀπολελυμένην, κινδυνεύσει ἢ σιδήρω τρωθήσεται.

Ἐάν τις μεταξὺ τῆς χρονικῆς καὶ τῆς ζωηφόρου πρὸς τοῖς κάτω μέρεσιν αὐτῶν τόξω ἐοικυῖαν ἔχη γραμμὴν καὶ τοῦτο ἔχη ἐπὶ τὸν βραχίονα ῥέπον, ὁ ἔχων αὐτὸ τυφλὸς ἔσται.

Ἐάν τὰς δύο γραμμὰς, τὴν τε χρονικὴν καὶ τὴν ζωηφόρον, διακόπη τις ἄλλη γραμμὴ κυρτὴ ὁμοία τόξω, τὸ δὲ ἕτερον μέρος τὸν βραχίονα, ὁ ἔχων αὐτὸ πηρωθήσεται τὴν ὄρασιν.

Ἐάν ἐν τῇ δεξιᾷ χειρὶ ἀπὸ τῆς χρονικῆς γραμμῆς εὐρεθῆ γραμμὴ φέρουσα ἐπὶ τὴν ζωηφόρον καὶ ταύτη συνεφάπτηται ἢ καὶ διαιρῆ αὐτήν, τρωθήσεται ὁ ἔχων ἢ κινδυνεύσει τρωθῆναι.

Ἐάν ἀπὸ τῆς χρονικῆς ἐπὶ τὴν ζωηφόρον κλάδοι νεύοντες εὐρεθῶσι, ζημίαν ἢ δούλον ἔσεσθαι ἐπισημαίνουσιν.

Ἐάν ἡ χρονικὴ κατὰ τὴν κεφαλὴν ἐπὶ τὴν ζωηφόρον ἢ κατὰ μέσον<sup>112</sup> νεύη, ἀμειπτον βίον καὶ ἀκέραιον βιώσεται ὁ τοιοῦτος.

Ἐάν δέ τι μὴ ἐπὶ ταύτης τῆς γραμμῆς, λέγω δὴ τῆς χρονικῆς, ἢ διακεκριμένον ἐκ τῶν ἐν τῇ ζωηφόρῳ εἰρημένων κοινῶς περὶ δύο γραμμῶν μεταφέρων τεκμαίρου.

[Περὶ τῆς ἀναγκαίας γραμμῆς]

Ἐάν τις ἔχη τὴν ἀναγκαίαν γραμμὴν βλέπουσαν ἐπὶ τὴν ζωηφόρον, οὗτος εἰς μέγιστον φόβον καὶ κίνδυνον ἤξει θανάτου, οὐδὲν δὲ πείσεται κακόν.

Ἐάν τις ἔχη τὴν ἀναγκαίαν γραμμὴν ἐγκλίνουσαν κατὰ τὴν κεφαλὴν ἐπὶ τὸν τοῦ Κρόνου δάκτυλον, οὐδέποτε αὐτὸν λείψουσι δίκαι καὶ ἀηδία.

Ἐάν ἡ ἀναγκαία γραμμὴ οἶον κλάδους ἔχη, χαρίεντας, φιλοκάλους, μαθηματικούς, εὐέλπιδας, ἀγαθοὺς συμβούλους ὑπάρχειν δηλοῖ.

Ἐάν τις ἔχη τὴν ἀναγκαίαν γραμμὴν ὀρθὴν καὶ μὴ ὑπερορίζουσαν τὸ τοῦ Κρόνου δάκτυλον, ὡς ὄρνις τὸν ἐφήμερον βιώσεται βίον μετὰ κόπου καὶ μόχθου καὶ οὔτε λείψουσιν αὐτὸν τὰ ἀναγκαῖα οὔτε περισσεύουσιν.

Ἐάν τις ἔχη τὴν ἀναγκαίαν γραμμὴν κατὰ τὰ ἄνω μέρη εἰς ὅξυ λήγουσαν, ἐλαττώσει ὁ τοιοῦτος τὴν οὐσίαν. Ἐάν δὲ ἐκ τῶν κάτωθεν μερῶν ἢ πλατεῖα καὶ εὐρεία καὶ ἀσφαλῶς βεβηκυῖα, ἀναλήψεται τὰ ἐλαττωθέντα καὶ ἀποκαταστήσει.

Ἐάν ἡ ἀναγκαία γραμμὴ ἐπιστρέφεται καὶ ἐπινεύη ἐπὶ τὸν τῆς Ἀφροδίτης δάκτυλον, παρὰ γυναικῶν ἢ διὰ γυναικῶν κέρμα ἀποίσεται, ἐφ' ᾧ χαρήσεται μεγάλως.

Ἐάν τις ἀστέρα ἔχη μεταξὺ τῆς ἀναγκαίας καὶ τῆς ζωηφόρου, ἔσται δίκαιος καὶ εὐσεβής.

Ἐάν ἡ ἀναγκαία γραμμὴ ἐπὶ τὸν τοῦ Κρόνου δάκτυλον ἐπιστρέφεται, ὑπὸ τῶν οἰκείων οὗτος βλαβήσεται.

Ἐάν κλάδοι τινὲς τῆς ἀναγκαίας γραμμῆς ἐπὶ τὸν τοῦ Διὸς δάκτυλον ἐκτρέχωσιν, ἐντίμους ποιοῦσιν.

Ἐάν τις τὴν ἀναγκαίαν γραμμὴν ἀνατείνουσαν ἔχη ἐπὶ τὸν τοῦ Διὸς δάκτυλον ἢ ἐγκεκλιμένην ὑπ' αὐτόν, ἢν μὲν οὖν ὀρθὴν ἔχη, κρείττων ἢ γένεσις ἔσται τούτου, ἢν

112 μέρος E.

δὲ ἐγκεκλιμένην, καὶ οὕτως καλή, οἱ γὰρ ἔχοντες τοῦτο ἔσονται εὐτυχεῖς, ἀμέριμνοι, ἀμελεῖς, διὰ τὰ ἀγαθὰ ἀκόπως ζῶντες, εὐχερῶς ἀπατώμενοι ὑπὸ γυναικῶν.

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