# *Sefer ha-Kolel*: A Thirteenth-Century Compendium of Astronomical and Astrological Knowledge

*Sefer ha-Kolel* (“The Comprehensive Book”) is an eclectic Hebrew compendium devoted exclusively to astronomical and astrological knowledge. This work was compiled by an anonymous scholar in the mid-thirteenth century, probably in the Midi or northern Italy. *Sefer ha-Kolel* originally consisted of five sections (*ḥalaqim*) with a total of 40 chapters (*šeʿarim*); of these, only the last nine (Chapters 32–40) are still extant today.[[1]](#footnote-1) The surviving chapters are comprised of lengthy passages taken directly from astronomical and astrological works that were available to Hebrew readers at the time. These excerpts, quoted verbatim from their sources, are accompanied by the author’s own remarks. The compiler’s skillful selection of texts, his editorial decisions, and the comprehensiveness of his work – all discussed below – give the impression that the anonymous author sought to create an ‘encyclopedia’ of astronomical and astrological lore.[[2]](#footnote-2) Indeed, *Sefer ha-Kolel* seems to be the earliest Hebrew work to cover all the branches of medieval astrology in a single composition.

*Sefer ha-Kolel* provides a valuable opportunity to examine the early reception of the first medieval astronomical and astrological works written in Hebrew. Unfortunately, this compilation has not yet received enough scholarly attention. In 2014, Shlomo Sela published a pivotal study of *Sefer ha-Kolel* addressing a single manuscript that includes Chapters 32–35 of the work.[[3]](#footnote-3) Sela examined these chapters’ contents and sources, distinguished the author’s own comments from quotations from other literary sources, and evaluated the author’s *modus operandi*. Sela also illustrated that the work was composed in 1256, probably in Provence or northern Italy. Sela’s article is an invaluable contribution to the scholarship on *Sefer ha-Kolel*; nevertheless, it does not take into account the availability of six additional manuscripts that include the last five chapters of the work. Several years after the publication of his article, Sela wrote in a footnote that he had identified two additional manuscripts containing Chapters 36–40 of *Sefer ha-Kolel* (among the six manuscripts mentioned above in n. 1).[[4]](#footnote-4) These chapters, however, have never been the subject of academic scholarship. This article attempts to fill this lacuna, conducting an in-depth examination of the last five chapters of *Sefer ha-Kolel* – i.e., the fifth and last section of the work.

The article is divided into two parts. Part 1, the primary section of the study, addresses the contents of Chapters 36–40, locates all literary sources used by the author, and indicates the author’s original comments. In addition, it reports on a number of intriguing phenomena, such as the author’s adjustment of cross-references originally found in one of his sources so as to point at other sections of *Sefer ha-Kolel*. Part 2 asks two fundamental questions: Why should historians and sociologists of science be interested in compilations of already available texts, and what may we learn from the appearance of *Sefer ha-Kolel*? It also suggests some final insights into the general profile of the work.

The article also includes three appendices. Appendix 1 is a tabulated catalogue of all the textual sources used by the author in compiling the fifth section of *Sefer ha-Kolel*, summarizing some of the results presented in Part 1. Appendix 2 presents all the occasions in which the author adapts the cross-references found in one of his source materials in order to point at various locations in his own work, comparing his altered versions with their original counterparts. Appendix 3 discusses the author’s use of his most interesting textual source – Al-Qabīṣī’s *Introduction to Astrology*. While virtually all of the sources in *Sefer ha-Kolel* were available in Hebrew, we do not have evidence that Al-Qabīṣī’s *Introduction* was ever systematically translated into Hebrew.[[5]](#footnote-5) This last appendix comprises a critical edition of the parts of *Sefer ha-Kolel* that are based upon this source, alongside their equivalents in Al-Qabīṣī’s Arabic original and the Latin translation.

## Part 1: The Fifth Section of *Sefer ha-Kolel* (Chapters 36–40): Contents, Sources, and Use of Sources

**Introduction to the Fifth Section**

The fifth section of *Sefer ha-Kolel* begins with the author’s introduction, which includes a lengthy, detailed, and reliable account of the content discussed in the subsequent five chapters (Vienna, MS Cod. Hebr. 57, fols. 3v–6r).[[6]](#footnote-6) This introduction may be understood as a kind of table of contents for the section that follows. It informs the readers that *Sefer ha-Kolel* is divided into five sections, that Chapters 36–40 constitute the treatise’s fifth section, and that the work comes to an end with Chapter 40. The introduction also includes an explicit reference to the work’s title, which appears on six additional occasions throughout Chapters 32–40.[[7]](#footnote-7) After a survey of the section’s contents, the author declares that “all of these things are elucidated in a manner that will leave the sage [*navon*] in need of no further elucidations”; this statement attests to the fact that the author considered his work exhaustive. The overview provided in this introduction was later used by the author in compiling his concise introductions to Chapters 36­­, 37, and 38, which are described below.

**Chapter 36**

The author opens Chapter 36 with a concise introduction that describes the content discussed throughout this chapter, although not in the same order in which the content appears in the chapter itself (fols. 6r–6v). This short introduction is based on the author’s more detailed introduction to the fifth section of *Sefer ha-Kolel*, as well as on Chapter 20 of Abraham Bar Ḥiyya’s *Sefer Ḥešbon mahalaḵot ha-koḵavim* (“Calculations of the Stellar Motions”). The chapter itself is devoted to the astrological aspects, i.e., the angular relationships between the planets and sometimes the angular relationships between zodiacal signs. As I will show below, Chapter 36 consists of long quotations borrowed verbatim from seven distinct sources.[[8]](#footnote-8)

 **36.1 – Angular Relationships Between the Zodiacal Signs (Zodiacal Aspects)**

The first article of Chapter 36 reproduces most of the first chapter of Moses Ibn Tibbon’s Hebrew translation of Geminos’ *Introduction to the Phenomena* without revealing this source or its author (fols. 6v–8r).[[9]](#footnote-9) Moses Ibn Tibbon translated Geminos’ *Introduction to the Phenomena* in 1246, i.e., only a decade before the compilation of *Sefer ha-Kolel*. As indicated by a comment in Chapter 37, *Sefer ha-Kolel*’s author ascribed this treatise to Ptolemy, an attribution that was common in the Arabic, Hebrew, and Latin traditions.[[10]](#footnote-10) The article describes the four angular relationships between zodiacal signs: oppositions (180°), trines (120°), quartiles (90°), and pairs or equipotent signs.[[11]](#footnote-11) Following his source material, the author’s discussion of the trines includes a reference to the relationship between the position of the Moon in certain trines and wind forecasting.

**36.2 – *Parapegma***

After quoting the first chapter of the Hebrew translation of Geminos’ *Introduction*, the author cites the last chapter of the same work (Chapter 17) in its entirety (fols. 8r–10v).[[12]](#footnote-12) This article is a compilation of *parapegmata*; it addresses the number of days the Sun spends in each zodiacal sign (beginning with Cancer), and reports on the weather, as well as the rising and setting of stars and constellations on specific dates (the dates are indicated by the Sun’s position within the signs: the first day of the sign, the ninth day, and so on).[[13]](#footnote-13) One should note that the *Parapegma* found in Geminos’ *Introduction* may or may not have originally been compiled by Geminos.[[14]](#footnote-14)

**36.3 – Aspects (*marʾot*) and “Prorogation of the Planets” (*tahaluḵot ha-koḵavim*)**

At this stage, the author declares that his original intention was to open Chapter 36 with a discussion of the aspects of the planets. He then begins this discussion with a copy of Chapter 20 of Abraham Bar Ḥiyya’s *Sefer Ḥešbon mahalaḵot ha-koḵavim* (fols. 10v–14v). This chapter, which the author of *Sefer ha-Kolel* quotes in its entirety, is based in turn on Chapters 54–55 of Al-Battānı̄’s *Zı*̄*j al-S*̣*a*̄*bi*.[[15]](#footnote-15) It is concerned with two distinct topics: the four astrological aspects of the planets (*marʾot*, according to Bar Ḥiyya’s terminology); and the so-called procedure of “prorogation” or “directions” (*tahaluḵot ha-koḵavim*; lit. “processions of the planets”), an astrological doctrine designed to determine the native’s life expectancy. In this doctrine, several “indicators” are launched from certain zodiacal points and travel at various speeds along the zodiac.[[16]](#footnote-16) Following Abraham Bar Ḥiyya, the author of *Sefer ha-Kolel* states that this doctrine was discussed in Ptolemy’s *Tetrabiblos* (*Sefer ʾarbaʿat ha-maʾammarot*), a book “that one ought to rely on” (fol. 14v).[[17]](#footnote-17)

**36.4 – Aspects (*mabatim*) and Prorogation (*nihugim*)**

This article continues the earlier discussion of the planets’ aspects and the prorogation doctrine. Now, however, the author of *Sefer ha-Kolel* no longer uses the terms *marʾot* and *tahaluḵot* to denote these two topics. Instead, he adopts two Hebrew alternatives, both borrowed from the writings of Abraham Ibn Ezra: *mabatim* and *nihugim*. The article begins with a cross-reference to Chapter 33 of *Sefer ha-Kolel*, noting that these two topics were briefly discussed there and stating that this chapter is “particularly [devoted] to these topics.”[[18]](#footnote-18) (It should be noted that Chapter 32 of *Sefer ha-Kolel* discussed the procedure of *nihugim* in its reproduction of Chapter 10 of Abraham Ibn Ezra’s *Beginning of Wisdom.*)[[19]](#footnote-19) The author then remarks that “Ibn Ezra wrote about *mabatim* and *nihugim*” and inserts a copy of the second version of Abraham Ibn Ezra’s *Sefer Keli ha-neḥošet* (“Book of the Astrolabe”) (fols. 14v–16r).[[20]](#footnote-20) This passage instructs the reader on the use of an astrolabe to determine zodiacal positions that are in different aspects with a given planet, as well as to “direct” (*lenaheg*) the “five places of life.” The source text also includes a reference to *Sefer ha-Luḥot* – Abraham Ibn Ezra’s now-lost astronomical tables – and the author of *Sefer ha-Kolel* embeds this reference as is into his work (fol. 15v).[[21]](#footnote-21)

**36.5 – Aspects, the Influences of the Planets, and the Twelve Astrological Places**

The author proceeds to cite accounts of the astrological aspects found in distinct literary sources. After quoting several passages from the second version of *Sefer Keli ha-neḥošet*, the author states that “[Ibn Ezra] wrote more [on the aspects of the planets] in [his] *Book of Reasons*,” and copies the discussion of this subject found in the second version of Ibn Ezra’s *Sefer ha-Ṭeʿamim* (“Book of Reasons”) (fols. 16r–17r).[[22]](#footnote-22) When the discussion in *Sefer ha-Ṭeʿamim* turns to a different matter, the author ceases to copy the text.

The author then notes that “in addition, Ibn Ezra wrote in *Sefer ha-Ṭeʿamim* that the aspects are the essence of [the astrological] judgments,” and cites passages from the first version of *Sefer ha-Ṭeʿamim* (fols. 17r–20v). First, he transcribes the whole of Chapter 3, which is concerned with the astrological aspects and the twelve astrological houses (fols. 17r–19r).[[23]](#footnote-23) In this chapter, Ibn Ezra refers to himself in the first person; the author of *Sefer ha-Kolel* copies this reference as is (*ʾani Abraham*). Next, the author copies the opening of Chapter 4 of the same work, in which Ibn Ezra attributes a number to each planet. This number is derived from the ratio of the planet’s orb to the orb of the Earth. The ratio between the value attributed to a certain planet and that attributed to the Sun or Moon indicates whether the planet’s influence is beneficial or malefic.[[24]](#footnote-24) This quoted passage also associates the order of the planets’ orbs with the twelve astrological houses (fol. 19r).[[25]](#footnote-25) The compiler then skips the rest of Chapter 4, which discusses each planet separately; he will return to these discussions in Chapter 38 of *Sefer ha-Kolel*. Instead, he copies the whole of Chapters 5–7 (fols. 19r–20v), with two minor changes: He omits a short reference by Ibn Ezra to his own *Book of the World* and changes the wording of Ibn Ezra’s cross-reference to Chapter 10 of his *Book of Reasons*.[[26]](#footnote-26) These three quoted chapters discuss the beneficial and malefic influences of the planets in accordance with their locations and relative positions from one another.

As the author finishes copying Chapter 7 of the first version of the *Book of Reasons*, he incorporates the words: “he [namely, Ibn Ezra] wrote more [on the subject]” and embeds a verbatim copy of the whole of Chapter 3 of Ibn Ezra’s *Rešit ḥoḵmah* (“Beginning of Wisdom”) (fols. 20v–22v) – a chapter parallel to Chapter 3 of the first version of *Book of Reasons*, which he has already quoted. (Note that the explicit goal of the first version of the *Book of Reasons* is to elucidate the contents of *Rešit ḥoḵmah*.)[[27]](#footnote-27)

Next, the author embeds two passages taken from Al-Qabīṣī’s *Introduction to Astrology* (fols. 22v–23v; both passages may be found in Appendix 3). The use of this source comes as a surprise. While all other sources used in compiling *Sefer ha-Kolel* would have been available in Hebrew at the time of its composition, we are unaware of any complete Hebrew translation of Al-Qabīṣī’s work, although five short Hebrew fragments of the work have recently been discovered.[[28]](#footnote-28) At this stage, we cannot say exactly how these passages made their way into *Sefer ha-Kolel*, although three possibilities come to mind: (i) The author of *Sefer ha-Kolel* used a now-lost Hebrew translation of Al-Qabīṣī’s *Introduction to Astrology*; (ii) The author of *Sefer ha-Kolel* copied the text from a now-lost Hebrew source text that incorporated verbatim translations of Al-Qabīṣī’s *Introduction to Astrology* (perhaps the second and lost version of Ibn Ezra’s *Rešit ḥoḵmah*, which may have contained passages from Al-Qabīṣī);[[29]](#footnote-29) (iii) The author of *Sefer ha-Kolel* translated these segments by himself, either from the Arabic original or from the twelfth-century Latin translation.[[30]](#footnote-30)

The first of these two passages attributes a color (plural: *ṣivonim*) to each of the twelve astrological places, introduces the planets’ places of joys (*simḥat ha-mešartim ba-mazzalot*), and discusses the indications of the twelve places (divided into Cardines, Cadents, and Succedents) and the indications of the four lords of the cardines (*mošlim*) as they reach the cardines. In addition, it explains how one may find the ruling planet for a specific topic. The second passage, borrowed from Chapter 2 of Al-Qabīṣī’s work, covers the nature (*toledet*) and influence of the Head and the Tail of the Dragon (a subject that appears often in Abraham Ibn Ezra’s writings), the attribution of each hour of the day to one planet, and the division of the hours into masculine and feminine.[[31]](#footnote-31)

The author then states that “the lots of the [horoscopic] places and planets have all been written out in the previous chapter,” and returns to *Rešit ḥoḵmah*, this time quoting its Chapters 5–7 (fols. 23v–28r) in their entirety.[[32]](#footnote-32) While the lots were indeed discussed in Chapter 35 of *Sefer ha-Kolel*, one wonders why the author chooses to embed this remark here.[[33]](#footnote-33) Chapters 5–7 of *Rešit ḥokhmah* cover the planets’ fortune and misfortune, power and weakness; describe the planets’ ‘conditions’ (حلات) according to their positions with respect to the Sun and their motions; and list 30 planetary conditions. As Shlomo Sela has noted, these chapters in Ibn Ezra’s work are largely based on Abū Maʿshar’s *Great Introduction to Astrology*.[[34]](#footnote-34) In Chapter 7, Ibn Ezra once again refers to himself in the first person, a reference that is once again transcribed verbatim by the author of *Sefer ha-Kolel*.

**Chapter 37**

Chapter 37 (28v–54r) begins with a brief introduction (28v) based on the introduction to the fifth section of *Sefer ha-Kolel* and partly on Abraham Ibn Ezra’s introduction to *Rešit ḥoḵmah*.[[35]](#footnote-35) While the introduction provides a concise overview of the subjects discussed through the chapter, the list is incomplete and less detailed than that found in the introduction to the fifth section. Chapter 37 addresses three main topics: general cosmological and astrological principles, catalogues of constellations and fixed stars, and world astrology.

**37.1 ­– Cosmological and Astrological Principles**

The first article of Chapter 37 is a word-for-word copy of *Rešit ḥoḵmah*, from the end of its introduction to the end of its second chapter (28r–44v).[[36]](#footnote-36) The section quoted from *Rešit ḥoḵmah*’s first chapter includes the Hebrew names of the 48 Ptolemaic constellations (divided into three categories: zodiacal, southern, and northern constellations), the number of fixed stars in each constellation, the division of the stars into six magnitudes and the number of stars in each magnitude, the names of the planets and the order of their orbs, a discussion of the astrological doctrine of triplicities (a division of the twelve signs into four groups, where each group is associated with one terrestrial element), and some basic astrological properties of the planets. The text from *Rešit ḥoḵmah*’ssecond chapter is concerned with the characteristics of the zodiacal signs, the planetary dignities, and the relationship between the nature of specific asterisms (or fixed stars) and the nature of the planets (“the planetary mixture of the stars”). The careful reader will note that the reference to the year 1148 in this passage was taken directly from *Rešit ḥoḵmah* and does not indicate the year of *Sefer ha-Kolel*’s composition.

**37.2 – Catalogues of Constellations and Fixed Stars**

After a brief opening remark – “And Ptolemy wrote in his *Book of Introduction*” (44b) – this article proceeds to quote all of Chapter 2 of Moses Ibn Tibbon’s Hebrew translation of Geminos’ *Introduction to the Phenomena*, with the exception of its first few sentences (44v–45r).[[37]](#footnote-37) This chapter introduces the names of several asterisms and fixed stars, as well as the names of the northern and southern constellations. In so doing, the author diverts the discussion in *Sefer ha-Kolel* from astrology to astronomy. This transition is fairly smooth, as the content of Chapter 2 of Geminos’ treatise bears a resemblance to the material previously quoted from *Rešit ḥoḵmah*.

The author’s false attribution of Geminos’ *Introduction to the Phenomena* to Ptolemy should come as no surprise. The thirteenth-century scholar Levi ben Abraham ben Ḥayyim, who also drew on the Hebrew translation of Geminos’ work, ascribed it to Ptolemy as well. In fact, it seems evident that Moses Ibn Tibbon, who translated the work from its Arabic translation, believed he had translated a work by Ptolemy. The colophon in his translation refers to it as “Ptolemy’s book on the art of the sphere.” Gerard of Cremona’s Latin translation of Geminos’ work also ascribes it to Ptolemy, at least according to the list of Gerard’s works compiled by his students after his death. There, the work is referred to by the title *Liber introductorius Ptolomei ad* *artem spericam*, a title very similar to that given in the Hebrew version’s colophon.[[38]](#footnote-38) Thus, it seems reasonable to assume that this false attribution dates back to the Arabic tradition, and that both Moses Ibn Tibbon and Gerard of Cremona translated the text from Arabic manuscripts that had already ascribed the work to Ptolemy. Although there seem to be no extant Arabic manuscripts of Geminos’ treatise, we nonetheless have evidence to support this claim. In his *Chronology of Ancient Nations*, Al-Bīrūnī used the first chapter of Geminos’ work as source material, calling it *Introduction to the Spherical Art* and ascribing it to Ptolemy.[[39]](#footnote-39)

In Chapter 32 of *Sefer ha-Kolel*, the author mentions that “in Chapter 37 of this *Sefer ha-Kolel*, one may find the opinions of Ptolemy and Al-Farghānī on the names of the fixed stars and the lunar mansions.” It is then unsurprising that after the author quotes Geminos’ treatise (which he ascribes to Ptolemy), we find the following note: “Now that we have cited Ptolemy’s words, we should [also] quote those of Al-Farghānī, as there is a minor disagreement between them regarding the first-magnitude ­[lit. ‘big’] stars” (45r). At this point, the author begins to copy Chapter 22 of Jacob Anatoli’s Hebrew translation of Al-Farghānī’s *Elements* (45r–46v). This chapter contains a catalogue of the 48 Ptolemaic constellations, the names of the first-magnitude stars, and a list of the 28 lunar mansions.[[40]](#footnote-40) Surprisingly, the quoted passages are not identical to the text found in Anatoli’s Hebrew translation, at least as this text is preserved in its manuscript tradition; *Sefer ha-Kolel* includes brief additions that are absent from Anatoli’s translation, mostly Arabic names of certain stars. Despite these slight differences, it is clear that the author of *Sefer ha-Kolel* made use of Anatoli’s Hebrew translation. The author of *Sefer ha-Kolel* not only adopts Anatoli’s scientific vocabulary, but also embeds literal quotations of Anatoli’s original remarks.[[41]](#footnote-41) As *Sefer ha-Kolel* was composed only two decades after Anatoli translated Al-Farghānī’s *Elements*, one wonders whether the additions found in *Sefer ha-Kolel* were originally included in Anatoli’s translation. As *Sefer ha-Kolel* has its own independent tradition of dissemination, a study of *Sefer ha-Kolel* may uncover early and even unknown versions of its source materials.

After quoting Chapter 22 of Al-Farghānī’s *Elements*, the author embeds a cross-reference to Chapter 32 of *Sefer ha-Kolel* (one should bear in mind that Chapter 32 also contains a cross-reference to Chapter 37). In this cross-reference, the author mentions that he has already elucidated “some of the opinions of the ancients” regarding the names of the fixed stars, and notes that there are differences between the lists of stars that he brought in Chapter 32 and those in Chapter 37. As Shlomo Sela has noted, the catalogues of fixed stars in Chapter 32 are based on Abraham Bar Ḥiyya’s *Luh*̣*ot ha-nasi*ʾ (“The Tables of the Prince”) and *Sefer Ḥešbon mahalaḵot ha-koḵavim*.[[42]](#footnote-42)

**37.3 – World Astrology**

The last article of Chapter 37 is concerned with world astrology, i.e., the astrological branch devoted to prognostications of historical, political, meteorological, and religious events. The article is a verbatim copy of the entire first version of Abraham Ibn Ezra’s *Sefer ha-ʿOlam* (“Book of the World”) (47v–54r).[[43]](#footnote-43) The author precedes his quotation of this source with a surprising remark: “On the topic of the conjunctions [of the planets] and their indications [with regard to the world], Al-Ghazālī wrote […]” (47v).[[44]](#footnote-44) I am not familiar with any other source that ascribes the first version of *Sefer ha-ʿOlam* to Al-Ghazālī. In fact, this attribution is quite puzzling, as the author of *Sefer ha-ʿOlam* refers to himself in the first person as “Abraham.” The readers will note that as in the quotation from *Rešit ḥoḵmah* discussed above, the reference to the year 1148 in this article (49v) does not imply the year of composition of *Sefer ha-Kolel*, but is merely quoted from *Sefer ha-ʿOlam*. One should also bear in mind that the author of *Sefer ha-Kolel* already drew on a fragment from the first version of *Sefer ha-ʿOlam* in Chapter 32 of his work; likewise, he used the whole of the second version of *Sefer ha-ʿOlam* in compiling Chapter 33 of *Sefer ha-Kolel*.[[45]](#footnote-45)

**Chapter 38**

The author opens this new chapter with a brief introduction based on the introduction to the fifth section of *Sefer ha-Kolel*. This introduction contains a succinct list of the subjects discussed through the chapter. Chapter 38 is devoted to the natures and significations of the planets.

**38.1 – The Planets’ Natures and Significations**

The author begins the first article with Chapter 4 of Ibn Ezra’s *Rešit ḥoḵmah* (transcribed in full, with the exception of its opening sentence and a few minor changes).[[46]](#footnote-46) This passage addresses the astrological characteristics of the seven planets in the Ptolemaic order, beginning with Saturn and ending with the Moon (54v–58r). When the author finishes his transcription of this section of *Rešit ḥoḵmah*, he states: “Now I will state in brief what the author has written at length” (58r). He then quotes Chapter 4 of the first version of *Sefer ha-Ṭeʿamim*, a work that aims to explicate the fourth chapter of *Rešit ḥoḵmah* (58r–59v). This quotation in *Sefer ha-Kolel* does not include the beginning or ending of *Sefer ha-Ṭeʿamim*’s fourth chapter, but it follows that chapter’s structure, discussing the planets according to the classical order from Saturn to the Moon.[[47]](#footnote-47)

The author then introduces his next source text by means of a short linking clause: “I will [now] bring up more [information] on the matter of the seven planets as it was brought by the sage Ibn Ezra in *Sefer ha-Ṭeʿamim*” (59v). He thereupon begins to replicate the whole of Chapter 5 of the second version of *Sefer ha-Ṭeʿamim* (59v–62r).[[48]](#footnote-48) While this chapter is also devoted to the astrological properties of the planets, it discusses the planets in a different order: First it addresses the two Luminaries, followed by the five planets, and finally the lunar nodes. A very similar discussion of the lunar nodes appeared earlier in Chapter 36 of *Sefer ha-Kolel*; there, the author drew directly or indirectly upon Al-Qabīṣī’s *Introduction to Astrology*.

**Chapter 39**

Chapter 39 has no preface by the author. It is largely devoted to two branches of astrology – elections and interrogations – but also touches upon some astrological matters associated with nativities. The author opens Chapter 39 with the following heading: “On Ibn Ezra’s elections, and all of the judgments related to nativities, anniversaries, and interrogations.” The chapter consists of three articles: (i) On elections; (ii) On interrogations; (iii) 120 aphorisms related to the nativities, anniversaries, interrogations, and elections.

**39.1 – Elections**

The first article (62v–67r) is devoted to elections, an astrological doctrine concerned with finding the optimal time to begin a particular activity. The article includes the complete text of the second version of Ibn Ezra’s *Sefer ha-Mivh*̣*arim* (“Book of Elections”).[[49]](#footnote-49) However, this time, the text is not a mere copy of Ibn Ezra’s work. In the copied introduction to the second version of *Sefer ha-Mivh*̣*arim*, the author of *Sefer ha-Kolel* incorporates a number of quotations borrowed from the first version of *Sefer ha-Mivh*̣*arim*.[[50]](#footnote-50) In so doing, the author creates an alternative version of Ibn Ezra’s introduction to *Sefer ha-Mivh*̣*arim*. This alternative introduction reads seamlessly, so that a reader unfamiliar with Ibn Ezra’s writings could not possibly perceive that this text consists of excerpts from two different works.[[51]](#footnote-51) In addition to the supplements from the first version of *Sefer ha-Mivh*̣*arim*, the author also integrates a remark on the “five places of life,” apparently taken from Ibn Ezra’s *Sefer ha-Moladot* (“Book of Nativities”).[[52]](#footnote-52) All these additions may be found in the part of the article that is parallel to the introduction to the second version of *Sefer ha-Mivh*̣*arim*. The remainder of the article is a verbatim quotation of the same source, with no additions or alterations.

**39.2 – Interrogations**

The second article is devoted to interrogations, an astrological doctrine that allows the astrologer to reply to any question raised by his client or patron. After a short opening clause (“The sage further writes in his *Book of Interrogations*”), the article includes a complete word-for-word copy of the first version of *Sefer ha-Sheʾelot* (“Book of Interrogations”) (67r–75r). No original additions are embedded in the text, with the exception of one short sentence of which I was unable to identify the origin. This sentence appears in the discussion of the eleventh astrological place.[[53]](#footnote-53)

**39.3 – 120 Aphorisms**

The last article of Chapter 39 begins with the following sentence: “After clarifying the judgment of the [horoscopic] places (*mišpaṭei ha-batim*), I was obliged to introduce all the judgments (*dinim*) related to nativities, the event (*meʾoraʿ*), revolutions of the years [or ‘anniversaries’] (*haqafat ha-šanim*), interrogations, and elections, of which there are 120” (75r). Next, the author incorporates a verbatim copy of the whole of Chapter 8 of Ibn Ezra’s *Rešit ḥoḵmah* (75r–77r).[[54]](#footnote-54) This chapter consists of 120 short aphorisms on nativities, anniversaries, interrogations, and elections. This article serves as a transition between Chapter 39, which is mostly concerned with elections and interrogations, and Chapter 40, which is devoted, *inter alia*, to the doctrine of nativities.

**Chapter 40**

Chapter 40, which is the final chapter of *Sefer ha-Kolel*, does not include a preface by the author. The author begins this chapter with the following statement: “Chapter 40. On the judgments (*ba-dinin ve-ba-mišpaṭim*) and the events of the native according to the opinion of the astronomers (*ḥaḵmei ha-teḵunah*), and on the indications of the Luminaries on diseases” (77r). The chapter is indeed devoted to the two astrological doctrines presented in this opening statement: nativities and medical astrology. Following the textual sources used by the author, this chapter also touches upon continuous horoscopy in nativities, a doctrine that is related to nativities but usually treated separately in the astrological literature.[[55]](#footnote-55)

**40.1 – Nativities and Continuous Horoscopy in Nativities**

The first article is devoted to nativities. According to this astrological doctrine, the destiny of the newborn is determined by the configuration of the celestial bodies at the moment of birth and may be learned from the natal horoscopic chart. The article is a faithful copy of the whole of Ibn Ezra’s *Sefer ha-Moladot*, including its fourth part, which addresses continuous horoscopy (77r–92v).[[56]](#footnote-56) This article includes a phenomenon that is absent from all other surviving articles of *Sefer ha-Kolel*: The author of *Sefer ha-Kolel* copied six cross-references to other works by Ibn Ezra from *Sefer ha-Moladot*, yet he modified these references to direct the reader to parts of his own work (see below, Appendix 2).

**40.2 – Medical Astrology**

The last article of Chapter 40, which is also the final article of *Sefer ha-Kolel*, is a complete and word-for-word copy of Abraham Ibn Ezra’s *Sefer ha-Meʾorot* (“Book of the Luminaries”).[[57]](#footnote-57) This work expounds the astrological theory behind the doctrine of critical days and addresses the course of both acute and chronic diseases.[[58]](#footnote-58) On the basis of the introduction to *Sefer ha-Kolel*’s fifth section, we may be confident that *Sefer ha-Kolel* comes to an end with the quotation from *Sefer ha-Meʾorot*.[[59]](#footnote-59)

\* Appendix 1 features a catalogue of all sources used by the author in compiling the fifth section of *Sefer ha-Kolel*.

## Part 2: Compendia in the Process of Knowledge Absorption and New Insights into *Sefer ha-Kolel*

In conclusion, we have established that the surviving chapters of *Sefer ha-Kolel* are comprised of long quotations borrowed from astronomical and astrological literature already available to Hebrew readers in the mid-thirteenth century.[[60]](#footnote-60) The anonymous author skillfully selected and connected quotations, occasionally incorporating his own remarks into the text. In the fifth section of the work, these remarks tend to be exceedingly concise; they usually serve as mediate sentences, allowing the text to segue from one source to another. The author’s presence is also reflected in the slight adjustments he made to his textual sources. Of these, the most prominent are in Chapter 40, where he modifies the cross-references found in one of his sources to point to parts of his own *Sefer ha-Kolel*. The compiler also created a new introduction to Abraham Ibn Ezra’s *Sefer ha-Mivh*̣*arim* by combining passages from Ibn Ezra’s two versions of the work. Moreover, the author divided his *Sefer ha-Kolel* into chapters, composed a detailed introduction to the fifth section of his work and three concise introductions to some of its chapters, and made several editorial decisions in selecting and organizing his source materials. The author’s presence, however, is not particularly strong. As shown above, the author did not bother to modify the dates that appeared in his source materials, and occasionally copied first-person references brought by the authors of his sources. Furthermore, the anonymous compiler did not try to standardize the terminology in his work; rather, he simply adopted the various vocabularies found in his sources. We have encountered more than one example in which the author used two distinct terms (e.g., *marʾot* and *mabatim*) to denote a single semantic signified.[[61]](#footnote-61)

Despite the author’s apparent acquaintance with both astronomical and astrological lore, the extant chapters of his eclectic work lack any innovative notions. In terms of their content, they contain virtually nothing that would be new to medieval Hebrew readers already conversant with the Hebrew astronomical and astrological literature of the time.[[62]](#footnote-62) This raises two fundamental questions: What is the historical significance of such a composition? Should the historian or sociologist of science be interested in scientific compilations that contain knowledge already available to these compilations’ intended audience? We will now attempt to address these questions.

Scholars may be drawn to scientific compilations out of an interest in the philological and historical aspects of the compilation’s source texts. In the beginning of his article on *Sefer ha-Kolel*, Sela informs his readers that the work aroused his curiosity because of its extensive quotations from the works of Abraham Bar Ḥiyya and Abraham Ibn Ezra. “Since this work [i.e., *Sefer ha-Kolel*] was compiled in the mid-thirteenth century,” he adds, “and because this is substantially earlier than the date of any other manuscript of any scientific treatise written by Bar Ḥiyya or Ibn Ezra, I realized that it contains the earliest available copies of their work.”[[63]](#footnote-63) Because compilations often gain their own independent dissemination and circulation traditions, they may, at least potentially, contain early and perhaps not-yet-discovered versions of their source materials.[[64]](#footnote-64) The study of compilations like *Sefer ha-Kolel* may also be essential in understanding how earlier scientific works were read, interpreted, studied, and disseminated in the early phases of their reception in different reading cultures.

However, the study of Hebrew scientific compilations based on other Hebrew texts should not be motivated only by interest in the compilers’ source texts. Although each compilation is deserving of its own study and has its own unique characteristics,[[65]](#footnote-65) the emergence of such works in medieval societies should also be examined as a general phenomenon. In a recently published volume, medieval compendia, encyclopedias, and other related literary genres were discussed in the context of medieval attempts to popularize philosophy and science.[[66]](#footnote-66) The many important questions raised by this volume regarding the concept of “popularization” are indeed relevant to our discussion. Here, however, I would like to propose that we view the emergence of scientific compilations from an additional, although closely related, perspective – that of knowledge assimilation. The appearance of some of these works may represent a distinct and integral stage in the complex process by which scientific knowledge naturalizes in new cultural climates. Thus, their study may provide a glance into the dynamics and procedures of knowledge transmission and absorption.

To illustrate this last claim, we should briefly remark on the first stage of this process, which, in our medieval Hebrew-reading context, is European Jews’ early encounters with Greco-Arabic knowledge via the noninstitutionalized enterprise of translation.[[67]](#footnote-67) The translational activity into Hebrew that emerged in the twelfth century and continued throughout the Middle Ages was a necessary condition for the process by which scientific lore was transmitted and assimilated among educated audiences in the Jewish communities of Latin Europe. However, translating a scientific treatise from one language into another does not guarantee that the knowledge contained in the translated work will indeed be integrated into its new cultural environment.[[68]](#footnote-68) Historians, philosophers, and sociologists of science and knowledge note diverse factors that affect the ways in which notions, beliefs, and theories are accepted or rejected in various social climates. Be these factors as they may, the integration of knowledge into a new cultural environment does not happen overnight. It involves not only the appearance of texts that introduce new knowledge, but also the reactions to these texts. Such reactions may include the study of these texts and the discourses they evoke, as well as the interpretation, adaptation, and diffusion of their content in different channels, both inside and outside scholarly circles. Sometimes, as in several famous cases, scientific knowledge is accepted into the learned strata of society only after it has been rigorously criticized or aroused heated debate.[[69]](#footnote-69) All these reactions represent, at the very least, an interest in this new knowledge, or indicate that this knowledge may be of some relevance to the receiving culture.

Fortunately, these reactions usually leave clear historical footprints. One such footprint is the emergence of new literary genres that aim to assist readers in internalizing the “new” and “foreign” knowledge, such as commentaries, summaries of already available works, dictionaries, dialogues, textbooks, and compendia.[[70]](#footnote-70) *Sefer ha-Kolel* should be understood in this context, and specifically among works that seek to provide convenient access to, or facilitate greater understanding of, scientific knowledge already available to the medieval Hebrew reader. As such, it should be counted alongside *Ruaḥ ḥen*, Gershom ben Solomon’s *Sha‘ar ha-shamayim*, and the scientific sections of Levi ben Abraham’s *Livyat* *ḥen*. While none of these works contain innovative ideas, their emergence, as well as the wide circulation of at least some of them (*Ruaḥ ḥen* and *Sha‘ar ha-shamayim*), show that the knowledge they contained had indeed begun to spread among certain sectors of society.

However, we may assume that the role played by compilations in medieval societies was not restricted to the passive transmission of knowledge to new audiences, nor to making such knowledge more comprehensible. By its very nature, the genre of compilations may also have helped to bolster the legitimacy of the specific bodies of knowledge that the compilations contained. Compilers usually did not try to hide the eclectic characteristics of their works, and readers of these compilations may have been fully aware that their authors had selected specific texts from various sources over others and were presenting already available knowledge in a new format. The emergence of “second-generation” texts that accepted and used concrete scientific models and methods of research, alongside readers’ own awareness that they were reading eclectic compositions of this kind, could have strengthened confidence in the specific knowledge and scientific traditions featured in these texts. If this is true, these works not only helped to disseminate knowledge and make it more comprehensible, but also to inculcate it among the learned strata of society. Further study should be dedicated to the question of the level of authority attributed to compilations in medieval society, as well as the exact role played by compilations in the process of knowledge assimilation.

As we have seen, the appearance and circulation of compilations (and related literary genres) may indicate that the knowledge they contained had made inroads into the educated strata of the receiving culture. In light of this view, and because *Sefer ha-Kolel* is almost exclusively devoted to astrological knowledge, we may conclude that the appearance of *Sefer ha-Kolel* illustrates the acceptance of astrology in the intellectual life of at least some thirteenth-century Hebrew-reading scholars. At the very least, it demonstrates a curiosity about astrology in the environment in which *Sefer ha-Kolel* was written and read. The debut of *Sefer ha-Kolel* is, of course, only one indication of the growing interest in astrology among Jewish intellectuals after the appearance of Abraham Ibn Ezra’s astrological corpus. As early as the twelfth century, a group of Provençal Jews addressed a series of queries on astrology to Maimonides, deriving their astrological knowledge from Ibn Ezra’s works.[[71]](#footnote-71) The appearance of numerous codices of Ibn Ezra’s astrological corpus also point to a curiosity of this kind, although the earliest such codices extant today are from the fourteenth century.[[72]](#footnote-72) *Sefer ha-Kolel*, then, indicates that Ibn Ezra’s astrology also intrigued thirteenth-century Hebrew-reading scholars. The same is true of the lost Hebrew version of *Tractatus Particulares*,[[73]](#footnote-73) as well as the astrological chapter of *Livyat* *ḥen*, which was produced in the late thirteenth century and constituted of quotations borrowed, *inter alia*, from the astrological corpus of Ibn Ezra.[[74]](#footnote-74) Although Ibn Ezra was the most prominent astrological authority in thirteenth-century European Hebrew-reading environments, we must recall that he was not the only authority. Abraham Bar Ḥiyya’s astrological work, especially the fifth chapter of his *Megillat ha-megalle* (“Scroll of the Revealer”), was also known to thirteenth-century readers, including to the author of *Sefer ha-Kolel*.[[75]](#footnote-75) The astrological works of well-respected Greek and Muslim authorities were also made available to the Hebrew-reading scholars of the time. Less than a decade before the appearance of *Sefer ha-Kolel*, Judah ben Solomon ha-Kohen of Toledo translated his *Midrash ha-ḥoḵmah* (“The Study of Wisdom”)into Hebrew at the request of his co-religionists in Tuscany. This work contains, *inter alia*, a summary of Ptolemy’s *Tetrabiblos*, alongside a critique of certain parts of Ptolemy’s work.[[76]](#footnote-76) In Judah’s summary of the *Tetrabiblios*, he testifies that his grandfather was involved in astrological practice; in fact, this grandfather used one of Ptolemy’s doctrines related to nativities in the astrological prognostication he conducted at the moment of Judah’s birth.[[77]](#footnote-77) A few decades later, the Provençal scholar Jacob ben Elijah translated two seminal works on astrology – Pseudo-Ptolemy’s *Centiloquium* and Abū Maʿshar’s *Great Introduction* – from their Latin translations into Hebrew. These two translations were produced in approximately 1280, after Jacob ben Elijah’s arrival in Venice. This thirteenth-century growth in the quantity of Hebrew astrological literature may demonstrate a growing interest in astrology among Jews in Christian Europe.

*Sefer ha-Kolel* holds one intriguing characteristic that is absent from all the aforementioned Hebrew astrological literature, with the exception of *Livyat* *ḥen*. As we have seen, the nine extant chapters of *Sefer ha-Kolel* address all the branches of medieval astrology: introduction to astrology, nativities, continuous horoscopy, elections, interrogations, world astrology, and medical astrology. As such, the study of this compilation may illuminate how medieval thinkers perceived the relationships and interconnections between the distinct branches of astrology. Here I will limit myself to a brief evaluation of the order in which these branches are presented in the work, as this order may reflect the compiler-editor’s opinion regarding the proper way to acquire astrological knowledge. In my view, the way in which *Sefer ha-Kolel* presents its materials is peculiar, and certainly far from ideal for the systematic study of astrology. First of all, topics belonging to the same branch of astrology are scattered throughout different parts of the work. This is especially true of materials related to introduction to astrology, world astrology, and continuous horoscopy.[[78]](#footnote-78) True, other branches of astrology (nativities, elections, interrogations, and medical astrology) are each presented in a single concentrated location. However, all these discussions are mere quotations of complete works by Ibn Ezra; as such, there does not seem to be an advantage in acquiring the knowledge they contain specifically from *Sefer ha-Kolel*. Moreover, the order in which the various branches appear in *Sefer ha-Kolel* is rather puzzling. For example, the doctrine of nativities is only seriously discussed in the final chapter of the work; one wonders why such a pivotal subject of medieval astrology makes its first real appearance there. That said, it is worth noting that *Sefer ha-Kolel* may well be the first Hebrew work to discuss all the branches of medieval astrology in a single composition. Thus, it is only reasonable that such a work contains neither a definite curriculum for the study of astrology nor a clear stance on the appropriate way to acquire this knowledge.

## Appendix 1: A Catalogue of All Sources Used by the Author in the Fifth Section (Chapters 36­–40) of *Sefer ha-Kolel*[[79]](#footnote-79)

**A. List of Sources by Order of Appearance in *Sefer ha-Kolel***

| *Sefer ha-Kolel* | Source |
| --- | --- |
| Chap. | Vienna MS 57 | Author | Title | Chapter |
| 36 | 6v–8r | Geminos | *Introduction to the Phenomena* (trans. Moses Ibn Tibbon) | §1 |
| 8r–10v | §17 |
| 10v–14v | Abraham Bar Ḥiyya | *Sefer Ḥešbon mahalaḵot ha-koḵavim* | §20 |
| 14v–16r | Abraham Ibn Ezra | *Sefer Keli ha-neḥošet* II | “On Aspects” |
| 16r–17r | *Sefer ha-Ṭeʿamim* II | §4.3, §4.4:1, §4.5–8 |
| 17r–20v | *Sefer ha-Ṭeʿamim* I | §3, §4.1, §§5–7 |
| 20v–22v | *Rešit ḥoḵmah* | §3 |
| 22v–23v | Al-Qabīṣī | *Introduction to Astrology* | §1.69–78, §2.45–50 |
| 23v–28r | Abraham Ibn Ezra | *Rešit ḥoḵmah* | §§5–7 |
| 37 | 28r–44v | Abraham Ibn Ezra | *Rešit ḥoḵmah* | Intro. (par. 3), §§1–2 |
| 44v–45r | Geminos | *Introduction to the Phenomena* | §2 |
| 45r–46v | Al-Farghānī | *Elements* (trans. Jacob Anatoli) | §22 |
| 47v–54r | Abraham Ibn Ezra | *Sefer ha-ʿOlam* I | Complete work |
| 38 | 54v–58r | Abraham Ibn Ezra | *Rešit ḥoḵmah* | §4 |
| 58r–59v | *Sefer ha-Ṭeʿamim* I | §4.2–8 |
| 59v–62r | *Sefer ha-Ṭeʿamim* II | §5 |
| 39 | 62v–67r | Abraham Ibn Ezra | *Sefer ha-Mivh*̣*arim* II (including additions from *Sefer ha-Mivh*̣*arim* I and likely additions from *Sefer ha-Moladot*) | Complete work  |
| 67r–75r | *Sefer ha-Sheʾelot* I | Complete work |
| 75r–77r | *Rešit ḥoḵmah* | §8 |
| 40 | 77r–92v | Abraham Ibn Ezra | *Sefer ha-Moladot* | Complete work |
| New York, MS 2601, 144r–147r[[80]](#footnote-80) | *Sefer ha-Meʾorot* | Complete work |

**B. List of Sources by Names of Sources’ Authors**

| Source | *Sefer ha-Kolel* |
| --- | --- |
| Author | Title | Chapter | Chapter |
| Abraham Bar Ḥiyya | *Sefer Ḥešbon mahalaḵot ha-koḵavim* | §20 | 36 |
| Abraham Ibn Ezra | *Rešit ḥoḵmah* | Intro. (par. 3), §§1–2 | 37 |
| §3 | 36 |
| §4 | 38 |
| §§5–7 | 36 |
| §8 | 39 |
| *Sefer ha-ʿOlam* I | Complete work | 37 |
| *Sefer Keli ha-neḥošet* II | “On Aspects” | 36 |
| *Sefer ha-Meʾorot* | Complete work | 40 |
| *Sefer ha-Mivh*̣*arim* II (including additions from *Sefer ha-Mivh*̣*arim* I) | Complete work | 39 |
| *Sefer ha-Moladot* | Complete work | 40 |
| *Sefer ha-Sheʾelot* I | Complete work | 39 |
| *Sefer ha-Ṭeʿamim* I | §3, §4.1 | 36 |
| §4.2–8 | 38 |
| §§5–7 | 36 |
| *Sefer ha-Ṭeʿamim* II | §4.3, §4.4:1, §4.5–8 | 36 |
| §5 | 38 |
| Al-Farghānī | *Elements* (trans. Jacob Anatoli) | §22 | 37 |
| Al-Qabīṣī | *Introduction to Astrology* | §1.69–78, §2.45–50 | 36 |
| Geminos | *Introduction to the Phenomena* (trans. Moses Ibn Tibbon) | §1 | 36 |
| §2 | 37 |
| §17 | 36 |

## Appendix 2: Six Modifications of Abraham Ibn Ezra’s Cross-Referencesby the Author of *Sefer ha-Kolel*

As noted above, the author of *Sefer ha-Kolel* adapts six cross-references originally found in Abraham Ibn Ezra’s *Sefer ha-Moladot* to direct the reader to sections of his own work. These modifications all appear in Chapter 40 of *Sefer ha-Kolel*. In the following, I present all of the modifications found in *Sefer ha-Kolel* alongside their original counterparts from *Sefer ha-Moladot*, both accompanied by an English translation.[[81]](#footnote-81)

A.

|  |  |
| --- | --- |
| *Sefer ha-Moladot*, III.I.4:9–10, p. 102 | *Sefer ha-Kolel* (Vienna, MS 57), 79v |
| ויאמר סהל בן בשר הישראלי כי שר הפנים יורה על פני האדם, ואמר כי נסה זה פעמים רבות. והדין עמו, אם היה שר הפנים מביט אל המעלה הצומחת. **וכבר פירשתי בספר ראשית חכמה** תולדת כל מזל ומזל וכל מה שיורה מי שיולד באחת הפנים. | ויאמר סהל בן בשאר הישראלי כי שר הפנים יורה על פני האדם, ואמר שנסה זה פעמים רבות. והדין עמו, כי היה שר הפנים מביט אל המעלה הצומחת. **וכבר פירשתי בספר הזה הכולל בשער שלשים ושבע** תולדת כל מזל ומזל וכל מה שיורה על מי שיולד באחת הפנים. |
| Sahl Ibn Bishr the Jew said that the lord of the decan signifies the human face, and said that he demonstrated this empirically many times. He is right, as long as the lord of the decan aspects the ascendant degree. **In the *Book of the Beginning of Wisdom* I have explained** the nature of every sign and its significations when the native is born in one of [their] decans.  | Sahl Ibn Bishr the Jew said that the lord of the decan signifies the human face, and said that he demonstrated this empirically many times. He is right, as long as the lord of the decan aspects the ascendant degree**. In Chapter 37 of this Comprehensive Book [*Sefer ha-Kolel*], I have explained** the nature of every sign and its significations when the native is born in one of [their] decans. |

B.

|  |  |
| --- | --- |
| *Sefer ha-Moladot*, III.I.7:12, p. 106 | *Sefer ha-Kolel* (Vienna, MS 57), 80v |
| וכל כחות הכוכבים כבר הזכרתים **בספר ראשית חכמה**. | וכל כחות הכוכבים כבר הזכרתים **בספר ראשית החכמה ובשער שלשים ושמנה מהספר הזה**. |
| I have already mentioned the powers of all the planets **in the *Book of the Beginning of Wisdom***. | I have already mentioned the powers of all the planets **in the *Book of the Beginning of Wisdom* and in Chapter 38 of this book**. |

C.

|  |  |
| --- | --- |
| *Sefer ha-Moladot*, III.I.11:4, p. 114 | *Sefer ha-Kolel* (Vienna, MS 57), 81v |
| והניהוגים ראוים להיות כאשר הזכרתי **בספר הטעמים**. | והניהוגים ראויים להיות כאשר הזכרתי **בשער שלשים ושלש ושלשים וארבעה מהספר הזה הכולל**. |
| And the directions should be done according to what I explained **in the *Book of Reasons*.** | And the directions should be done according to what I explained **in Chapters 33 and 34 of this Comprehensive Book [*Sefer ha-Kolel*].** |

D.

|  |  |
| --- | --- |
| *Sefer ha-Moladot*, III.I.15:4, p. 120 | *Sefer ha-Kolel* (Vienna, MS 57), 82r |
| ולא יהיה כרת בגעת מקום החיים אל מעלת המזיק או מבטו, על מנת שיהיו המעלות חסרות מהמבט או נוספות כאור גוף הכוכב, כאשר הזכרתי **בספר ראשית החכמה**. | ולא יהיה כרת בגעת מקום החיים אל מעלת המזיק או מבטו, על מנת שיהיו המעלות חסרות מהמבט או נוספות כאור גוף הכוכב, כאשר הזכרתי **בספר הזה בשער הקודם**. |
| We do not have [a place of] death when a place of life reaches the malefic’s degree or its aspect, on condition that the degrees short of or beyond the aspect are equal to the [degrees of the] planet’s ray, as I explained **in the *Book of the Beginning of Wisdom***. | We do not have [a place of] death when a place of life reaches the malefic’s degree or its aspect, on condition that the degrees short of or beyond the aspect are equal to the [degrees of the] planet’s ray, as I explained **in the previous chapter of this book**. |

E.

|  |  |
| --- | --- |
| *Sefer ha-Moladot*, IV.9:2, pp. 188–190 | *Sefer ha-Kolel* (Vienna, MS 57), 90v–91r |
| דע אי זה הוא מקום החיים שיורה על חיי הנולד, ככתוב בבית הראשון, ונהג אותו בשני הנהוגים, כאשר הזכרתי **בספר הטעמים**. | דע אי זה מקום החיים שיורה על חיי הנולד, ככתוב בבית הראשון, ונהוג אותו בשני הניהוגים כאשר הזכרתי **בשער השלשים וארבע מהספר הזה הכולל, ובשער שלשים ושלוש**. |
| Determine the place of life that signifies the native’s life, as written in the [chapter on the] first place, and direct it by two directions, as I have mentioned **in** **the *Book of Reasons***. | Determine the place of life that signifies the native’s life, as written in the [chapter on the] first place, and direct it by two directions, as I have mentioned **in** **Chapters 33 and 34 of this Comprehensive Book [*Sefer ha-Kolel*].** |

F.

|  |  |
| --- | --- |
| *Sefer ha-Moladot*, IV.27:1, p. 202 | *Sefer ha-Kolel* (Vienna, MS 57), 92r–92v |
| הפאות. הסתכל מקום המזיקים והטובים באי זה רביעיות הם, כאשר מפורש **בראשית החכמה**, ובחר לו שילך אל הצד ששם הכוכבים הטובים. | הפאות. הסתכל מקום המזיקים והטובים באי זה רביעית הם, כאשר מפורש **בספר ראשית חכמה ובשער שלשים ושבע מהספר הזה**, ובחר לו שילך אל הצד ששם הכוכבים הטובים. |
| The cardinal points. Observe the quadrants in which the malefic and benefic [planets] are located, as explained in the ***Book of the Beginning of Wisdom***. Then advise him that he travel in the direction of the benefic planets [are located]. | The cardinal points. Observe the quadrants in which the malefic and benefic [planets] are located, as explained in the ***Book of the Beginning of Wisdom* and in Chapter 37 of this book**. Then advise him that he travel in the direction of the benefic planets [are located]. |

## Appendix 3: *Sefer ha-Kolel* and Al-Qabīṣī’s *Introduction to Astrology*

The following includes passages from *Sefer ha-Kolel* that are directly or indirectly based on Al-Qabīṣī’s *Introduction to Astrology*, alongside their counterparts in Al-Qabīṣī’s Arabic original and the Latin translation. As mentioned above, we have no evidence that Al-Qabīṣī’s *Introduction* was ever systematically translated into Hebrew, despite the recent discovery of five short Hebrew fragments of the work.[[82]](#footnote-82) For now, we remain unable to determine how parts of Al-Qabīṣī’s work made their way into *Sefer ha-Kolel*, although we have provided three possible explanations.[[83]](#footnote-83)

When these Hebrew excerpts from *Sefer ha-Kolel* are placed next to their Arabic and Latin counterparts, it becomes evident that the Hebrew is indeed a translation of Al-Qabīṣī’s *Introduction*. Although most of the Hebrew text closely follows that of Al-Qabīṣī, we find that some passages in the Hebrew are more succinct than their equivalents in the Arabic original and Latin translation. Moreover, while the Hebrew version follows the structure of the original text, it omits significant portions of that text.

*Editorial remarks:*

The original Arabic and the Latin translation were taken directly from Al-Qabīṣī, *The Introduction to Astrology*, eds. Burnett, Yamamoto, and Yano. The Hebrew text is based on three manuscripts, each identified by a Hebrew letter in the *apparatus criticus*:[[84]](#footnote-84)

ו – Vienna, MS Cod. Hebr. 57, fols. 22v–23v

נ – New York, MS 2601, fols. 99v–100v

ק – New York, MS 2553, 74v–76r

**Sigla**

< In the apparatus: For a given lemma, the word(s) following the siglum are added in the indicated manuscript after the lemma.

> In the apparatus: For a given lemma, the word(s) following the siglum are added in the indicated manuscript before the lemma.

חסר In the Hebrew text: lacuna.

**A. *Sefer ha-Kolel* and Its Use of Al-Qabīṣī’s *Introduction to Astrology*, Chapter 1**

| Al-Qabīṣī’s *Introduction to Astrology* – Arabic original (Chapter 1, §§69–78) | Al-Qabīṣī’s *Introduction to Astrology* – Latin translation | *Sefer ha-Kolel* (Chapter 36)  |
| --- | --- | --- |
| وأمّا ما تدلّ عليه البيوت من الألوان فإنّ الطالع والسابع أبيضان والثاني والثاني عشر أخضران والثالث والحادي عشر أصفران والرابع والعاشر أحمران والخامس والتاسع عسليّان والسادس والثامن أسودان. | Significant etiam .xii. domus colores, et hii sunt. Nam domus ascendens et .vii. sunt albe, secunda et duodecima virides, tertia et undecima crocee, quarta et decima rubee, quinta et nona mellite, id est habent mellis colorem,[[85]](#footnote-85) sexta vero et octava sunt nigre. | **1** ואלה השנים עשר[[86]](#footnote-86) בתים מורים על[[87]](#footnote-87) מיני צבעונים. הבית הראשון והשביעי[[88]](#footnote-88) על הלבן; והבית השני והשנים עשר[[89]](#footnote-89) על הירוק; והשלישי והאחד עשר[[90]](#footnote-90) על הצהוב; והרביעי והעשירי[[91]](#footnote-91) על האדום; והחמישי והתשיעי[[92]](#footnote-92) כצבעון הדבש; והששי והשמיני[[93]](#footnote-93) על השחור. |
| ولكلّ كوكب من الكواكب السبعة حظّ في بيت من هذه البيوت وهو من الحظوظ التي تكون بالعرض ويقال لها الأفراح فعطارد يفرح في الطالع والقمر في الثالث والزهرة في الخامس والمرّيخ في السادس والشمس في التاسع والمشتري في الحادي عشر وزحل في الثاني عشر. | Et unusquisque ex planetis habet in unaquaque harum domorum quandam potestatem ex potestatibus scilicet accidentalibus que dicitur gaudium; quia Mercurius gaudet in ascendente et Luna in tertio, Venus quoque in quinto et Mars in .vi., Sol in .ix. et Iupiter in xi., Saturnus vero in .xii. | **2** ושמחת המשרתים במזלות: כוכב[[94]](#footnote-94) חמה שמח[[95]](#footnote-95) במזל הצומח[[96]](#footnote-96) שהוא הבית הראשון. והלבנה בבית השלישי[[97]](#footnote-97). ונגה בחמישי. ומאדים בששי. וחמה בתשיעי[[98]](#footnote-98). וצדק באחד עשר[[99]](#footnote-99). ושבתאי בשנים עשר[[100]](#footnote-100). |
| ويقال في دلالة البيوت إنّ الأوتاد تدلّ على القوّة والإقبال والسواقط تدلّ على الضعف والإدبار غير أنّ التاسع والثالث يدلّان على الشهرة والثاني عشر والسادس يدلّان على الاكتتام والستر وخمول الأمر والأوتاد وأرباب الأوتاد تدلّ على عظم القدر والسعادة والنباهة والبعد عن السقوط وحلول السواقط ضدّ السعادة أعني المهانة والسقوط. | Et dicitur in significatione domorum quia anguli significant fortitudinem et perfectionem, cadentes vero ab angulis debilitatem et detrimentum, nisi quod nona et tertia significant apparitionem et .xii. et vi. significant occultationem et tectionem et vilitatem rerum. Anguli autem et domini angulorum significant magnitudinem honoris et pretii atque fortune et excitationem et elongationem a casu, et presentia casus contrarium est fortune, id est dedecus et casus. | **3** והיתדות שהזכרנו מורים חוזק וטוב. והחלשים מורים[[101]](#footnote-101) רעה[[102]](#footnote-102) וקלון וחלישות ואבידה חוץ מן השלישית והתשיעית[[103]](#footnote-103) כי הם מורים ריוח[[104]](#footnote-104) טוב. והנה היתדות ומושליהם מורים טובה יתירה וכבוד גדול ואריכות מנפילתו ומאבידתו. |
| فأمّا ما يلي الأوتاد فإنّ الذي يلي العاشر وهو الحادي عشر إذا كان على ما وصفنا من القوّة دلّ على القوّة والسعادة المتوسّطة بسبب الأعوان والأصدقاء والأشياء التي يرجوها وأمّا الذي يلي الرابع وهو الخامس فالسعادة المتوسّطة بسبب الهدايا والتحف وبسبب الأولاد مع السرور والفرح وأمّا الذي يلي الطالع وهو الثاني فالسعادة المتوسّطة بسبب الأموال والأعوان وأمّا الذي يلي السابع وهو الثامن فيدلّ على السعادة المتوسّطة بالمواريث والأمور الخفيّة. | De succedentibus vero angulorum, que succedit decimam, id est undecima, significat fortitudinem et fortunam mediam ex amicis ex ea parte in qua erat fiducia. Et illa que sequitur quartam, id est quinta, significat fortunam mediam per donationes et venerationes et est causa filiorum cum veneratione, letitia et gaudio. Que autem succedit ascendens, que est secunda, similiter fortunam mediam ex causa substantie et ministrorum. Que vero succedit .vii., que est octava, significat fortunam mediam ex almauerith, id est ex substantia que hereditatur a mortuis, et a rebus occultis. | **4** והסמוכים אחרי היתדות האחד עשר[[105]](#footnote-105) יורה טובה אבל טובה בינונית וחוזק מאותו הצד שיש לו בטחון. והחמישי[[106]](#footnote-106) יורה טובה בינונית[[107]](#footnote-107) מצד מתנה או כבוד שיעשה לו לאדם[[108]](#footnote-108) בשמחה בעבור בנו. והשנית[[109]](#footnote-109) יורה טובה בינונית שיבא לו בעבור ממונו וכל בני הבית. והשמינית[[110]](#footnote-110) יורה טובה בעבור ירושה שנופלת לו מן המתים או מטמונות. |
| وأمّا ما يدلّ عليه حلول أصحاب الأوتاد في الأوتاد فإنّ صاحب الطالع يدلّ بحلوله في الطالع على سعادته بنفسه ودخليه واكتسابه وأمّا ما يدلّ عليه بحلوله في العاشر فالسعادة بالسلطان والصناعات العالية وأمّا ما يدلّ عليه بحلوله في السابع فالسعادة بالمعاملات والمنازعين والأزواج وأمّا ما يدلّ عليه بحلوله في الرابع فالسعادة بالعقارات وبسبب الآباء واستنباط المياه والخراج وعمارة الأرضين وبناء المدن والأمور القديمة الأصلية. | Hee sunt quoque significationes dominorum angulorum dum fuerint presentes in angulis. Presentia domini ascendentis in ascendente significat eius fortunam per semetipsum et per eius familiam et acquisitionem. Et significat per presentiam in decimo per regem et per magisteria altiora. Et cum fuerit in septimo, per conventiones et satores atque uxores. Per presentiam quoque eius in quarto significat fortunam per hereditates et per causas patrum et per productiones aquarum et per populationes et ex rebus antiquis et radicalibus. | **5** ומושל הבית הראשון כשהוא בו יורה טובה שיבא לו בעבור עצמו. וכשהוא בשביעי[[111]](#footnote-111) יורה טובה[[112]](#footnote-112) שיבא לו בעבור[[113]](#footnote-113) שותפו[[114]](#footnote-114) או בעבור אשתו. וכשהוא בעשירי[[115]](#footnote-115) טובה שיבא לו בעבור המלך או בעבור חכמתו הגדולה. וכשהוא ברביעית[[116]](#footnote-116) טובה שיבא לו[[117]](#footnote-117) בעבור ירושת אביו או מהבאת מים או מעבודת ארץ או ירושה שיפלו מהקדמונים. |
| وأمّا ما يدلّ عليه صاحب العاشر بحلوله في العاشر فالسعادة بالسلطان العظيم والصناعات العالية وأمّا ما يدلّ عليه بحلوله في السابع فالسلطان بالفلح على المنازعين وأسباب الأزواج وأمّا ما يدلّ عليه بحلوله في الرابع فالسلطان بسبب الخراج وعمارة الأرضين وبناء المدن وشقّ الأنهار وحراسة المدن والأمور القديمة وأمّا ما يدلّ عليه بحلوله في الطالع فالسلطان بالحيلة والتوسّل إليه وأمور العامّة. | Significat quoque dominus decime per presentiam suam in eadem decima fortunam per regnum magnum vel per regem et magisteria altiora. Et significat per presentiam suam in .vii. fortunam per regnum et victoriam contentionum et ex causis uxorum. Et per presentiam eius in quarto, per regnum et causas tributorum et cultus terrarum et edificationes civitatum, per divisiones fluminum et custodias civitatum et ex rebus antiquis. Et presentia sua in ascendente, per regnum et ingenia et per propinquitatem regis ex rebus vulgi. | **6** ומושל העשירית[[118]](#footnote-118) כשהוא בו יורה שיבא לו בעבור המלך או בעבור חכמתו הגדולה. וכשהוא בשביעית[[119]](#footnote-119) יורה טובה שיבא לו בעבור המלכות או מנצחון מלחמות ודינין או בעבור אשתו. וכשהוא ברביעית[[120]](#footnote-120) טובה שיבא לו בעבור המכסים של המלך או מעבודת ארצות או בעבור[[121]](#footnote-121) בנין ארצות או בעבור מים או בשמירת ארצות או דברים שיש להם ימים רבים. וכשהוא בצומח יורה טובה שיבא לו בעבור מלכות או מחכמה או מקרובת המלך או בעבור דבר עם. |
| وأمّا ما يدلّ عليه صاحب السابع بحلوله في السابع فالمتاجرات والمعاملات بسبب الكفالات والنساء والمنازعين وأمّا ما يدلّ عليه بحلوله في الرابع فالمعاملات والنساء والمتاجرات بسبب الآباء والعقارات والحرث وأمّا ما يدلّ عليه بحلوله في الطالع فالمعاملات والمتاجرات بسبب الطبّ والنجوم والأعمال النفسانية والحيل وما أشبهها وأمّا ما يدلّ عليه بحلوله في العاشر فالمعاملات والمتاجرات والنفع بالتزويج وبسبب السلطان والصناعات. | Presentia autem domini .vii. in .vii. significat fortunam per negotiationes et conventiones, per nutritiones quoque ac mulieres et per satores. Et significat per presentiam suam in quarto per conventiones mulierum et negotiationes per causas patrum et hereditatum et cultus terre. Et presentia sua in ascendente, per conventiones et negotiationes per causas medicine atque astronomie et per opera spiritualia atque ingenia et cetera similia. Et significat per presentiam suam in .x. fortunam per conventiones et negotiationes et per uxores et per causas regis. | **7** ומושל השביעי[[122]](#footnote-122) כשהוא בו יורה טובה שיבא לו בעבור סחורה או בשותפות או במקנה או מזרע[[123]](#footnote-123) ארץ או בעבור אשתו. וכשהוא ברביעית[[124]](#footnote-124) יורה טובה שיבא לו בסבת אשתו או בסחורה או ירושת אביו או בעבור עבודת ארצות. וכשהוא בצומח יורה טובה בשותפות או בסחורה או ברפואות או מחכמת הכוכבים[[125]](#footnote-125) או מחכמה שהיא בלב ולא במעשה או בעבור מלאכה שיעשה בעבור הכחות. וכשהוא בעשירית[[126]](#footnote-126) יורה טובה בעבור שותפות או סחורה או בעבור אשתו או במעשים של מלך[[127]](#footnote-127). |
| وأمّا ما يدلّ عليه صاحب الرابع بحلوله في الرابع فالغلّات والحرث بسبب الآباء والأمور القديمة وأمّا ما يدلّ عليه بحلوله في الطالع فالغلّات والحرث بسبب الحيل وبعد الغور وأمّا ما يدلّ عليه بحلوله في العاشر فالمنفعة بالحرث والغلّات بسبب السلطان والصناعات وأمّا ما يدلّ عليه بحلوله السابع فالغلّات والحرث بسبب الأزواج والمنازعين والمتاجرات فهذا ما يدلّ عليه أرباب الأوتاد بحلولها في الأوتاد وكذلك تعمل بحلول سائر أرباب البيوت في البيوت وإنّما أتيت بذكر أرباب الأوتاد مشالا يحتذى عليه. | Presentia vero domini quarti in quarto significat fortunam ex cultu terre et fructu per causas patrum atque res antiquas. Et per presentiam eius in ascendente significat fortunam ex cultu terre et fructu per ingenium et consilii profunditatem. Et per presentiam suam in .x. significat profectum ex cultu terre et fructu per causas regis et magisteriorum. Et presentia sua in .vii. significat fortunam ex cultu terre et fructu et per causas uxorum et satorum et per negotiationes. Hec significant domini angulorum per presentiam suam in angulis. Similiter facies de presentia dominorum ceterarum domorum, set ideo introduximus tantum dominos angulorum ut essent exemplar in ceteris. | **8** ומושל הבית הרביעי[[128]](#footnote-128) כשהוא בו יורה טובה בעבור עבודת[[129]](#footnote-129) הארץ או פרי הארץ או ירושת אביו. וכשהוא בבית הראשון[[130]](#footnote-130) יורה טובה בעבור עבודת הארץ או פריה או חכמה או עצה עמוקה. וכשהוא בעשירית[[131]](#footnote-131) יורה טובה בעבודת הארץ או פריה או במעשה המלך או מחכמתו. וכשהוא בשביעית[[132]](#footnote-132) טובה שיבא לו בעבודת הארץ או פריה או בעבור אשתו או בסחורה. העניין[[133]](#footnote-133) הזה מורים[[134]](#footnote-134) בעלי היתדות כאשר הם ביתדות עצמם וגם כן[[135]](#footnote-135) מורים בעלי הבתים האחרות[[136]](#footnote-136) כפי עניינם[[137]](#footnote-137) כי אלו פרשנו דמיון לכל האחרים. |
| فإذا أردت أن تعرف المستولي على الحاجة نظرت أكثر الكواكب حظوظا في بيت الحاجة والكوكب الدالّ على طباع الحاجة كما سنذكر ذلك في طباع الكواكب وسهم الحاجة من جهة قواها التي قدّمنا قبل من قوى الحظوظ فأيّها كان أقوى وأكثر قوى في موضع الحاجة فهو المستولي عليها مثال ذلك أنّ السؤال كان عن المال فأردت أن تعرف المستولي على المال فكان البيت الثاني الدالّ على المال خمس درج من الحمل والبيت للمرّيخ فله في الموضع خمس قوى والشرف للشمس فلها فيه أربح قوى والمثلّثة للشمس فلها فيه ثلث قوى فيكون فيه للشمس سبع قوى والحدّ للمشتري وله قوّتان والوجه للمرّيخ وله قوّة واحدة فيصير للمرّيخ ستّ قوى وللشمس سبع قوى فتكون الشمس المستولية على بيت المال وكذلك تنظر في موضع سهم المال وموضع سهم السعادة وتشرك مع ذلك المشتري الذي هو دليل المال بالطبع وتمزج بين الشهادات وتفعل كذلك بسائر البيوت لتعرف المستولي عليها. | Et cum volueris scire planetam dominatorem rei, aspicies quis planetarum sit plus auctoritatis in domo rei et planetam qui significat naturam illius rei, sicuti dicemus in naturis planetarum–vide ergo quis planeta sit fortior in domo rei–et in parte eius, ex fortitudinibus quas prediximus, id est ex numero quem prediximus dum de fortitudine potestatum planetarum tractaremus, et qui fortior omnibus fuerit in loco rei, ipse erit dominator eius. Verbi gratia, interrogatio si fuerit de substantia et volueris scire quis sit dominator eius, et fuerit secunda domus, que significat substantiam, .v. gradus signi Arietis, quia domus est Martis, habet in hoc loco Mars quinque fortitudines; exaltatio quoque est Solis, et habet in ea .iiii. fortitudines; est etiam et ipsius Solis triplicitas, et habet in ea tres fortitudines–habet ergo ibi Sol .vii. fortitudines; et est terminus Iovis, et habet ibi duas fortitudines; est etiam facies Martis, et habet ibi unam fortitudinem. Igitur Mars habet ibi sex fortitudines, .v. ex domo et unam ex facie, et Sol .vii. et planeta talis vocatur almubtaz. Sol ergo accipit principatum ibi, quia habet .vii. fortitudines et ipse dominatur hic in domo substantie. Similiter aspicies in loco partis substantie et Partis Fortune et participem illorum facies Iovem, qui est significator substantie naturaliter, et miscebis significationes partium et planetarum testimonia, facies hoc de omnibus domibus et scies dominatorem earum.  | **9** וכאשר תרצה[[138]](#footnote-138) לדעת המשרת שהוא בעל השאלה ראה אי זה מן המשרתים יותר חזק בבית שאלתו[[139]](#footnote-139) והוא יהיה מורה על השאלה. וככה תדענו: חשוב כחות כל אחד מהם ואותו אשר כחותיו רבים בענין השאלה הוא השליט והמורה, והוא בעל השאלה. וכאשר תמצא צדק שיורה על ממון במקום חלק הממון ובמקום חלק הטובה אז הוראתו נכונה וכן לכל המשרתים לפי הענינים[[140]](#footnote-140) שמורים עליו. |
| ومن حظوظ الكواكب العرضية الحلب وهو أن يكون الكوكب النهاري بالنهار فوق الأرض وبالليل تحت الأرض والكوكب الليل بالليل فوق الأرض وبالنهار تحت الأرض فإن كان مع ذلك الكوكب الذكر في برج ذكر والكوكب الأنثى في برج أنثى قيل إنّه في حيّزه وقوّته كقوّة الرجل في موضع فوائده وكسبه وسعادته. | Ex potestatibus quoque planetarum accidentalibus est alhaiz; hoc est cum fuerit planeta diurnus in die super terram et in nocte sub terra et planeta nocturnus in nocte super terram et in die sub terra. Et si cum hoc fuerit planeta masculinus in signo masculino et planeta femininus in signo feminino, dicitur esse in suo aiz. Et erit fortitudo eius ut fortitudo viri in loco eius profectus, acquisitionis atque fortune. | **10** וכאשר תמצא המשרתים[[141]](#footnote-141) שיהיה המשרת שהוא מן היום ביום למעלה מן הארץ, ובלילה תחת הארץ, והמשרת שהוא מן הלילה בלילה למעלה מן הארץ וביום תחת הארץ, והמשרת שהוא זכר במזל זכר ושהוא נקבה במזל נקבה: אז יהיו המשרתים[[142]](#footnote-142) על מתכונתם. |

**B. *Sefer ha-Kolel* and Its Use of Al-Qabīṣī’s *Introduction to Astrology*, Chapter 2**

| Al-Qabīṣī’s *Introduction to Astrology* – Arabic original (Chapter 2, §§45–50) | Al-Qabīṣī’s *Introduction to Astrology* – Latin translation | *Sefer ha-Kolel* (Chapter 36) |
| --- | --- | --- |
| وأمّا رأس الجوزهر فإنّه سعد وطبيعته مركّبة من طبيعة المشتري والزهرة وهو يدلّ على الملك والسعادة والمال. وقال قوم طبيعته الزيادة فإن كان مع السعود زاد في سعادتها وإن كان مع النحوس زاد في نحوستها وسنو فرداريته ثلث سنين. | Caput Draconis est masculus; similiter est fortuna et natura eius est composita ex natura Iovis et Veneris. Et hoc significat regnum et fortunam atque substantiam. Et dixerunt quidam quod natura eius sit augmentatio, quod cum fuerit cum fortunis, auget fortunam eorum, et cum fuerit cum malis, auget malitiam eorum. Et anni firdarie eius sunt .iii. | **1** ראש התלי זכר וטוב, ותולדתו מעורבת בין תולדת צדק ונוגה[[143]](#footnote-143), ויורה מלכות וממון וטובה עד מאד. ויש אומרים[[144]](#footnote-144) כי תולדתו להוסיף: כאשר יתחבר עם משרת שתולדתו טובה מוסיף טובה; ואם תולדתו רעה מוסיף רע. והשנים המורים על תולדתו הם שלוש[[145]](#footnote-145). |
| وأمّا الذنب فإنّه نحس وطبيعته مركّبة من طبيعة زحل والمرّيخ وهو يدلّ على الضعة والسقوط والفقر. وقال قوم إنّ طبيعته النقصان فإذا كان مع السعود نقص من سعادتها وإن كان مع النحوس نقص من منحوستها فلذلك قيل إنّ الرأس سعد مع السعود ونحس مع النحوس والذنب نحس مع السعود وسعد مع النحوس وسني فرداريته سنتان. | Cauda vero eius est mala, naturaque illius est composita ex natura Saturni et Martis. Significat deiectionem, casum atque paupertatem. Et dixerunt quidam quod natura eius sit diminutio, que cum fuerit cum fortuniis, minuit fortunam eorum, et cum fuerit cum malis, minuit malitiam eorum. Ideoque dictum est quod Caput esset fortuna cum fortunis et malum cum malis, et Cauda mala cum bonis et bona cum malis. Et anni firdarie eius sunt duo. | **2** וזנב התלי הוא רע, ותולדתו[[146]](#footnote-146) מעורבת בין תולדת שבתאי[[147]](#footnote-147) ומאדים, ויורה ירידת אדם מכבודו. ויש אומרים[[148]](#footnote-148) כי תולדתו הוא לגרוע: כאשר יתחבר עם משרת טוב גורע לו מן הטובה, ואם יתחבר עם רע גורע לו מן הרעה. ובעבור זה נאמר[[149]](#footnote-149) כי הראש טוב עם טוב ורע עם רע; והזנב טוב עם רע ורע עם טוב. ושנותיו שתים. |
| وإذا كان يوم أو ليلة لكوكب من الكواكب فإنّ الساعة الأولى منه لذلك الكوكب والساعة الثانية للكوكب الذي يليه والثالثة للكوكب الذي يلي ذلك الكوكب مثاله أنّ يوم الجمعة للزهرة فالساعة الأولى منه للزهرة والساعة الثانية لعطارد والثالثة للقمر والرابعة لزحل وكذلك إلى آخر اليوم والليلة من الساعات الزمانية. | Incipit capitulum quid habeat unusquisque planeta ex diebus. Si fuerit aliqua dies vel nox alicui planetarum, erit eius prima hora ipsius planete et secunda hora alterius planete qui hunc succedit et cetera. Verbi gratia, dies Veneris est Veneris, et prima hora eius est Veneris, secunda Mercurii, tertia Lune, quarta Saturni […]. | **3** ושעות היום והלילה הם למשרתים, והיה הכח לבעל היום או לבעל הלילה והוא העולה ראשון. |
| وقد يقال إنّ في الساعات مذكّرة ومؤنّثة وذلك أنّ الساعة الأولى من كلّ يوم وكلّ ليلة مذكّرة والتي تتلوها مؤنّثة والثالثة مذكّرة والرابعة مؤنّثة على الولاء واحدة مذكّرة وواحدة مؤنّثة إلى آخر اليوم والليلة. | Dicuntur etiam hore esse masculine atque feminine, quia hora prima uniuscuiusque diei ac noctis est masculina et secunda feminina, tertia quoque masculina et quarta feminina, sicque succedunt per ordinem, una scilicet masculina et alia feminina, usque in finem diei et noctis. | **4** ומן השעות יש מהם זכרים ומהם[[150]](#footnote-150) נקבות. כי הראשונה מן היום[[151]](#footnote-151) ומן הלילה היא זכר; והשנית[[152]](#footnote-152) נקבה; והשלישית[[153]](#footnote-153) זכר; והרביעית[[154]](#footnote-154) נקבה; והחמישית[[155]](#footnote-155) זכר; וכן כולם[[156]](#footnote-156) הזוגות נקבות והנפרדים[[157]](#footnote-157) זכרים. |

1. *Sefer ha-Kolel* has survived in seven manuscripts: (i) Paris, Bibliothèque Nationale de France, MS. Héb 1058 (Institute of Microfilmed Hebrew Manuscripts [=IMHM] 14642), fols. 50r–129r; (ii) Vienna, Austrian National Library, Cod. Hebr. 57 (IMHM 1334), fols. 3v–93r; (iii) New York, Jewish Theological Seminary of America, MS. 2553 (IMHM 28806), fols. 49v–189v; (iv) New York, The Jewish Theological Seminary of America, MS. 2601 (IMHM 28854), fols. 90r–147r; (v) Oxford, The Bodleian Library, MS. Reggio 13 (IMHM 19313), fols. 1r–76v; (vi) Cambridge, University Library, MS. Or. 2281, fols. 45r–50v, 78r–120r; (vii) Warsaw, Library of the Emanuel Ringelblum Jewish Historical Institute, MS. 253 (IMHM 10120), fols. 21r–84v. MS. Paris contains Chapters 32–35 of *Sefer ha-Kolel*, while all other manuscripts contain Chapters 36–40. On these manuscripts and their paleographical and codicological characteristics, see Niran Garshtein, “Astronomy and Astrology in the Hebrew Encyclopedias of the Thirteenth Century,” (PhD dissertation, Bar-Ilan University, 2021), pp. 277–283. In writing this article, I have consulted all seven manuscripts; however, references are mostly to Vienna, MS. Cod. Hebr. 57. [↑](#footnote-ref-1)
2. It would be more precise to describe *Sefer ha-Kolel* as a compendium, at least according to Elvira Wakelnig’s definition. For her discussion of this literary genre, see Elvira Wakelnig, “Anonymous Philosophical Compendia: An Attempt at Vulgarization?” in *The Popularization of Philosophy in Medieval Islam, Judaism, and Christianity*, eds. Marieke Abram, Steven Harvey, and Lukas Muehlethaler (Turnhout: Brepols, 2022), pp. 109–120. On the possible identity of *Sefer ha-Kolel*’s anonymous author, see below, n. 61. [↑](#footnote-ref-2)
3. Shlomo Sela, “The Astronomical-Astrological Encyclopedia in MS Paris 1058,” *Aleph* 14.1 (2014): 189­–241. For further references to *Sefer ha-Kolel* in the scholarly literature, see notes 2–3 in Sela’s article. In addition, see Raphael Levy, *The Astrological Works of Abraham Ibn Ezra: A Literary and Linguistic Study with Special Reference to the Old French Translation of Hagin* (Baltimore: The Johns Hopkins Press, 1927), p. 19; Reimund Leicht, “Toward a History of Hebrew Astrological Literature,” in *Science in Medieval Jewish Cultures*, ed. Gad Freudenthal (Cambridge: Cambridge University Press, 2011), pp. 255–291, on p. 277. [↑](#footnote-ref-3)
4. Shlomo Sela, “Al-Farghānī on the 48 Ptolemaic Constellations: A New Discovered Text in Hebrew Translation,” *Aleph* 16.2 (2016): 249–365, on p. 279, n. 97; idem, “What is *Tractatus Particulares*, A Four-Part Work Assigned to Abraham Ibn Ezra? A Study of its Sources and General Features,” *Archives d'histoire doctrinale et littéraire du Moyen Âge*, 86 (2019): 141–195, on p. 195, n. 78. Gad Freudenthal has addressed the existence of additional manuscripts. See Gad Freudenthal, “Sur la Partie Astronomique du *Liwyat Ḥen* de Lévi ben Abraham ben Ḥayyim,” *Revue des Études Juives* 148 (1989): 103–112, on p. 108. On the apparent connection between Chapters 32–35 and Chapters 36–40, see Garshtein, “Astronomy and Astrology,” pp. 276–277. [↑](#footnote-ref-4)
5. Five short Hebrew fragments of Al-Qabīṣī’s *Introduction to Astrology* were recently discovered and published. See below, n. 28. [↑](#footnote-ref-5)
6. Henceforth, parenthetical references to *Sefer ha-Kolel* will be to the Vienna manuscript. [↑](#footnote-ref-6)
7. The title appears twice in Chapter 32 and on five occasions in the fifth section of the work. For its appearance in Chapter 32, see Sela, “The Astronomical-Astrological Encyclopedia,” p. 203, n. 44, and p. 229 (Appendix 1, §4). [↑](#footnote-ref-7)
8. See below, Appendix 1. [↑](#footnote-ref-8)
9. Note that in some modern editions, including the modern English translation, the quoted passages are parallel to Chapter 2 of Geminos’ work. Hereafter, all references to Geminos’ work are according to the division of chapters found in the surviving manuscripts of the Hebrew translation. Cf. Ibn Tibbon’s translation in Paris, Bibliothèque Nationale de France, MS. Héb 1027 (IMHM 15719), fols. 6r–9v. The author of *Sefer ha-Kolel* chooses to omit the first passages of the *Introduction*’s first chapter, but quotes to the first chapter’s very end. On the division of Geminos’ work into chapters in modern editions, see James Evans and J. Lennart Berggren, *Geminos’s Introduction to the Phenomena: A Translation and Study of a Hellenistic Survey of Astronomy* (Princeton and Oxford: Princeton University Press, 2006), pp. 105–106. [↑](#footnote-ref-9)
10. See below, p. 10. [↑](#footnote-ref-10)
11. On zodiacal aspects, see Auguste Bouché-Leclercq, *L'astrologie grecque* (Paris: E. Leroux, 1899), pp. 165–179. See also Ptolemy, *Tetrabiblos*, ed. and trans. F. E. Robbins (London: Harvard University Press, 1940), I:13–15, pp. 72–77. [↑](#footnote-ref-11)
12. Cf. Paris, MS. Héb 1027, fols. 51v–56r. [↑](#footnote-ref-12)
13. On the genre of *parapegmata*, see B. L. van der Waerden, “Greek Astronomical Calendars. I. The Parapegma of Euctemon,” *Archive for History of Exact Sciences* 29.2 (1984): 101–114; Daryn Rosario Lehoux, “Parapegmata, or, Astrology, Weather, and Calendars in the Ancient World,” (PhD dissertation, University of Toronto, 2000), esp. pp. 1–27, 34–35. [↑](#footnote-ref-13)
14. On this question, see Evans and Berggren, *Geminos’s Introduction to the Phenomena*, pp. 275–276. [↑](#footnote-ref-14)
15. Cf. Abraham Bar Ḥiyya, *La Obra Séfer Ḥešbón Mahlekot ha-Kokabim*, ed. and trans. José Maria Millás Vallicrosa (Madrid: CSIC, 1959), pp. 108–117 (Hebrew section); Al-Battānī sive Albatenii, *Opus Astronomicum*, ed. Carolo Alphonso Nallino (Milano: Mediolani Insubrum, Prostat apud U. Hoeplium, 1903), pp. 129–134. [↑](#footnote-ref-15)
16. On this doctrine, see S. J. Tester, *A History of Western Astrology* (Suffolk: The Boydell Press, 1987), pp. 84–85. [↑](#footnote-ref-16)
17. Ptolemy, *Tetrabiblos*, ed. Robbins, III:10, pp. 271–307; IV:10, pp. 447–451. For more on Chapter 20 of Bar Ḥiyya’s *Sefer Ḥešbon mahalaḵot ha-koḵavim*, see Shlomo Sela, “Abraham bar Ḥiyya’s Astrological Work and Thought,” *Jewish Studies Quarterly* 12 (2005): 128–158, on pp. 137–138. [↑](#footnote-ref-17)
18. On Chapter 33 of *Sefer ha-Kolel*, see Sela, “The Astrological-Astronomical Encyclopedia,” pp. 207–212. [↑](#footnote-ref-18)
19. Sela, “The Astrological-Astronomical Encyclopedia,” p. 206. [↑](#footnote-ref-19)
20. Cf. Paris, Bibliothèque Nationale de France, MS. Héb, 1045 (IMHM 33996), fols. 194r–195r. The author of *Sefer ha-Kolel* also uses this source material in compiling Chapters 32, 34, and 35 of his work. See Sela, “The Astrological-Astronomical Encyclopedia,” pp. 238–239. [↑](#footnote-ref-20)
21. Niran Garshtein has recently studied and published several astronomical tables attributed to Abraham Ibn Ezra. Garshtein points to evidence that some of these tables could originally have been compiled by Ibn Ezra himself, while others were certainly produced by later scholars on the basis of Ibn Ezra’s writings. See Niran Garshtein, “Texts and Astronomical Tables Attributed to Abraham Ibn Ezra in Abraham bar Ḥiyya’s *Luḥot ha-naśi*ʾ” (Heb.), in Dov Schwartz (ed.) *Rabbi Abraham Ibn Ezra: A Renaissance Man* (Tel Aviv: Idra Press, 2023), pp. 129–149. [↑](#footnote-ref-21)
22. Cf. Abraham Ibn Ezra, *The Book of Reasons: A Parallel Hebrew-English Critical Edition of the Two Versions of the Text*, ed. and trans. Shlomo Sela (Leiden and Boston: Brill, 2007), second version, §4.3, §4.4:1, §§4.5–4.8, pp. 208–212. The author of *Sefer ha-Kolel* omits §4.4:2–3. [↑](#footnote-ref-22)
23. Cf. Ibn Ezra, *The Book of Reasons*, ed. Sela, first version, §3, pp. 58–68. [↑](#footnote-ref-23)
24. On these values, see N. M. Swerdlow, “Ptolemy’s *Harmonics* and the ‘Tones of the Universe’ in the *Canobic Inscription*,” in *Studies in the History of the Exact Sciences in Honour of David Pingree*, ed. Charles Burnett et al. (Leiden and Boston: Brill, 2014), pp. 137–180, esp. on pp. 165–173. [↑](#footnote-ref-24)
25. Cf. Ibn Ezra, *The Book of Reasons*, ed. Sela, first version, §4.1, pp. 68–70. See also Sela’s notes on pp. 154–157. [↑](#footnote-ref-25)
26. Cf. Ibn Ezra, *The Book of Reasons*, ed. Sela, first version, pp. 82–91. The sentence omitted by the author is found in Sela’s edition on pp. 86–87 (§6.3:6): “I shall explain the keys of the Moon in the *Book of the World*.” Ibn Ezra’s cross-reference, “I shall say more about the aspects in the tenth chapter,” was altered by *Sefer ha-Kolel*’s author to “I shall say more in the chapter on aspects.” [↑](#footnote-ref-26)
27. Cf. Abraham Ibn Ezra, *Introductions to Astrology: A Parallel Hebrew-English Critical Edition of the Book of the Beginning of Wisdom and the Book of the Judgments of the Zodiacal Signs*, ed., trans., and annot. Shlomo Sela (Leiden and Boston: Brill, 2017), §3, pp. 138–146. There is a minor difference between the two texts. Compare Vienna, MS. Cod. Hebr. 57, fol. 22r–22v (or New York MS. 2601, fol. 74v) and Abraham Ibn Ezra, *Introductions to Astrology*, ed. Sela, §3.16, p. 146. [↑](#footnote-ref-27)
28. Five Hebrew fragments of this work, found in two distinct manuscripts, were recently discovered, published, and discussed in Garshtein, “Astronomy and Astrology,” pp. 406–412. As demonstrated there, at least two of these fragments were not translated into Hebrew from the Arabic original, but probably from the Latin translation. [↑](#footnote-ref-28)
29. As Shlomo Sela has shown[or:as demonstrated by Sela?], Ibn Ezra was familiar\acquainted with Al-Qabīṣī’s *Introduction* and used\utilized it as a source material. Some of the topics addressed in Al-Qabīṣī’s *Introduction* are also treated in Abraham Ibn Ezra’s second version of *Sefer ha-Ṭeʿamim*, a work meant to explicate the now-lost second version of *Rešit ḥoḵmah*. The two passages borrowed from Al-Qabīṣī’s work include two Hebrew terms characteristic of Abraham Ibn Ezra’s scientific vocabulary: *mešartim* and *toledet* (‘planets’ and ‘nature,’ respectively). On the other hand, the first of the two passages includes the usage of the term *ṣivonim* to denote ‘colors,’ a term that, to the best of my knowledge, was never used by Ibn Ezra.  [↑](#footnote-ref-29)
30. For the Arabic original and the Latin translation, see Al-Qabīṣī, *The Introduction to Astrology*, eds. Charles Burnett, Keiji Yamamoto, and Michio Yano (London: Warburg Institute, 2004). [↑](#footnote-ref-30)
31. See below, Appendix 3. [↑](#footnote-ref-31)
32. Cf. Ibn Ezra, *Introductions to Astrology*, ed. Sela, pp. 182–211. Note that that the author has already quoted Chapters 5–7 of the first version of *Sefer ha-Ṭeʿamim*, which aims to clarify Chapters 5–7 of *Rešit ḥoḵmah*. [↑](#footnote-ref-32)
33. The lots are not the next topic discussed in Al-Qabīṣī’s *Introduction*, nor do they appear in Chapter 4 of *Rešit ḥoḵmah*, which the author of *Sefer ha-Kolel* omits. Instead, the lots are discussed in Chapter 5 of Al-Qabīṣī’s work and in Chapter 9 of Ibn Ezra’s *Rešit ḥoḵmah*. If the passages borrowed from Al-Qabīṣī’s *Introduction* were copied into *Sefer ha-Kolel* from a now-lost Hebrew source, the astrological lots may have been the next topic examined in that source. Above, I allude that the second version of *Rešit ḥoḵmah* could well have been such a source. However, in the second version of *Sefer ha-Ṭeʿamim* (as noted, an explication of the second version of *Rešit ḥoḵmah*), the astrological lots appear immediately after a discussion related to nativities, and not after topics similar to those borrowed from Al-Qabīṣī’s work in *Sefer ha-Kolel*. [↑](#footnote-ref-33)
34. Ibn Ezra, *Introductions to Astrology*, ed. Sela, pp. 10–13, Sela’s notes on Chapters 5–7, and Appendix 2, pp. 640–661. [↑](#footnote-ref-34)
35. Cf. Ibn Ezra, *Introductions to Astrology*, ed. Sela, §2, p. 48. [↑](#footnote-ref-35)
36. *Sefer ha-Kolel*’s author copied the text as is, with the exception of two omissions: (i) While Ibn Ezra wrote “Virgo. One of the earthy signs, feminine, one of the nocturnal signs, southern. One of the signs of summer, and bicorporal,” the author of *Sefer ha-Kolel* abbreviated this to “Virgo. Summer and bicorporal.” (Cf. Ibn Ezra, *Introductions to Astrology*, ed. Sela, §2.6:1–2, p. 92; Vienna, MS. Cod. Hebr. 57, fol. 36r). (ii) *Sefer ha-Kolel*’s author omitted the following sentence, found in *Rešit ḥoḵmah*: “From the beginning of the sign to the end of nine degrees, [the degrees are] bright, then [come] three mixed [degrees], then seven bright [degrees], then four dark [degrees], and then seven empty [degrees]” (Ibn Ezra, *Introductions to Astrology*, ed. Sela, §2.9:41, p. 114). [↑](#footnote-ref-36)
37. Cf. Ibn Tibbon’s Hebrew translation of Geminos’ *Introduction to the Phenomena*: Paris, MS. Héb 1027, fols. 9v–11r. [↑](#footnote-ref-37)
38. See Charles Burnett, “The Coherence of the Arabic-Latin Translation Program in Toledo in the Twelfth Century,” *Science in Context* 14 (1/2) (2001): 249–288, on p. 278, §23. [↑](#footnote-ref-38)
39. See Al-Bīrūnī, *Chronology of Ancient Nations*, ed. and trans. C. Edward Sachau (London: W. H. Allen, 1879), p. 322, lines 14–29. For Levi ben Abraham’s ascription, see Niran Garshtein, “The Mechanism of General Providence in the Astronomical-Astrological Section of Levi ben Abraham’s *Livyat ḥen*,” *Aleph* 20.1–2 (2020): 203–228, on pp. 214–215, n. 34. Another thirteenth-century Jewish scholar to have used this work is Gershom ben Solomon. See Garshtein, “Astronomy and Astrology,” pp. 239, 249, 256, 258–260. On the reception of the text in the Middle Ages and the Renaissance, see Robert B. Todd, “Geminus and the Ps.-Proclan *Sphaera*,” in *Catalogus Translationum et Commentariorum: Mediaeval and Renaissance Latin Translations and Commentaries. Annotated Lists and Guides*, Vol. 8, ed. Virginia Brown (Washington, D.C.: Catholic University of America Press, 2003): 7–48, esp. pp. 9–10, 16–19. On the Hebrew translation, see Y. Tzvi Langermann, “From My Notebooks: Studies on the Hebrew Geminos: The Chapter on Weather Signs,” *Aleph* 10.2 (2010): 357–395. [↑](#footnote-ref-39)
40. Chapter 22 of Jacob Anatoli’s Hebrew translation of Al-Farghānī’s *Elements* was published, translated, and examined in detail. See Sela, “Al-Farghānī on the 48 Ptolemaic Constellations.” [↑](#footnote-ref-40)
41. Jacob Anatoli states that he translated Al-Farghānī’s *Elements* from its Arabic version and “from the mouth of a Christian,” a statement that suggests that a certain Christian scholar assisted him by reading one of the Latin translations of the work and perhaps simultaneously translating it into some vernacular. (Today, we know that the Latin translation used by Anatoli was Gerard of Cremona’s translation. See Sela, “Al-Farghānī on the 48 Ptolemaic Constellations,” pp. 271–272). In the quoted passage, Anatoli referred to his use of the “Arabic version”; the author of *Sefer ha-Kolel* copied this reference into his work (Vienna, MS. Cod. Hebr. 57, fol. 45v). [↑](#footnote-ref-41)
42. Sela, “The Astrological-Astronomical Encyclopedia,” pp. 192–200. [↑](#footnote-ref-42)
43. Cf. Abraham Ibn Ezra, *The Book of the World: A Parallel Hebrew-English Critical Edition of the Two Versions of the Text*, ed. and trans. Shlomo Sela (Leiden and Boston: Brill, 2010), pp. 52–97. [↑](#footnote-ref-43)
44. This attribution appears in all the manuscripts of *Sefer ha-Kolel* that I have examined. In addition to the Vienna MS., see, for instance, Oxford, MS. Reggio 13, fol. 35r; New York, MS. 2553, fol. 109v; New York, MS. 2601, fol. 115r. [↑](#footnote-ref-44)
45. Sela, “The Astrological-Astronomical Encyclopedia”, pp. 204, 211–212. [↑](#footnote-ref-45)
46. Cf. Ibn Ezra, *Introductions to Astrology*, ed. Sela, §4, pp. 146–183. One notable difference is that the ‘shapes’ of each planet found in *Rešit ḥoḵmah* are absent from all four manuscripts of *Sefer ha-Kolel* that I have checked. [↑](#footnote-ref-46)
47. Cf. Ibn Ezra, *The Book of Reasons*, ed. Sela, first version, §4.2–8, pp. 70–80. [↑](#footnote-ref-47)
48. Cf. Ibn Ezra, *The Book of Reasons*, ed. Sela, second version, §5, pp. 216–235. [↑](#footnote-ref-48)
49. Cf. Abraham Ibn Ezra, *On Elections, Interrogations, and Medical Astrology*: *A Parallel Hebrew-English Critical Edition of the Book of Elections (3 Versions), the Book of Interrogations (3 Versions), and the Book of the Luminaries*, ed., trans. and annot. Shlomo Sela (Leiden and Boston: Brill, 2011), pp. 142–176. [↑](#footnote-ref-49)
50. The passages borrowed from the first version of *Sefer ha-Mivh*̣*arim* are as follows: Ibn Ezra, *On Elections, Interrogations, and Medical Astrology*, ed. Sela, §1:1,3, §3:1–3, §7:2–3, §8:1,3, pp. 46–50. Cf. Vienna, MS. Cod. Hebr. 57, fols. 62v–63r. [↑](#footnote-ref-50)
51. The author does something similar in Chapter 35, where he combines excerpts from the two versions of *Sefer ha-Ṭeʿamim*. See Sela, “The Astrological-Astronomical Encyclopedia,” pp. 216–218. [↑](#footnote-ref-51)
52. Vienna, MS. Cod. Hebr. 57, fol. 63r. Cf. Abraham Ibn Ezra, *On Nativities and Continuous Horoscopy: A Parallel Hebrew-English Critical Edition of the Book of Nativities and the Book of Revolution*, ed. and trans. Shlomo Sela (Leiden and Boston: Brill, 2013), III.I.3:2, p. 100. [↑](#footnote-ref-52)
53. This sentence is as follows: “אם הוא מלך בביתו הוא העשירי, אם אח בשלישי, אם אב ואם ברביעי” (If he [=the one the client asks about] is a king, [observe the lord of] his place, [which is] the tenth [place]. If [the client asks of his] brother, [observe the lord of] the third [place]. If [he asks of his] father or mother, [observe the lord of the] fourth [place]). See Vienna, MS. Cod. Hebr. 57, fol. 74v; New York, MS. 2601, fol. 132r; Oxford, MS. Reggio 13, fol. 57r; New York, MS. 2553, fol. 152v. Cf. Ibn Ezra, *On Elections, Interrogations, and Medical Astrology*, ed. Sela, the first version of *Sefer ha-Sheʾelot*, §1.1:4­­–7, pp. 246–248, and the second version of *Sefer ha-Sheʾelot*, §3.3:1, p. 362. [↑](#footnote-ref-53)
54. Cf. Ibn Ezra, *Introductions to Astrology*, ed. Sela, §8, pp. 212–235. [↑](#footnote-ref-54)
55. See Ibn Ezra, *On Nativities and Continuous Horoscopy*, ed. Sela, p. 5. On the doctrine itself, see pp. 58–69. [↑](#footnote-ref-55)
56. Cf. Ibn Ezra, *On Nativities and Continuous Horoscopy*, ed. Sela, pp. 84–203. [↑](#footnote-ref-56)
57. The Vienna manuscript contains only the beginning of Chapter 40. The full text appears in New York, MS. 2601, fols. 144r–147r. And cf. Ibn Ezra, *On Elections, Interrogations, and Medical Astrology*, ed. Sela, pp. 452–482. [↑](#footnote-ref-57)
58. On the work, see Ibn Ezra, *On Elections, Interrogations, and Medical Astrology*, ed. Sela, pp. 4–5, 17–19, 23–25; and Sela’s notes on *Sefer ha-Meʾorot*. [↑](#footnote-ref-58)
59. The introduction, which presents the contents of the fifth and last section of the work, indicates that medical astrology is the final subject discussed in *Sefer ha-Kolel*. [↑](#footnote-ref-59)
60. A list of all sources used by the author in the fifth section of the work appears below in Appendix 1. [↑](#footnote-ref-60)
61. The nine extant chapters of *Sefer ha-Kolel* provide no information that may help to disclose the identity of its author, with the exceptions of the work’s year of composition (1256) and the possibility that it was compiled in the Midi or northern Italy. However, a separate textual source implicitly raises the possibility that the author of *Sefer ha-Kolel* was none other than the well-known physician and translator Solomon ben Moses Melguiri (b. ca. 1225) or, alternately, an otherwise unknown figure named Samuel ben Moses Melguiri. These speculations emerge from Isaac ben Jacob de Lattes’ testimony on Melguiri’s work, brought in his *Ŝaʿarei ṣiyyon* (1372; *Schaare Zion. Beitrag zur Geschichte des Judentums bis zum Jahre 1372 von von Rab. Isaac de Lattes*, ed. Salomon Buber (Jaroslaw, 1885), pp. 42–43). De Lattes explicitly mentions an astronomical work entitled *Sefer ha-Kolel* and attributes it to Samuel ben Moses Melguiri. However, some scholars have maintained that the name Samuel is a mistake, and that de Lattes originally referred to Solomon Melguiri. Moreover, one wonders whether this testimony in fact refers to our *Sefer ha-Kolel*, or to a different work with the same title. On the one hand, Isaac ben Jacob states that Melguiri’s *Sefer ha-Kolel* was devoted to astronomy, and Solomon Melguiri’s biography is indeed in line with our work’s date and plausible place of composition. On the other hand, none of the nine extant chapters of *Sefer ha-Kolel* include any information that corresponds to the little we know about Solomon Melguiri’s life, such as his profession as a physician, his personal connections with what he called “kings and noblemen” (*melaḵim ve-sarim*), or his knowledge of Latin. As the connection between Solomon Melguiri and our *Sefer ha-Kolel* is far from obvious, the identity of *Sefer ha-Kolel*’s author must, at least for now, remain unresolved. See Hagar Kahana-Smilansky, “Solomon ben Moses Melguiri and the Transmission of Knowledge from Latin into Hebrew,” in *Studies in the History of Culture and Science. A Tribute to Gad Freudenthal*, eds. Resianne Fontaine et al. (Leiden and Boston: Brill, 2011), pp. 283–302, on pp. 295–296; Garshtein, “Astronomy and Astrology,” pp. 274–276. [↑](#footnote-ref-61)
62. The only possible exception is the author’s use of materials taken directly or indirectly from Al-Qabīṣī’s *Introduction to Astrology*. See above, p. 7, and below, Appendix 3. [↑](#footnote-ref-62)
63. Sela, “The Astrological-Astronomical Encyclopedia,” p. 190. [↑](#footnote-ref-63)
64. See above, p. 11. [↑](#footnote-ref-64)
65. Each compilation may provide different answers to questions such as the following: What motivated the compiler to create such a work, rather than, for instance, copying a collection of works into one codex? Did the compiler even refer to his compilation as a “work” that stands for its own sake? Did the compiler produce his compilation only for his own use, or for the use of others? Who read his work and for what purposes? [↑](#footnote-ref-65)
66. *The Popularization of Philosophy in Medieval Islam, Judaism and Christianity*, eds. Marieke Abram, Steven Harvey, and Lukas Muehlethaler (Turnhout: Brepols, 2022). [↑](#footnote-ref-66)
67. My reference to this stage as the “first” should by no means be taken chronologically, as many translations continued to appear long after the emergence of the first Hebrew scientific compilations, textbooks, and other related literary genres. On the decentralized character of the Hebrew translation movement, see Gad Freudenthal and Ruth Glasner, “Patterns of Medieval Translation Movements,” in *De l’Antiquité tardive au Moyen Âge. Études de logique aristotélicienne et de philosophie grecque, syriaque, arabe et latine offertes à Henri Hugonnard-Roche*, eds. Elisa Coda and Cecilia Martini Bonadeo (Paris: Librairie philosophique J. Vrin, 2014), pp. 245–252, esp. on pp. 246–247. [↑](#footnote-ref-67)
68. On the role of the receiving audience in the early stages of the Hebrew translation movement, see, e.g., Isadore Twersky, “Aspects of the Social and Cultural History of Provençal Jewry,” *Journal of World History* 11 (1968): 185–207, on pp. 196–198; Gad Freudenthal, “Causes and Reasons for the Emergence of the 12th-Century Translation Movement in Lunel,” (Heb.), in *Ta-Shma: Studies in Judaica in Memory of Israel M. Ta-Shma*, eds. Avraham Reiner et al. (Alon Shvut: Tevunot, 2011), pp. 649–670. [↑](#footnote-ref-68)
69. The early scientific and nonscientific reactions to the Copernican system, and especially to the notion that the Earth is in motion, are one prominent example of this phenomenon. On the assimilation of Copernicus’ astronomy, see Thomas S. Kuhn, *The Copernican Revolution. Planetary Astronomy in the Development of Western Thought* (Cambridge: Harvard University Press, 1957), chap. 6. Despite this famous example, the claim presented above is not limited to “revolutionary ideas” that constitute a “paradigm shift” – to use Thomas Kuhn’s expression – but may also be extended to notions that represent the “mopping-up operations” of “normal science.” [↑](#footnote-ref-69)
70. There are other, no less clear signs of these reactions in medieval Jewish cultures, such as the assimilation of scientific ideas into nonscientific literature (e.g., poetry, biblical commentaries, and sermons) and literary descriptions of attempts by the so-called “traditionalists” to curb the influence of Maimonides and “foreign” knowledge over some Jewish communities. On the former, see James T. Robinson, “Secondary Forms of Philosophy: On the Teaching and Transmission of Philosophy in Non-Philosophical Literary Genres,” in *Vehicles of Transmission, Translation, and Transformation in Medieval Textual Culture,* eds. Robert Wisnovsky et al.(Turnhout: Brepols, 2011), pp. 235–248. [↑](#footnote-ref-70)
71. Shlomo Sela, “Queries on Astrology Sent from Southern France to Maimonides: Critical Edition of the Hebrew Text, Translation, and Commentary,” *Aleph* 4 (2004): 89–190. [↑](#footnote-ref-71)
72. Leicht, “Toward a History of Hebrew Astrological Literature,” pp. 263–271; Shlomo Sela, “Astrology in Medieval Jewish Thought (Twelfth-Fourteenth Centuries)” in *Science in Medieval Jewish Cultures*, ed. Gad Freudenthal (Cambridge: Cambridge University Press, 2011), pp. 298–299. The fourteenth century also saw a great interest in Ibn Ezra’s biblical exegesis, which also included astrological knowledge. See, e.g., Howard Kreisel and Dov Schwartz, “Changing Patterns in the Medieval Supercommentaries on Abraham Ibn Ezra’s Biblical Commentary” (Heb.), in Dov Schwartz (ed.), *Rabbi Abraham Ibn Ezra. A Renaissance Man* (Tel Aviv: Idra Press, 2023), pp. 284–333. [↑](#footnote-ref-72)
73. This work has survived in two Latin translations. The original Hebrew version was probably composed between 1161–1280. See *Abraham Ibn Ezra Latinus on Elections and Interrogations. A Parallel Latin-English Critical Edition of Liber Electionum, Liber Interrogationum, and Tractatus Particulares*, ed., trans., and annot. Shlomo Sela (Leiden and Boston: Brill, 2020), pp. 48–80; Garshtein, “Astronomy and Astrology,” pp. 298–306. [↑](#footnote-ref-73)
74. On the astrological chapter of *Livyat* *ḥen*, including its content, sources, and use of sources, see Garshtein, “Astronomy and Astrology,” pp. 189–204, 209–217, 413–428. [↑](#footnote-ref-74)
75. Sela, “The Astrological-Astronomical Encyclopedia,” pp. 208–209. *Megillat ha-megalle* was also used by Levi ben Abraham as source material. See Garshtein, “Astronomy and Astrology,” pp. 154, 211, 224, 427. On Abraham Bar Ḥiyya’s astrological thought, see Shlomo Sela, “Abraham Bar Ḥiyya’s Astrological Work and Thought.” [↑](#footnote-ref-75)
76. For an overview of *Midrash ha-ḥokhmah*, its author, structure, and contents, see Colette Sirat, “Juda B. Salomon Ha-Cohen. philosophe, astronome et peut-être kabbaliste de la première moitié du XIIIe siècle,” *Italia* I, no. 2 (1978): 39–61; Resianne Fontaine, “Judah ben Solomon ha-Cohen’s Midrash ha-Ḥokhmah: Its Sources and Use of Sources,” in *The Medieval Hebrew Encyclopedias of Science and Philosophy*, ed. Steven Harvey (Boston: Kluwer Academic, 2000): 191–210; idem, *A Hebrew Encyclopedia of the Thirteenth Century. Natural Philosophy in Judah ben Solomon ha Cohen’s Midrash ha-Ḥokhmah* (Leiden and Boston: Brill, 2023), esp. pp. 7–18. On the astrological section, see Marienza Benedetto, *Un enciclopedista ebreo alla corte di Federico II. Filosofia e astrologia nel Midrash ha-hokmah di Yehudah ha-Cohen* (Bari: Pagina, 2010); idem, “A Hebrew Version of Ptolemy’s Tetrabiblos: The Decrees of the Stars by Judah Ben Solomon ha-Cohen,” *Iberia Judaica* VII (2015): 111–120; Garshtein, “Astronomy and Astrology,” pp. 53–76; idem, “Translations and Use of Translations in Medieval Hebrew Encyclopedias of Science,” in Cristina D’Ancona (ed.), *A Cultural History of Translation in the Postclassical Era* (London: Bloomsbury, forthcoming). The astrological section was published in 1886 on the basis of a single manuscript, but it is incomplete and contains more than a few errors. A critical edition of Judah’s introduction to the section devoted to astrology and his critique of the *Tetrabiblos* appears in Garshtein, “Astronomy and Astrology,” pp. 346–362. [↑](#footnote-ref-76)
77. Sabine Arndt, “Judah ha-Cohen and the Emperor’s Philosopher: Dynamics of Transmission at Cultural Crossroads” (Ph.D. dissertation, St. Cross College, 2016), p. 11. [↑](#footnote-ref-77)
78. Materials related to introduction to astrology are distributed throughout most of the surviving chapters. World astrology is treated in Chapters 32–33, then at the end of Chapter 37. Content related to continuous horoscopy is discussed in Chapters 35 and 40. [↑](#footnote-ref-78)
79. References to Ibn Ezra’s works are to Sela’s editions; references to Al-Qabīṣī’s treatise are to the edition mentioned above in n. 30. [↑](#footnote-ref-79)
80. Chapter 40 is incomplete in Vienna MS. Cod. Hebr. 57. I have therefore directed the reader here to the New York MS. 2601. For all available manuscripts, see above, n. 1. [↑](#footnote-ref-80)
81. The Hebrew text and English translation of *Sefer ha-Moladot* presented here are taken directly from Ibn Ezra, *On Nativities and Continuous Horoscopy*, ed. Sela. [↑](#footnote-ref-81)
82. See above, n. 28. [↑](#footnote-ref-82)
83. See above, p. 8. [↑](#footnote-ref-83)
84. For more information on the following manuscripts, see above, n. 1. [↑](#footnote-ref-84)
85. Note that the phrase “id est habent mellis colorem” appears neither in the original Arabic nor in the Hebrew text of *Sefer ha-Kolel* (although *Sefer ha-Kolel* does include the term צבעון, i.e., “color”). [↑](#footnote-ref-85)
86. השנים עשר] נ; קו: הי"ב. [↑](#footnote-ref-86)
87. על] קו; נ< כל. [↑](#footnote-ref-87)
88. הראשון והשביעי] ונ; ק: הא' והז'. [↑](#footnote-ref-88)
89. השני והשנים עשר] נ; ו: השני והי"ב; ק: הב' והי"ב. [↑](#footnote-ref-89)
90. והשלישי והאחד עשר] נ; ו: והשלשי והי"א; ק: והג' והי"א. [↑](#footnote-ref-90)
91. והרביעי והעשירי] ונ; ק: והד' והי'. [↑](#footnote-ref-91)
92. והחמישי והתשיעי] ונ; ק: והה' והט'. [↑](#footnote-ref-92)
93. והששי והשמיני] נ; ו: והששי והשמני; ק: והו' והח'. [↑](#footnote-ref-93)
94. כוכב] נ; קו: ככב. [↑](#footnote-ref-94)
95. שמח] וק; נ: ישמח. [↑](#footnote-ref-95)
96. הצומח] וק; נ: צומח. [↑](#footnote-ref-96)
97. השלישי] ונ; ק: הג'. [↑](#footnote-ref-97)
98. בתשיעי] ונ; ק: בט'. [↑](#footnote-ref-98)
99. באחד עשר] נ; קו: בי"א. [↑](#footnote-ref-99)
100. ושבתאי בשנים עשר] נ; קו: ושבתי בי"ב. [↑](#footnote-ref-100)
101. מורים] נ; קו: מורה. [↑](#footnote-ref-101)
102. רעה] קו; נ: רע. [↑](#footnote-ref-102)
103. השלישית והתשיעית] נו; ק: הג' והט'. [↑](#footnote-ref-103)
104. ריוח] וק; נ: ריח. [↑](#footnote-ref-104)
105. האחד עשר] נ; קו: הי"א. [↑](#footnote-ref-105)
106. והחמישי] ונ; ק: והה'. [↑](#footnote-ref-106)
107. בינונית] נ; קו: חסר. [↑](#footnote-ref-107)
108. לאדם] קו; נ: אדם. [↑](#footnote-ref-108)
109. והשנית] ונ; ק: והב'. [↑](#footnote-ref-109)
110. והשמינית] ו; נ: והשמיני; ק: והח'. [↑](#footnote-ref-110)
111. בשביעי] ונ; ק: בז'. [↑](#footnote-ref-111)
112. טובה] נ; קו: חסר. [↑](#footnote-ref-112)
113. בעבור] קנ; ו: בעבו'. [↑](#footnote-ref-113)
114. שותפו] וק; נ: ישותפו. [↑](#footnote-ref-114)
115. בעשירי] ונ; ק: בי'. [↑](#footnote-ref-115)
116. ברביעית] ונ; ק: בד'. [↑](#footnote-ref-116)
117. טובה שיבא לו] וק; נ<טובה שיבא לו. [↑](#footnote-ref-117)
118. העשירית] ונ; ק: הי'. [↑](#footnote-ref-118)
119. בשביעית] ונ; ק: בז'. [↑](#footnote-ref-119)
120. ברביעית] ונ; ק: בד'. [↑](#footnote-ref-120)
121. בעבור] קנ; ו: בעבו' מים בעבור [ו – the word “water” seems to have been deleted]. [↑](#footnote-ref-121)
122. השביעי] ו; נ: השביעית; ק: הז'. [↑](#footnote-ref-122)
123. מזרע] ונ; ק: בזרע. [↑](#footnote-ref-123)
124. ברביעית] ונ; ק: בד'. [↑](#footnote-ref-124)
125. הכוכבים] נ; וק: הככבים. [↑](#footnote-ref-125)
126. בעשירית] ונ; ק: בי'. [↑](#footnote-ref-126)
127. מלך] קו; נ: המלך. [↑](#footnote-ref-127)
128. הרביעי] ו; נ: הרביעית; ק: הד'. [↑](#footnote-ref-128)
129. עבודת] נ; ק: תגבורת [ו – not clear enough]. [↑](#footnote-ref-129)
130. הראשון] ונ; ק: הא'. [↑](#footnote-ref-130)
131. בעשירית] ונ; ק: בי'. [↑](#footnote-ref-131)
132. בשביעית] ונ; ק: בז'. [↑](#footnote-ref-132)
133. העניין] נ; קו: הענין. [↑](#footnote-ref-133)
134. מורים] קנ; ו: מודים. [↑](#footnote-ref-134)
135. וגם כן] ו; ק: וג"כ; נ: כן. [↑](#footnote-ref-135)
136. האחרות] נ; קו: האחדות. [↑](#footnote-ref-136)
137. עניינם] נ; קו: ענינם. [↑](#footnote-ref-137)
138. תרצה] קו; נ: תרצו. [↑](#footnote-ref-138)
139. ראה אי זה מן המשרתים יותר חזק בבית שאלתו] קו; נ: חסר. [↑](#footnote-ref-139)
140. הענינים] קו; נ: הענין. [↑](#footnote-ref-140)
141. המשרתים] ונ; ק: המשרתי'. [↑](#footnote-ref-141)
142. המשרתים] ונ; ק: המשרתי'. [↑](#footnote-ref-142)
143. ונוגה] נ; קו: ונגה. [↑](#footnote-ref-143)
144. ויש אומרים] ונ; ק: וי"א. [↑](#footnote-ref-144)
145. שלוש] קו; נ: שלש. [↑](#footnote-ref-145)
146. ותולדתו] ונ; ק: והוא. [↑](#footnote-ref-146)
147. שבתאי] נ; קו: שבתי. [↑](#footnote-ref-147)
148. ויש אומרים] נ; קו: וי"א. [↑](#footnote-ref-148)
149. נאמר] ונ; ק: נאמ'. [↑](#footnote-ref-149)
150. ומהם] ונ; ק: ומהן. [↑](#footnote-ref-150)
151. היום] קו [נ – The word has been deleted]. [↑](#footnote-ref-151)
152. והשנית] ונ; ק: והב'. [↑](#footnote-ref-152)
153. והשלישית] נ; ו: והשלישי'; ק: והג'. [↑](#footnote-ref-153)
154. והרביעית] ונ; ק: והד'. [↑](#footnote-ref-154)
155. והחמישית] ונ; ק: והה'. [↑](#footnote-ref-155)
156. כולם] וק; נ: לעולם כלם. [↑](#footnote-ref-156)
157. והנפרדים] ונ; ק: והנפרדי'. [↑](#footnote-ref-157)