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Renate Smithuis

## Abraham Ibn Ezra's Astrological Works in Hebrew and Latin: New Discoveries and Exhaustive Listing

A well-known personage for historians of medieval science, Abraham Ibn Ezra (1089/1092–1164/1167) is noted for his sustained activity in the fields of poetry, bible commentary, mathematics, astronomy, and astrology. Born in Tudela in the Muslim kingdom of Saragossa, he was educated no less in the Hebrew tradition than in contemporary Arabic culture. About the first fifty years of his life, which he spent in Spain, we know disappointingly little. During the latter part of his life

\* The abbreviations used throughout this article are as follows. (1) Libraries: BAV Biblioteca Apostolica Vaticana; BnF Bibliothèque Nationale de France; BS Bayerische Staatsbibliothek; IMHM Institute of Microfilmed Hebrew Manuscripts; IOSRAS Institute of Oriental Studies of the Russian Academy of Sciences; JTS Jewish Theological Seminary; UL University Library; (2) Manuscripts: B Berlin, Staatsbibliothek 220 [Or. Qu. 679]; C Cambridge, University Library, Add. 1517; E Erfurt, Amplon. O.89; F1 Paris, BNF, fonds français, 24276; F2 Paris, BNF, fonds français, 1351; G Gent 5 [Saint-Genois 416]; L Leipzig University 1466; M München, Bayerische Staatsbibliothek, Cod. Hebr. 202; P Paris, BNF, héb. 1058; O Oxford, Bodleian Library, Opp. 707 [Neubauer 2025]; V Vienna, Österreichische Nationalbibliothek 5442.

(beginning 1140), which he spent in Italy, France, and England, Ibn Ezra issued a steady stream of scientific writings.

Ibn Ezra's scientific writings were composed not only in Hebrew, but in Latin as well. The thesis that Ibn Ezra authored treatises in Latin without the intermediary stage of a Hebrew text was first put forward by Millás Vallicrosa with respect to certain astronomical writings. More recently it has been suggested that several of his astrological and perhaps mathematical treatises,<sup>1</sup> too, are such Latin works.<sup>2</sup> It should be emphasized, however, that Ibn Ezra presumably authored these Latin texts with the linguistic help of others. Therefore, the term "author" is here understood in a broad sense, as denoting the recognizable source of knowledge and ideas.

Ibn Ezra's Hebrew scientific treatises are among the first of their kind to convey Arabic learning to Jews who could not read Arabic. Their exceptional value derives from the fact they were written at a time when a Hebrew scientific library of translated Arabic texts did not yet exist: a true Hebrew counterpart of the twelfth-century Latin translation movement emerged only a century later. Ibn Ezra contributed to this transfer of knowledge from Arabic into Hebrew through his scientific translations, too, although their significance is secondary to that of the treatises.<sup>3</sup> Similarly, Ibn Ezra's Latin scientific treatises are early examples of Latin texts drawing on Arabic sources.

Ibn Ezra's astrological writings form a remarkably extensive corpus and constitute by far the greatest bulk of his scientific output. He wrote on all the main branches of astrology with a competence that earned him a secure place in the history of the discipline. At the core of his production are the commented introductions to astrology, specialized treatises on nativities, elections, and interrogations, and works on medical and general astrology. This corpus consists of the following treatises:

1. *Rešit ḥokmah* (Beginning of wisdom)
2. *Mišpeṭei ha-mazzalot* (Judgments of the zodiacal signs)

3. *Te'amim* (Reasons)
4. *Moladot* (Nativities)
5. *Mivḥarim* (Elections)
6. *Še'elot* (Interrogations)
7. *Me'orot* (Luminaries)
8. *‘Olam* (World).

<sup>1</sup> Tony Lévy, "Hebrew and Latin Versions of an Unknown Mathematical Text by Abraham Ibn Ezra," *Aleph* 1 (2001): 295–305; Tony Lévy and Charles Burnett in the present issue of *Aleph*.

<sup>2</sup> For the latest findings and considerations, see Renate Smithuis, "Science in Normandy and England under the Angevins: The Creation of Abraham Ibn Ezra's Latin Works on Astronomy and Astrology," in *Hebrew to Latin—Latin to Hebrew: The Mirroring of Two Cultures in the Age of Humanism*, ed. G. Busi (Berlin and Turin: Nino Aragno, 2006). To avoid confusion, let me state at the outset that the newly discovered Latin texts discussed in this article are all translations made long after Ibn Ezra's death.

<sup>3</sup> Gad Freudenthal, "Les sciences dans les communautés juives médiévales de Provence: leur appropriation, leur rôle," *Revue des Études Juives* 152 (1993): 29–136; Shlomo Sela, *Abraham Ibn Ezra and the Rise of Medieval Hebrew Science* (Leiden: Brill, 2003), pp. 17–92. Ibn Ezra's translations include: (1) the Arabic works of the Jewish grammarian Ḥayyūj (c. 945–c. 1000); (2) Ibn al-Muthannā's commentary to the astronomical tables of Al-Khwārizmī, translated by Ibn Ezra in 1160 and designated the "Parma version" in Bernard R. Goldstein, *Ibn al-Muthannā's Commentary on the Astronomical Tables of al-Khwārizmī: Two Hebrew versions* (New Haven: Yale University Press, 1967); (3) Māshā'allāh's *Še'elot* (Interrogations); and, perhaps, (4) Māshā'allāh's *Be-qadrut ha-levanah we-ha-šemeš* (On lunar and solar eclipses) (see Bernard R. Goldstein, "The Book on Eclipses of Masha'allah," *Physis* 6 [1964]: 205–13). Sela doubts whether Ibn Ezra is the translator of the last text—not without reason, I believe. The present article is based on research set out in Renate Smithuis, "Abraham Ibn Ezra the Astrologer and the Transmission of Science to the Christian West" (Ph.D. thesis, University of Manchester, 2004). See pp. 21 and 102–103.

These titles faithfully reflect the corresponding Arabic tradition: *mudkhals* (introductions) to the art of astrology, *kutub al-mawālīd* (books on nativities), *taḥāwīl sinī 'l-ʿālam* (revolutions of the years of the world), *kutub al-ikhtiyārāt* (books on interrogations), and so forth.<sup>4</sup> Ibn Ezra's Hebrew astrological treatises are regarded today as parts of an "encyclopedia"<sup>5</sup> whose internal coherence is due to the fact that Ibn Ezra interspersed numerous forward and backward cross-references in the individual texts: these suggest that he intended to provide his readers with a comprehensive compendium of astrology that included all its essential sub-branches.

It is well known that Abraham Ibn Ezra rewrote most of his works, often more than once: this is true of his biblical commentaries no less than of his scientific writings. In what follows, I will call each distinct form of a given work a *redaction* of that work: this term, then, refers to a form of a work that resulted from rewriting by Ibn Ezra himself and not from the accidents of textual transmission. Thus, whereas the astrological encyclopedia basically consists of around seven different works, the number of redactions needs to be determined separately for each work. I will use the term *text* to denote a specific witness of a given redaction of a work, as carried by a particular manuscript. It is not always easy to decide whether the variations displayed by the texts carried by different manuscripts are the result of rewriting by Ibn Ezra or simple scribal interventions or errors; i.e., whether these texts represent different redactions or merely variants of a single redaction. This must and can be determined by a careful comparison of these texts. Lastly, I will use the term *version* when a given redaction of a work is extant in different languages.

The numerous cross-references between the different works making up Ibn Ezra's astrological encyclopedia allow us to establish the order in which the works were composed. This order seems to be invariant, both for the different redactions of the Hebrew works and for the newly discovered Latin versions (of which more will be said below);

namely: (1) the introduction to astrology (always referred to as *Rešit ḥokmah / Liber primus de sensu*); (2) the commentary on the above (*Sefer ha-Te'amim*); (3) nativities (*Sefer ha-Moladot / Liber nativitatium / Liber revolucionum*); (4) elections (*Sefer ha-Mivḥarim*); (5) luminaries (*Sefer ha-Me'orot / Liber claritatum*); (6) interrogations (*Sefer ha-Se'elot*); (7) general astrology (*Sefer ha-ʿOlam / Sefer ha-Maḥberot / Liber iurium seculi*).<sup>6</sup>

The principal aim of the present article is to report the discovery of four astrological treatises—*Liber nativitatium*, *Liber revolucionum*, *Liber eleccionum*, and *Liber interrogacionum*—which, I will argue, were authored by Ibn Ezra. I will also show that these works were originally composed in Hebrew and subsequently translated into Latin through an intermediary version in Old French. This will allow the conclusion that, contrary to what has been known so far, Ibn Ezra produced not two but three redactions of his Hebrew astrological encyclopedia: an early redaction was written in Italy (before 1148); a second redaction was composed in southern France in 1148; and a third one in the Angevin territories after 1148. In order to establish this, I begin with a full survey of Ibn Ezra's known astrological works as preserved in Hebrew, in Latin, and in medieval French versions. Appendix A provides a list of all Hebrew manuscripts of Ibn Ezra's astrological works.

<sup>4</sup> Fuat Sezgin, *Geschichte des Arabischen Schrifttums* [= GAS], 9 vols. (Leiden: E. J. Brill, 1967–1984), vol. 7.

<sup>5</sup> The term was introduced in this context by Millás Vallicrosa and has been current ever since. See Sela, *Abraham Ibn Ezra*, p. 57.

<sup>6</sup> This is not to say that each encyclopedia necessarily included versions of all these treatises. For the full pattern of cross-references see Appendix 2 in Smithuis, "Abraham Ibn Ezra."

## Abraham Ibn Ezra's Astrological Works in Hebrew, French, and Latin

Ibn Ezra's popular astrological works survive in impressive numbers of manuscripts in Hebrew, medieval French (as well as some other vernaculars),<sup>7</sup> and Latin. The known manuscripts of the core treatises are as follows.

### A. Manuscripts of Hebrew Redactions

Building on the work of predecessors like Steinschneider and Millás Vallicrosa, Shlomo Sela has published several surveys of Ibn Ezra's scientific output concerning the Jewish calendar, mathematics, astronomy, and astrology.<sup>8</sup> Neither his research nor my own has brought to light any previously unknown astrological treatise by Ibn Ezra. The known astrological treatises and their redactions are as follows:

1. *Rešit ḥokmah*
2. *Mišpeṭei ha-mazzalot*
3. *Te'amim* 1 and 2
4. *Moladot*
5. *Mivḥarim* 1 and 2
6. *Še'elot* 1 and 2
7. *Me'orot*
8. *‘Olam* 1 and 2.

These astrological writings by Ibn Ezra in Hebrew are preserved in 115 manuscripts (for an exhaustive index, see Appendix B).

### B. Manuscripts of French Versions

No more than two manuscripts containing French translations of astrological writings by Ibn Ezra are known today, both discovered by Raphael Levy. These translations were made by Hagin le Juif during the second half of the thirteenth century. They are Paris, BnF, fonds français 24276 (= F1) and Paris, BnF, fonds français 1351 (= F2).<sup>9</sup> The first

manuscript dates from the thirteenth century.<sup>10</sup> A certain Viennot Pingot copied the second manuscript in 1477 (F2, f. 123b). These two manuscripts contain:

1. *Li Livres du Commencement de sapience* (= *Rešit ḥokmah*) (F1, ff. 1a–66a; idem in F2)

<sup>7</sup> For information on other vernacular translations 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: John Hopkins Press; Paris: Les Presses Universitaires de France, 1927), pp. 51–57.

<sup>8</sup> Most up-to-date is Sela, *Abraham Ibn Ezra*, pp. 17–92. See also his “Abraham Ibn Ezra's Scientific Corpus: Basic Constituents and General Characterization,” *Arabic Sciences and Philosophy* 11 (2001): 91–149; *Astrology and Biblical Exegesis in Abraham Ibn Ezra's Thought* (Hebrew) (Ramat Gan: Bar-Ilan University, 1999). Older surveys include: José María Millás Vallicrosa, *El Libro de los Fundamentos de las Tablas Astronómicas de R. Abraham Ibn ‘Ezra: Edición Crítica, con Introducción y Notas* (Madrid/Barcelona: CSIC, Instituto Arias Montano, 1947); Moritz Steinschneider, “Abraham Ibn Ezra (Abraham Judaeus Avenare),” *Supplement zur Zeitschrift für Mathematik und Physik* 25 (1880): 59–128, repr. in Heinrich Malter and Alexander Marx, eds., *Gesammelte Schriften* [= GS] (Berlin: M. Poppelauer, 1925), 1: 407–506.

<sup>9</sup> Raphael Levy and Francisco Cantera, *Sefer Reshit Hokhma. The Beginning of Wisdom: An Astrological Treatise by Abraham Ibn Ezra. Part I: An Edition of the Old French Version of 1273 and an English Translation of the Hebrew Original. Part II: An Edition of the Hebrew Original of 1148* (Baltimore: The Johns Hopkins Press, 1939), p. 30. The first manuscript was formerly MS Paris, BnF, fonds de la Sorbonne 1825, mentioned thus by Thorndike, *A History of Magic and Experimental Science*, 8 vols. (New York and London: Macmillan and Columbia University Press, 1923–58), 2: 926. See also F1, f. 1a and Levy, *The Astrological Works*, p. 20.

<sup>10</sup> A note above the table of contents states that the manuscript is from the thirteenth century. Cf. Levy, *The Astrological Works*, p. 20. The edition in Levy-Cantera, *Beginning of Wisdom*, is based on this manuscript.

2. *Le Livre (des Jugemens) des nativites (= Moladot)* (F1, ff. 66a–100b; F2, ff. 66a–102a)<sup>11</sup>
3. *Le Livre des Elections Abraham (= Mivharim 2)* (F1, ff. 109a1.8–113b1.23, ff. 104a–107a; F2, ff. 102a.9–110b);<sup>12</sup>
4. *Le Livre des Questions (= Šeʿelot 2)* (F1, ff. 113b1.24–125a1.23; F2, ff. 110b–123a2).<sup>13</sup>

Both manuscripts include additional astrological material. Near the end of the discussion of the third place of the horoscope in *Le Livre des Elections* (F1, ff. 112a2–113a1.1) are some further judgments. In F1 and 2, the complete text of *Le Livre des Questions*, which corresponds to *Šeʿelot 2* as we know it in Hebrew, is followed by astrological judgments in the style of Ibn Ezra on illnesses (place 6), introduced in F1 by the words “Sur le *Livre de Q(ue)stions* sur la .6. meson” (F1, ff. 125a1.23–b), which are absent from the original.<sup>14</sup> F1 also contains an incomplete French version of the *Livre des Revolucions du Siecle* by Abū Maʿshar (ff. 100b1.24–103b1.10)<sup>15</sup> and a Latin fragment in which the same Arabic author is quoted from his *Flores* (F1, ff. 103b1–104a1.13). I am not aware of other manuscript copies in French of astrological writings by Ibn Ezra.

### C. The Latin Versions in Manuscripts and Early Editions

In 1944, Lynn Thorndike published a comprehensive survey of “The Latin Translations of the Astrological Tracts of Abraham Avenezra.”<sup>16</sup> To date, however, no attempt has been made to match the Latin versions preserved in these manuscripts with their possible Hebrew originals. This task will be undertaken here.

We know the identities of four Latin translators of Ibn Ezra’s astrological works: Henry Bate (1246–ca. 1310), Peter d’Abano (ca. 1250–ca. 1315), Arnoul de Quinquempoix (d. 1321/6), and Ludovicus de Angulo (fifteenth century).

Henry Bate’s translations are found together in MS Leipzig University 1466 [= L]:

<sup>11</sup> F1, f. 66a: “Or co(m)mence son *Livre des Jugemens des Nativites*. E dist nostre maistre Abraham le sage lavertissant...;” f. 100b: “Ci define le *Livre des Nativites*...” ספר המולדות משפטי המולדות is attested as an alternative title in various Hebrew manuscripts.

<sup>12</sup> In F2, *Le Livre des Elections* follows without a heading directly after nativities and ends with the words: “Cy fine *Le Livre des Elections*” (f. 110b). In F1, the text of *Le Livre des Elections* is complete, but its final part, starting from place six (f. 104a), comes first. The intermediate folios (107b–109a1.7) contain an extensive French gloss that respectively begins and ends with the copyist’s remark “Sup(er) *Libr(um) Electionum* i(n) signis talib(us)” and “Ces gloses estoient en 1 marge en cor le premier chapitre et le .2. et .3. et .4.” This gloss is not in F2.

<sup>13</sup> In both manuscripts, *Šeʿelot 2* follows directly on *Elections*, without a heading, although “*Liber de Interrogacionibus*” can be found in the margin of F1, f.113b. The title *Le Livre des Questions (de Abraham Avenazze, F2)* is found only at the end of the treatise.

<sup>14</sup> In F2, f. 123b the same text starts with “dela 6 maison es q(ue)stion.” All the text additions can be found transcribed in Appendix 10 of Smithuis, “Abraham Ibn Ezra.”

<sup>15</sup> Part of the incipit: *Le Livre Even Massar des Revolucions du Siecle*. Il est devise en .xvi. chapitres devises en asses de manieres ainsi co(m) je lesplanerai, et ce sont il lun le sire de lennee, le secont celi qui ensegne ala gent, le tiers qui ensegne au roi et de la gent, le q(u)int de lensegneme(n)t des planetes, le .6. sure les batailles (etc.), le .13. des estoile fichies, le .14. du ... essample, le q(ui)nsieme du movement de la t(er)re, le .16. de lafaire des planetes. Incipit of the book proper: Le p(re)mier le sire de lennee. Ce dit Even Massar: Tu dois equier le lieu du soleil ou p(re)mier menu de Legnel et equier le (de)g(re) asce(n)dant et regarde se le g(er)mina(n)t est signe v(er)itable il sera enseignant sur toute lennee et sil est signe de .2. cors il enseign(er)a sur demi an et q(ua)nt retorn(er)a le soleil au chief des Balances etc.

<sup>16</sup> *Isis* 35 (1944): 293–302.

1. *Introductorius ad astronomiam* (= *Rešit ḥokmah*) (ff. 2a–23b)
2. *De mundo vel seculo* (= *‘Olam 1*) (ff. 25a2.7–30b1.28), with Henry’s own prologue on ff. 24a–25a2.6
3. *De luminaribus seu De diebus creticis* (= *Me’orot*) (ff. 30b1.29–34a2.27)<sup>17</sup>
4. *Liber introductionis ad iudicia astrologie* (= *Mišpeṭei ha-mazzalot*) (ff. 37a–48a2.1), followed by some annotations and with the explicit only at the very end (f. 49b1)
5. *Liber causarum seu racionum* (= *Ṭe’amim 2*) (ff. 49b2–60b2.28)<sup>18</sup>
6. *Liber causarum seu racionum* (= *Ṭe’amim 1*) (ff. 60b2.35–73b1.4), followed by an annotation and the explicit (4–27).<sup>19</sup>

The colophons to Henry’s versions reveal the following chronology: (1) *De mundo vel seculo* translated in Liège<sup>20</sup> and Malines in 1281;<sup>21</sup> (2) *Introductorius ad astronomiam* (August 1292), the two versions of the *Liber causarum seu racionum* (September 1292), *Liber introductionis ad iudicia astrologie* (October 1292), all four completed at Orvieto; *De luminaribus seu De diebus creticis* (also 1292) is dedicated to the bishop of Aversa.<sup>22</sup> *De luminaribus seu De diebus creticis* was printed in a separate edition by Erhard Ratdolt (Venice, 1482) and again in abbreviated form, together with Ganivetus’ *Amicus medicorum*, in Venice in 1550.<sup>23</sup>

Peter d’Abano’s versions (which contributed greatly to the popularization of Ibn Ezra’s astrology in the Christian world) are to be found in another famous early edition of Ibn Ezra’s works, namely *Abrabe Avenaris Iudei astrologi peritissimi in Re Iudicali Opera ab Excellentissimo Philosopho Petro de Albano post accuratam castigationem in Latinum traducta*, published by Petrus Liechtenstein at Venice in 1507. Peter’s translations are:

1. *Introductorium qui dicitur Principium sapientie* (1293; = *Rešit ḥokmah*) (2a1–31b1);
2. *Liber rationum* (= *Ṭe’amim 2*) (32a1–43a2);
3. *Liber nativitatum et revolutionum earum* (= *Moladot*) (44b1–60b1);

4. *De interrogationibus* (= *Še’elot 2*) (60b2–67a1);
5. *De electionibus* (= *Mivḥarim 2*) (67a2–71a2);
6. *Liber luminarum* (= *Me’orot*) (71b1–75b2).

*Liber rationum* concludes somewhat ambiguously. The explicit at the close of 43a2, “Hic co(m)pletus est *Liber rationum*,” corresponds to the end of the Hebrew original. The intermediate text, up to the explicit on 44a, “Explicit translatio *Libri de r(at)ionibus* (etc.),” is introduced by “Here, to the best of my ability, is what I have discovered at the end of this book, and it is, to begin with, on nativities.”<sup>24</sup> What follows is indeed a first short paragraph on the subject of nativities, written in a style similar to Ibn Ezra’s. This is followed, however, by two further sections dealing with historical astrology, also written by an unknown Jewish author.

<sup>17</sup> The folios the follow (ff. 34a–37a) contain William the Englishman’s short treatise on astro-medicine, *Libellus de iudicio urine non vise* (Incipit: De ignorancie), in which he refers to Ptolemy, Abū Ma’šhar, Al-Qabīšī, Māshā’allāh, and a certain Hermann.

<sup>18</sup> Cf. in the margin of f. 49b: “*Tractat(us) d(e) causis seu r(aci)o(nibus) eo(rum) q(ui) dic(untur) Introduct(or)ie ad iudicia astronomie.*”

<sup>19</sup> The explicit reads further (f. 60b): “sup(er) hiis q(ui) dicu(n)tur in *Introductorio* Abrache qui incipit Sapie(n)tie timor D(o)m(ini) ...”

<sup>20</sup> Pierre Duhem, *Le Système du Monde: Histoire des Doctrines Cosmologiques de Platon à Copernic*, 10 vols. (Paris: Librairie Scientifique Hermann, 1914–50), 8: 445, says its was translated in Leiden (probably misrendering “Leodium”).

<sup>21</sup> According to Thorndike, *A History of Magic*, vol. 2, p. 928 one manuscript mentions 1292 in the colophon.

<sup>22</sup> Thorndike, “The Latin Translations.” Cf. Steinschneider, “Abraham Ibn Esra,” *GS*, 1: 495.

<sup>23</sup> Perhaps Ganivetus should be held responsible for the abbreviation. Cf. Levy, *The Astrological Works*, p. 51, and the suggestion of Thorndike, *A History of Magic*, 8: 139.

<sup>24</sup> Hic i(n) fine istius libri ut possum inveni et est primum super nativitat(es).

It is worth noting that the Venice 1507 edition also contains (1) Henry Bate's *De mundo vel seculo* (= *Olam 1*; 77b2–85a1); (2) *Tractatus particulares*; and (3) two texts ascribed to a certain Bethen–*Centiloquium* (or *Liber de consuetudinibus in iudiciis astrorum*) and *Libellus de horis planetarum*.<sup>25</sup> The *Tractatus particulares* consists of an interesting collection of short astrological writings attributed to Abraham Ibn Ezra, but of which no Hebrew original has been identified. However, it has emerged that, while the collection as a whole cannot be ascribed to Ibn Ezra, there is still a significant link to his astrology, since the collection contains substantial portions of some of his Hebrew astrological writings.<sup>26</sup>

The versions by Arnoul de Quincampoix are found together in MS Gent 5 [Saint-Genois 416] [= G], as follows:

1. *De questionibus* (= *Še'elot 2*) (ff. 85a.13–91b), preceded by Arnoul's prologue (from f. 84b.17);
2. *De electionibus* (= *Mivḥarim 2*) (ff. 91b–96a);
3. *Tractatus particulares* (ff. 96b.6–103a.9).<sup>27</sup>

In his preface to *De questionibus*, Arnoul promises to translate Ibn Ezra's *Liber de questionibus*, *Liber de electionibus*, and *Liber de inventione occultorum* (or *Liber de occultorum inventionibus*); the latter title probably refers to the work Peter d'Abano called *Tractatus particulares*.

Ludovicus de Angulo produced a Latin version of *Moladot*, which he completed in 1448. Preserved in MS Paris, BnF 7321, ff. 87a–111ab, it was done from one of the abridged Catalan versions that have traditionally been ascribed to a certain Martin d'Ozca (= Huesca in Aragon).<sup>28</sup>

In addition, MS Oxford, Bodleian Library, Digby 212 contains two anonymous Latin translations of known Hebrew originals:

1. *Elecciones Abraham* (= *Mivḥarim 2*) (ff. 64b–67b2), also preserved in MS London, British Library, Royal 12.C.XVIII, ff. 26a–30b;
2. *De questionibus* (= *Še'elot 2*) (ff. 67b2–72a).

A question that I can only mention but not discuss here is: what is the

*Vorlage* from which the Latin translations were made? My own view, which I intend to present in detail elsewhere, is that all the Latin translators (except for Ludovicus de Angulo) translated from the Old French versions by Hagin le Juif and did not consult the Hebrew originals. This is important to bear in mind in view of the next section, in which I will present new Latin translations that also show the marks of having been done from Hagin's French. This view implies that Hagin translated many more of Ibn Ezra's works than the four that survive today; these translations must be assumed lost.

Another point to be mentioned before proceeding is that when we try to match the Latin versions of works by Ibn Ezra with Hebrew originals we must bear in mind that, as already noted, Ibn Ezra seems to have authored some of his works directly in Latin. This, I believe, is the

<sup>25</sup> The short Bethen treatises may well originate from the Arabic, though nothing is known about their supposed author. Earlier suggestions that this person be identified with either Henry Bate or Al-Battānī have been discarded (see Sezgin, *GAS*, 7: 160). Francis J. Carmody (*Arabic Astronomical and Astrological Sciences in Latin Translation: A Critical Bibliography* [Berkeley: University of California Press, 1956], p. 74) claims to have found an Arabic original of Bethen's *Centiloquium* in the form of two manuscripts at the Escorial. Cf. Thorndike, "The Latin Translations," p. 299, who mentions an Oxford manuscript that ascribes the translation to Peter.

<sup>26</sup> I hope to demonstrate this elsewhere. See also Smithuis, "Abraham Ibn Ezra," pp. 128–35.

<sup>27</sup> To be precise, in G only Arnoul's version of *Mivḥarim 2* and the second part of his text matching Peter's *Tractatus particulares* are expressly attributed to Ibn Ezra.

<sup>28</sup> Levy, *The Astrological Works*, pp. 51–4; idem, "The Authorship of a Latin Treatise on the Astrolabe," *Speculum* 17 (1942): 566–69, on p. 568. But cf. D. Romano, "Obras Astrológicas de Abraham Ibn Ezra en Catalán," in Fernando Díaz Esteban, ed., *Abraham Ibn Ezra y su Tiempo* (Madrid: Asociación Española de Orientalistas, 1990), pp. 259–67.

case of the *Liber de nativitatibus*, dated 1154, also listed by Thorndike: it was published by Erhard Ratdolt at Venice in 1485, ascribed to “Abraham Iudeus,” together with Henry Bate’s work on the astrolabe, *Magistralis compositio astrolabii*.<sup>29</sup> Since Steinschneider it has been agreed, correctly I think, that this is indeed a work by Ibn Ezra. Steinschneider, followed by all later scholars, probably assumed that it was a translation, although no Hebrew original is known.<sup>30</sup> I believe, however, that this is not the case: it was probably written directly in Latin for a Latin readership, if not by Ibn Ezra himself, then in his name and under his direction. It is thus on a par with Ibn Ezra’s commentaries to the Pisan tables and the treatises on the astrolabe, which all seem to have been written directly in Latin. There is indeed a striking resemblance between *Liber de nativitatibus* and the latter works, which suggests a similar genesis for all of them. I have taken up this question in detail elsewhere.<sup>31</sup>

Thorndike called attention to a number of other compositions in Latin that are ascribed to Ibn Ezra. These texts are intriguing because, as it turns out, they are not translations of any of Ibn Ezra’s treatises known in Hebrew, but still present characteristics allowing their ascription to him. My suggestion, to be substantiated below, is that these are anonymous translations of unknown Hebrew astrological treatises by Ibn Ezra, made from an intermediary French version. These are: *Liber nativitatum*, *Liber revolucionum*, *Liber electionum*, and *Liber interrogacionum*,<sup>32</sup> all preserved in MS Erfurt, Amplon. O.89 [= E] and MS Vienna, Österreichische Nationalbibliothek 5442 [= V]. The same two manuscripts also contain a text entitled *Excerpta quaedam ex Libro iudiciorum Abraham deprompta* (Excerpts taken from a book on [astrological] judgments of Abraham), which, I will suggest, may be an incomplete and possibly shortened version of a likewise lost Hebrew treatise on nativities by Ibn Ezra. Manuscripts E and V preserve these five important but hitherto neglected texts along with a few additional anonymous versions of known texts, as follows:

1. *De iudiciis signorum* (= *Mišpetei ha-mazzalot*) (E, ff. 5a–19b9)<sup>33</sup>
2. *Liber interrogacionum* (no Hebrew original) (E, ff. 19b10–30a27; V, ff. 180a–186a2.14)
3. *Liber de interrogationibus* (= *Še’elot 2*) (E, ff. 30a28–39b3; V, ff. 186a2.15–192b2.9)
4. *Liber electionum* (no Hebrew original) (E, ff. 39b4–46b11; V, ff. 192b2.10–198b1.7)
5. *Liber de electionibus* (= *Mivḥarim 2*) (E, ff. 46b12–52b; V, ff. 198b1.8–203b1.3)
6. *Liber nativitatum* (no Hebrew original) (E, ff. 53a–68b; V, ff. 203b1.4–217b2.4),<sup>34</sup> followed by a short text and a gloss
7. *Liber revolucionum* (no Hebrew original) (E, ff. 69a25–72b; V, ff. 218a1.18–220b),<sup>35</sup> followed by an undated horoscope

<sup>29</sup> Its title reads in full: *Abrabe de nativitatibus cum exemplaribus figuris singulis domibus antepositis et Magistralis compositio astrolabii Hanrici Bate*. John North (*Horoscopes and History* [London: The Warburg Institute, University of London, 1986], pp. 109 ff.) concludes that the fourteen horoscopes printed alongside *De nativitatibus* “stem from the very time of the printing of the book.”

<sup>30</sup> Steinschneider, “Abraham Ibn Ezra,” in *GS*, 1: 497. Levy (*The Astrological Works*, p. 50) calls it an anonymous translation. Sela (“Abraham Ibn Ezra’s Scientific Corpus,” p. 137) classifies the treatise confusingly as “the second version of *Sefer ha-Moladot*: Hebrew, France, 1154.” Equally premature is his claim that this translation was the work of Henry Bate. Millás Vallicrosa tends to call it a translation, except for in “Sobre un ‘Tratado de Astrolabio’ atribuido a R. Abraham Ibn ‘Ezra,” *Sefarad* 4 (1944): 31–38, on pp. 33–34.

<sup>31</sup> Smithuis, “Science in Normandy and England.”

<sup>32</sup> For the sake of clarity, only the titles of these four treatises will be used in the genitive plural throughout this article.

<sup>33</sup> Thorndike, “The Latin Translations,” 301.

<sup>34</sup> Called *Iudicia nativitatum* in the explicit.

<sup>35</sup> In V another hand has added: *annorum nati*.

8. *Excerpta quaedam ex Libro iudiciorum Abraham deprompta* (no Hebrew original) (E, ff. 73a–77a, V, ff. 221a–224b.1.11; both uncompleted).

Manuscripts E and V, from the fourteenth and fifteenth century respectively, show great affinity—a proximity down to the level of spelling. While E consists exclusively of texts by Ibn Ezra, V contains several other astrological books, including (Pseudo-?) John of Seville’s *Liber Quadripartitus* and ʿUmar Ibn al-Farrukhān’s *De nativitatibus*.<sup>36</sup>

Thorndike’s comprehensive overview thus allows us to identify new treatises, which, as I will now argue, are by Abraham Ibn Ezra. It is of course possible that the newly identified treatises will be found in additional manuscripts and that other Latin versions of works by Ibn Ezra will be discovered in the future.<sup>37</sup>

### Ibn Ezra’s Authorship of the Four Treatises

I now argue that the *Liber nativitatum*, *Liber revolucionum*, *Liber eleccionum*, *Liber interrogacionum*, and perhaps the *Excerpta* are Latin translations of compositions originally written in Hebrew by Ibn Ezra. The following considerations seem to confirm this thesis.

#### A. Attribution

Manuscripts E and V both ascribe all five texts to Abraham, just as they attribute the translations of the known Hebrew treatises to him. This suggests that all attributions are of equal reliability. *Liber de electionibus* even specifies more fully “Abraham Avenezre” in its incipit. It must be admitted, though, that the copyists of both manuscripts, or perhaps the translator, assumed that the authors of the *Liber interrogacionum* (explicit: “editus ab Abraham Iudeo quodam,” “translated by a certain Abraham the Jew”) and *Liber de interrogationibus* (incipit: “ab alio editus”) were different Abrahams.

Abraham is more than once explicitly mentioned as the author within the texts themselves. In manuscript E this happens as follows: (1) “Dicit Abraham additor,” f. 53a (*Liber nativitatum*, incipit); (2) “Et ego Abraham additor dico,” f. 39b20 (*Liber eleccionum*, within the main body of the text); (3) “Et ego Abraham qui addo hunc librum,” f. 20a8–9 (*Liber interrogacionum*, in the main body of the text); (4) “Et ego Abraham addens confiteor,” f. 20b1 (idem); and (5) “Et ego Abraham temptavi multotiens,” f. 25b3 (idem).<sup>38</sup> Furthermore, the author may be referring to himself on the following occasions: (1) “Dicit Abraham subtilis,” f. 20b24 (*Liber interrogacionum*, in the main body of the text); (2) “Dicit Abraham additor,” f. 21b19 (idem); (3+4) “Dicit Abraham”, f.

<sup>36</sup> The table of contents on f. 4b of E announces “Oamar [sic] *De nativitatibus*,” but this text seems now lost. Charles Burnett has recently questioned the ascription of the *Ysagoge* and *Liber quadripartitus* to John of Seville, taking into account the possibility that the works may well represent Latin originals authored by Abraham Ibn Ezra. These works belong to the first (and very few twelfth-century) Latin compositions based on Arab astrological sources. They were printed as *Epitome totius astrologiae*, accompanied by an introduction of Joachim Heller, by Iohannes Montanus and Ulricus Neuber at Nuremberg in 1548. See Charles Burnett, “John of Seville and John of Spain: A *Mise au Point*,” *Bulletin de Philosophie Médiévale* 44 (2002): 59–78, §6. See also Chapter 3 of Smithuis, “Abraham Ibn Ezra.”

<sup>37</sup> The treatise that Thorndike, “The Latin Translations,” mentions as “Abrahismus” corresponds to Ibn Ezra’s commentary on his astronomical tables, which was edited by Millás Vallicrosa in *El Libro de los Fundamentos*. The Latin versions often contain added text additions as compared to their Hebrew originals. For a preliminary transcription of these see Appendix 10 of Smithuis, “Abraham Ibn Ezra.”

<sup>38</sup> This is a phrase which Ibn Ezra often used in his astrological works to stress how he had lengthily tested a particular astrological doctrine before incorporating it into his own work.

22a4 and 6 (idem); (5) “Dicit Abraham additor,” f. 29a13 (idem);<sup>39</sup> (6) “Dicit Abraham,” f. 30a23 (idem).

In this context the following literary problem should be mentioned. In the table of contents of both E and V, *Liber nativitatum*, *Liber revolucionum*, and *Liber eleccionum* are attributed to “Abraham Additor.” This attribution is undoubtedly based on the incipit to the *Liber nativitatum*, which reads “Dicit Abraham additor,” a phrase that also appears several times in the *Liber interrogacionum* and *Liber eleccionum* (see above). Several attempts have been made to explain this expression. Thorndike speculated that the works to which this name is attached could have been written by a different author, for instance some editor, who expanded Ibn Ezra’s astrological work with his own texts. The word “additor” would then refer to a person “who adds.” In reaction to this hypothesis, Levy upheld the explanation offered by Steinschneider, who interpreted “additor” in the light of Hagin le Juif’s colophon to *Rešit ḥokmah*, in which Ibn Ezra is called “master of help” (maître de aide), a pun on Ibn Ezra’s name that Ibn Ezra already had made himself.<sup>40</sup> In their colophons to *Rešit ḥokmah*, Henry Bate and Peter d’Abano translated this expression as “magister adiutorii.” According to Steinschneider’s and Levy’s hypothesis, copyists could then have mistaken *adiutor* for *additor*.

Neither of these theories seems correct to me. The phrase “Dicit Abraham additor” probably reflects an original Hebrew “Amar Avraham ha-meḥabber” (“Abraham, the writer [of this book], said”), a formula that Ibn Ezra sometimes used in his writings to introduce a personal opinion. Now an examination of the Latin works reveals that they contain variants of the word “additor,” all of which reflect the same Hebrew background, i.e., the root ḥ-b-r.<sup>41</sup> This peculiarity seems to have its origin in the French versions of Hagin le Juif. In general, Hagin used a single French equivalent for all derivatives of the root ḥ-b-r, even though they have many different meanings. Thus he translated both “addition” (*meḥubbar*) and “conjunction” (*maḥberet*) by

“ajousterment” or “a(d)jouste.” The *piel* form of the same root became “ajouster,” irrespective of whether, in the context, the verb in fact meant “to add” or “to write, compose.”<sup>42</sup> For instance, the sentence in *Moladot*, “the astrologers wrote (*ḥibberu*) many books on how to know the native’s profession,” is rendered by Hagin as “et les sages des signes ont adjouste asses de Livres por savoir le mestier au ne.”<sup>43</sup> In chapter seven of *Rešit ḥokmah* Ibn Ezra speaks directly to his readers: “And I, Abraham, the compiler (*ha-ma<sup>c</sup>atiq*) of this book,” which Hagin translated as “Et Abraham Even Azre *ajoustant* che Livre.”<sup>44</sup> According to my suggestion, then, the presence of the word *additor* attests both to the original’s having been in Hebrew and to the fact that the Latin translation was made from the Old French of Hagin. This conclusion confers additional credibility on the ascription of the works contained in manuscripts E and V to Abraham Ibn Ezra.

<sup>39</sup> At the same time, the two words seem to function as a kind of incipit to the final section of the book, which includes astrological judgments on hidden treasures and the whereabouts of a fugitive slave.

<sup>40</sup> Thorndike, “The Latin Translations,” 294; Levy, “A Note on the Latin Translators of Ibn Ezra,” *Isis* 37 (1947): 153–55, on p. 154; idem., *The Astrological Works*, p. 32; Steinschneider, “Abraham Ibn Ezra,” *GS* 1: 495: “... übersetzte ... auch den Namen ‘ibn Ezra’ in *maître de aide*, daraus wurde lateinisch *magister adiutorii* ... und *adjutor*, daraus ohne Zweifel wieder *additor* in einer Wiener HS.” Undoubtedly, he is referring here to V.

<sup>41</sup> See “Ego Abraham qui addo hunc librum” (E, f. 20a); “Et ego Abraham addens confiteor” (*Liber interrogacionum*; E, f. 20b), which suggests an original reading of אבני אברהם מודה.

<sup>42</sup> Listed in the glossary of Levy, *The Astrological Works*. See also “ajindre” for התחבר.

<sup>43</sup> MS Oxford, Bodleian Library, Opp. 707 [Neubauer 2025] [= O], f. 86b; F2, f. 93a.

<sup>44</sup> Henry Bate (and Peter d’Abano) chose the word “compiler” here, but also elsewhere for *ha-meḥabber*: L, f. 61b2.3 (*Te<sup>c</sup>amim* 1) and f. 24a2 (prologue to *Olam* 1).

## B. Hebraisms

Persuasive evidence of a Hebrew origin of the texts can be found in several curious Latin expressions that can be explained as calques from the Hebrew, which passed via the Old French version. A few examples may suffice.

From *Liber nativitatium*

1. *Et n(un)c appone cor tuu(m) cui pl(anet)e assim(i)lat(ur) n(atur)a sua; h(oc) est via c(ommun)is o(mn)ibus natis.* / Now, *put your heart on (the question)*, which planet his personality resembles—this is a general rule applicable to all the natives (E, f. 55a25–7).

*Comment:* The first few words (in italics) can easily be retranslated into Hebrew as “*we-<sup>c</sup>atta sim libbeka <sup>’</sup>el.*” Thus the Latin is a literal rendering of the idiom that actually means “to pay attention to, to consider.” It also seems that “*via communis*” ultimately goes back to “*derek kelal.*”

2. *Ita facies in v(er)bis asp(ect)uum* / Thus you must act in *words* related to the aspects (E, f. 68b26).

*Comment:* *Davar* in Hebrew means both “thing, matter” and “word”; here the translator clearly chose the wrong meaning. This translation error appears quite regularly, also, for instance, in the *Liber interrogacionum*.

3. *Na(m) ibi sc(ri)psi s(ecundum) q(uo)d c(on)cordave<rit> a(n)im(us) Antiq(uorum)* / For there I have written down what the *mind* of the Ancients agrees upon (E, f. 57b25–6).

*Comment:* *De<sup>c</sup>ab*, which must have been the original word here, can mean “mind,” but also “opinion” and “knowledge.” The translator again chose the wrong meaning. This peculiarity is quite frequent in the *Liber nativitatium*. Similarly, an opinion of an as-

trological authority is sometimes called “scientia” in the *Liber eleccionum*.

4. *Et s(im)i(l)ite)r si fu(er)it stella mala in domo quarta, accidet da(m)pn(um) p(er) manum pat(ri)s sui.* / Likewise, if a malefic is in the fourth place, harm will befall [the native] through *the hand of* his father (E, f. 63a15–6).

*Comment:* *Per manum* apparently mirrors *‘al yedei*, literally “by the hands of” but actually “through, by means of.” This translation error is common in the *Liber nativitatium*.

*Liber interrogacionum*

*Et no(n) iudices p(er) os testimonii unius.* / You must not judge *through the mouth of* one testimony (E, f. 21b2).

*Comment:* The words “per os” become understandable only when one realizes that *le-fi* ‘according to’ is literally “to the mouth of.”

By contrast, I could not identify any traces of Hebraisms in the *Liber revolucionum* and the *Excerpta*, with the possible exception of the slightly odd expression “*infirmas ponderosa*,” which may reflect *ḥoli kaved* ‘severe illness’.

## C. Date of composition

Lists of star positions are found scattered throughout astrological literature.<sup>45</sup> To produce such a list, an author as a rule copied the latitudes from his chosen source, but occasionally adapted the longitudes for a given year by applying a certain precession rate. The author of the *Liber*

<sup>45</sup> An example of a list with fatal stars can be found in Kušyār Ibn Labbān, *Al-Mudkhal fī Sinā‘at Ahkām al-Nujūm*, ed. and trans. Michio Yano (Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa, 1997), p. xxiv.

*nativitatum* lists the positions of the fatal stars at the beginning of 1149.<sup>46</sup> He gives their longitude, latitude, and the corresponding “mixed nature,” which, following *Tetrabiblos* I, 9, determines their astrological character similar to one planet or to the mixture of two. Now on several occasions Ibn Ezra mentions a specific year in connection with star positions; namely (1) the end of the description of each of the zodiacal signs in chapter two of *Rešit ḥokmah* (1147/8); (2) *‘Olam 1* (1148); and (3) the Hebrew treatises on the astrolabe, all of which are named *Keli haneḥšet* (1145/6 in the first two known versions and 1147/8 in the third version). If correctly interpreted, the date in the *Liber nativitatum* clearly lies within the same range. In this context it should be noted that manuscript E refers to “annis .1148. integris” = “1148 complete years.” Apparently, this year is expressed according to the Christian calendar. However, Ibn Ezra used the Jewish calendar (i.e., 4909) in his Hebrew writings. Moreover, in his version of *Rešit ḥokmah*, Hagin le Juif rendered Ibn Ezra’s only reference to 4908, found in the description of Aries in chapter two, as “...4908. (du creement d’Adam)”; the explanatory words were added by Hagin or someone else.

The *Liber revolucionum* contains an anniversary horoscope, in which reference is made to a particular year. In E (f. 72a) the relevant passage seems to read: “V(erbi) g(ratie)—Sit a(li)quis nat(us) in hora .12. diei sexte a(n)no .921. et sint t(ra)nsacti .25. a(n)ni nati.” In translation: “Example—If someone were born on the twelfth hour of the sixth day of the year 921, and 25 years have passed since (etc.)” If the date was transmitted correctly and is interpreted as a reference to the *Jewish* calendar, 921 would be 1160, and the passage of 25 years would bring us to 1185, which is after Ibn Ezra’s death. Of course nothing in the passage necessarily implies that the text was written in 1160 or 1185.

#### D. Cross-references

The *Liber nativitatum*, *Liber revolucionum*, *Liber eleccionum*, and *Liber interrogacionum* reveal a pattern of cross-references similar to

what we know from the corpus of Ibn Ezra’s Hebrew astrological treatises. The author of the *Liber nativitatum* refers to his *Liber primus de sensu* (E, ff. 58b13, 60b20, 63b25, 64a23, 68b2+28), a title that can be read as reflecting *Rešit ḥokmah*. He also promises to write a *Liber revolucionum* (56b17, 61a14, 68a26) and a *Verba iurium seculi* (53b4), which can be taken as a reference to *‘Olam*. The *Liber revolucionum* refers to the *Liber nativitatum* (69b26). The *Liber interrogacionum* contains references to the *Liber primus de sensu* (20a19, 22a20, 23a18, 25b1), the *Liber nativitatum* (22a10, 22b26), and a *Liber claritatum*, which reflects *Me’orot* (E, f. 26a8).<sup>47</sup> The author of the *Liber eleccionum*, finally, refers to his *Liber primus de sensu* (45a18) and *Liber nativitatum* (40a24) as completed works, while promising to write a *Liber iurium / iudiciorum seculi* (42a28, 42b1, 45a24) in the future. To complete the picture, the *Liber nativitatum* mentions a *Liber tabularum* (54b15, 57b23+25), a reference that also frequently turns up in Ibn Ezra’s Hebrew astrological works, mostly in the form of *Sefer ha-Luḥot*. This pattern of cross-references corroborates the attribution to Abraham Ibn Ezra.<sup>48</sup> By contrast, there are no cross-references in the *Excerpta*.

#### E. Structure and Doctrines

There is a very strong case to be made in favor of Ibn Ezra’s authorship of the *Libri nativitatum*, *revolucionum*, *eleccionum*, and

<sup>46</sup> Isti a(utem) s(un)t loci stella(rum) fixa(rum) q(ui) occidu(n)t et absco(n)dunt vita(m) et s(un)t loci eo(rum) a(n)nis .1148. integ(ri)s. E, f. 59a23.

<sup>47</sup> *Verba iurium seculi* is probably a corruption of דברי משפטי העולם. All book titles mentioned in this paragraph can be convincingly explained by reference to Hagin’s versions.

<sup>48</sup> Sela has devoted much attention to the interpretation of these cross-references; see *Abraham Ibn Ezra*, pp. 57–74.

*interrogacionum*, on the basis not only of their structure, but also of their close parallels with his other astrological writings. These parallels are too numerous to be detailed here. I hope to highlight them by publishing an edition and translation of the *Liber nativitatum*. What follows is a brief discussion of the overall structure and contents of the treatises in comparison with the rest of Ibn Ezra's astrological works. The four treatises, together with *Excerpta*, belong to the part of astrology known as "individual" (γενεθλιαλογικόν),<sup>49</sup> in distinction to general astrology (καθολικόν), according to Ptolemy's classic definitions in *Tetrabiblos* (especially II, 1). This part of astrology concentrates on the interpretation of an individual nativity or horoscope (*molad*). Horoscopes are devised with the aim of discovering clues about certain aspects of life. Each of the twelve places into which the horoscope is commonly divided is assumed to hold the key to a different set of these aspects of life.<sup>50</sup> The basic aspects associated with the twelve places can be summarized as follows: life—property—brothers and sisters—parents—children—health—marriage—death—travel—honors—friends—enemies. The more precise subject matter with which the places are usually linked varies to some extent from one branch of astrology to the other.

The *Liber nativitatum*, *Liber revolucionum*, and *Excerpta*

These works belong to the field of nativities. Like *Moladot* and the *Liber de nativitatibus* of 1154, the *Liber nativitatum* and *Excerpta* deal with the interpretation of natal horoscopes. The *Liber revolucionum*, similar to the second part of *Moladot*, which is known as *Tequfot ha-šanim* (= Revolutions of the years [of nativities]), concentrates on topics relevant for the casting of anniversary horoscopes. Ibn Ezra's works on anniversary horoscopes form a natural sequel to those on nativities, so it is sensible to treat the *Liber nativitatum* and *Liber revolucionum* together. As will become clear, the *Liber revolucionum* covers the same

combination of material as *Tequfot ha-šanim*, thus qualifying as a supplement to the *Liber nativitatum* (or indeed any other treatise on nativities by Ibn Ezra) in the same way as *Tequfot ha-šanim* complements the first part of *Moladot*. It may be added that in some manuscripts *Tequfot ha-šanim* appears as a separate treatise.

A treatise on nativities written by Ibn Ezra can be recognized above all by its introduction. Parallel to the *Liber de nativitatibus* and the first part of *Moladot*, the *Liber nativitatum* opens with a lengthy introduction to what forms a highly specialized field of astrology. The *Excerpta*, on the other hand, lacks an introduction altogether, probably because it is an abridgement. This renders it more difficult to identify the author of *Excerpta*, whereas Ibn Ezra's authorship of the *Liber nativitatum* is easier to establish.

As a rule, the introductions to Ibn Ezra's works on nativities extend to the first main section of the work, place one, covering most of its paragraphs, with only a few series of astrological judgments interspersed, and usually comprise about six standard topics of discussion. In what follows, E, O, and Venice 1485 refer respectively to the *Liber nativitatum* (E, ff. 53a–68b), *Moladot* (O, ff. 65b–90b), and the *Liber de nativitatibus* (Venice 1485, f. a2a–c4b).

1. The relation between general and individual astrology (E, ff. 53a–54a28, basically the first four of the ten *capitula*;<sup>51</sup> O, ff. 65b–66b3, eight *derakim* or ways;<sup>52</sup> absent in Venice 1485);

<sup>49</sup> Literally the word means "belonging to one's birth."

<sup>50</sup> A. Bouché-Leclerq, *L'astrologie grecque* (Paris, 1899; repr. Brussels: Culture et Civilisation, 1963), chapter nine.

<sup>51</sup> Namely: (1) region (*clima*) but also country/town (*patria*), (2) people (*gens*), (3) family (*descensus*), (4) country/town (*patria*): great conjunction.

<sup>52</sup> Namely: (1) people (*'am*), (2) region (*gevul*), (3+4) town (*medinah*): great conjunction and revolution of the year of the world, (5) family (*mišpaḥah*), (6) king (i.e., his

2. Determination of the ascending degree: astrolabe and “balances” (E, ff. 54b23–55a17;<sup>53</sup> O, ff. 66b3–68b9; Venice 1485, f. a2a1–b25);
3. Determination of the strongest planet of the horoscope from the “five places of life” (E, f. 58b5–12, place one, definition of five places only; O, f. 69a2–14, place one; Venice 1485, f. a5a37–b24, place one);
4. First four years of life: doctrines about “testimony” (E, ff. 56b22–57b12; O, ff. 69b5–70a16; Venice 1485, f. a4a4–a5a37, place one);
5. Length of life (E, ff. 58a14–59b20, place one; O, ff. 71a3–74a14, end of place one; Venice 1485, ff. a7a20–a8a, end of place one);
6. Determination of the twelve cusps of the horoscope (E, ff. 57b21–58a13, beginning of place one; absent in O; Venice 1485, ff. a3a33–a4a2).<sup>54</sup>

After the introduction, Ibn Ezra’s treatises on nativities continue with the twelve main sections of the book, in which a number of astrological judgments (*mišpaṭim* in Hebrew, *iudicia* in Latin) are recorded for each place (H. *bayit*, L. *domus*) of the horoscope. According to Ibn Ezra’s works, the basic aspects associated with the twelve places can be further refined as follows:

- Place one: Physical appearance—Character—Wisdom—Length of life
- Place two: Property and wealth
- Place three: Brothers and sisters—Faith
- Place four: Parents (life of the father)—Outcome of a situation, event, etc.—Hidden treasures
- Place five: Children
- Place six: Illnesses and injuries—Slaves
- Place seven: Marriage—Sex—Wars—Associates
- Place eight: Death—Inheritance
- Place nine: Travel (long journeys)—Faith—Dreams—Sciences
- Place ten: Honors—Profession—Life of the mother
- Place eleven: Success—Popularity—Friends

Place twelve: Imprisonment and captivity—Enemies and quarrels—Animals for riding on

These topics return in the form of astrological judgments in all Ibn Ezra’s treatises on nativities.<sup>55</sup>

In the *Liber revolucionum* and the second part of *Moladot, Tequfot ha-šanim* (which can, in fact, be considered as a treatise within a treatise), Ibn Ezra discusses anniversary horoscopes. The astrological genre at which these book titles hint, and in which he also wrote the closing parts of *Te’amim* 2,<sup>56</sup> is known as the revolutions of the years of nativities. The classic manual on the subject is the fourth book of Dorotheos’ *Pentabiblos*;<sup>57</sup> later there were various *kutub taḥāwīl sinī ’l-mawāhid* (Books of the revolutions of the years of nativities). In general, the genre was widespread in Arabic astrological literature, where the revolutions of the years were studied in terms of both general and individual astrology.

Anniversary horoscopes are drawn up at the moment when the sun enters the same degree of the zodiac that it occupied at the time of birth, for comparison with the horoscope at the birth or base-nativity, known

decisions), (7) the weather (*ha-toledet*; Sela: “natural power”), (8) the wise soul (*nešamah ḥakamah*) and piety.

<sup>53</sup> The text is somewhat messy, as this discussion appears at the end of *capitulum* five before the other chapters, which deal with more general astrological lore.

<sup>54</sup> For a discussion of the difficult doctrines involved in these introductions see Smithuis, “Abraham Ibn Ezra,” chapter 1.5.3.

<sup>55</sup> For a detailed comparative table see Smithuis, “Abraham Ibn Ezra,” Appendix 6.

<sup>56</sup> O, ff. 108b–109b14, where the section is entitled *ha-tequfah*, referring to the revolution of the years of nativities, and ff. 111a23–113a.

<sup>57</sup> David Pingree, *Dorothei Sidonii Carmen astrologicum interpretationem anglicam versam una cum Dorothei fragmentis et graecis et latinis* (Leipzig: Teubner, 1976). He calls this genre “progressive genethliological astrology.”

in Arabic as the *ʿaṣl al-mīlād* or *ʿaṣl al-mawlid*.<sup>58</sup> Central themes shared by the *Liber revolucionum* and *Tequfot* include the exact length of the tropical year (a recurrent theme in Ibn Ezra’s writings) and the technical question of how to compute the ascending degree after one tropical year (or a multiple of this) has passed since the base-nativity. Later in *Tequfot*, Ibn Ezra draws attention to monthly and daily horoscopes, leaving out weekly horoscopes (O, ff. 90ii<sup>b</sup>14–iii<sup>a</sup>20). All three kinds of progressive horoscopes occur in the *Liber revolucionum* (E, ff. 71b23–72b) as well as in *Ṭe<sup>c</sup>amim* 2.<sup>59</sup> Ibn Ezra’s technical expositions of the revolutions of the years are exceedingly difficult to understand.

#### The *Liber eleccionum*

Elections (H. *miṣḥarim*) are astrological judgments that advise an individual on the best moment to start an activity. They belong to the field of catarchic astrology, a term derived from the Greek *καταρχή* (commencement). In Arabic astrological literature, *καταρχαί* were known as either *ibtidāʿāt* (commencements) or *ikhtiyārāt* (choices). The introductions to the *Liber eleccionum* and both redactions of *Miṣḥarim* are similar to one other. In Ibn Ezra’s works the actual elections, ranging from astrological advice on how to secure male offspring and make a dinner party a success to recommendations for travelling safely on the open sea or when to wage a war, relate to the following topics:

- Place one: Taking medicine and bloodletting—Studying—Taking a bath
- Place two: Buying something—Lending money
- Place three: Going on a short trip—Studying the law
- Place four: Buying land—Erecting a building—Laying the foundation for some edifice—Doing something secret—Searching for buried treasure
- Royal horoscopes: Founding a town—Building a wall around an existing town

- Place five: Begetting a child—Preparing a feast—Wearing new clothes—Weaning—Taking a bath
- Place six: Buying a slave—Buying an animal
- Place seven: Waging war—Marrying—Choosing associates
- Place eight: Fleeing—Demanding money from an inheritance—Finding a lost object (?)
- Place nine: Trading—Meeting people—Learning—Travelling
- Place ten: Visiting a powerful person to ask for a favor—Enthroning a king—Entering a profession
- Place eleven: Winning someone’s affection—(Trading)—Going to court
- Place twelve: Buying an animal

The *Liber eleccionum* includes a passage on the computation of the moments of conception and birth and the duration of the pregnancy as part of place five, after an election for begetting a child. This is the kind of material Ibn Ezra usually includes in the introductions to his treatises on nativities because of its relevance to the discussion on “balances” (item 2 in the list on p. 00 above). In the same book, the discussion of place six is noteworthy in that it consists of a lengthy exposition of the twenty-eight mansions of the moon with the respective actions that are believed to be particularly suitable whenever the sun is located in this

<sup>58</sup> An Arabic example of a text on anniversary horoscopes is the *Kitāb al-Mawālīd* of the Persian astrologer Al-Andarzaghār. See *Zādānfarrūkh al-Andarzaghār on Anniversary Horoscopes*, ed. and trans. by Charles Burnett and Ahmed Al-Hamdi (Frankfurt a.M.: Institut für Geschichte der Arabisch-Islamischen Wissenschaften, 1991/92). See also: L. P. Elwell-Sutton, *The Horoscope of Asadullāh Mīrzā: A Specimen of Nineteenth-Century Persian Astrology* (Leiden: E. J. Brill, 1977), p. 60 (aṣl): “radical position of a planet as at the nativity”; Sela, *Abraham Ibn Ezra*, pp. 180–81.

<sup>59</sup> See further Smithuis, “Abraham Ibn Ezra,” pp. 93–95.

mansion. The *locus classicus* for this alternative type of elections, in which the twelve places of the horoscope no longer constitute the dominant system of reference, is a chapter of the seventh book of ʿAlī ibn abī al-Rijāl’s *Kitāb al-Bārīʿ fī aḥkām al-nujūm* (The outstanding book on astrological judgments).<sup>60</sup>

#### The *Liber interrogacionum*

In the curious technique of interrogations (H. *šeʿelot*), the astrologer casts a horoscope during a moment of intense self-examination or during a consultation by a client in order to find an answer to a well-defined question or set of questions. The idea sometimes encountered that the astrological genres of elections and interrogations are basically the same<sup>61</sup> may be due, in part, to the absence of a clear-cut distinction between the two genres in *Fī ʿl-masāʿil* (On interrogations), the influential fifth book of Dorotheos of Sidon’s *Pentabiblos*, which later became fully integrated into Arabic catarchic astrology. Some confusion may have arisen also because elections and interrogations were common kinds of astrological examination to which people had recourse in everyday life. The two kinds of astrological judgements existed side by side and were to some extent interchangeable. People often used the method of interrogations when they wanted news about a third person, information that cannot be obtained via the method of elections, where the horoscope applies only to the individual for whom it is cast. An interrogation may concern the fate of a missing or absent person or lead to information about the approximate whereabouts of a fugitive slave, lost property, and hidden treasures.

Being rather different from elections, the technique of interrogations requires some theoretical backing of its own, which is exactly what Ibn Ezra tries to provide, in a number of ways, in his introduction to the *Liber interrogacionum* and his two other redactions of *Šeʿelot*. These introductions, which can be read in close conjunction with each other, include a number of striking parallels.<sup>62</sup> In the *Liber interrogacionum* as

well as in *Šeʿelot 1* and *2* the astrological judgments are grouped following the system of the twelve places.<sup>63</sup> Both the *Liber interrogacionum* (E, ff. 29a13–30a) and *Šeʿelot 2* add a number of final paragraphs after this discussion of the twelve places. Characteristic of both works is that these concluding sections combine a general exposition of different aspects of the method of interrogations with additional astrological judgments, which are thematically grouped around, respectively, (1) the finding of hidden objects (E, f. 29b1–17) and fugitive slaves (E, f. 30a) and (2) wives/marriage (relevant to place seven), the location of stolen goods (places seven and eight), and treasures (P, ff. 7a–8a).

#### F. Transliteration of Foreign Terms

Arabic astrological writings and their Latin descendants abound with transliterated technical terms deriving from Greek, Persian, or Sanskrit.<sup>64</sup> Ibn Ezra, by contrast, generally avoided transliterations from other languages and used Hebrew scientific terms that he had coined

<sup>60</sup> It may be noted that similar material ascribed to Dorotheos and the Indians occurs at the end of part four on elections of (Pseudo-?) John of Seville’s *Liber quadripartitus*. See n. 37 above and the Hebrew fragment preserved in MS Cambridge, University Library, Add. 1186, ff. 80a–82b. For more information on Ibn Ezra’s books on elections see Smithuis, “Abraham Ibn Ezra,” chapter 1.5.4 and Appendix 6.

<sup>61</sup> E.g., S. J. Tester, *A History of Western Astrology* (Woodbridge, Suffolk and Wolfeboro, New Hampshire: Boydell, 1987), pp. 88 ff.

<sup>62</sup> See Smithuis, “Abraham Ibn Ezra,” pp. 101–108.

<sup>63</sup> The questions concerned are listed in an extensive comparative table in *ibid.*, Appendix 6.

<sup>64</sup> See, for instance, Paul Kunitzsch, *Mittelalterliche astronomisch-astrologische Glossare mit arabischen Fachausdrücken* (Munich: Verlag der Bayerischen Akademie der Wissenschaften, 1977).

himself.<sup>65</sup> Leaving aside transliterated star names (which appear occasionally alongside newly coined Hebrew names), there are only four transliterations of technical terms in Ibn Ezra’s Hebrew astrological works. This selective use of transliteration makes it possible for us to recognize astrological texts from his pen, both in Hebrew and in Latin. The transliterated terms are: (1) In several of his astrological treatises Ibn Ezra mentions the Arabic *al-fardār*, a technical term that derives from a Pahlavī transliteration of the Greek *periodos*, denoting a cycle of seventy-five years in both individual and general astrology (only in rare instances did he render it as *heleq* ‘part’).<sup>66</sup> (2–3) He replaced the common but difficult terms *hīlāj* and *kadkhudāh*, which in the field of nativities are of special relevance to the determination of the length of life of individuals, with new standard expressions (*meqomot ha-ḥayyim* and *ha-šalliṭ* (<sup>ʿ</sup>*al ha-nolad / ha-molad*), i.e., “the ruler/lord” (“of the horoscope”), with variants,<sup>67</sup> but often not until he had first briefly introduced them in transliteration to his reader. The latter happens in the introduction to *Moladot* but also in *Teʿamim* 2.<sup>68</sup> (4) When evaluating various techniques for the determination of the ascending degree at the time of birth, in the introductions to his treatises on nativities Ibn Ezra usually explains his own term *moznayim* ‘balance’ (*trutina*) as a translation of the Persian word *namūdār*, which can be understood as rectification.<sup>69</sup>

While the *Excerpta* unfortunately lacks an introduction in which the terms *hīlāj*, *kadkhudāh*, and *namūdār* could have appeared, the first two are nevertheless briefly mentioned in the discussion related to place one, where they are accompanied by the information that Ibn Ezra usually provides on such occasions. None of the four transliterated terms occurs in the *Liber nativitatum*. This can be explained as due to the relative brevity of his discussion of the determination of the length of life (E, f. 58b5–12), which did not give Ibn Ezra an occasion to use *hīlāj* or *kadkhudāh*.<sup>70</sup> The Latin translator of the *Liber nativitatum* was obviously at a loss when he encountered the word “balances” in his

French *Vorlage*, for this is how he decided to translate, or rather *not* to translate, part of the passage in front of him:

Et inhibeo t(ibi) ne decipiaris in accipiendo gr(adus) ascen(-  
dentem) *es bala(n)ces* <Pt>ho(lomeus) v(e)l *es balances* sapi-  
entu(m) P(er)sie, c(om) *ilia esc(ri)t jour eus e(st) bala(n)ces (...)*  
*mo(n)ter de ?me(n)t ensemble.* (f. 54b)

Ibn Ezra thus seems to have refrained here from mentioning the originally Persian term *namūdār* to supplement the new and unusual term. In the tenth *capitulum* of his introduction to the same treatise (ff. 56b–57a), finally, he dealt with the theory of *al-fardār* without feeling the need to use the term in transcription or a Hebrew equivalent. On the other hand, “alpardar” occurs twice in the *Liber revolucionum*. No other transliterations of technical terms common in medieval astrological literature are to be found in any of the four Latin works under discussion.

<sup>65</sup> Sela, *Abraham Ibn Ezra*, pp. 93–143.

<sup>66</sup> Abū Maʿshar, *Kitāb al-Milal wa al-Duwal* (or: *Kitāb al-Qirānāt*), Arabic original and Latin versions ed. and trans. by K. Yamamoto and C. Burnett, 2 vols. (Leiden: Brill, 2000), 1: 592.

<sup>67</sup> See Smithuis, “Abraham Ibn Ezra,” pp. 89–91.

<sup>68</sup> MS Oxford BL Opp. 707 [Neubauer 2025] = O, f. 108a9.

<sup>69</sup> See O, ff. 66b3–68b9; Venice 1485, a2a1–a2b25; cf. *Liber nativitatum* E, ff. 54b23–55a17. Definitions of the various technical terms can be found in Elwell-Sutton, *The Horoscope*, pp. 63–65 (*hīlāj*), 82 (*mustauli*), 83 (*namūdār*). For Ibn Ezra’s use of the term *moznayim* see also Gad B. Sarfatti, *Mathematical Terminology in Hebrew Scientific Literature of the Middle Ages* (Hebrew) (Jerusalem: Magnes Press, 1968), §186.

<sup>70</sup> The terms “signator” and “prepositus,” on the other hand, mentioned in the same discussion, do reflect the notion of “ruler” or “lord of the horoscope.”

### G. Mention of Authorities

Arabic astrological literature often quotes sayings or opinions attributed to a certain scholarly circle or individual from the past, notably Ptolemy, Dorotheos of Sidon, and the fictitious Hermes. In Ibn Ezra's Hebrew astrological writings these authorities are also quoted often, but Hermes, who is very frequently mentioned, is replaced by *Ḥanok* (Enoch).<sup>71</sup> The four Latin treatises show the same general pattern of quoting authorities as do Ibn Ezra's Hebrew works, and in particular use the latinized form of *Ḥanok*, Enoc(h).<sup>72</sup> References to astrological authorities are absent from the *Excerpta*, however.

All the above considerations allow us to conclude, I think, that there is abundant evidence in favor of Ibn Ezra's authorship of the *Libri nativitatum, revolucionum, eleccionum, and interrogacionum*. The *Excerpta* remains a maverick: we can be truly certain only that this is probably a Latin version of a lost Hebrew original, which is attributed to a certain Abraham. Like all other Latin translations, these versions of Ibn Ezra's works were made from the Old French versions of Hagin le Juif. The fact that no corresponding versions in French are known today is not a counter-argument, for, as I argued, many of Hagin's translations have been lost.

### Conclusion

The astrological works of Abraham Ibn Ezra, who was known to Christian scholars of the Middle Ages and Renaissance mainly as an astrologer, are preserved in a remarkable number of Latin translations. I suggested that the number of French translations, made by Hagin le Juif in the thirteenth century, was also considerable, and that in fact all Latin translations derive from them. I have reported here the discovery of four Latin astrological works, which I argued should also be ascribed to

Ibn Ezra: the *Liber nativitatum, Liber revolucionum, Liber eleccionum, and Liber interrogacionum*. I also argued that Ibn Ezra composed these treatises in Hebrew and that they were subsequently translated into Latin via an intermediary in Old French. The existence of these newly discovered works should not come as a surprise: Ibn Ezra worked for different local audiences and patrons and wrote and rewrote the same basic treatises a number of times during his life, sometimes in Hebrew and sometimes in Latin: this is why we have multiple redactions of his works. In the present case, however, we are dealing with more than newly identified redactions. Although in these four works Ibn Ezra covered the same ground as in other works and naturally repeated in part what he said there, I think that these Latin texts differ sufficiently to warrant being referred to as *separate works* rather than as additional redactions of known works. In this sense it can be said that we now have in Hebrew two detailed treatments of nativities—*Moladot* and the *Liber nativitatum*. These four works are thus an important addition to Ibn Ezra's known astrological corpus. It should be noted in passing that these are very literal translations that, even more than the other Latin versions, must have left their readers perplexed.

The newly identified treatises invite us to revise the traditional view that Ibn Ezra composed two Hebrew astrological encyclopedias during his lifetime: one in Italy, around 1146, and another in southern France around 1148.<sup>73</sup> Shlomo Sela holds a slightly different view. He argues

<sup>71</sup> That Ibn Ezra equated these two names is well-known. See Sela, *Abraham Ibn Ezra*, pp. 33, 184–85.

<sup>72</sup> For a full index of sources as referred to in Ibn Ezra's astrological works, see Smithuis, "Abraham Ibn Ezra," Appendix 2.

<sup>73</sup> Steinschneider, "Abraham Ibn Ezra," *GS* 1: 495; Levy-Cantera, *Beginning of Wisdom*, pp. 13–14; Hermann Greive, *Studien zum jüdischen Neuplatonismus: die Religionsphilosophie des Abraham Ibn Ezra* (Berlin and New York: Walter de Gruyter, 1973),

that Ibn Ezra first composed a series of seven compositions (*Rešit ḥokmah*, the first redactions of *Te'amim*, *Moladot*, *Mivḥarim*, *Še'elot*, *Me'orot*, and *‘Olam*) in Béziers in 1148, and later wrote, still in France but after 1148, a second one (including *Mišpeṭei ha-mazzalot* and the second redactions of *Te'amim*, *Moladot*,<sup>74</sup> *Mivḥarim*, *Še'elot*, *Me'orot*,<sup>75</sup> and *‘Olam*).<sup>76</sup> Thus he, too, ascribes two Hebrew encyclopedias to Ibn Ezra, one composed in 1148 and the other after that date.<sup>77</sup> These views must probably be modified. In view of the new findings reported here we now have, in Hebrew, *one* treatise on medical astrology; *two* introductions, commentaries, and treatises on nativities and on general astrology; and *three* treatises on both elections and interrogations. Given the systematic character of Ibn Ezra's writing (especially the cross-references), it is tempting to assume that there originally existed at least *three* Hebrew encyclopedias.

The following, hypothetical reconstruction of the dates and places of composition can now be proposed. There can be little doubt that Ibn Ezra composed a first Hebrew encyclopedia in Italy before 1148: this seems plausible in view of the length and productivity of his sojourn there (1140–48). The next Hebrew encyclopedia he wrote in Southern France, and it contained at least *Rešit ḥokmah*, *Te'amim 1*, and *‘Olam 1*. The third encyclopedia he may have written in Angevin France or perhaps in England.<sup>78</sup> A (very) small indication to this effect may be the local latitude mentioned in *Mišpeṭei ha-mazzalot*.<sup>79</sup>

p. 43 (plus references); Y. Tzvi Langermann, "Science in the Jewish Communities of the Iberian Peninsula," in his *The Jews and the Sciences in the Middle Ages* (Aldershot: Ashgate, Variorum, 1999), pp. 16 and 40. Cf., however, Sela, *Abraham Ibn Ezra*, p. 58. The date of 1146 is approximate (see Smithuis, "Abraham Ibn Ezra," pp. 149–53). A rare example of a concrete attempt to reconstruct an early date for one of the treatises is provided by Ibn Ezra's biographer, Judah L. Fleischer, "Sefer ha-‘Olam le-Rabbenu Avraham ibn Ezra," *Ošar ha-Ḥayyim* 13 (1937): 33–49, where he dates *‘Olam 2* to after 1145 and locates its writing in a north-Italian city.

<sup>74</sup> The treatise Sela is referring to here is the *Liber de nativitatibus*, written in 1154, assuming that it is a translation of a Hebrew original. See, however, my remarks above.

<sup>75</sup> He assumes this particular version to be lost, since only one version of *Me'orot* has so far been identified among the Hebrew manuscripts.

<sup>76</sup> He has abandoned his initial hypothesis that *Mišpeṭei ha-mazzalot* was the first astrological treatise Ibn Ezra wrote, that is, in Lucca in 1146. See Sela, *Abraham Ibn Ezra*, pp. 79–80.

<sup>77</sup> Ibid.

<sup>78</sup> See also Smithuis, "Science in Normandy."

<sup>79</sup> See Shlomo Sela and Gad Freudenthal, "Abraham Ibn Ezra's Non-Poetic Writings: A Chronological Listing," in this issue of *Aleph* (especially with regard to the dating of *Te'amim 2*).

## Appendix A: Table of Incipits and Explicits

Most of Ibn Ezra's astrological treatises remain in manuscript. Notable exceptions are (1) the edition of *Rešit ḥokmah* by Levy and Cantera [= L/C], who accompanied it with an inadequate English translation; (2) the uncritical edition of *‘Olam 1* by Judah L. Fleischer. Several other treatises were published by M. Baqāl (Jerusalem, 1971; 1980).<sup>80</sup> Short references to manuscripts not yet cited in this article are B (= MS Berlin, Staatsbibliothek 220 [Or. Qu. 679]), C (MS Cambridge, University Library, Add. 1517), M (MS München, Bayerische Staatsbibliothek, Cod. Hebr. 202), and P (MS Paris, BnF, héb. 1058). A few simple transcription rules have been observed. Letters between brackets represent:

- ( ) letters not found in the original text due to abbreviations
- < > altered letters in case of obvious spelling, grammatical, or similar errors by the printer or copyist
- [ ] reconstructions of lost or illegible letters; blank space between square brackets denotes a lacuna in the original text

The “i” has been changed into “j” at the beginning of each French syllable or word. My distinction into “first” and “second” versions follows the standard set by Sela. Incidentally, Ptolemy is rendered in these texts as בטלמיס (all the first versions) and the rabbinic תלמי (all the second versions).

## I. Treatises extant in Hebrew and their French and Latin Versions

INCIPIIT	EXPLICIT
<p>1. <i>Rešit ḥokmah</i> A. Hebrew original (1148):</p> <p>ראשית חכמה יראת יי' כי היא המוסד כי כאשר לא יתור אדם אחר-י' עיניו ולבו למלאת תאוותו אז תנוח החכמה בקרבו ועוד שיראת ה"ש תשמרנו מחקת שמים ומשטרים כל ימי חייו ובהפרד נשמתו מגוייתו תנחילנו יש וחי לעולם</p> <p>(L/C, p. v)</p>	<p>1. <i>Rešit ḥokmah</i> A. Hebrew original (1148):</p> <p>ויש עוד נהוג אחר-במולד האדם ובתקופת שנת העולם והוא שתנהג מן המעלה הצומחת אל גוף כוכב או מבט אורו אל מול ידוע או אל מעלה ידוע-ה' לכל שנה מעלה אחת וניהוג הגורלות הפך המזלות כאשר הזכיר בטלמיס בספר הפרי</p> <p>(L/C, p. lxxvi)</p>
<p>B. Hagin, <i>Li Livres du Commencement de sapience</i> (1273):</p> <p>Comenchal de sapience, c'est cremeur de Dieu; et c'est li chasti car, quant un home ne cherche après ses ieus ne après son cuer por acomplir son desir, adonc se repose le sens dedens li ; et encore la cremeur de Dieu le garde des coustumes des cieus et de leur destine trestous les jors de sa vie, et quant departira l'ame de son cors il la fera heriter vie de siecle. (L/C, p. 31)</p>	<p>B. Hagin, <i>Li Livres du Commencement de sapience</i> (1273):</p> <p>Et meinemens autres est encore en la nativité de l'ome et es revolucions d'ennée du siecle; et c'est que tu dois mener du gré l'ascendent a cors d'estoile ou au regart de sa clarté a signe seu ou a degré seu chascun an .1. degré. Et le meinement des sors et le rebours des signes est com a ramenteu Bertelmieu ou <i>Livre</i> du fruit. (L/C, p. 125)</p>

<sup>80</sup> Levy-Cantera, *Beginning of Wisdom*; Fleischer, “Sefer ha-‘Olam”; Sela, *Abraham Ibn Ezra* and Greive (*Studien*) mention additional uncritical editions.

<p>C. Henry Bate, <i>Introductorius ad astronomiam</i> (1292):</p> <p>Inicium sapientie timor d(o)m(ini), hui(us) au(t) v(er)bi seu dicti s(en)s(us) hic e(st) q(uod) du(m) homo n(ec) post oc(u)l(o)s suos ne(que) post cor suum ite ?stud(ere) seu evagari ad c(on)cupiscencias suas p(er)ficiendas t(un)c in ip(s)o quiescit i(n) (...) ad (...) timor Dei p(re)s(er)vat ip(su)m a c(on)suetis celo(rum) legib(us) seu ordinac(i)o(n)ib(us) et fatis eo(rum) cunctis diebus vite sue et cum a corp(or)e sep(ar)ata fu(er)it anima f(a)cit eam inhabitare vitam s(e)c(u)lo(rum). (L, f. 2a)</p>	<p>C. Henry Bate, <i>Introductorius ad astronomiam</i> (1292):</p> <p>Postremo e(st) ad huc alia directio i(n) nati(vitatibus) hom(?inis) ac revoluc(i)o(n)ib(us) anno(rum) mu(n)di et e(st) q(uod) tu di(ri)g(er)e debes g(ra)du(m) asce(nden)te(m) ad corp(or)a stella(rum) a(ut) ad aspectus radio(rum) a signo scito ac a g(ra)du scito quolibet anno .1. g(radus). Directio v(er)o sorciu(m) s(ecundu)m c(ontra)riu(m) signo(rum) ita e(st) ut c(om)memorat Ptolome(us) in <i>Libro Fructus .i. Ce(n)tiloq(u)ii</i>. (L, f. 23a–b)</p>
<p>D. Peter d'Abano, <i>Introductorium qui dicitur Principium Sapientie</i> (1293):</p> <p>Cum initium sapientie Dei timor existat, h(oc) utique virtus et sapere deprehendit(ur) quando ho(mo) non suorum oculo(rum) ductu cordisq(ue) i(m)petu sua illicita adimpleat desideria s(unt) magis seipso retrahe(n)s compellitur. Tunc na(m)q(ue) Dei timor ipsum ab illo(rum) imp(re)ssionibus fatoq(ue) illesum usq(ue) ad sue vite terminu(m) c(on)servabit a Deo q(ui) ipsius animam post a corpore separationem vite futuri seculi heredem instituet. (Venice 1507, 2a1)</p>	<p>D. Peter d'Abano, <i>Introductorium qui dicitur Principium Sapientie</i> (1293):</p> <p>Su(n)t et alie adhuc ductiones in nat(ivitate) hominis et in revolutionibus annorum mundi, h(oc) autem est q(uo)d dirigere debet a gradu ascende(n)tis ad corpus stelle, aut ad eius luminis aspectum ad signu(m) notum, vel ad gradum cognitum omni anno uno gra(dus). Directio vero partium est in oppositum signorum, ut dixit in <i>Libro Fructuum</i> Ptol(emeus). (Venice 1507, 31b1)</p>

<p>2. <i>Ṭe'amim</i> 1 A. Hebrew original (1148):</p> <p>השער הראשון חלקו הגלגל לשלש מאות וששים מעלות בעבור שלא מצאו חשבון פחות ממנו שיש לו כל השברים חוץ מהשביעית על כן אם תערוך זה המספר על שבעה או תמצא החשבון שיש לו כל השברים והוא אלפים וחמש מאות ועשרים (M, f. 52a)</p>	<p>2. <i>Ṭe'amim</i> 1 A. Hebrew original (1148):</p> <p>וזה יקרה בעבור מהירות הליכת שני עליונים או המתנתם ועוד אפרש זה &lt;ב&gt;ספר העולם אם עורני<sup>81</sup> אלהי עולם (M, f. 67a)</p>
<p>B. Henry Bate, <i>Liber rationum</i> (1292):</p> <p>Circulus .360. p(ar)tes h(abet) eo quod no(n) invenerunt nume(rum) minore(m) ip(s)o tot habente fractiones unde si n(umer)um hu(n)c p(er) septem m(u)ltiplicav(er)is invenies n(umer)um om(ni)s habe(n)te(m) fractiones et est .2520. (L, f. 60b)</p>	<p>B. Henry Bate, <i>Liber rationum</i> (1292):</p> <p>Et hoc utiq(ue) co(n)tingit p(ro)p(ter) velocitate(m) mot(us) duo(rum) sup(er)io(rum) aut p(ro)p(ter) eo(rum) tarditate(m). Hoc (i)g(itur) adhuc explanabo tibi in <i>Libro Seculi</i> sive <i>Revoluc(i)onu(m) M(u)ndi</i> p(er) adiutoriu(m) [scratched out: mundi] Dei seculo(rum). (L., f. 73 a-b)</p>
<p>3. <i>Mišpeṭe ha-mazzalot</i> A. Hebrew original:</p> <p>הגלגל הגדול הנכבד ששם צבאות השם הנכבד הוא הנקרא שמי השמים כי למטה ממנו גלגלי הוי המשרתים ובאמצע זה &lt;ה&gt;גלגל<sup>82</sup> שנים עשר מזלות כי חכמי קדם חלקו כל הגלגל על מ"ח צורות מהם שמאליים לקו המזלות והם ב"א והדרומיים ט"ו צורות (O, f. 48b)</p>	<p>3. <i>Mišpeṭe ha-mazzalot</i> A. Hebrew original:</p> <p>ועל זה הדרך תחלת הבית השני רק יש לך לשמור קשת השענה של הנכבד וככה תחלת הג' (etc.) אם תרצה לדעת הניהווגים בקירוב קח מצעדי המבוקש וראה כמה יחסר בינו לבין &lt;ה&gt;גלגל וככה תוסיף על מצעדי מעלת אותו שנהגת אליו וכמו המעלות ככה הם שני&gt;ים אם תרצה לחלק (O, f. 65a)</p>

<sup>81</sup> Elsewhere: בעורת.

<sup>82</sup> C and M2: באפודת הגלגל.

<p>B. Henry Bate, <i>Liber introductorius ad iudicia astrologie</i> (1292):</p> <p>Spera maior honorabilis in qua totus est exe(r)cit(us) Dei gl(ori)osi et s(u)blimis celu(m) celo(rum) notata est, ab illa quidem inf(er)ius spere s(un)t septe(m) planeta(rum). Duodecim v(er)o sig(ni) in cingulo sp(er)e s(un)t quam et Antiq(ui) sapientes partiti s(un)t in .48. ymagines. Qua(rum) .21. septe(n)t(ri)onaes s(un)t a linea signo(rum) .15. v(er)o meridionales. (L, f. 37a2)</p>	<p>B. Henry Bate, <i>Liber introductorius ad iudicia astrologie</i> (1292):</p> <p>S(e)c(un)d(u)m hanc ergo viam accipiendu(m) est p(ri)ncipiu(m) dom(us) secu(n)de, n(isi) q(uod) tu co(n)sid(er)are debes arcu(m) oppositu(m). Et c(on)si(mi)l(ite)r est d(e) p(ri)nc(í)pio t(er)tie dom(us).<sup>83</sup> (L, f. 48a1.43ff.)</p> <p><u>Earlier:</u></p> <p>Porro si directio(n)es scire volu(er)is s(ecundum) p(ro)pinq(ui)tate(m) accipe in tabula regionis asce(n)c(i)one(s) g(ra)dus q(ue)siti et vide q(ua)nta e(st) dimi(n)u(i)o int(er) ip(s)as et ascenc(i)ones sp(er)e recte et p(ar)tiar(es) eam atq(ue) sic addes sup(er) asce(n)c(i)ones g(ra)dus q(ua)m dirig(er)e volebas et s(e)c(un)d(u)m quod fu(er)int g(ra)d(us) sic et ille .2. et c(etera). In eq(ua)ndis a(utem) domib(us) sic facies (etc.) (L, f. 48a1.18ff.)</p>
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<p>C. Anonymous translation of <i>De iudiciis signorum</i>:</p> <p>[Beginning is lacking:]</p> <p>Pri(n)cipia domo(rum) p(os)s(un)t esse q(ui)lib(et) p(unc)t(us) c(ir)culi signo(rum), sive de die, sive de nocte et p(ar)it(er) c(ir)culus signo(rum) sup(er) .4. p(unc)ta, un(us) e(st) g(ra)dus ascendens q(ui) g(radus) sit ille et cui(us)q(ue) signi in p(ar)te orie(n)tis et vocat(ur) cavilla p(ri)ma.<sup>84</sup> (E, f. 5a)</p>	<p>C. Anonymous translation of <i>De iudiciis signorum</i>:</p> <p>Et sup(er) illa(m) viam p(ri)ncipiu(m) dom(us) se(cunde), nisi q(uo)d o(portet) te respic(er)e g(radum) opp(osition)is et ita fu(er)it p(rincipiu)m tertie que h(ab)et magn(um) nom(en).<sup>85</sup> (19b6–8)</p> <p><u>Earlier:</u></p> <p>Si vis scire p(ri)ncipia in ap(pro)pi(n)uac(i)one, accipe ascenc(i)ones q(ue)siti et vide quanta minuetur int(er) ip(sum) et c(ir)culu(m), si ip(sum) velis p(ar)tire et ita acc(re)scas sup(er) asce(n)c(i)ones g(ra)du(m) illo(rum) q(uo)s duxisti ad illu(m) et sic(ut) er(it) g(radus), ita illa .2. et sic ult(er)ius. (E, f. 19a20–24)</p>
<p>4. <i>Ṭe'amim 2</i></p> <p>A. Hebrew original:</p> <p>הנה הואלתי לשום מוסד לספר ראשית חכמה ואמנם ידעתי כי כל נוצר ילאה לעמוד בסוד השם הנכבד והנורא כדברי אגור ולא למדתי חכמה ודעת קדושים אדע שהם המלאכים</p> <p>(O, f. 91b)</p>	<p>4. <i>Ṭe'amim 2</i></p> <p>A. Hebrew original:</p> <p>גם הקדמונים מחכמי הודו אמרו שאין כח לאחד מהם רק אם יהיה בתחלת אחת היתדות עם השמש ביום ועם הלבנה בלילה</p> <p>(O, f. 113a)</p>

<sup>83</sup> Thorndike (“The Latin Translations,” p. 296) mentions one more manuscript with the same explicit.

<sup>84</sup> This version starts from מחלקות הבתים after the discussion of the planetary domains. O, f. 50b–51a:

כל רגע ביום או בלילה יתחלק גלגל המזלות על ד' נקודות הא' חלק ראשון ממעלה צומחת איוז מעלה שתהיה מאיזה מול שיעלה בקצה המזרח וזה יקרא היתד הראשון

<sup>85</sup> “Que habet magnum nomen” is not found on f. 65a of O.

<p>B. Henry Bate, <i>Liber rationum</i> (1292): Fundam(en)tum q(ui)de(m) volo pon(er)e <i>Libro initii sapientie</i>. Scito ne(m)pe quod omnis c(re)atura s(u)bsist(er)e nitit(ur) ex Dei co(n)silio gloriosi ac metuendi. In <i>Proverbüs</i> a(utem) ait Salomon no(n) didici sapie(n)tiam neq(ue) sancto(rum) sci(enti)am id est angulo(rum). (L, f. 49b2)</p>	<p>B. Henry Bate, <i>Liber rationum</i> (1292): Deniq(ue) co(n)senseru(n)t Antiqui quod no(n) e(st) fortitudo alicui ip(s)a(rum) nisi cu(m) fu(er)it in p(ri)ncipio alicui(us) angulo(rum) cu(m) sole de die et cu(m) luna de nocte. (L, f. 60b2.24–8)</p>
<p>C. Peter d’Abano, <i>Liber rationum</i>: Volo enim nu(n)c ponere fundamentu(m) <i>Libro de P(ri)ncipio Sapientie</i>. Certitudinaliter autem scio creature omnem labore, ut Dei honorati intersit consilio et timori, s(ecundu)m parabolis Aghur id est Salamonis. Et ego non didici sapientiam, neq(ue) scientiam sanctorum id est angelorum. (Venice 1507, 32a1)</p>	<p>C. Peter d’Abano, <i>Liber rationum</i>: Adhuc autem consenseru(n)t Antiqui nullam harum habere fortitudinem, nisi fuerit in aliquos angulo cum sole in die et cum luna de nocte. (Venice 1507, 43a2)</p>
<p>5a. <i>Moladot</i> (part 1) A. Hebrew original: אמר [רבינו אברהם הספרדי] כל משכיל בחכמת משפטי המולות ואיננו יודע מהחכמה העליונה יש פעמים שיהיו דינו כזבים בעבור שלא נשמר מהדברים הראויים להשמר מהם (O, f. 65b)</p>	<p>5a. <i>Moladot</i> (part 1) A. Hebrew original: ומאדים יותר מוזק בבית הזה משבתאי בעבור שהוא בית שמחת שבתאי ובית אבלו של מאדים והפך הדבר כי שבתאי יזיק הרבה בבית הו' בעבור שהוא בית אבלו ולא כן מאדים כי הוא בית שמחתו (O, f. 88a–b)</p>

<p>B. Hagin le Juif, <i>Livre des Jugemens des nativités</i>: E dist nostre maistre Abraham le sage lavertissant que tout sage que sentremet du sens des jugemens des signes et il ne set mie de la sapie(n)ce souveraine il est tel fois que ses jugemens sont faus pource quil ne se garde mie des choses de quoi il se doit garder. (F1, f. 66a2–b1)</p>	<p>B. Hagin le Juif, <i>Livre des Jugemens des nativités</i>: Et Mars est le plus damachant en ceste meson que Satur pource que cest la meson de la joie de Satur et la meson du duel de Mars et a rebours e(n) la meson .6. pource que cest la meson du duel de Satur et la meson de la joie de Mars. (F1, f. 95a)</p>
<p>C. Peter d’Abano, <i>Liber nativitatium et revolutionum earum</i>: Inquit magister n(oste)r Abraham sapiens astutus, q(uod) omnis sapiens qui se immiscet scie(n)tie iudiciorum signorum, et sapientia caret omnino superiori, contingit interdu(m) eius falsificari iudicia, eo q(uod) sibi no(n) precavet ab hiis que ipsum precavere oportet. (Venice 1507, 44b1)</p>	<p>C. Peter d’Abano, <i>Liber nativitatium et revolutionum earum</i>: Et Mars magis nocet in hac domo Sa(turni) quonia(m) est domus gaudii Sa(turni). Et domus tristitie Martis. Et contrarium est in domo sexta, quoniam est domus tristitie Sa(turni) et domus gaudii Martis. (Venice 1507, 60a1)</p>
<p>D. Ludovicus de Angulo, <i>De nativitatibus</i> (1448): Omnis inte(n)dens circa sci(enti)am iudic(i)orum ut dic(it) Abraham Yspan(us) et laborat in sci(enti)a sup(er)io(rum) aliq(uo)t(ies) accidit in ei(us) iudiciis e(ss)e error et falsitas, q(ua) (...) nesciu(n)t (...)ab hiis a q(ui)b(us) qu(i)cumq(ue) vole(n)s in sci(enti)a iudiciali astro(rum) (...).<sup>87</sup> (MS Paris, BNF 7321, f. 87a)</p>	<p>D. Ludovicus de Angulo, <i>De nativitatibus</i> (1448): Et Mars est peior in h(a)c domo q(uam) Sat(ur)n(us) i(de)o q(uonia)m dom(us) ista est gaudiu(m) Sat(ur)ni et est do(mus) tristi(tie) et planita (sic) Mart(is) et ec(ontrari)o sit in .6. domo q(uonia)m Sat(ur)n(us) est peior in. 6. q(uam) Mars i(de)o q(uonia)m Sat(ur)n(us) c(um) ibi in domo sue tristitie et pla(n)ita et Mars in domo ubi gaudet et hec su(n)t iudicia .12. domorum nati(vitatis). (MS Paris, BNF 7321, f. 111 a–b)</p>

<sup>86</sup> Found in, for instance, B.

<sup>87</sup> Three words have not been deciphered.

<p><b>5b. Moladot (part 2–Tequfot ha-šanim)</b> A. Hebrew original:</p> <p>אנשי הודו אומרים כי שנת השמש ש'ס'ע' יום ורביע וחומש שעה על כן יש בין תקופה לתקופה צ"ג מעלות גם שני חלקים</p> <p>(O, f. 88b)</p>	<p><b>5b. Moladot (part 2–Tequfot ha-šanim)</b> A. Hebrew original:</p> <p>ואם היה במחברת או במבט עם כוכב עליון ממנו אותה הכוכב העליון המקבל הכח הוא יהיה שליט על הנולד ויש לך לערב תולדת שניהם כפי מקומם מהשמש ובמזל שניהם וביתדות</p> <p>(O, f. 90iiib)</p>
<p>B. Hagin, <i>Le Livre des Jugemens des nativites</i>:</p> <p>Les homes dinde si dient que lan du soleil si est .365. jours et le quart et le q(ui)nt dune heure sur ce ail entre chascune revolucion .93. (de)g(res) et jerres .2. p(ar)ties. (F1, f. 95a)</p>	<p>B. Hagin, <i>Le Livre des Jugemens des nativites</i>:</p> <p>Et se cele estoile est en c(on)iu(n)ction ou en regart avec estoile plus haute que li, cele estoile haute qui recoit la force ele sera poostant sur le ne. Et tu dois meler la nature de eus .2. aver le lieu du soleil et &lt;en&gt; signe de eus .2. et es cheuilles. (F1, f. 100b)</p>
<p>C. Peter d'Abano, <i>De revolutionibus nativitatium</i> (tractatus secundus):<sup>88</sup></p> <p>Indi dixerunt annu(m) solare(m) esse .365. dies et quartam diei p(ar)te(m) et quinta(m) unius hore. Et sunt secundu(m) hoc in qualibet revolutione .93. gra(dus) et iteru(m) .2. partes. (Venice 1507, 60a1)</p>	<p>C. Peter d'Abano, <i>De revolutionibus nativitatium</i> (tractatus secundus):</p> <p>Et si hec planeta fuerit in co(n)iunctione, aut aspectu planete ipso altioris, planeta hic superiori recipiens vim principabitur in nato. Et debes miscere naturam illarum domorum s(ecundu)m locu(m) solis, et signum illorum .2. et angulo(rum). (Venice 1507, 60b1)</p>

<p>D. Ludovicus de Angulo, <i>De nativitatibus</i> (1448):</p> <p>Indy dicu(n)t q(uod) ann(us) solis est .365. die(rum) .6. hora(rum) .12. mi(nutorum) et i(de)o int(er) duas revol(uci)o(n)es est spatiu(m) .93. g(radus) .2. mi(nutorum). (MS Paris, BNF 7321, f. 111b)</p>	<p>D. Ludovicus de Angulo, <i>De nativitatibus</i> (1448):</p> <p>Et si fu(er)it in c(oniunctio)ne vel asp(e)ctu alic(uius) pla(?netarum) superio(rum) eo, ille sup(er)ior recipiet virtute(m) et erit almu(b)t(a)z nati et debes misce(re) naturam illo(rum) duo(rum) s(ecundu)m locu(m) eorum a sole et in signo in quarto su(n)t et in angulis. (MS Paris, BNF 7321, f. 114/5b)</p>
<p><b>6. Mivḥarim 1</b> Hebrew original:</p> <p>אחל ספר המבחרים וטרם אדבר &lt;ע&gt;ליהם אומר הדרך כלל כי יש לנשמת האדם העליונה כח לבטל קצת הפרטים ולהוסיף או לגרוע על מה שיוורו הכוכבים רק אין כח לה לבטל הכל</p> <p>(O, f. 156a)</p>	<p><b>6. Mivḥarim 1</b> Hebrew original:</p> <p>ואבו מעשר אמר כי כוכב חמה יורה עליהם ואין מחלוקת כי נוגה יורה על הגמלים וצדק על הפילים</p> <p>(O, f. 165a)</p>
<p><b>7. Mivḥarim 2</b> A. Hebrew original:</p> <p>חכמי התורה מודים שיש יכלת באדם לעשות טוב גם רע ומשה אדננו אמר מפורש ובחרת בחיים ולולי זה לא היה זה נענש גם אמרו קדמונינו זכרם לברכה הכל בידי שמים חוץ מיראת שמים</p> <p>(M, f. 144a)</p>	<p><b>7. Mivḥarim 2</b> A. Hebrew original:</p> <p>ולא יהיה כוכב רע במזל טלה בקנות הצאן ולא בקשת ודגים בקנות הטוס ולא בעקרב בקנות הפרד ולא בגדי בקנות החמור ולא במזל שור בקנות השור ולקנות גמל תקן מקום נגה תקן מקום צדק ככה אמרו הקדמונים</p> <p>(M, f. 149b)</p>

<sup>88</sup> A few pages are mixed up in the Venice, 1507 edition.

<p>B. Hagin, <i>Le Livre des Elections Abraham</i>: Es sages de la loi sotroient q(ue) lome a bien pouvoir de faire bien et mal et Moyses n(ost)re mestre le dit esplaneement cest a savoir et eslisies la vie et se ce fust ou ne fust pas dampne. Jerres nos Anciens leur ram(em)brance soit beneie dirent q(ue) tout est en la mein Dieu, fors la creneur Dieu. (F1, f. 109a1)</p>	<p>B. Hagin, <i>Le Livre des Elections Abraham</i>: Et no(n) soit male estoile en Aignel<sup>89</sup> q(ua)nt tu achat(er)as la berbis<sup>90</sup>, ne en Sagit(taire), ne en Poissons q(ua)nt tu acheteras le cheval ne en lescorpion q(ua)nt tu achates la mule, ne en Cap(ri)corne q(ua)nt tu achates lasne, ne en Torel<sup>91</sup> q(ua)nt tu achates le buef. Et por acheter chamel app(ar)eille le lieu de Venus ou de Jupit(er), ainsi dire(n)t les Anciens. (F1, f. 107a)</p>
<p>C. Peter d'Abano, <i>De electionibus</i>: Sapie(n)tes legis consenserunt hominem perfecte habere potestatem in faciendo bonum et malum. Et Moyses magister noster dixit plane hoc quidem est scire et super istud est via. Q(uo)d si hoc non fuisset, non esset damnatus homo. Et iterum nostri Antiqui, quoru(m) sit memoria benedicta dixere totum fore in manu divina, excepto timore Dei. (Venice 1507, 67a2)</p>	<p>C. Peter d'Abano, <i>De electionibus</i>: Non sit quoq(ue) malus in Ariete quando emes pecudem, neq(ue) in Sagittario aut Piscibus, quando emes equu(m). Neq(ue) in Scorpio, quando mulum emes, neq(ue) in Capricor(no), quando asinu(m), neq(ue) in Tauro quando bovem. In emendo vero camellum apta locum Veneris aut Iovis, ita enim dixerunt Antiqui. (Venice 1507, 71a2)</p>

<p>D. Arnoul de Quincampoix, <i>De electionibus</i>: Sapientes in lege concordati sunt q(uod) homo naturaliter de libertate arbitrii potest facere bonu(m) et malum. Et hoc plane testatur m(a)g(iste)r noster Moyses, dicens et eliges vita(m). Et nisi hoc esset non dampnaremur. Preterea n(ost)ri Veteres benedicatur eo(rum) memoria, dixerunt q(uod) o(mn)ia sunt in manu Dei. (G, f. 91b)</p>	<p>D. Arnoul de Quincampoix, <i>De electionibus</i>: Nec sit in Ariete mala stella q(ua)n(do) emes oves n(ec) in Piscib(us) nec Sagit(tario), q(ua)n(do) emes equu(m), n(ec) in Scorpione q(ua)n(do) emes mulu(m) n(ec) in Cap(ricorno) q(ua)n(do) emes asinu(m) n(ec) in Tauro q(ua)n(do) emes bove(m). Et pro emendo camelo apta locu(m) Veneris aut Iovis ita dixerunt Antiqui. (G, f. 96a)</p>
<p>E. Anonymous translation of <i>De electionibus</i>: Sapie(n)tes leg(is) sustine(n)t q(uo)d h(omo) h(abe)t posse faciendi bon(um) et malu(m). Et Moyses m(a)g(iste)r n(oste)r d(ici)t h(oc) ap(er)te. Et n(isi) h(oc) fuiss(et) n(u)ll(us) da(m)pnaret(ur). It(em) Antiqui m(a)g(ist)ri q(uorum) rememor(aci)o sit b(e)n(e)d(i)c(t)a(m), dixer(un)t q(uo)d om(n)e q(uo)d e(st) e(st) in manu D(e)i n(isi) timor D(e)i. (E, f. 46b)</p>	<p>E. Anonymous translation of <i>De electionibus</i>: Et q(uo)d no(n) sit stella mala in sig(no) Arietis, q(ua)n(do) emes oves n(ec) in sig(no) Sagitarii, n(ec) in Piscib(us) q(ua)n(do) emes equu(m), n(ec) i(n) Scorpione q(ua)n(do) emes mula(m), n(ec) in Cap(ri)corno q(ua)n(do) emes asin(um), n(ec) in Tauro q(ua)n(do) emes bove(m). Et p(ro) camelo em(en)do p(re)para loc(um) Ven(er)is v(e)l p(re)para loc(um) Iovis, ita dixeru(n)t Antiqui. (E., f. 52b)</p>

<sup>89</sup> F2, f. 110b: Aries.

<sup>90</sup> F2, f. 110b: les brebis.

<sup>91</sup> Levy, *The Astrological Works*, p. 148: Toriau.

<p><b>F.</b> Anonymous translation of <i>Elecciones Abraham</i>:</p> <p>Sapientes legis s(e)n(tenc)iaverunt<sup>92</sup> q(uod) homo de libero arbitrio p(otes)t fac(er)e bonu(m) et malu(m) et Moyses mag(iste)r legis dixit h(oc) exp(re)sse. Tu eliges vitam nam si no(n) posset vita(m) elig(er)e nu(m)q(uam) e(ss)et ho(mo) da(m)pnat(ur). Et Antiqui n(ost)ri, quo(rum) memo(ria) sit in b(e)n(e)dic(i)one dix(er)unt, q(uod) quic(um)q(ue) e(st) n(os)t(er) sit in mu(n)do e(st) in ma(n)u D(e)i p(raete)r timere D(omi)ni q(ui) e(st) in homi(n)e. (MS Oxford, BL, Digby 212, f. 64b)</p>	<p><b>F.</b> Anonymous translation of <i>Elecciones Abraham</i>:</p> <p>Et si no(n) sit stella mala in signo Ariet(is) q(ua)ndo emes ove(m), nec in Sagitt(ario) n(ec) in Piscib(us) q(ua)n(do) tu emes equ(um), nec in Scorpione q(ua)n(do) emes mulu(m), nec in Cap(ri)corno q(ua)n(do) tu emes asinu(m), n(e)c in Tauro q(ua)n(do) tu emes bove(m). Et in eme(n)do camelum p(re)p(ar)a locum Ven(er)is v(e)l p(re)p(ar)a locu(m) Iovis et ita dix(er)unt Antiqui. (MS Oxford, BL, Digby 212, f. 67b2)</p>
<p><b>8. Še'elot 1</b><sup>93</sup> Hebrew original:</p> <p>חכמי המזלות נחלקו בשאלות לשתי תורות גדולות התורה האחת חנוך הקדמון ובטלמיס וקדמונים רבים עמהם וכולם אומרים כי דיני המזלות הם ברורים ונכונים בדברי העולם ובגולדים רק השאלות אין בהם ממש (O, f. 141b)</p>	<p><b>8. Še'elot 1</b> Hebrew original:</p> <p>וא'ע"פ' שיש שותפות בדברי האויבים לבית זה אין צריך להזכירם כי כבר דברתי עליהם בבית בשביעי כדי למשכיל (O, f. 155a–b)</p>

<p><b>9. Še'elot 2</b> A. Hebrew original:</p> <p>ראשי חכמי המזלות היו שנים האחד תלמי והשני דורוניס ושניהם היו מלכים ותלמי מודה משפטי המזלות ויש לו ספרים שלשה בדברי העולם גם במולדות ואיננו מודה כי השאלות הם נכונות (P, f. 1a)</p>	<p><b>9. Še'elot 2</b> A. Hebrew original:</p> <p>גם רבים יסתכלו במספר ימות כל משרת והם לעולם כמספר שנותיו הקטנות (P, f. 8b)</p>
<p>B. Hagin, <i>Le Livre des Questions</i>:</p> <p>Es chie&lt;f&gt;s dastronomie furent .2. Li uns Pto(lémée), li autres Doro(nius) et tous .2. furent rois. Et Pto(lémée) otroi les jugeme(n)s des revolucions et des nativites et fit .3. <i>Livres</i> de ce, mes il notroie pas q(ue) dema(n)des soient vraies. (F1, f. 113b1.24–32)</p>	<p>B. Hagin, <i>Le Livre des Questions</i>:</p> <p>Jerres pluseurs garderent ou conte des jors de chascun planete et eus sont to(us) c(om)me le conte de leur ans le petis. (F1, f. 125a1.19–23)</p>
<p>C. Peter d'Abano, <i>De interrogationibus</i>:</p> <p>Astrologie duo extiteru(n)t capita, un(um) quide(m) Ptoleme(us), alteru(m) v(er)o Doroni(us). Et ambo fueru(n)t reges. Ptolemeus aut(em) concessit revolutiones et nativitates et composuit libris .2. ex eis, s(ed) non invenit interrogationes veras e(ss)e. (Venice 1507, 60b2)</p>	<p>C. Peter d'Abano, <i>De interrogationibus</i>:</p> <p>Plures itidem inspexerunt numerum dierum cuiuslibet planete qui o(mn)es sunt, sicut est numerus annorum minorum ipsorum. (Venice 1507, 67a1)</p>

<sup>92</sup> Different word in MS London, British Library, Royal 12.C.XVIII, f. 26a.

<sup>93</sup> In the manuscripts this treatise is regularly tucked away as the last section of a larger work, which also bears the title *Sefer ha-Še'elot*. In general, catalogues tend to ascribe the complete work prematurely to Ibn Ezra (thus IMHM, Zotenberg, Neubauer, and Steinschneider). Sela, on the other hand, defines *Še'elot 1* in the same way as I do in the present table. See further Appendix B below.

<p>D. Arnoul de Quincampoix, <i>De questionibus</i>:</p> <p>Capita astronomie fuerunt duo, unu(m) Ptholome(us) et aliud Doronius et ambo fu(er)unt reges. Et P&lt;t&gt;holomeus asserit iudicia revolucionu(m) et <i>nativitatum</i> et edidit tres libros ex eis, ni(s) ipse non concedit interrogac(i)o(n)es esse veras. (G, f. 85a)</p>	<p>D. Arnoul de Quincampoix, <i>De questionibus</i>:</p> <p>Preterea plures aspiciabant in numero dierum pla(neta)rum cui(us)libet et illi sunt sicut anni eo(rum) minores. (G, f. 91b)</p>
<p>E. Anonymous translation of <i>De interrogationibus</i>:<sup>94</sup></p> <p>Capita sapie(n)tu(m) signo(rum) fuer(un)t .2. Doroni(us) scilicet et &lt;Pt&gt;ho(lomeus) et ambo fuer(un)t reges. Et &lt;Pt&gt;ho(lomeus) c(on)ced&lt;i&gt;t iudicia signo(rum) et s(un)t .3. lib(ri) ab eo editi in v(er)bis u(n)iversa)lib(us), it(e)m i(n) nativi(tatibus) s(ed) no(n) c(on)cedit q(uo)d int(er)rog(ac)iones s(un)t vere. (E, f. 30a28–31)</p>	<p>E. Anonymous translation of <i>De interrogationibus</i>:</p> <p>Plures asp(e)xer(un)t in c(om)putac(i)one die(rum), c(uius)lib(et) plane[te] et ip(s)i s(un)t om(n)es s(e)c(un)d(u)m c(om)putac(i)one(m) a(n)no(rum) mi(n)o(rum). (E, f. 39b)</p>

<p>F. Anonymous translation of <i>De questionibus</i>:</p> <p>Et sup(er)is et p(ri)ncipalib(us) sapientib(us) sig(norum) et planeta(rum) fu(er)unt duo, un(us) Tholome(us), alt(er) D&lt;o&gt;roni(us) et ambo fu(er)unt reges. Et Tholome(us) concedit iudicia signo(rum) et c(om)posuit sup(er) hoc tres libros in v(er)bis sec(u)li(s). Et postea in nativitatib(us). Sed no(n) c(on)cedit o(m)n&lt;e&gt;s q(uesti)ones (...). (MS Oxford, BL, Digby 212, f. 67b2)</p>	<p>F. Anonymous translation of <i>De questionibus</i>:</p> <p>Et deinde plures respex(er)int in comp&lt;u&gt;to die(rum) cui(us)l(i)bet planete et comp&lt;u&gt;tu&lt;s&gt; ip(s)o(rum) die(rum) e(st) s(e)c(un)d(u)m comp&lt;u&gt;tum anno(rum) mi(n)o(rum) ip(s)i(us) planete. (MS Oxford, BL, Digby 212, f. 72a).</p>
<p>10. <i>Me<sup>2</sup>orot</i> A. Hebrew original:</p> <p>מפיל אני תחנתי<sup>95</sup> לפני אלהי אבי כל עוד נשמתי בי לשלוח אורו ואמתו אל לבבי כי מתוק אורו וטוב לעיני הגשמה לראותו ולילה ביום יאיר ועננים לא יסתירוהו (M, f. 101b)</p>	<p>10. <i>Me<sup>2</sup>orot</i> A. Hebrew original:</p> <p>ואם עברה שנה הסתכל בתחלת השנה השנית לכל המבטים ולכל הגבולים ואם ידעת המזל העולה בתחלת החולי דע תקופת השנה שתוסיף על המעלה הצומחת שבע ושמונים מעלות גם חמשה עשר חלקים ראשונים והסתכל איך יביטו הכוכבים אל המזל הראשון גם אל השני א'ע'פ' שהעיקר היא השמש לכן גם אלה שניהם יוסיפו ויגרעו וכן תעשה שנה בשנה (M, f. 108a)</p>

<sup>94</sup> The explicit mentions *Liber questionum* as the book title.

<sup>95</sup> Other manuscripts read תפלתי.

<p>B. Henry Bate, <i>De luminaribus</i> (1292):</p> <p>Dominu(m) Deu(m) meu(m) simplicit(er) oro q(uam) diu in me e(st) anima mea ut in cor meu(m) lume(n) suu(m) i(m)mittat et v(er)itatem m(u)ltu(m) (e)n(im) del(e)c(t)abile lume(n) eius ac bonu(m) oc(u)lis a(n)i(m)e ad vidend(um) et nox sicut dies illu(m)i(n)ab(&lt;i&gt;tu)r nec occultabu(n)t ip(su)m nubes. (L, f. 30b1.29–34)</p>	<p>B. Henry Bate, <i>De luminaribus</i> (1292):</p> <p>Q(uod) si elapsus est un(us) ann(us) c(on)sid(er)a s(e)c(un)d(u)m annu(m) in o(mn)ib(us) asp(e)c(t)ibus ac t(ermin)is ?c(on)fi(ni)b(us) et si tu sciv(er)is g(ra)d(um) signi asc(ende)ntis in p(ri)n(cipio) eg(ri)tudinis scito revoluc(i)o(n)em anni secundi sive seq(ue)ntis addendo .87. g(ra)dus et co(n)sid(er)a qualit(er) aspiciant stelle signu(m) p(rimu)m ac et secundum et q(uam)q(uam) sit in hoc radix sol n(ihil)omi(nus) h(oc) duo addu(n)t aliq(ui) et minuunt sic ergo fac(er)e debes d(e) anno in annu(m). (L, f. 34a2.19–27)</p>
<p>C. Peter d'Abano, <i>Liber luminarium</i>:</p> <p>Ego facio cadere deprecationem mea(m) ante Deu(m) meum dum anima mea i(n) me existit, ut mittat suam lucem ac veritatem in cor meum, lux enim ipsius dulcis est valde et bona anime oculis ad videndum et nocte cum die respic(n)det, ne(que) ipsam nubes obtegent. (Venice 1507, 71b1)</p>	<p>C. Peter d'Abano, <i>Liber luminarium</i>:</p> <p>Q(uod) si unus transiverit annus, respice annum s(e)c(un)d(u)m in omnibus aspectibus et termi(ni)s. Et si sciveris gradum signi ascendentis in principio morbi. Scias revolutione(m) anni secundi et adde .87. gradus. Et respice qualiter stelle respiciunt signu(m) primum et iterum s(e)c(un)d(u)m, qua(m)vis radix sit, tamen iste due vie crescunt et ?minuunt. Et ita debes facere de anno in annu(m). (Venice 1507, 75b2)</p>

<p>11. <i>‘Olam 1</i> A. Hebrew original (1148):</p> <p>אם מצאת ספר אבו מעשר במחברות המשרתים לא תאבה לו ולא תשמע אליו כי הוא סומך על מחברות המשרתים במהלך השווה ואין חכם מודה לו כי האמת להיות המחברת כנגד גלגל המזלות (Ed. Fleischer, p. 38)</p>	<p>11. <i>‘Olam 1</i> A. Hebrew original (1148):</p> <p>ואם בשלישי ירבו עוברי דרכים ואם ברביעי ירבו הזרעים ואם היה מושחת תדין הפך הדבר ואם בה' ירבו בניהם ואם היה שם אחד המזויקים ימותו הנערים הקטנים ועל זה הדרך תדין בשאר הבתים ולעולם הסתכל &lt;א&gt;ל המבטים כי עליהם כל המשפטים (Ed. Fleischer, p. 49)</p>
<p>B. Henry Bate, <i>De mundo vel seculo</i> (1281):</p> <p>Si tu inveneris <i>Librum</i> Alb(umasaris) <i>de coniu(n)ctionibus planetarum</i>, non acquiescas ei nec audias ipsum, sustentatus enim est super coniunctiones planetarum s(ecundu)m medium cursum vel equalem. Non est autem sapiens aliquis qui huic consentiat. Veru(m) na(m)q(ue) est planetis esse coniu(n)ctiones s(ecundu)m orbe(m) signorum. (Venice 1507, 77b2)</p>	<p>B. Henry Bate, <i>De mundo vel seculo</i> (1281):</p> <p>Et si<sup>96</sup> in .3. multiplicabu(n)tur peregrinationes. Si vero in .4. multiplicabu(n)tur semina. Q(uo)d si fuerit impeditus econtrario iudicabis. Deniq(ue)<sup>97</sup> si in quinta multiplicabuntur pueri seu infantes. Si autem malorum aliquis ibidem fuerit morie(n)tur infantes parvi. S(e)c(un)d(u)m igitur hanc viam iudicare poteris i(n) reliq(ui)s domibus. Ad aspectus autem semper intendas. (Venice 1507, 85a1)</p>

<sup>96</sup> E adds fuerit.

<sup>97</sup> E deinde.

III. Treatises originally Composed in Hebrew but Extant in Latin Translation Only

<p>12. <i>‘Olam 2</i> Hebrew original:</p> <p>ברוך השם המיוחד שהוא הכל ומאתו הכל ומשרתיו אליו הם הנמשלים לכל על כן הקדמונים כי אמרו הכללים עומדים תמיד בעבור צורות הגלגל העליון ובעבור זה אמרו חכמי המזלות כי השלשה כוכבים והטעם העליונים שהם למעלה מהשמש ישרתו בדברי הכל וידענו כי מחברות השבעה משרתים הם מאה ועשרים</p> <p>(M, f. 138a)</p>	<p>12. <i>‘Olam 2</i> Hebrew original:</p> <p>ורבים אמרו כי אם היה הכוכב במקום גבהותו או טוב ואחרים אומרים הפך הדבר ולפי דעתי שהגבהות יורה על כל דבר נכבד רק יהיה מעט ואם היה בשפלות יורה דבר רב רק יהיה נבזה ואם במרובעים יהיה אמצעי</p> <p>(M, f. 143b)</p>
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II. Treatise created in Latin under Ibn Ezra’s direction

INCIPIIT	EXPLICIT
<p>13. <i>Liber de nativitatibus (1154)</i></p> <p>Dixit quoq(ue) Abraha(m) Iude(us): Optimu(m) instrumento(rum) ad inveniendu(m) gradu(m) orientem in nativitatib(us) est astrolabiu(m), q(uo)d qua(n)to p(er)fectius fuerit ta(n)to meli(us). Post astrolabium aut(em) optimu(m) e(st) instrumentu(m) q(uo)d appellat(ur) quarta circuli. Post hec umbra recta. Post hec umbra transversa. Post hec mensura p(er) aqua(m) facta. (Venice 1485, a2a)</p>	<p>13. <i>Liber de nativitatibus (1154)</i></p> <p>Saturn(us) de asinis iudicat. Mars de mulis, scilicet filiis asini et eque. Sol de equis. Mercurius de brudonibus scilicet filiis equi et asine. Luna de bob(us) s(e)c(un)d(u)m statu(m) suu(m), nam si male luna fuerit disposita, ex p(ar)te bo(n)u(m) vel eq(ui)tatu bo(n)u(m) vel p(er)cussione malu(m) continget. Venus de camelis. Iuppiter de dromedariis. Andruçagar: Dominus prime triplicitatis duodecime de inimicis. Secu(n)dus de angustiis. Terti(us) de pecorib(us) et pecudibus iudicat singulis(ecundu)m propriu(m). (Venice 1485, c4b)</p>

<p>14. <i>Liber nativitatium</i> Anonymous translation:</p> <p>In n(omin)e illi(us) q(ui) scit res fut(ur)as, incipia(m) <i>Lib(rum) nati(vita)tu(m)</i>. D(ici)t Ab(ra)ham additor: O(portet) me loq(ui) s(ecundum) vias c(ommu)nes i(n) o(mn)ib(us) nat(ivi)tatibus sig(n)or(um) eo q(uo)d ego loquar sup(er) nativitatib(us) et ea(rum) revoluc(i)onib(us) et h(oc) q(uo)d ego dica(m) i(n) eis e(ri)t bon(um) et n(e)cc(es)ariu(m) i(n) int(er)rogaci)onib(us) et elec(c)ionib(us) et in revoluc(i)onib(us) a(n)no(rum) m(un)di et h(oc) docet(ur) in .10. capitulis. (E, f.53a)</p>	<p>14. <i>Liber nativitatium</i> Anonymous translation:</p> <p>Et sic(ut) locut(us) fui t(ib)i s(upe)r loca stella(rum) ita facies in v(er)bis asp(e)ctuu(m) in g(ra)dib(us) equalib(us) s(ecundum) h(oc) q(uo)d eru(n)t in nati(vi)tate et s(ecundum) asp(ec)tus bonos v(e)l malos, sic(ut) scri(p)tu(m) e(st) in <i>P(rimo) Lib(ro) de Sensu</i>. S(un)t t(erm)i(n)ata iudicia nati(vi)tat[um]. Laus no(min)i illi(us) cui(us) s(un)t bonitates. Explicit. Am(en). Deo gr(aci)as per om(n)ia. (E, f. 68b)</p>
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<p><b>15. Liber revolucionum</b> Anonymous translation:</p> <p>In n(omin)e illi(us) c(uius) nom(en) est admirabile i(n)cipia(m) <i>Lib(rum) revolucion(um)</i>. Cum sol rev(er)tit(ur) ad g(radum) et ad minutu(m) i(n) q(ui)b(us) fuit i(n) na(tivita)te tu(n)c p(er)ficietur nato a(n)n(us) integ(er) et i(ta) facies de a(n)no i(n) a(n)n(um) usq(ue) ad fine(m) a(n)ni nati, et h(oc) pot(er)is scire via b(re)vi scilicet q(uo)d accipies cuilib(et) a(n)no i(n)teg(ro) t(ra)nsacto id est die(m) et .5. horas eq(ua)les. (E, f. 69a–b)</p>	<p><b>15. Liber revolucionum</b> Anonymous translation:</p> <p>Et a(li)q(ua)n(do) exhibit i(llud) ad op(us) v(e)l eff(e)c(tu)m i(llud) q(uo)d o(ste)ndit(ur)<sup>98</sup> in via sup(er)na (...) ab op(er)e v(e)l cogitac(i)o asc(ende)ns s(upe)r cor suu(m). Et sc(ri)psi t(ib)i revoluc(i)one(m) a(n)ni via b(re)vi, q(ui)a c(on)sido i(n) s(u)btilitate tua. Et sc(ri)ptu(m) est (...) sapie(n)ti occ(asi)one(m) et sapie(n)tior fiet aduc ad ex(tre)mu(m) rem de re. Et De(us) qui doc(et) ho(m)i(n)em scire intell(e)c(tu)m faciat<sup>99</sup> m(i)hi iter in itine(re) r(ec)to. Amen. (E, f. 72b)</p>
<p><b>16. Liber electionum</b> Anonymous translation:</p> <p><i>Incipia(m) Lib(rum) el(ec)c(i)onu(m)</i>. C(ommune)s<sup>100</sup> s(un)t s(empe)r g(ra)dati(m) succedentes et sc(i)entia eo(rum) est fidel(is). Sc(i)entia a(utem) si(n)g(u)lariu(m) el(ec)c(i)on(um) q(ue) n(on) s(un)t stabiles in .1. p(unc)to, s(upe)r una c(om)putac(i)one n(on) est sc(i)entia, eo q(uo)d ip(s)a div(er)sificat(ur) s(ecundum) div(er)sitate(m) eo(rum) [ ]. Et [ ] i(n) el(ec)c(i)onib(us) suis et volu(n)tate eo(rum) n(on) (e)n(im) pos(sun)t mutare c(ur)su(m) suu(m), n(ec) na(tura)m sua(m), na(m) for(titudo) D(e)i altissi(mi) ded(it) eis c(on)suetu(dinem) q(uam) n(um)q(uam) t(ra)nsibu(n)t. (E, f. 39b)</p>	<p><b>16. Liber electionum</b> Anonymous translation:</p> <p>Et si ad em(en)d(um) mula(m), p(re)para loc(um) M(ar)tis. Et si ad as(inu)m, loc(um) Sat(ur)ni. Et si ad camelu(m), loc(um) Ven(er)is. Et si ad bestiam p(ar)va(m) sic(ut) est ovis, loc(um) M(er)curii). Et si ad bove(m) p(re)p(ar)a loc(um) lu(n)e r(espectu) asc(ende)ntis, loc(um) dico q(uo)d no(n) sit minue(n)s lu(n)e et si ip(s)a e(st) i(n) p(ar)te sua clara, q(uo)d e(st) in medie(tate) c(ir)culi b(re)vis, q(ue) a capite Canc(ri) usq(ue) ad fine(m) Sagittarii et tu(n)c meli(us) et q(uo)d d(omi)n(u)s hore sit in bo(n)o loco r(espectu) asc(ende)ntis. (E, f. 46b)</p>

<p><b>17. Liber interrogacionum</b> Anonymous translation:<sup>101</sup></p> <p>In no(m)i(n)e illi(us) q(ui) scit absco(n)ditata et ap(er)ta, incipia(m) <i>Lib(rum) Interrogac(i)on(um)</i>. Et diviser(un)t se sapie(n)tes iudicio(rum) sig(norum) in .2. societates, una societas dix(it), q(uo)d iura s(un)t exp(er)ta in capite claviu(m) ad esse g(radus) .2000. et sig(nat) s(upe)r .2000. russus centha et 20 et .1. et c(um) .720. modis<sup>102</sup> c(on)iu(n)ct(i)onu(m) pla(netarum) et in p(ri)n(cipio) q(uorum)libet .75. a(n)no(rum) et coniunctionum Saturni c(um) Marte in sig(no) Canc(ri) q( uo)d est in signo seculi in finis de c(ur)sos toti(us) a(n)ni et p(ar)tes et duct(us) et iura sing(u)lariu(m) c(um) disp(osicio)ne sig(ni) asc(ende)ntis et te(m)p(or)e nati(vi)tatis c(um) revoluc(i)onib(us) a(n)no(rum) nati et duct(us) et p(ar)tes. (E, f. 19b)</p>	<p><b>17. Liber interrogacionum</b> Anonymous translation:</p> <p>Et si n(on) int(er)rogaret<sup>103</sup> d(omi)nu(s) suus, s(ed) ip(s)e d(omi)nu(m) suu(m) accipe loc(um) d(omi)ni septime et co(n)te ?co(m) e(n)contre sig(num) asc(ende)ns in p(unc)to int(er)rogac(i)on(is), q(uo)d pones a p(ri)n(cipio) g(radus) asc(ende)ntis usq(ue) ad p(ri)n(cipium) quarte do(mus) ad orie(n)te(m). Et a p(ri)n(cipio) quarte usq(ue) ad p(ri)n(cipium) septime ad (septen)t(ri)one(m) et a p(ri)n(cipio) septime usq(ue) ad p(ri)n(cipium) decime ad<sup>104</sup> occide(n)te(m) et a p(ri)n(cipio) decime usq(ue) ad p(ri)n(cipium) p(ri)me ad m(er)idie(m). Dic(it) Ab(ra)ha(m) m(u)ltum honora(n)t(ur) v(er)ba &lt;Pt&gt;ho(lomei) in <i>Lib(ro) .C. V(er)bo(rum)</i> de te et de ill(is), it(e)m id radix mag(na). (E, f. 30a18–25)</p>
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<sup>98</sup> V non ostendetur.

<sup>99</sup> V faciet.

<sup>100</sup> Cf. Thorndike, “The Latin Translations,” p. 299: conclusiones.

<sup>101</sup> Possibly without knowing this, Peter d’Abano and Arnoul de Quinquempoix translated the end of this book as part of the *Tractatus particulares*, which they attributed in its entirety to Ibn Ezra.

<sup>102</sup> V probably reads “et est 120 modis.”

<sup>103</sup> V interrogarent.

<sup>104</sup> Lacking in V.

## Appendix B Index of Hebrew Manuscripts

This index has been drawn up on the basis of the information gathered from the Collective Catalogue of Hebrew Manuscripts of the Institute of Microfilmed Hebrew Manuscripts (= IMHM) in the Jewish National and University Library in Jerusalem (card and on-line catalogues). The catalogues of Steinschneider (Berlin, Munich, Leiden), Zotenberg (Paris), Reif (Cambridge), and Neubauer (Oxford) have also been consulted. The following abbreviations of Ibn Ezra's astrological treatises are used:

Ho: horoscope.

Me: *Me'orot*

Mi: *Mivharim*

Mo: *Moladot*

Mz: *Mišpeṭei ha-mazzalot*

Ol: *ʿOlam*

Rh: *Rešit ḥokmah*

Sh: *Še'elot*

Te: *Te'amim*

The index includes references to horoscopes that, although transmitted anonymously, are commonly ascribed to Ibn Ezra. More information on these is given below. Numbers after an abbreviation refer to the Table of Incipits and Explicits. Manuscripts studied by me personally are marked with an asterisk. Since I inspected only a limited number of

<sup>105</sup> This section is a free translation of an Arabic text that happens to be included in the so-called Alchandreana corpus (an edition by David Juste is forthcoming). This emerged initially from a superficial comparison with a quotation from this corpus in English translation in Burnett, "Lunar Astrology: The Varieties of Texts using Lunar Mansions, with Emphasis on *Jafar Indus*," *Micrologus* 12 (2004): 43–133, on p. 44.

<sup>106</sup> V alnait(us).

<p>(18a.) <i>Excerpta quaedam ex Libro iudiciorum Abraham deprompta</i> (part one) Anonymous translation of a work by Ibn Ezra?  Hec est nati(vitas) q(ue)da(m) ad instruend(um) te i(n) aliis nativitatib(us) et [est] de <i>Iudiciis Abraha(m)</i>. Dom(us) p(ri)ma: Q(uia) v(ero) M(er)c(ur)ius e(st) i(n) domo sua et est dom(us) honoris sui, it(e)m i(n)t(er) et sole(m) est un(us) me(dieta)te sui c(ur)sus sig(na)t s(upe)r a(n)i(m)a(m) s(u)bt(ill)is s(ensus) et acc(res)c(ere)e valore(m) suu(m) in s(ens)u sig(norum) q(ui) suspendit(ur) i(n) sole. (E, f. 73a)</p>	<p>(18a.) <i>Excerpta quaedam ex Libro iudiciorum Abraham deprompta</i> (part one) Anonymous translation of a work by Ibn Ezra?  Duo(decima): Q(uia) Sat(ur)n(us) e(st) in signo Sagitt(arii), o(ste)ndit q(uod) ip(s)e cadet ab eq(uo) et malu(m) ei n(on) faciet. Na(m) Iup(ite)r dist(ur)bat illud q(uod) Sagitt(arius) o(stendi)t et h(oc) erit i(n) a(n)no .31. It(e)m i(n) anno .60. s(ed) inimici ei(us) eru(n)t declinati cora(m) eo q(uia) man(us) sua s(em)p(er) erit sup(er)ior i(n) a(lio) audeseure. Explicit. (E, f. 76a)</p>
<p>(18b.) <i>Excerpta quaedam ex Libro iudiciorum Abraham deprompta</i> (part two?)<sup>105</sup> Anonymous translation of a work by Ibn Ezra?  Quicu(m)que nascit(ur) in Capite Arietis que pars d(icitu)r Syriace Alnaith<sup>106</sup> hora p(ri)ma bona i(n)ve(n)iet et q(?uod) petit accipit s(u)biu(n)g(ere) machinac(i)onib(us) magicis moriet(ur) aut sp(irit)u(m) vexabit(ur) maligno, p(ri)nceptus erit p(o)p(u)li aut p(at)rie (etc.) (E, f. 76b)</p>	<p>(18b.) <i>Excerpta quaedam ex Libro iudiciorum Abraham deprompta</i> (part two?) Anonymous translation of a work by Ibn Ezra?  Si i(n) Aldoraia quod est finis Ge(m)ino(rum), addiscet m(u)lta potator nepos i(n) capite plagatus felle asce(ndente) i(n) caput oc(u)li mutabu(n)t(ur), sepeliet pare(n)tes irascit(ur) pare(ntibus). (E, f. 77a)</p>

manuscripts, the exact redactions of the various treatises could be identified only in a limited number of cases. Future closer investigation will have to determine whether more redactions of the same works can be identified in the manuscripts listed here.

Some explanatory remarks are required with respect to *Še<sup>2</sup>elot 1*. In the manuscripts this treatise often occupies the closing part of a five-part work likewise called *Sefer ha-Še<sup>2</sup>elot*. This larger work, I believe, is a compilation, which, as the long quotations from *Rešit ḥokmah* suggest, was probably put together after 1148 by either Ibn Ezra or (and this would seem more plausible) by an anonymous scholar, who may have written several parts himself and/or drawn material from sources unconnected to Ibn Ezra. Therefore, whenever two ranges of folios are cited below with respect to *Še<sup>2</sup>elot 1*, the folios mentioned between brackets refer to Ibn Ezra's original treatise as defined in Appendix A. Otherwise the manuscript simply retains the same core treatise only. The annotation "Pseudo-Ptolemaic interrogations" refers to the last section of part three of the wider composition *Sefer ha-Še<sup>2</sup>elot*.

1) Berlin, Staatsbibliothek 219 [Or. Fol. 1618]

Me ff. 1–3  
Ol ff. 4–10  
Mi ff. 11–17

2) Berlin, Staatsbibliothek 220 [Or. Qu. 679]\*

Rh ff. 1a–31b  
Te2 ff. 1b, 2b–3a, 4a, 8b, 16b (fragments)  
Te1 ff. 1a, 1b–5a, 5b, 16b–32a (not complete)  
Mz ff. 33a–40  
Te2 ff. 33a–35a (other fragments)  
Mo ff. 41a–54a  
Te2 ff. 51b–54a (other fragments)

Mi2 ff. 55a9–60b  
Mi1 ff. 55a1–9, 55b–59b (not complete)  
Me ff. 61a–64b  
Ol1 ff. 65a–71a  
Ho f. 72a (introduction)

3) Cambridge, University Library [=UL], Add. 481\*

Rh ff. 55b–102a  
Mo ff. 102a–127a  
Mi2 ff. 127a–134b  
Sh2 ff. 134b–142b (but title: ספר המזלות והשאלות)  
Te2 ff. 143a–157b (beginning is lacking)  
Ho ff. 158b–168a  
Ol2 ff. 168a–175a (ספר העולם השני)

4) Cambridge, UL, Add. 1186\*

Rh ff. 3a–36a  
Te1 ff. 36b–51b  
Mo ff. 52a–71a  
Ol2 ff. 73b–79b (see also the section below on a variant ending of *‘Olam 2*)  
Te2 ff. 87a–100a (טעמים אחרים)

5) Cambridge, UL, Add. 1501\*

Rh ff. 1a–33b (large columns, beginning is lacking)  
Te1 ff. 1a–33b (small columns, beginning is lacking)  
Sh1 ff. 33b–45b (large columns)  
Mo ff. 45b–66b (large columns, end is lacking)  
Mi1 ff. 67a–73a (large columns)  
Ol1 ff. 34a–57a (small columns)  
Ol2 ff. 57b–74a (small columns)  
Mi2 ff. 77a–85b (end is lacking)

## 6) Cambridge, UL, Add. 1517\*

- Rh ff. 1a–15a (beginning is lacking)  
 Mi2 ff. 15a22–40 (at least 22–31 taken from the introduction of Mi2) (small fragment)  
 Te1 ff. 15b–21b  
 Mo ff. 22a–30b  
 Ho ff. 30b–34a (ספר משפטי המולדות)  
 Sh1 ff. 34a–38b
- Mz ff. 39b–44b  
 Me ff. 45a–47a (not. 47b, as probably erroneously indicated in this manuscript)  
 Mi2 ff. 47b–50a  
 Ol1 ff. 50a–53a  
 Ho ff. 53a

## 7) Cambridge, UL, Or. 2281

- Rh ff. 1a–44b

## 8) Dresden, Sächsische Landesbibliothek, Eb 384

- Rh ff. 8a–29b  
 Te ff. 32a–41a  
 Ho ff. 41a–42b  
 Mo ff. 42b–54b  
 Sh ff. 54b–60b  
 Me ff. 61a–64a  
 Mi ff. 65a–69a  
 Ol ff. 69b–74a (probably Ol1)

## 9) Firenze, Biblioteca Medicea Laurenziana, Plut.88.30

- Rh ff. 127b–141a (end missing)

## 10) Firenze, Biblioteca Nazionale Centrale 2

Mi, Sh

## 11) Firenze, Biblioteca Nazionale Centrale 27

Ol (tenth item)

## 12) Firenze, Biblioteca Nazionale Centrale Magl. III.36

Mi (מבחרים שניים), Sh, Me

13) Firenze, Biblioteca Nazionale Centrale, Magl.<sup>107</sup> III.139

- Me 4ff.  
 Ol ff. 103b–109b  
 Sh ff. 109b–118b  
 Te ff. 118b–133b  
 Mi ff. 133b–139b  
 Mo ff. 139b–160a

## 14) Jerusalem, Benyahu 131ע

- Mi ff. 1a–11b  
 Ol ff. 24a–27a

## 15) Jerusalem, Benyahu 132ע

Sh

## 16) Jerusalem, Benyahu 133ע

- Rh ff. 1a–29b  
 Te ff. 1b–31a (starts with the introduction to Te2 but continues with the text of Te1)  
 Mz ff. 31a–42b

<sup>107</sup> “CL” according to the card catalogue.

Te ff. 31b–35a (probably continuation of Te2)  
 Mi ff. 43a–49a  
 Sh ff. 49a–56b  
 Mo ff. 57a–65b  
 Ol ff. 66a–69b  
 Me ff. 70a–76a

17) Jerusalem, Makhon Ben Tzvi 280<sup>108</sup>  
 Ol ff. 1a–5b (probably Ol1)

18) Jerusalem, Rabbi Yosef Qāfah 36  
 Rh ff. 138b–150b (otherwise Mz)  
 Ol ff. 151a–156b  
 Ol ff. 157a–164b (probably Ol1)  
 Mo ff. 166a–173a  
 Me ff. 173a–179b  
 Mi ff. 179b–186a (probably Mi2 with fragments following from another version)  
 Sh ff. 187a–194b (probably Sh2) (cf. ff. 200a–207a, interrogations attributed to Ptolemy)

19) Leiden, Universiteitsbibliotheek, Scal. 14\*  
 Rh ff. 1b–62b  
 Me ff. 63a–71b  
 Ol1 ff. 72a–86a (at the end entitled (משפטי העולם))

20) London, British Library, Or. 5560 E  
 Rh ff. 7a–8b (fragment)

21) London, British Library, Or. 10243  
 Mo ff. 1–6

22) London, British Library, Or. 11900  
 Rh ff. 1a–47a

23) London, London School of Jewish Studies, Asher Myers 4  
 Mz (third item)

24) Madrid, Biblioteca de la Real Academia de la Historia 7<sup>109</sup>  
 Mo ff. 53–70  
 Me ff. 72–78  
 Sh ff. 79–88  
 Ol1 ff. 89–100 (entitled משפטי העולם)  
 Ol2 ff. 101–124  
 Te2 f. 125  
 Mi1 ff. 152–158  
 Mi2 ff. 164–169

25) Manchester, John Rylands University Library, Gaster 59\*  
 Rh ff. 2a–59a  
 Mo ff. 59b–90b  
 Ol1 ff. 91a–91b (fragment from the beginning, on the mathematical explanation of the possibility of a maximum of 120 conjunctions)  
 Ol2 ff. 91b–99a  
 Me ff. 100a–107a

26) Manchester, John Rylands University Library, Gaster 1775\*  
 ? f. 38a

<sup>108</sup> Cf. also below Jerusalem, Schocken Institute 10/16143.

<sup>109</sup> Following card catalogue 8.

- Rh ff. 41a–45b (the opening sentences are lacking, ends within chapter 2/Taurus = L/C xii 9)
- Mz ff. 48a–57a<sup>110</sup> (including tables; a quick glance does not reveal that this text is interspersed with that of another book, as the title to this text appears to promise)
- Mo ff. 61a–74a (complete, despite change of hands and blank pages)
- 27) Moscow, Russian State Library, Günzburg 274  
Rh ff. 37a–84b (only the first eight chapters)
- 28) Moscow, Russian State Library, Günzburg 338  
Sh
- 29) Moscow, Russian State Library, Günzburg 414  
Mo ff. 1a–25b<sup>111</sup>  
Me ff. 26a–31a  
Rh ff. 40a–97a  
Te ff. 97a–114b
- 30) Moscow, Russian State Library, Günzburg 421\*  
Rh ff. 2a–12b (from beginning to chapter 3 and possibly a small part of chapter 9)  
ff. 21a–23a (chapter 9, first lines lacking)  
ff. 23a–26b (chapters 7 and 8)  
ff. 26b–28a (chapters 5 and 6)  
Te1 ff. 13a–20b (of which 14a–20b correspond to chapters 4–10)  
Sh2 ff. 28a–32b  
Mi2 ff. 32b–36a  
Ol1 ff. 36b–39b (not complete)  
Mz ff. 41a–50b (including the astronomical tables)  
Mo ff. 54a–75b (different hand)

- 31) Moscow, Russian State Library, Günzburg 712  
Rh ff. 1a–167a [sic!]
- 32) Moscow, Russian State Library, Günzburg 840  
Rh ff. 8a–9b (fragment)  
Mz ff. 10a–b (fragment, possibly part of Mz, מחברת המשרתים)  
ff. 11a–13a (fragment)  
ff. 13a–17b (fragment, המבטים)  
Ol ff. 17b–18a (fragment)
- 33) Moscow, Russian State Library, Günzburg 1745  
Rh ff. 9b–13a
- 34) München, Bayerische Staatsbibliothek (= BS), Cod. Hebr. 45\*  
Rh ff. 379a–422a  
Mz ff. 422b–437a (astronomical tables lacking)  
Mo ff. 437b–460b  
Te2 ff. 461a–477b  
Sh1 ff. 478a–509b (500b–509b)  
Mi1 ff. 510a–517b
- 35) München, BS, Cod. Hebr. 202\*  
Rh ff. 1a–37a  
Te2 ff. 37a–52a  
Te1 ff. 52a–67a (title: טעמים אחרים)  
Ho ff. 68a–70a  
Mo ff. 70a–91a

<sup>110</sup> Somewhere in the middle the title changes to ספר המולות והמולדות of Ibn Ezra, though the same text is continued.

<sup>111</sup> Attributed to “Abraham.”

- Sh1 ff. 91b–101b  
 Me ff. 101b–108a  
 Mi1 ff. 108b–116a  
 Ol1 ff. 116a–124b  
 [Sh1 ff. 130a–137b] (pseudo-Ptolemaic interrogations)  
 Ol2 ff. 138a–143b  
 Mi2 ff. 144a–150a  
 Mz ff. 150a–163b
- 36) München, BS, Cod. Hebr. 261  
 Ol ff. 95–96 (fragment)
- 37) München, BS, Cod. Hebr. 304  
 Ol ff. 1–10  
 Ho ff. 10–13  
 Sh ff. 13–29  
 Te ff. 30 ff.  
 Rh ff. 55 ff.  
 Mi ff. 116b–228  
 Ol ff. 136–145<sup>112</sup>
- 38) Napoli, Biblioteca Nazionale Vittorio Emanuele III, III.F.12  
 Sh ff. 79b–83b
- 39) New York, Columbia University Library, X 893 Ib 53  
 Rh, Te, Mz, Mi, Sh, Mo, Ol, Me (47 folios, probably Sh1)
- 40) New York, Columbia University Library, X 893 Ib 55<sup>113</sup>  
 Rh, Mo, Mi, ?Mz,<sup>114</sup> Te, Ho (73 folios)
- 41) New York, Jewish Theological Seminary [= JTS], Elkan N. Adler  
 747

- Mi
- 42) New York, JTS, Mic 2349  
 Rh (sixth item)
- 43) New York, JTS, Mic 2553  
 Rh (first item)
- 44) New York, JTS, Mic 2558<sup>115</sup>  
 Rh ff. 3a–18a  
 Mo ff. 19a–39a
- 45) New York, JTS, Mic 2623  
 Rh, Te, Sh, Mo, Mi
- 46) New York, JTS, Mic 2625  
 Rh, Te, Mo, Me, Mi (probably Mi2)
- 47) New York, JTS, Mic 2626  
 Rh ff. 33a–75b  
 Mz ff. 75b–91a  
 Mo ff. 91b–116b

<sup>112</sup> Ol1, Te1, Mi1, Ol2? Cf. Steinschneider, *Die Hebraeischen Handschriften der K. Hof- und Staatsbibliothek in Muenchen*, 2<sup>nd</sup> ed. (Munich, 1895), p. 166.

<sup>113</sup> According to a note added to the description of MS Cambridge, UL, Add. 481 in the IMHM computer catalogue, MS New York, Columbia University Library, X 893 Ib 56 contains “*Olam* in what is probably the first version.

<sup>114</sup> The title is “מולוח,” according to the IMHM computer catalogue.

<sup>115</sup> Cf. MS New York, JTS 2611, which preserves an *English* collection of astrological writings, among them a number of texts written by Ibn Ezra.

Sh ff. 117a–126a, 140b–142b  
 Ol ff. 126b–133b  
 Me ff. 134a–140a  
 Te2 ff. 143a–160a

48) New York, JTS, Mic 2629

Ol ff. 77–88  
 Te ff. 91–122  
 Mi ff. 123–135  
 Mo ff. 137–175 (title מולד האדם)<sup>116</sup>

49) New York, JTS, Mic 2631

Sh ff. 16b–23b  
 Rh ff. 35a–66b  
 ?Sh2 ff. 67a–74a (title: ספר המזלות והשאלות; cf. Cambridge, UL, Add. 481 above)

50) New York, JTS, Mic 2636

Sh ff. 111a–121b  
 Te f. 127a–b (fragment)  
 Me ff. 144a–149b  
 Ol ff. 151a–159a (probably Ol1)  
 Te ff. 160a–196b

51) New York, JTS, Mic 2639 (?)<sup>117</sup>

Mo? (מולד האדם)

52) New York, JTS, Mic 2731

Mi ff. 71א-72[ט]  
 Ol ff. 71א-72[ו]

53) New York, JTS, Mic 8197

Sh ff. [1]a–[8]a  
 Mi ff. [8]a–[10]b (end is lacking)

54) New York, JTS, Mic 9531

Te f. 1a–b (fragment from the end of chapter 3 to the beginning of chapter 4)

55) New York, JTS, Mic 9537<sup>118</sup>

Mo (27 folios, not complete)

56) New York, Lehmann BR 180

Rh 50ff.

57) New York, Lehmann D 59

Rh 121ff.

58) Nürnberg, Stadtbibliothek, Cent.V<sup>119</sup>.app.4

<sup>116</sup> Binyamin Richler has kindly provided me with the incipit and explicit of this text, which correspond with those of *Moladot*.

<sup>117</sup> Cf. Y. T. Langermann, “Some Astrological Themes in the Thought of Abraham ibn Ezra,” in I. Twersky and J. M. Harris, eds., *Rabbi Abraham ibn Ezra: Studies in the Writings of a Twelfth-Century Jewish Polymath* (Cambridge, Mass.: Harvard University Press, 1993), pp. 28–85: “In this manuscript [i.e., MS New York JTS Mic 2639] the text is called *Sefer Molad ha-Adam*; it remains to be seen whether this is a different version of *Sefer ha-Moladot*” (p. 81, n. 78). This manuscript turns out to be in poor condition due to acid damage and is almost illegible. However, a printing error may have been made and Langermann actually intended to refer to manuscript 2629. But see above.

<sup>118</sup> New York, M. Lehmann 134 preserves a text סדר המזלות attributed to Ibn Ezra.

<sup>119</sup> Or: B.

Rh ff. 1–125  
 Te ff. 129–187  
 Mo ff. 188–259  
 Sh ff. 260–300  
 Me ff. 301–327  
 Mi ff. 328–356  
 Ol ff. 358–392

59) Oxford, Bodleian Library, Mich. 469 [Neubauer 458]  
 Rh ff. 95–154 (up to beginning of chapter 8)

60) Oxford, Bodleian Library, Mich. 56 [Neubauer 1662]\*  
 Te1 ff. 18a–34a

61) Oxford, Bodleian Library, Mich. 71 [Neubauer 2010]  
 Rh or Mz (ff. 18–59)

62) Oxford, Bodleian Library, Mich. 39 [Neubauer 2023]\*  
 Mo ff. 1a–34b  
 Mi1 ff. 35a–48b  
 Ol1 ff. 49a–61b  
 Me ff. 72a–82a

63) Oxford, Bodleian Library, Mich. 45 [Neubauer 2024]\*  
 Te1 ff. 3a–28b  
 Ho ff. 29b–32a  
 Rh ff. 33a–87a

64) Oxford, Bodleian Library, Opp. 707 [Neubauer 2025]\*  
 Rh ff. 1a–46b  
 Mz ff. 48b–65a  
 Mo ff. 65b–90b

Te2 ff. 91b–113a  
 Sh1 ff. 114a–155b (141b–155b)  
 Mi ff. 156a–165a

65) Oxford, Bodleian Library, Hunt. 606 [Neubauer 2026]\*  
 Mi1 ff. 3a–9a  
 Ol1 ff. 9b–16a

66) Oxford, Bodleian Library, Mich. 144 [Neubauer 2027]\*  
 Ol1 ff. 1a–9a (end is lacking)

67) Oxford, Bodleian Library, Mich. 221 [Neubauer 2246]\*  
 Te1 ff. 99a–116a

68) Oxford, Bodleian Library, Add. Qu. 160 [Neubauer 2518]\*  
 Rh ff. 13a–65a  
 Te1 ff. 65a–87b  
 Mo ff. 88a–117b  
 Me ff. 118a–126a  
 Mi1 ff. 128b–140a  
 Ol2 ff. 140b–153b  
 Ho ff. 162b–164b  
 Ol1 ff. 165a–167b

69) Paris, Bibliothèque nationale de France (= BnF), héb. 189\*  
 Te1 ff. 72b–87b  
 Mo ff. 87b–109a  
 Sh1 ff. 109a–120a (?–120a)  
 Me ff. 120a–125b  
 Mi1 ff. 125b–133b  
 Ol1 ff. 134a–142b (ca. ff. 135b–137a also some Ol2 and Rh passages)

70) Paris, BnF, héb. 259\*  
 Rh ff. 54a–93b  
 Mo ff. 94a–119b (with its second part presented as a separate treatise, ff. 115b–119b)  
 Me ff. 120a–126b  
 Ol1 ff. 127a–136b  
 Te2 ff. 137a–153b

71) Paris, BnF, héb. 979\*  
 Mo ff. 80b–107a

72) Paris, BnF, héb. 1031<sup>120</sup>  
 Rh ff. 102–130a

73) Paris, BnF, héb. 1044\*  
 Rh ff. 132b–192b  
 Te1 ff. 192b–217a  
 Te2 ff. 217b–239b  
 Mi2 ff. 240a–249a  
 Ol2 ff. 249b–258b

74) Paris, BnF, héb. 1045\*  
 Rh ff. 89a–117a  
 Te1 ff. 117b–127a  
 Mo ff. 127b–146a  
 Sh1 ff. 146a–155b (?–155b)  
 Me ff. 155b–161a  
 Mi1 ff. 161a–168b  
 Ol1 ff. 168b–177b  
 Ol2 ff. 196b–200b

75) Paris, BnF, héb. 1047

Rh ff. 223–253

76) Paris, BnF, héb. 1051\*  
 Mo ff. 66a–92b  
 Sh2 ff. 95a–106b

77) Paris, BnF, héb. 1055\*  
 Rh ff. 1b–27a  
 Te1 ff. 27b–37b  
 Sh1 ff. 41a–48a  
 Me ff. 48b–52a

78) Paris, BnF, héb. 1056\*  
 Rh ff. 3a–33b  
 Te1 ff. 34a–43b  
 Mo ff. 44a–61b  
 Sh1 ff. 62a–69b  
 Me ff. 70a–73b  
 Mi1 ff. 74a–79a  
 Ol1 ff. 80a–86a

79) Paris, BnF, héb. 1057\*  
 Rh ff. 1a–36a  
 Mi1 ff. 36a–36b (fragment from the introduction; see also below)  
 Ho ff. 37a–45b  
 Te1 ff. 46a–63b  
 Mz ff. 68a–81b

<sup>120</sup> On ff. 165a–206b, the astrological work פועל השפעת has been attributed, though by another hand, to Ibn Ezra. This text was probably written in 1311. See Zotenberg catalogue, p. 23.

Mi2 ff. 82a–87b  
 Me ff. 88a–93b  
 Ol1 ff. 95b–103a  
 Ho f. 103b

80) Paris, BnF, heb. 1058\*

Sh2 ff. 1a–8b  
 Mi2 ff. 8b–13b  
 Mz ff. 13b–26a  
 Te2 ff. 26a–38b

81) St. Petersburg, Institute of Oriental Studies of the Russian Academy of Sciences [= IOSRAS] A82

Sh ff. 137b–148a

82) St. Petersburg, IOSRAS A185

Ho?

83) St. Petersburg, IOSRAS B70

Rh ff. 36a–75a  
 Mz ff. 76a–89b  
 Mo ff. 90a–111a  
 Sh ff. 114a–121b, 136a–137b  
 Ol ff. 122a–129a  
 Me ff. 130a–135b  
 Te ff. 138a–152b

84) St. Petersburg, IOSRAS B117

Rh 37 folios

85) St. Petersburg, IOSRAS B118

Sh ff. 7a–17b

86) St. Petersburg, IOSRAS B131

Rh ff. 1a–32b  
 Mo ff. 33a–54b  
 Ol ff. 55a–61a  
 Me ff. 61b–66b  
 Mi ff. 67a–68a

87) St. Petersburg, IOSRAS B150\*

Rh ff. 104a–140b  
 Mz ff. 141a–153b (astronomical tables lacking)  
 Mo ff. 153b–180a  
 [Sh1 ff. 180b4–181b21 (23?)] (pseudo-Ptolemaic interrogations)  
 Sh1 ff. 181b–186a2 (from within place seven)  
 Ol2 ff. 172a–176b (opening lines lacking)  
 f. 190b (opening lines)  
 ff. 191a–193b (rest of Ol2)  
 Me ff. 196a–202a  
 Sh2 ff. 202a–204b (from place twelve)  
 Te2 ff. 204b–220a

88) St. Petersburg, IOSRAS B185

Mo f. 4b (fragment from the introduction)  
 Ho On or after f. 47a

89) St. Petersburg, IOSRAS B228

Sh ff. 119a–124a (starts in place seven)  
 Me ff. 124b–130b  
 Sh2 ff. 131a–133a<sup>121</sup>

<sup>121</sup> According to the computer catalogue this is the same text as that preserved in Cambridge, UL, Add. 481.

90) St. Petersburg, IOSRAS B294<sup>122</sup>

Mz ff. 1a–16a  
 Te ff. 17a–31a (f. 20a–b blank folios, lacuna)  
 Mi ff. 32a–38a  
 Mo ff. 38b–60a

## 91) St. Petersburg, IOSRAS B447\*

Rh ff. 5a–49b  
 Ho ff. 50b–52a  
 Mz ff. 53a–67a (including astronomical tables)  
 Te1 ff. 69a–83b (most of chapter 2 is lacking)  
 [Sh1 ff. 85a–95a] (pseudo-Ptolemaic interrogations)  
 Mi2 ff. 97a–103a  
 Mo ff. 105a–126b  
 Sh1 ff. 129a–141a

## 92) St. Petersburg, IOSRAS C5

Rh 9 folios (up to halfway through chapter 4)

## 93) St. Petersburg, IOSRAS C76

Ho f. 135a–ב משפטי הנולד  
 Ho ff. 136a–141b משפטי הנולד

94) St. Petersburg, Russian National Library, Evr. II A245<sup>123</sup>

Sh ff. 1a–9b  
 Mi f. 10a–16b  
 Me ff. 17a–24b  
 [Sh ff. 29a–36a] (pseudo-Ptolemaic interrogations (?), end lacking)

## 95) Roma, Biblioteca Casanatense 222

Mo<sup>124</sup>

## 96) Roma, Biblioteca Nazionale Centrale Vittorio Emanuele II, Or. 54

Rh ff. 1a–36b

## 97) Sassoon 189

Rh (fragments)

## 98) Sassoon 789\*

Rh ff. 202–286  
 Mi2 ff. 286–291 (up to beginning of place four)  
 Sh2 ff. 291–304 (opening lines lacking, up to place eight)  
 Mz ff. 304–340 (including astronomical tables)  
 Ol1 ff. 340–346 (not complete)

99) Sassoon 823\*<sup>125</sup>

Rh ff. 25–60  
 Mi2 ff. 61–62 (fragment, up to near the end of place one)  
 Sh2 ff. 63–68 (opening lines lacking; up to place eight)  
 Mz ff. 69–86  
 Ol1 ff. 86–92 (about first half of the text)  
 Me f. 93 (fragment, the end of the text)

## 100) Strasbourg, Bibliothèque nationale et universitaire 4024

Sh 10 ff.

<sup>122</sup> Cf. St. Petersburg, IOSRAS B446, f. 90b–91b מנהוגים ascribed to Ibn Ezra. This may be a fragment from one of his introductory treatises.

<sup>123</sup> Belongs to the second Firkovich collection.

<sup>124</sup> According to Binyamin Richler, director of the IMHM, this manuscript retains only a few quotes from Ibn Ezra's astrological works.

<sup>125</sup> Y. Zvi Langermann (with K. A. F. Fischer and P. Kunitzsch), "The Hebrew Astronomical Codex MS Sassoon 823," *Jewish Quarterly Review* 78 (1989): 253–92.

101) Tel Aviv, Bill Gross 326

Mz ff. 1a–11b

102) Vatican, Biblioteca Vittorio Emanuele 12

Rh

103) Vatican, Biblioteca Apostolica Vaticana [=BAV] 47

Rh, Te, Ho, Mi, Mi, Te, Me, Mo

104) Vatican, BAV 202

Me ff. 217a–218b (only the beginning)

105) Vatican, BAV, ebr. 390

Rh ff. 1a–57a

Sh1 ff. 58a–76a (starts in the “third” part according to the computer catalogue of the IMHM)

Mi ff. 76a–84b

Te1 ff. 85a–108a

Mo ff. 108a–138b

Me ff. 138b–146a

Ol1 ff. 146a–157b<sup>126</sup>

106) Vatican, BAV, ebr. 477\*

Rh ff. 22a–?23a (fragment from chapter 9)

Sh2 ff. 53a–b 5 (fragment)

Mz ff. 67b–85b

Ol2 ff. 86a–94b

Mi1 ff. 97a–108a

Ol1 ff. 108a–121a

Te2 ff. 121b–140b

107) Warszawa, Żydowski Instytut Historyczny 112<sup>127</sup>

Rh ff. 1a–28a

Mo ff. 28b–42a

Ol ff. 42b–46b

Me ff. 47a–51b

Mi ff. 52a–53b

108) Warszawa, Żydowski Instytut Historyczny 255

Rh ff. 1a–25a

Te ff. 25b–37a

Mo ff. 37b–50a

Mi ff. 50b–55a

Ol ff. 55b–60a (probably Ol1)

Me ff. 64b–68a

109) Warszawa, Żydowski Instytut Historyczny 282

Te ff. 18a–31b

110) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 38

Rh

111) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 60

[Schwarz 183]

Rh 35ff.

112) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 65

[Schwarz 169]

Mo 21ff.

<sup>126</sup> Ed. Fleischer, p. 34.

<sup>127</sup> Cf. MS Warszawa, Żydowski Instytut Historyczny 253, ff. 21a–85b, which contains an adaptation of some of Ibn Ezra’s astrological writings.

113) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 67  
Rh ff. 192a–240b

114) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 132  
[Schwarz 185]  
Mz ff. 1–2 (end lacking)  
Ol1 f. 3a–3b (incomplete)  
Mi ff. 4a–5b  
Sh ff. 5b–10b  
Rh ff. 11a–18a  
Te ff. 18a–19b

115) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 195  
[Schwarz 196]  
Sh f. 94a (incomplete)  
Sh ff. 95a–96a (incomplete)<sup>128</sup>  
Rh f. 107b (chapter nine)  
(Me) f. 113a (notes to this treatise)  
Ho ff. 117–118

<sup>128</sup> Finally, Binyamin Richler has informed me that PH 6548 contains two astrological fragments that were originally in secondary use as wrappers in the Archivio di Stato, one with places 5–7 of what may be one of Ibn Ezra's treatises on interrogations, and the other with places 6–9, also possibly Ibn Ezra's.

Summary

○ Preserved fully or partially—Preserved fully if the manuscript

□ Preserved partially

Columns Te, Mi, Sh, and Ol are used whenever the exact redaction

is marked with an asterisk

of the relevant treatise remains to be determined with certainty.

Manuscript	Mz	Rh	Te	Te 1
1) Berlin, Staatsbibliothek 219 [Or. Fol. 1618]				
2) Berlin, Staatsbibliothek 220 [Or. Qu. 679]*	○	○		□
3) Cambridge, UL, Add. 481*		○		
4) Cambridge, UL, Add. 1186*		○		○
5) Cambridge, UL, Add. 1501*		□		□
6) Cambridge, UL, Add. 1517*	○	□		○
7) Cambridge, UL, Or. 2281		○		
8) Dresden, Sächsische Landesbibliothek, Eb 384		○	○	
9) Firenze, Biblioteca Medicea Laurenziana, Plut. 88.30		□		
10) Firenze, Biblioteca Nazionale Centrale 2				
11) Firenze, Biblioteca Nazionale Centrale 27				
12) Firenze, Biblioteca Nazionale Centrale Magl. III.36				
13) Firenze, Biblioteca Nazionale Centrale, Magl. III.139			○	
14) Jerusalem, Benyahu 131 <sup>Y</sup>				
15) Jerusalem, Benyahu 132 <sup>Y</sup>				
16) Jerusalem, Benyahu 133 <sup>Y</sup>	○	○	○(2x)	
17) Jerusalem, Makhon Ben Tzvi 280				
18) Jerusalem, Rabbi Yosef Qafah 36		○		
19) Leiden, Universiteitsbibliotheek, Scal. 14*		○		
20) London, British Library, Or. 5560 E		□		
21) London, British Library, Or. 10243				
22) London, British Library, Or. 11900		○		
23) London, London School of Jewish Studies, Asher Myers 4	○			
24) Madrid, Biblioteca de la Real Academia de la Historia 7				
25) Manchester, John Rylands University Library, Gaster 59*		○		
26) Manchester, JRUL, Gaster 1775*	○	□		

Te 2	Mo	Mi	Mi 1	Mi 2	Me	Sh	Sh1	Sh 2	Ol	Ol 1	Ol 2
		○			○				○		
□	○		□	○	○					○	○
□	○			○				○			○
○	○										○
	○		○	□			○			○	○
	○			○	○		○			○	
	○	○			○	○			○		
		○				○					
									○		
		○			○	○					
	○	○			○	○			○		
		○							○		
	○	○			○	○			○(2x)		
					○					○	
	○										
○	○		○	○	○	○				○	○
	○				○					□	○
	○										







Manuscript	Mz	Rh	Te	Te 1
114) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 132 [Schwarz 185]	○	○	○	
115) Wien, Österreichische Nationalbibliothek, Cod. Hebr. 195 [Schwarz 196]		□		

Te 2	Mo	Mi	Mi 1	Mi 2	Me	Sh	Sh1	Sh 2	OI	OI 1	OI 2
		○				○				○	
					(□)	□ (2x)					

## Horoscopes

In this section, the horoscopes mentioned above have been grouped according to the year in which they purport to have been cast. The 1143 horoscope may well have been drawn up by Ibn Ezra, perhaps for someone born in Verona. This “horoscope” is in fact a technical astrological treatise, in which the horoscope serves only as a mathematical example and is never interpreted. The second horoscope, drawn up for a boy in Narbonne, is probably spurious<sup>129</sup>. It cannot be ruled out that other manuscripts preserve horoscopes in addition to those mentioned here.

1) 4 Marḥeshvan 4904 ( ד'תתק"ד=14 October 1143) at 2 pm is preserved in at least:

- Cambridge, UL, Add. 481\*, ff. 158b1.24–168a
- Cambridge, UL, Add. 1517\*, ff. 30b–34a: ספר משפטי המולדות; the text seems to read 14 Marḥeshvan 4904, but this must be a copying error
- New York, Columbia University Library, X 893 Ib 55
- Paris, BnF, héb. 1057, ff. 37a–45b
- St. Petersburg, IOSRAS C76, ff. 136a–141b: משפטי הנולד<sup>130</sup>

Incipit according to the second Cambridge manuscript:

היה הנולד בתחלת השעה התשיעית מיום ראשון י"ד<sup>131</sup> למרחשון שנת תתק"ד

Explicit:

והתוספת כ"ב שעות כ"ו חלקים ועל דרך זו תעשה תמיד ואין אחר זה הדקדוק כלום

2) 13 Marḥeshvan 4921 ( א'תתקכ"א=15 October 1160) is preserved in at least:

- Berlin, Staatsbibliothek 220 [Or. Qu. 679]\*, f. 72a (introduction)
- Cambridge, UL, Add. 1517\*, f. 53a (introduction and horoscope)
- Dresden, Sächsische Landesbibliothek, Eb 384, ff. 41a–42b
- München, BS, Cod. Hebr. 202\*, ff. 68a–70a

- Oxford, Bodleian Library, Mich. 45 [Neubauer 2024]\*, ff. 29b–32a
- Oxford, Bodleian Library, Add. Qu. 160 [Neubauer 2518]\*, ff. 162b–164b
- Paris, BnF, héb. 1057\*, f. 103b (introduction and horoscope)
- (?) St. Petersburg, IOSRAS A185 (probably)
- St. Petersburg, IOSRAS B185, on or after f. 47a (probably; see also under 3)
- St. Petersburg, IOSRAS B447\*, ff. 50b–52a
- Vatican, BAV, 47 (probably)
- Wien, Österreichische Nationalbibliothek, Cod. Hebr. 195 [Schwarz 196], ff. 117–118

Incipit according to M2:

נולד הילד המבורך בחלק הראשון מן השעה הראשונה מיום שבת שלשה עשר יום לירח מרחשון

Explicit:

גם אנחנו לא נדע מה נעשה כי עליו עיניו יתברך שמו לעד אמן

3) Horoscopes, for which the dates have not yet been identified, are been preserved in:

- München, BS, Cod. Hebr. 304, ff. 10–13
- St. Petersburg, IOSRAS B185, on or after f. 47a: ממשפט הנולד for the year תתקכ"א, two versions according to the computer catalogue of the IMHM

<sup>129</sup> On both horoscopes see Smithuis, “Abraham Ibn Ezra,” pp. 13542

<sup>130</sup> According to the IMHM computer catalogue this is the same text as in MS Cambridge, UL, Add. 481.

<sup>131</sup> Sic! But, for example, the first Cambridge manuscript reads: רביעי.

- St. Petersburg, IOSRAS C76, f. 135a–b: משפטי הנולד

An Astrological Prognostication for the Year 1166  
Various manuscripts preserve an interesting astrological prognostication written in 1153/4 based on the Saturn-Jupiter conjunction in 1166. Goldstein has rejected the possibility of Ibn Ezra's authorship of this text (I believe rightly so).<sup>132</sup> The text has been preserved at least in the following manuscripts:

- Cambridge, UL, Add. 1517\*, f. 47a–b, where it appears as a separate fragment following *Me'orot*, with the remark תם ספר המאורות, however, occurring at the end of the prognostication.
- Dresden, Sächsische Landesbibliothek, Eb 384, f. 64a
- Jerusalem, Ha-Rav Yosef Qāfah 36, ff. 164a–165b.
- Oxford, Bodleian Library, Add. Qu. 160 [Neubauer 2518]\*, ff. 126b–128a, where it follows *Me'orot*.
- Paris, BnF, héb. 1057\*, f. 94a–95a: same comment as with respect to the Cambridge manuscript.

Incipit:

שאו מרום עיניכם וראו מי ברא אלה המוציא במספר כל צבאם לכלם

Explicit:

וברוך האל היודע העתידות כי אין זולתו ברוך שם כבוד מלכותו לעולם ועד אמן

More Material: *Goralot*

Numerous geomantic treatises and compositions of a magical nature have been attributed to Ibn Ezra. In the Collective Catalogue of the IMHM they are often listed under the title *Goralot*, though also under a number of other titles, such as *Še'elot*. The great majority of these texts have been preserved in manuscripts other than those retaining Ibn Ezra's astrological writings. Since it can be assumed that most of this material is not strictly astrological in the way that would require in-

clusion in this article and, second, that these texts are probably spurious, the relevant manuscripts have not been studied. Future investigation will have to establish whether or not these manuscripts also contain astrological texts written by Ibn Ezra. On the other hand, a few manuscripts listed above preserve what are in fact excerpts from an astronomical-astrological treatise, which, based on its incipit, catalogues inappropriately designate *Goralot*. This composition, which apparently belongs to Ibn Ezra's astrological corpus,<sup>133</sup> has so far been identified in the following manuscripts:

- Cambridge, UL, Add. 1517\*, f. 38b–39b
- Paris, BnF, héb. 1057\*, f. 66a–68a

Another manuscript that may contain this text is MS Firenze, Biblioteca Nazionale Centrale 2. According to the Cambridge manuscript, the incipit of *Goralot* reads:

אלה גורלות כל תקופה לדעת כל דבר שיתיקר או יהיה בזול הסתכל למקום הגורל מי הוא בעל ביתו

Explicit:

ולהבין זה? אחוק לך לוחות הנשיא בשנים ועשרות שנים בתקופת שנת חמה לדעת הנשיא לוח החלוף הנמצא בתקופת שנת חמה על ז' ז' לדעת (?) הא'ע'

This work, transmitted anonymously, consists of two fragments. The first is an almost literal excerpt from the ninth chapter on lots (*goralot*)

<sup>132</sup> Bernard R. Goldstein, "A Prognostication based on the Conjunction of Saturn and Jupiter in 1166 [561 A.H.]," in C. Burnett, J. Hogendijk, K. Plofker, and M. Yano, eds., *Ketuprakasa: Studies in the History of the Exact Sciences in Honour of David Pingree* (Leiden: Brill, 2004), pp. 735–57.

<sup>133</sup> For arguments in favor of such an attribution see Smithuis, "Abraham Ibn Ezra," pp. 142–44.

in *Rešit ḥokmah*, regarding the lots of water and various foodstuffs (L/C, pp. lxxiii 16–lxxiv 23). The second fragment, which has no connection with the foregoing, though it follows it immediately, starts with (f. 39a10–1 of the Cambridge manuscript):

ניסן הכנס בשנה זו שהיא ד' אלף תתק"ח ליצירה ב"ג מחדש מארט ובקש עד שיהיה מהלך  
השנה לשמש שמ"ח מעלות ודק אחד