

ABRAHAM IBN EZRA
THE BOOK OF REASONS

A PARALLEL HEBREW-ENGLISH
CRITICAL EDITION OF THE TWO
VERSIONS OF THE TEXT

by

SHLOMO SELA

BRILL

Abraham Ibn Ezra
The Book of Reasons

Études sur le Judaïsme Médiéval

Fondées par
Georges Vajda

Dirigées par
Paul B. Fenton

TOME XXXV

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LEIDEN • BOSTON
2007

This book is printed on acid-free paper.

**Library of Congress Cataloging-in-Publication Data is available on
<http://catalog.loc.gov>.**

ISSN: 0169-815X

ISBN: 978 90 04 15764 4

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PRINTED IN THE NETHERLANDS

*To the beloved memory of my mother,
Esther Feigue Goldberg de Slucki*

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ACKNOWLEDGMENTS

Lenn Schramm revised my translations and edited the English sections of this book; he also made very helpful suggestions about the interpretation of the Hebrew texts. Several colleagues provided useful assistance in various domains. Prof. Charles Burnett carefully read the entire text of both versions of the *Book of Reasons* and offered valuable suggestions on astrological, astronomical and linguistic topics. Prof. Gad Freudenthal read the introduction and provided advice about its organization (as well as that of the entire whole book). Prof B.R. Goldstein and Dr. Tony Levy read various sections of the texts and enlightened me on various points of astronomy and mathematics. The Oxford Centre for Jewish Studies awarded me the Skirwall Fellowship for the 2004/5 academic year, allowing me time to prepare most of my manuscript. Prof. Moises Orfali, dean of the Faculty of Jewish Studies at Bar-Ilan University, and the *Fondation Ihel* (Bar-Ilan University) provided generous grants in 2004–2006. My warmest thanks to all of them.

Sh.S.

ABBREVIATIONS

Bnf	Bibliothèque nationale de France
IMHM	Institute for Microfilmed Hebrew Manuscripts, Jewish National and University Library, Jerusalem
<i>Reshit Hōkhmah I</i>	extant version of <i>Reshit Hōkhmah</i>
<i>Reshit Hōkhmah II</i>	lost version of <i>Reshit Hōkhmah</i>
Rh, II, viii:25	Abraham Ibn Ezra, <i>Reshit Hōkhmah</i> in Raphael Levy and Francisco Cantera, <i>The Beginning of Wisdom</i> , An Astrological Treatise by Abraham Ibn Ezra, Baltimore, 1939, second chapter, page viii, line 25
Ta §1.2:3	First version of <i>Sefer ha-Ṭe'amim</i> , chapter 1, section 2, passage 3
Tb §1.2:3	Second version of <i>Sefer ha-Ṭe'amim</i> , chapter 1, section 2, passage 3
<i>Ṭe'amim I</i>	First version of <i>Sefer ha-Ṭe'amim</i>
<i>Ṭe'amim II</i>	Second version of <i>Sefer ha-Ṭe'amim</i>

INTRODUCTION

From the Middle Ages until the present, the development of astrology among Jews was associated mainly with the name of Abraham Ibn Ezra (1089–1167). The vicissitudes of his life, along with the organization and scope of his literary work, are the embodiment of the emergence of medieval Hebrew science, a cultural phenomenon that saw Jewish scholars gradually abandon the Arabic language and adopt Hebrew as a vehicle for the expression of secular and scientific ideas. Ibn Ezra's writings were not produced in Muslim Spain, where he was born and grew up. In fact, his earliest scientific works date from the time he left al-Andalus for Latin Europe in 1140, at the age of fifty. From then on he led the life of the vagabond scholar, roaming through Italy, France and England, where he taught and wrote prolifically, almost exclusively in Hebrew, on an extremely wide variety of subjects.

Ibn Ezra's fame is due to his outstanding biblical commentaries, but he also wrote religious and secular poetry and a series of religious-theological monographs and grammatical treatises, and his intellectual interests extended to the sciences as well.¹ His scientific corpus, comprising roughly thirty treatises, deals with mathematics, astronomy, scientific instruments and tools, and the Jewish calendar; but especially with astrology. Twelve of his Hebrew astrological writings are extant. Along with four introductions to astrology—*Reshit Hokhmah* (Beginning

¹ For a chronological listing of Ibn Ezra's scholarly writings (biblical commentaries; books related to the Hebrew language or bearing on theology; scientific treatises), see Sela-Freudenthal, 2006. On Ibn Ezra's exegetical work, see Simon, 1983, pp. 47–60; Sarna, 1993, pp. 1–27. For Ibn Ezra's religious poetry, see Shirey ha-Qodesh, 1980. For his profane poetry, see Diwan, 1886. For a general review of Ibn Ezra's poetry, see Levin, 1956; Schirman, 1997, pp. 13–92; Itzhaki, 2000, pp. 53–59. For an assessment of Ibn Ezra's philosophical, religious, and theological thought, see Friedlander, 1877; Rosin, 1898–1899; Greive, 1973; Schwartz, 2005, pp. 9–26. For a discussion of Ibn Ezra's contribution to the development of Hebrew grammar, see Charlap, 1995. For a general evaluation of Ibn Ezra's scientific contribution, see Steinschneider, 1880, pp. 59–128; Steinschneider, 1925, pp. 327–387; Vallicrosa, 1949, pp. 289–347; Baron, 1958, VIII, pp. 138–220; Levey, 1971, IV, pp. 502–503; Goldstein, 1996, pp. 9–21. Lévy, 2000, pp. 60–75; Sela, 2001b, pp. 91–149; Sela, 2003a, pp. 17–92.

of Wisdom), the two versions of *Sefer ha-Ṭe'amim* (Book of Reasons), and *Mishpetei ha-Mazzalot* (Judgments of the Zodiacal Signs), we have: a work on nativities—*Sefer ha-Moladot* (Book of Nativities); two treatises on general astrology—the two versions of *Sefer ha-'Olam* (Book of the World); two monographs on the doctrine of interrogations—the two versions of *Sefer ha-She'elot* (Book of Interrogations); two treatises on the doctrine of elections—the two versions of *Sefer ha-Mivharim* (Book of Elections); and one work on medical astrology—*Sefer ha-Me'orot* (Book of the Luminaries).

Two general statements can be made about Ibn Ezra's astrological work. First, although composed of at least twelve separate treatises, it may be considered to constitute a single astrological encyclopedia, whose unity derives from a network of cross-references, or a single major work divided into chapters, which deal separately with the four main systems of Arabic astrology: nativities, elections, interrogations, and general astrology. Second, most of the individual treatises were composed in at least two different versions or recensions, which indicates that Ibn Ezra supported himself by his pen, writing a new version of an old work for a new patron when he arrived in a new town, and that he could keep stimulating the attention and curiosity of readers all along his itinerary through Latin Europe.

Ibn Ezra's astrological work circulated widely. At least 100 Hebrew manuscripts with diverse collections of these treatises, dating from the second half of the thirteenth century until the nineteenth centuries, have survived.² Soon after his death, his disciples and admirers began copying and commenting on excerpts from his writings into other works.³ From the second half of the thirteenth century, translations into Latin, French, and other European languages made his astrological works available to Christian readers.⁴ They have received increasing scholarly attention since the late nineteenth century.⁵ Nevertheless, only one of the twelve extant astrological treatises has been published in an (inadequate) scholarly edition with translation.⁶ Most of the others

² Smithuis, 2006, pp. 299–322.

³ For a remarkable example, see below, n. 61 and Sela, 2004b. See also Šafnat Pa'aneah, 1911 (Introduction).

⁴ Thorndike, 1944, pp. 293–302; Smithuis, 2004, chapter 6 and appendix 1.

⁵ For a synoptic review of Ibn Ezra's astrological works, see Steinschneider, 1880, pp. 495–498; Rosin, 1898–1899, pp. 250–251; Levy, 1927, pp. 11–13; Sela, 2001b, pp. 115–131; Sela, 2003a, pp. 57–74; Smithuis, 2004, chapter 1.

⁶ Reshit Hokhmah, 1939. This edition, published by Raphael Levy and Francisco

are available in uncritical editions, based on a single manuscript and lacking a translation and commentary.⁷

The present volume begins to fill this lacuna by offering a critical Hebrew text of the two versions of Ibn Ezra's *Sefer ha-Ṭe'amim*, the Book of Reasons, accompanied by an annotated translation and commentary (The first version will be referred to as *Ṭe'amim I* and the second as *Ṭe'amim II*).⁸ This volume is planned as the first product of a larger enterprise—a critical edition, English translation, and commentary on all twelve of Ibn Ezra's astrological treatises. The English translations of the Hebrew texts, with their explanatory annotations, are not meant only for those who do not read Hebrew. In fact, a critical edition without a translation into a widely used modern language would leave most of the difficulties posed by obscure and convoluted medieval Hebrew texts like *Ṭe'amim I* and *Ṭe'amim II* as incomprehensible as before, even for those who are fluent in modern Hebrew.

The two treatises presented here were designed to offer *ṭe'amim* (טעמים)—“reasons”, “explanations”, or “meanings”—of the raw astrological concepts formulated in the introduction to astrology that Ibn Ezra entitled *Reshit Hokhmah* (Beginning of Wisdom). This is clear from the fact that in *Ṭe'amim I* the “reasons” are often preceded by quotations from *Reshit Hokhmah*, and from the explicit statement, in the first sentence of *Ṭe'amim II*, to “lay the foundation of *Sefer Reshit Hokhmah*.”⁹

According to the tradition handed down by the manuscripts, both treatises bear the same title, namely, *Sefer ha-Ṭe'amim* (Book of Reasons) or *Ṭe'amim 'aḥerim* (Other Reasons).¹⁰ But even though these twin treatises were purportedly designed to serve the same purpose and

Cantera, incorporates the Hebrew text of *Reshit Hokhmah*, an inadequate English translation of the Hebrew original, and an edition of the old French version of 1273. Unless otherwise indicated, this edition will be used for any quotation from or reference to the Hebrew text of *Reshit Hokhmah*, in the format Rh, II, viii:25 = *Reshit Hokhmah*, 1939, second chapter, page viii, line 25.

⁷ Me'orot, 1933; 'Olam A, 1937; Ṭe'amim B, 1941; Ṭe'amim A, 1951; Mivḥarim A, 1969; 'Olam A, 1971; Me'orot, 1971; Mishpetei haMazalot, 1995; Moladot, 1995; She'elot A, 1995.

⁸ References to the Hebrew text and English translation of *Ṭe'amim I* are given in the format Ta §2.4:5 = *Ṭe'amim I*, chapter 2, section 4, passage 5; references to the Hebrew text and English translation of *Ṭe'amim II* are given in the format Tb §8.7:2 = *Ṭe'amim II*, chapter 8, section 7, passage 2.

⁹ For the quotations from *Reshit Hokhmah* in *Ṭe'amim I*, see the notes to the English translation. For the promise in the opening sentence of *Ṭe'amim II*, see Tb §1.1:1.

¹⁰ However, the name *Sefer ha-Ṭe'amim* is much more frequent than *Ṭe'amim 'aḥerim*. For both titles, see the *variae lectiones* to the initial canticles.

consequently share a common name, *Ṭe'amim I* and *Ṭe'amim II* are quite different from each other. (1) Whereas *Ṭe'amim I* is full of quotations from *Reshit Hokhmah*, the identity of the text underlying *Ṭe'amim II* is shrouded in mystery, as will be shown in due course. (2) Whereas *Ṭe'amim I* is structured as long quotations followed by brief glosses, it is not clear whether *Ṭe'amim II* was organized as a loose commentary on rough ideas or as a running and close commentary on some other text. (3) Important topics covered in *Ṭe'amim II* are altogether absent from *Ṭe'amim I*, and vice versa. (4) Those topics that are addressed in both are treated in a different order and sometimes in a different fashion. (5) In sharp contrast to *Ṭe'amim I*, the date and place of composition of *Ṭe'amim II* are unclear, making it difficult to establish its relative place vis-à-vis *Ṭe'amim I* in the framework of Ibn Ezra's work.

Given these dissimilarities, it is not surprising that in the Middle Ages and early Modern period *Ṭe'amim I* and *Ṭe'amim II* circulated as two distinct treatises rather than as variant versions of a single text. In at least seven Hebrew and one Latin manuscript collections of Ibn Ezra's astrological treatises *Ṭe'amim I* and *Ṭe'amim II* were copied alongside each other or one after the other, as if they were two dissimilar treatises worthy to be read sequentially.¹¹ Let us try now to solve these puzzles.

Interpretive Organization

That *Ṭe'amim I* is a close commentary on *Reshit Hokhmah* (as we have it today) is borne out by the fact that its text is full of quotations from the latter, presented in the order that they appear in the longer work, so that *Ṭe'amim I* offers a nearly exact replica of the main astrological topics and points of interest discussed in *Reshit Hokhmah*. These quotations can be readily identified by a comparison of the two texts, but also by means of certain formulas, such as the peculiar use of the third person plural that often introduces verbatim quotations, or conjunctions such as “because of” (כי), “on account of” (בעבור), “this is the reason for”

¹¹ Munich, Bayerische Staatsbibliothek, Cod. Hebr. 202, ff. 35a–67a; New York, Columbia University Library, X 893 Ib 53, ff. 1–35; Paris, Bibliothèque nationale de France, héb. 1044, ff. 192b–239b; Vatican, Biblioteca Apostolica Vaticana 47, ff. 25a–34b, 44b–53b; Berlin, Staatsbibliothek 220, ff. 1b–32a, 51b–54a; Cambridge, University Library, Add. 1186, ff. 36b–51b, 87a–100a; Jerusalem, Benyahu 2133, ff. 1a–35a; Leipzig, University, 1466, ff. 49^{b2}–73^{b1}.

(ככה טעם), etc.¹² Another method employed in *Ṭe'amim I* consists of relatively long digressions spurred by brief quotations that quickly develop into independent discussions.¹³

In sharp contrast to *Ṭe'amim I*, the interpretive organization of *Ṭe'amim II* is far from clear. Despite the promise in its opening sentence “to lay the foundation of the *Book of the Beginning of Wisdom*” (Tb §1.1.1), it is virtually impossible to find explicit and obvious quotations from the extant text of *Reshit Hokhmah* in *Ṭe'amim II*. Was *Ṭe'amim II*, then, organized as a loose commentary on rough ideas, but without quotations from *Reshit Hokhmah*? Or is it a running commentary interspersed with quotations from a version of *Reshit Hokhmah* that is substantially different from the extant version? In favor of the first alternative is the fact that much of *Ṭe'amim II* appears to be designed as relatively long and detailed definitions or explanations of astrological concepts, which may be read without the support of an underlying text.¹⁴ This hypothesis is strengthened by the consideration that a number of years elapsed between the composition of *Reshit Hokhmah* and *Ṭe'amim II* and that a manuscript of the former was not available to Ibn Ezra when he wrote *Ṭe'amim II*.¹⁵ Closer scrutiny, however, makes this hypothesis untenable. For one thing, two chapters of *Ṭe'amim II*, §6 and §8, address a variety of concepts related to nativities, which are totally absent from the extant text of *Reshit Hokhmah*. In addition, in the many cases when similar topics are treated in *Reshit Hokhmah* and *Ṭe'amim II*, they are treated in a different order. Finally, as is shown in Appendix 4, many parts of *Ṭe'amim II* do not make sense unless one assumes that they are commenting on quoted passages.

What about the other parts of *Ṭe'amim II*, which are organized as relatively long and detailed self-contained discussions? In fact, many of these discussions are headed by lemmata that, as shown in the second example in Appendix 4, are quotations. Thus, as in the case of *Ṭe'amim I*, we may conclude that these are digressions occasioned by ideas or short quotations from an underlying text. Furthermore,

¹² Source references for quotations from *Reshit Hokhmah* are given in the notes that accompany the English translation of *Ṭe'amim I*. In addition, Appendix 2 presents two examples of the phenomenon.

¹³ For a list of these digressions in *Ṭe'amim I*, as well as the topics covered, see Appendix 3.

¹⁴ See, i.e., Tb §2.1, §2.5, §2.6, §2.7, §4.6, §4.7, §4.8, and all of §6.

¹⁵ As I myself thought before embarking on the critical edition of this text. See Sela, 2003a, pp. 193–194.

this impression is strengthened by the eclectic explanatory methodology of these discussions, a feature typical of the digressions in *Ṭe'amim I*, as well as by the fact that similar arguments and sources are employed in *Ṭe'amim I* and *Ṭe'amim II* to explain the same topics.¹⁶

What Text is Ṭe'amim II Commenting On?

The search for the underlying text of *Ṭe'amim II* began with anonymous copyists: in three manuscripts dating from the sixteenth, eighteenth, and nineteenth centuries, the copyists established a clear link between *Ṭe'amim II* and *Mishpetei ha-Mazzalot* by arranging sections of these texts in parallel columns.¹⁷ The same theory was briefly taken up by Moritz Steinschneider¹⁸ and later by J.L. Fleischer, who adduced four arguments to suggest that *Ṭe'amim II* is a commentary on *Mishpetei ha-Mazzalot*:¹⁹ (1) *Ṭe'amim II* and *Mishpetei ha-Mazzalot* are similar not only in their contents but also in the order of presentation of the topics.²⁰ (2) Some parts of *Ṭe'amim II* may be regarded as quotations from *Mishpetei ha-Mazzalot* but not from *Reshit Hokhmah*.²¹ (3) *Ṭe'amim II* and *Mishpetei ha-Mazzalot* employ similar terminology.²² (4) The original and authentic name of *Mishpetei ha-Mazzalot* is *Reshit Hokhmah*. Recently, Renate Smithuis has elaborated on the possible link between *Ṭe'amim II* and *Mishpetei ha-Mazzalot* and demonstrated additional points of

¹⁶ For a list of sources and authorities cited in *Ṭe'amim I* and *Ṭe'amim II*, see Appendix 5; for a list of the digressions in *Ṭe'amim II*, see Appendix 6; for the correspondence between the arguments of *Ṭe'amim I* and *Ṭe'amim II*, see the notes to the English translation.

¹⁷ Berlin, Staatsbibliothek 220 (F01779), ff. 33a–54a; New York, Columbia University Library, X 893 Ib 53 (F42426), ff. 32–35; Jerusalem, Benyahu 133 (F44867), ff. 31–42.

¹⁸ Steinschneider, 1870, pp. 342–342: “... משפטי המזלות welches im allgemeinen der zweiten Recension des B. ס' המזלות sehr ähnlich, aber viel kürzer ist ...”; Steinschneider, 1880, p. 496: “משפטי המזלות auch als ס' המזלות (Buch der Gestirne), unübersetzt, scheint eine Nebenrecension von III [i.e. ספר הטעמים, Liber Rationum]”.

¹⁹ *Ṭe'amim A*, 1951, (Introduction) pp. 19–22.

²⁰ For example, whereas in *Reshit Hokhmah* and *Ṭe'amim I* the planets are ordered from Saturn down to the Moon, in *Mishpetei ha-Mazzalot* and *Ṭe'amim II* they are arranged in the following order: Sun, Moon, Saturn, Jupiter, Mars, Venus, and Mercury.

²¹ For example, the “quartan fever” and “the angel of death” in the Saturn section. See Tb §5.3:6–7 and *Mishpetei ha-Mazzalot*, bnf 1058, f. 21b.

²² For example, the name of Claudius Ptolemy: *Talmi* (תלמי) in *Mishpetei ha-Mazzalot* and *Ṭe'amim II* but *Batalmiyūs* (בטלמיūs) in *Reshit Hokhmah* and *Ṭe'amim I*.

contact between the treatises, notably through a comparative table of their contents.²³

A closer look, however, renders this hypothesis untenable. Because *Ṭe'amim I* and *Ṭe'amim II* are similarly organized, if *Mishpetei ha-Mazzalot* is the underlying text of *Ṭe'amim II* it should display the characteristics common to *Reshit Hokhmah* and *Ṭe'amim I*. In other words, if *Ṭe'amim II* is a commentary on quotations and ideas from *Mishpetei ha-Mazzalot*, the latter should contain the vast majority of the quotations, the same terminology, and the same order of presentation found in *Ṭe'amim II*. But a close comparison of two parallel sections in *Ṭe'amim II* and *Mishpetei ha-Mazzalot* (see Appendix 7), demonstrates that *Mishpetei ha-Mazzalot* meets none of these three requisites. Despite some striking similarities, *Mishpetei ha-Mazzalot* does not contain most of the embedded quotations in *Ṭe'amim II*; in some cases they sharply deviate from one another in their nomenclature and order of presentation. Note also that none of the obvious quotations in *Ṭe'amim II*, presented in the third example of Appendix 4 (where chronological values are explained), can be located in *Mishpetei ha-Mazzalot*.²⁴ Hence, taking into account that at the very start of *Ṭe'amim II* Ibn Ezra wrote that “I wish to lay the foundation of the *Book of Reshit Hokhmah*,” we are forced to conclude that *Ṭe'amim II* is commenting on a second, lost version of *Reshit Hokhmah*.²⁵ In what follows we will refer to the extant version of *Reshit Hokhmah* as *Reshit Hokhmah I* and the lost version as *Reshit Hokhmah II*.

A glance at the contents and organization of *Ṭe'amim II* enables us to reconstruct the chapter structure of *Reshit Hokhmah II*: (1) an introduction presenting the various layers of the supra-lunar world and their motions, and the methodologies of astrology and astronomy; (2) the categories of the zodiacal signs and the signs that belong to each category, which, as in *Mishpetei ha-Mazzalot* and unlike *Reshit Hokhmah I*, must have been organized by category; (3) the planetary properties that depend on the zodiacal signs: planetary houses, exaltations, triplicities, and terms; (4) the mundane houses and their indications; (5) the “conditions” of the planets in relation one to the other, similar to the discussion in chapters VII and VIII of *Reshit Hokhmah I*; (6) the

²³ Smithuis, 2004, chapter 1, 5.2; chapter 2, 3; Appendix 5.

²⁴ Additional information about the similarities and dissimilarities between *Ṭe'amim II* and *Mishpetei ha-Mazzalot* is incorporated into the notes on the English translation.

²⁵ My examination of the vast majority of the extant manuscripts of *Reshit Hokhmah* shows that all of them are copies of the extant version of *Reshit Hokhmah*, one that does not correspond to the text underlying *Ṭe'amim II*.

astrological properties of the planets, which, like the corresponding section in *Mishpetei ha-Mazzalot* and unlike that in *Reshit Hokhmah I*, must have begun with the sun and moon but then, unlike *Mishpetei ha-Mazzalot*, concluded with the Head and Tail of the Dragon; (7) miscellaneous procedures related to nativities, which are completely absent from *Reshit Hokhmah I*: the selection of the ascendant (*nimubar*), the places of life and selection of the *hyl'eg*, the revolutions of the year, month, week and days; (8) the lots of the planets and of the twelve mundane houses.

Thematic Organization

Because *Te'amim I* is divided into the same ten chapters as *Reshit Hokhmah I*, the thematic organization of the former may be readily construed from the table of contents of the latter.²⁶ *Te'amim II* shares some features with *Te'amim I*, as may be expected of two texts written by the same author in the same astrological genre and tradition, but differs sharply from *Te'amim I* in other aspects of its thematic organization, as may be expected of commentaries on different underlying texts.

Both *Te'amim I* and *Te'amim II* start with a comprehensive description of the universe. The first chapter of *Te'amim I* scrutinizes the stars, constellations, and signs of the eighth orb, the relative positions of the planetary orbs, and the physical nature of the fixed stars and the planets. *Te'amim II* begins with a self-contained introduction that presents the orbicular structure of the universe, from the planetary orbs through the ninth and uppermost orb, and deduces it by means of arguments similar to those found in *Te'amim I* (cf. Tb §1.2:1–3 with Ta §1.3:5–7). The next chapters in *Te'amim I* and *Te'amim II* deal with the astrological properties of the zodiacal signs and with those astrological properties of the planets that depend on their position with respect to the zodiacal signs (planetary houses, exaltations, lords of triplicities, terms, ninth-parts, and dodecatemoria). *Te'amim I*, which follows the pattern of *Reshit Hokhmah I*, studies some of the zodiacal signs and their specific properties separately (Ta §2.1 through §2.3, §2.13 through §2.15) and incorporates digressions on some significant degrees of the zodiac and the planetary properties that depend on the zodiacal signs (Ta §2.4–5,

²⁶ See Rh, "Introduction," v:8–19.

§2.7–12). *Ṭe'amim II*, by contrast, explores various categories of zodiacal signs (Tb §2.3–4) and digresses to cover the planetary properties that depend on the zodiacal signs (Tb §2.1, §2.5–9).

From this point on, *Ṭe'amim I* and *Ṭe'amim II* part company regarding the order of presentation of the topics. Chapter 3 of *Ṭe'amim I* includes one excursus on the aspects and another on the twelve mundane house—topics that are presented in *Ṭe'amim II* along virtually identical lines but in different places (the aspects, in Tb §4.2–8; the mundane houses, in Tb §3.1–3). Chapter 4 of *Ṭe'amim I* addresses the astrological properties of the seven planets in sequence, from Saturn down to the Moon. Its counterpart, in the fifth chapter of *Ṭe'amim II*, presents the planets in a different order: the sun and the moon, followed by the other five planets, and finally the Head and Tail of the Dragon. Chapters 5 to 8 of *Ṭe'amim I* cover the “conditions” of the planets in themselves, with respect to the Sun, and with respect to each other; only some of these conditions are examined in the fourth chapter of *Ṭe'amim II*, just before the separate scrutiny of the planets. Chapter 9 of *Ṭe'amim I* deals with the astrological lots, a topic found in the seventh chapter of *Ṭe'amim II*.

Ṭe'amim I and *Ṭe'amim II* diverge sharply in that central topics considered in one are completely absent from the other, and vice versa. Thus, the relatively long tenth chapter of *Ṭe'amim I* is a highly technical examination of the calculation of the aspects, directions, and mundane houses, as well as of a series of periods employed in general astrology; none of these are found in *Ṭe'amim II*. Conversely, chapters six and eight of *Ṭe'amim II* are devoted mainly to nativities: the selection of the ascendant of the native, the five places of life and the selection of the *hyl'eg*, the revolutions of years, months, weeks and days; and none of these topics are covered by *Ṭe'amim I*. These discrepancies notwithstanding, *Ṭe'amim I* and *Ṭe'amim II* are harmonious in two essential respects: first, their almost identical astrological nomenclature (see Glossary); second, the very similar arguments adduced in both to flesh out the “reasons” behind identical astrological concepts.²⁷

²⁷ Note, for example, the discussion of the aspects in Tb §4.6:1–6, §4.7:1–8, §4.8:1–3, which is virtually a replica of Ta §3.1:1–6; §3.2:1–12, and the discussion of the mundane houses in Tb §3.1:1–12, §3.2:1–6, §3.3:1–7, §3.4:1–12, which is a paraphrase of Ta §3.5:1–11, §3.6:1–18.

Place and Date of Composition

Ṭe'amim I was written in 4908 A.M, i.e., 1148CE, in the town of Béziers in southern France. This year is mentioned twice (Ta §1.2:3, §2.12:14) as its date of composition. The same year and the city of Béziers are also noted as the date and place of composition of *Reshit Hokhmah I*.²⁸ Ibn Ezra began work on *Ṭe'amim I* as soon as he completed the extant version of *Reshit Hokhmah*, keeping the promise made in the introduction to the latter.²⁹ The proximity was so close that *Ṭe'amim I* begins with a discussion of the first item in the first chapter of *Reshit Hokhmah I*, skipping an introduction altogether—the only such case in Ibn Ezra's Hebrew scientific writings.

After *Reshit Hokhmah I* and *Ṭe'amim I*, Ibn Ezra composed the extant version of *Sefer ha-Moladot*. That work contains many unequivocal references in the past tense to various sections of *Reshit Hokhmah I* and *Ṭe'amim I*, including, on one occasion, the suggestive name “Book of the Reasons behind the Beginning of Wisdom” (ספר טעמי ראשית חכמה).³⁰ *Reshit Hokhmah I* and *Ṭe'amim I* repeatedly refer to *Sefer ha-Moladot* using the future tense.³¹ There are also cross-references between *Ṭe'amim I* and the first version of *Sefer ha-She'elot*,³² the third Hebrew version of *Sefer Keli ha-Nehoshet* (Book of the Astrolabe),³³ and the first version of *Sefer ha-'Olam*.³⁴ To sum up, *Ṭe'amim I* is part and parcel of an astrological encyclopedia that was composed at Béziers within five months,

²⁸ See Rh, II, x:19. See also *Reshit Hokhmah*, Berlin 220, f. 30: וּנְשַׁלֵּם בַּחֲדָשׁ תַּמּוּז שָׁנַת 4908 (“completed in the month of Tammuz, 4908A.M., (i.e. June 1148) in the city of Béziers”). Note that the colophon is incomplete in Rh, X, lxxvi:25, and contains a misprint; cf. English part, p. 235.

²⁹ See Rh, vi:5: וְאַחֵר שְׂאֵשִׁיִּים זֶה הַסֵּפֶר אַחֲבֵר סֵפֶר בְּפִירוֹשׁ הַטַּעֲמִים (“When this book is finished, I shall compile a treatise explaining the (astrological) reasons.”).

³⁰ For the references to *Reshit Hokhma I*, see *Moladot*, bnf 1056, ff. 48a, 49a, 50b, 53b, 55a, 58b, 59b, 61a. For the references to *Ṭe'amim I*, see Appendix 1, fragments 1–3.

³¹ See Rh, IV, xlv:2, VII, lvii:16; Ta §1.5:5, §8.1:9, §10.5:20.

³² See Sela-Freudenthal, 2006, n. 34, p. 36.

³³ *Ṭe'amim I* refers to *Sefer Keli ha-Nehoshet* in the past tense (Ta §10.5:19). The third version of *Sefer Keli ha-Nehoshet* in its turn includes a reference in the future tense to *Reshit Hokhmah* (Nehoshet C, Pinsker 26, f. 65b); the fixed star lists of its rete are accompanied by an explicit mention of the year 4908A.M., i.e., 1147/8CE (Nehoshet C, Pinsker 26, f. 67a).

³⁴ The first version of *Sefer ha-'Olam* is referred to three times, in the future tense, in *Ṭe'amim I* (Ta §2.4:5, §6.3:6, §10.9:4). A colophon (‘Olam A, München 304, f. 10a) indicates that the first version of *Sefer ha-'Olam* was completed in Marheshvan 4909A.M. (November 1148CE). The date of composition is again given in the body of the text as 4908A.M. (1147/8CE) (Olam a, bnf 1056, f. 82b). For Béziers as its place of

between Tammuz 4908 and Marḥeshvan 4909 A.M. (mid-June–mid-November 1148 CE). It comprises the following chronologically consecutive and interrelated astrological works: (1) *Reshit Hokhmah I*; (2) *Ṭe'amim I*; (3) the extant version of *Sefer ha-Moladot*; (4) *Sefer ha-Me'orot*; (5) the first version of *Sefer ha-She'elot*; (6) the first version of *Sefer ha-Mivḥarim*; (7) the first version of *Sefer ha-'Olam*.³⁵ In addition, during that same year, before *Reshit Hokhmah I*, Ibn Ezra also wrote the third version of *Sefer Keli ha-Neḥoshet*.³⁶

We have no explicit information about the date and place of composition of *Ṭe'amim II*, although a number of implicit indications furnish some clues. The date may be inferred from the correction values, given in parallel passages in *Ṭe'amim I* and *Ṭe'amim II*, for finding the location at specific times of the “bright degrees,” the “dark degrees,” and the “pits” (these are specific degrees in the zodiacal belt endowed with astrological influence; see Ta §2.6:2; §2.12:1; §2.12:14; §8.1:7; Tb §8.7:2). As Ibn Ezra explains, because the location of these points changes constantly with respect to the equinoxes but not with respect to the images of the zodiacal constellations, a correction is necessary if one wishes to locate them in astronomical tables that take account of the slow motion of the fixed stars (with respect to the equinoxes). Whereas Ta §2.12:14 specifies subtracting 8°, Tb §8.7:4 proposes 8° 5'. Since in both *Ṭe'amim I* and *Ṭe'amim II* Ibn Ezra endorses a steady motion of 1 degree in 70 years for the fixed stars, which corresponds to 51 seconds a year, the five-minute difference between these two values corresponds approximately to a difference of six years between the dates of composition of *Ṭe'amim I* and *Ṭe'amim II*. In other words, *Ṭe'amim II* was written around 1154,³⁷ which coincides with the date of composition of two of Ibn Ezra's Latin works—*Liber de rationibus tabularum* and possibly *Liber de nativitatibus*.³⁸

composition, see 'Olam A, bnf 1056, f. 81b, where 42° 39' is given as the relevant latitude for an exercise with solution.

³⁵ For the date and place of composition of these works, see Sela-Freudenthal, 2006, nn. 29–35, pp. 34–36.

³⁶ See Sela-Freudenthal, 2006, n. 28, p. 34.

³⁷ To flesh out this argument, see Ta §2.12:14, Tb §8.7:4, and notes there.

³⁸ *Liber de Rationibus Tabularum*, 1947, p. 78: “anno 1154 ab incarnatione Domini, quo hanc edicionem fecimus”, see also p. 99; *Liber de nativitatibus*, 1484, p. c 3: “Hoc 1154 ab incarnatione domini est adunatio eorum in triplicitate terrae”. See also the following statement by Pico de la Mirandola (1463–1494), quoted from Steinschneider, 1870, p. 382, n. 90: “Aben Ezra ... in libro rerum astrologicarum octo partium tradit ...

As for the place of composition, we know that from 1153 until 1157 Ibn Ezra lived in DRWM, DRWS, or RDWM (דרום, דרום, דרום), a Hebrew toponym that has been persuasively identified as Rouen, where he wrote a second series of biblical commentaries.³⁹ Furthermore, in Tb §4.8:2 we read that “if one planet is in the head of Leo and another in the head of Sagittarius, in a place whose latitude is close to 50°, they will be approximately 180° apart on the latitude plate [of the astrolabe].” This is very close to the latitude of Rouen;⁴⁰ in *Mishpeṭei ha-Mazzalot*, he gives almost the same latitude to specify the place of an astronomical observation.⁴¹

In sharp contrast to *Ṭe’amim I*, all but two of the twelve references in *Ṭe’amim II* to other parts of Ibn Ezra’s work use the past tense and allude to completed works.⁴² (1) The reference in the past tense to *Reshit Hokhmah* (Tb §1.1:1) clearly indicates that this was the title of the treatise on which *Ṭe’amim II* was designed to comment; this is not the extant version *Reshit Hokhmah*, composed in Béziers in June 1148, but a second and lost version of the same treatise, which was probably written shortly before *Ṭe’amim II*, that is, in Rouen in 1154.⁴³ (2) The reference in the past tense to *Sefer ha-‘Olam* (Tb §6.2:1) probably means the second version of that work, which was written between

scripsit n. anno millesimo centesimo quiquagesimo tertio”. See Sela-Freudenthal, 2006, nn. 47 and 48, p. 42.

³⁹ For this toponym, see Ibn Ezra’s long commentary on Exodus 12:2 and the colophon of his long commentary on Daniel. For a discussion of the meaning of these toponyms and for Ibn Ezra’s literary production in the French period, see Rosin, 1898, p. 25; Fleischer, 1930, pp. 79–84; Golb, 1998, pp. 3–5, 264–267. For Ibn Ezra’s exegetical work in Rouen, see below, n. 53.

⁴⁰ According to Matthew, 1996, p. 235, the latitude of Rouen (Rotomagus) is 49° 26’.

⁴¹ See *Mishpeṭei ha-Mazzalot*, bnf 1058, f. 16a: *והדמיון במקום זה שמרחבו חמישים מעלות*: “והנחשתי יראה אדם בעיניו גם בבירור כי אין בו ספק.” “In this place, whose latitude is 50.5°, if the ascendant is at the beginning of the sign of Cancer, the midheaven is at 24° at the sign of Aquarius; this may be clearly and unreservedly observed with the astrolabe.” For an analysis of this passage, see Sela, 2003a, pp. 71–73.

⁴² These are the references in *Ṭe’amim II*: one reference to *Reshit Hokhmah*, in the past tense (§1.1:1), one to *Sefer ha-‘Olam*, in the past tense (§6.2:1), two to *Sefer ha-Moladot*, in the future tense (§6.2:11, §6.6:1), six to *Sefer ha-Luhot*, in the past tense (§2.3:5, §2.7:13, §5.1:11, §6.3:4, §8.3:3, §8.7:6), and two to *Sefer Ma’ase ha-Luhot*, in the past tense (§8.5:6, §8.6:3). By contrast, all but one of the eight references in *Ṭe’amim I* use the past tense and refer to completed works: three to *Sefer ha-Moladot*, in the future tense (§1.5:5; §8.1:9; §10.5:20), two to *Sefer ha-‘Olam*, in the future tense (§6.3:6; §10.9:4), one to *Sefer ha-Mahbarot* (an alternative name for *Sefer ha-‘Olam*), in the future tense (§2.4:5), and one to *Sefer Keli ha-Nehoshet*, in the past tense (§10.5:19).

⁴³ See Sela-Freudenthal, 2006, nn. 29, 40, pp. 34, 37–38.

1148 and 1154, somewhere in the Midi or northern France.⁴⁴ (3) The two references in the future tense to *Sefer ha-Moladot* (Tb §6.2:11 and §6.6:1) are probably targeted at a second (lost) Hebrew version of *Sefer ha-Moladot*; this conclusion is entailed by the fact that the extant version of *Sefer ha-Moladot* was composed at Béziers in 1148, whereas *Ṭe'amim II*, according to the chronology presented above, dates from 1154. (4) The six retrospective references to *Sefer ha-Luhot* (Tb §2.3:5, §2.7:13, §5.1:11, §6.3:4, §8.3:3, §8.7:6) and the two references to *Sefer Ma'ase ha-Luhot* (Tb §8.5:6, §8.6:3) indicate that these astronomical tables were written shortly before and in the same place as *Ṭe'amim II*, which is borne out by the fact that in Tb §5.1:11 Ibn Ezra states that they were written for the same patron who commissioned *Ṭe'amim II*.

Motivation

In search of insight into what Ibn Ezra had in mind when he offered *ṭe'amim* (טעמים)—“reasons,” “explanations,” or “meanings”—we may turn to the introduction to his first commentary on Psalms, to his commentary on Deuteronomy 5:5, and his long commentary on Exodus 20:1, where he states, in an almost identical phrasing, that “words are like bodies and reasons are like spirits.”⁴⁵ He expanded on the same idea in the introduction to *Yēsod mora'* (The fundamentals of awe), his last and most brilliant monograph, where, after again equating words with bodies and reasons with spirits, he likened the cultivated reader who pays no heed to “reasons” to a physician who holds a book on medicine, tires himself out counting how many pages it contains, how many lines are on each page, and how many letters are on each line, yet, despite all his labor, cannot heal his patients.⁴⁶ Among his scientific works, in addition to *Ṭe'amim I* and *Ṭe'amim II*, providing “reasons” is also the main objective of *Sefer Ta'amei ha-Luhot* (Book of the reasons behind astronomical tables) and of the second and central chapter of *Sefer ha-Ibbur* (Book of intercalation), which is designated *Ba-ṭe'amim*, i.e., On the Reasons.⁴⁷

⁴⁴ Ibid., n. 39, p. 37.

⁴⁵ First Commentary on Psalms, 1991, p. 308–309; Commentary on Deuteronomy, 1976, p. 230; Long Commentary on Exodus, 1976, p. 127.

⁴⁶ *Yesod Mora'*, 1985, p. 316; see also p. 344, n. 5, where it is suggested that Ibn Ezra may have drawn on ideas conveyed by the poet Moshe Ibn Ezra.

⁴⁷ See Mispar, 1895, pp. 27, 79; *Ibbur*, 1874, p. 3a.

The titles of Ibn Ezra's extant Hebrew astrological treatises, with the notable exception of *Ṭe'amim I* and *Ṭe'amim II*, indicate that they were formed in the mold of the well-established branches and genres of Greek and Arabic astrology: introduction to astrology, nativities, general astrology, interrogations, elections, and medical astrology (see above, p. 1). There is, however, no autonomous genre in ancient or medieval astrological writing that encompasses works whose main objective is to expound the "reasons" behind astrological doctrines presented in another text by the same author.⁴⁸ But it is not surprising that Ibn Ezra felt a need for this idiosyncratic genre. For one thing, offering the "reasons" behind astrological doctrines presented in another text may be considered as only natural for a writer whose main literary form was the biblical commentary. Moreover, in both versions of *Sefer ha-Ṭe'amim* we notice a twofold interpretive strategy that is virtually identical to the one adopted by Ibn Ezra in his biblical commentaries: brief notes commenting on the biblical text interspersed with long digressions.⁴⁹

Ibn Ezra wrote *Ṭe'amim I*, as we learn from its introductory canticle, at the request of Isaac son of David, in all likelihood one of Ibn Ezra's student-patrons in Béziers.⁵⁰ The patron for whom he wrote *Ṭe'amim II* is not recorded, but, as already noted, we know that he was the same person who commissioned a set of astronomical tables.⁵¹ At Tb §8.2:8–9 Ibn Ezra gives instructions for making some astrological calculations fit the Julian calendar. This indicates that *Ṭe'amim II* was intended for Jewish readers deeply immersed in a Christian environment. That Ibn Ezra wrote two different versions of *Sefer ha-Ṭe'amim* is characteristic of his literary career in general: he often produced several versions or redactions of the same work—in some cases, four different versions.⁵²

⁴⁸ Actually, ancient and medieval introductions to astrology were designed to combine the technical details together with the theoretical explanations of astrological doctrines. See, inter alia, Ptolemy's *Tetrabiblos*, Abū Ma'shar's *Great Introduction*, Al-Qabīṣī's *Introduction to Astrology*, and Al-Bīrūnī's *Book of Instruction in the Elements of the Art of Astrology*.

⁴⁹ I am referring here to the *exegetical excursus*, in which Ibn Ezra illuminates some burning and controversial exegetical issue by providing supplemental information related to astronomy, astrology, mathematics, cosmology, Hebrew grammar, and logic. For some examples, see Sela, 2003a, pp. 273–276, 288–323.

⁵⁰ See below, p. 29. Two other patron-students of Ibn Ezra's in Béziers were Abraham ben Hayyim and Isaac ben Yehudah, the patron of *Sefer ha-Shem* (Book of the Name [of God]), as we learn from its introductory canticle. See haShem, 1985, p. 415.

⁵¹ See Tb §5.1:11.

⁵² Most of Ibn Ezra's extant astrological treatises are found in at least two versions. He also wrote three versions of *Sefer Keli ha-Nehoshet* (The Book on the astrolabe) plus

Consider his career as a biblical commentator, which may be divided broadly into two periods, the Italian and the French; during the latter he wrote second versions of some of the commentaries he had already produced in Rome and Lucca.⁵³ Thus *Ṭe'amim I* and *Ṭe'amim II* should be inserted into the framework of Ibn Ezra's nomadic existence and seen as a manifestation of his travels from one patron to another.

Ibn Ezra's Contribution

Ibn Ezra's innovativeness is particularly noticeable in his Hebrew astrological lexicon. Even though he was not the first medieval Jew to write about astrology in Hebrew,⁵⁴ he was the first to create a comprehensive astrological vocabulary in that language. Furthermore, this lexicon, most of which involves Hebraization of the terminology of Arabic astrology, also incorporates some remarkable neologisms that illustrate his strategy for the creation of a new scientific Hebrew vocabulary:

one Latin version, and four version of astronomical tables that were accompanied by its canons, two in Hebrew and two in Latin. See Sela-Freudenthal, 2006, esp. nn. 22, 24, 28, and 46, pp. 31–32, 34, 40–42.

⁵³ In Rome, in 1140–1142, Ibn Ezra wrote commentaries on Ecclesiastes, Esther, Job, Lamentations, Daniel, Song of Songs and Psalms. See Sela-Freudenthal, 2006, nn. 1, 2, 5, 6, 7, 8, 9, pp. 23–27; Fleischer, 1932, p. 98, 100, 129–131; Fleischer, 1933, p. 134–136; Friedlander, 1877, p. 195; Rosin, 1898, p. 25. In Lucca, in 1142–1145, he wrote commentaries on the twelve Minor Prophets, a complete commentary on the Pentateuch, and commentaries on Ruth and Isaiah. See Sela-Freudenthal, 2006, nn. 10, 11, 12, 13 pp. 27–29; Fleischer, 1970, p. 116–124; Commentary on Genesis, 1976, “Introduction,” pp. 8–29; Friedlander, 1877, pp. 142–195, esp. p. 195; Subsequently, in Rouen, in 1154–1157, he composed a second commentary on Esther, Daniel, Genesis, Exodus, Psalms, Song of Songs, and on the Minor Prophets. See Sela-Freudenthal, 2006, nn. 50, 51, 52, 53, 54, 55, 56 pp. 43–46; Golb, 1976, pp. 264–267; Fleischer, 1930, pp. 219–220; Friedlander, 1877, pp. 142–195.

⁵⁴ In two works from the early Middle Ages—the *Baraita de-Shemu'el* and the *Baraita de-Mazzalot*—the Hebrew astrological terminology reveals a Greek and Arabic origin. See Sarfati, 1965, pp. 56–82. There is also significant astrological content in *Sefer Ḥakmoni* and *Sefer ha-Mazzalot*, two Hebrew works by Shabbetai Donnolo (913–ca. 982), as well as in the *Commentary on Sefer Yeširah* (Book of Creation) by Judah ben Barzillai ha-Bargelloni, the leading rabbinic authority of Barcelona in the first half of the twelfth century. See Ḥakmoni, 1880, *Sefer haMazzalot*, 1843; Commentary on *Sefer Yeširah*, 1885. The contribution to the creation of a Hebrew astrological vocabulary made by Abraham Bar Ḥiyya (ca. 1065–ca. 1140) is of great importance but limited mainly to general astrology. For Bar Ḥiyya's astrological work and thought, see Sela, 2006, pp. 127–158. For a preliminary comparison between the astrological lexicons of Bar Ḥiyya and Ibn Ezra, see Sela, 2003a, pp. 103–104.

when the translator wishes to transmit Arabic technical words to Hebrew, the Bible can be mined for words that have precisely the required sense in their original context. Neologisms of this kind are conspicuous in both versions of *Sefer ha-Ṭe'amim*: *muṣaq* = center (מוצק; Job 36:16, 38:38, 37:10); *gevul* = climate (גבול; Psalms 74:17); *mishpaṭim* = ⟨astrological⟩ judgments (משפטים; Psalms 19:10); *mesharetim* = planets (משרתים; Psalms 103:21); *toledet* = nature (תולדת; Genesis 2:4); *heshev ha-'afudah* = ecliptic (חשב האפודה; Exodus 28:8).⁵⁵

Ibn Ezra's astrological work, on the whole, has a didactic character and makes no serious pretense of innovating. Its main building blocks are literal quotations or paraphrases from Arabic sources. This feature is amply documented in the notes to the English translations of *Ṭe'amim I* and *Ṭe'amim II*. Providing the "reasons" behind the astrological doctrines presented in another text entails a more creative approach, however, a more innovative explanatory strategy, and a more resourceful reorganization of the available data. As mentioned above, *Ṭe'amim I* and *Ṭe'amim II* employ two methods to explain and expand on quotations from the respective versions of *Reshit Hokhmah*: the brief gloss and the long excursus. In the latter, Ibn Ezra usually amplifies the astrology with astronomical and mathematical data and transforms the presentation of some topic into a debate among schools and scientists of different eras, nations, and religions. As already noted, these methods are reminiscent of Ibn Ezra's two-pronged explanatory methodology in his biblical commentaries.

In both versions of *Sefer ha-Ṭe'amim* Ibn Ezra offers extensive information about his sources; his references to them are an excellent means for learning about the astrological and scientific texts available in al-Andalus in the twelfth century and earlier. He explicitly names a relatively long list of celebrated scientists, referring to the work, scientific occupation, and specialty of his sources, along with generic references that highlight their geographical, national, and chronological affiliations (see Appendix 5). In most cases, Ibn Ezra invokes the name and opinion of some prominent authority in order to buttress the case for some astrological reason (i.e., "Ptolemy said ..."; "Ya'qub al-Kindī said ..."; "Enoch said ..."). In other cases, though, he does not hesitate to launch a harsh attack on celebrated scientists, such as Ptolemy

⁵⁵ For the loci of these terms, see Glossary. On Ibn Ezra's strategy for the creation of a new scientific Hebrew vocabulary, see Sela, 2003a, pp. 93–143.

(see Ta §1.5:5, §2.18:2, Tb §1.5:1), or, alternatively, expresses his agreement with only some of his doctrines (see Tb §4.8:2, §5.1:15).

Sometimes Ibn Ezra takes personal credit for a new approach to an astrological doctrine, as in his explanation of the astrological aspects by means of the mathematical properties of integers (see Ta §3.2:1–9 and Tb §4.7:1–8), or of the mechanism behind the distribution of the pains of the planets among the signs (see Ta §2.3:3–7 and Tb §4.10:1–7). In other places he defends a particular view, though it is not clear to which extent this position should be attributed to him,⁵⁶ or tries to reconcile opposing opinions about an astrological issue by offering a middle-ground solution.⁵⁷ In some cases he incorporates an account of empirical work he himself carried out in order to demonstrate the truth of falseness of some astrological tenet (Ta §5.2:7, §2.2:17, §2.18:1; Tb §6.1:4–5, §6.8:3).

One burning issue that provokes Ibn Ezra's active intervention relates to astrological doctrines that he believes to conflict with major aspects of his scientific world view. Most conspicuous is his concern that the standard astrological view of the physical natures of the planets (i.e., that the Sun is hot and the Moon is cold), or the standard astrological understanding of the physical natures of the zodiacal signs (i.e., that the signs of the fiery triplicity are hot) may threaten the rigid Aristotelian separation between the super- and sublunary domains, with which he identifies wholly. Ibn Ezra appears to be haunted by this quandary (Ta §1.5:1–16; §2.7:3; Tb §2.1:1; §8.7:8).⁵⁸ In this regard, besides endorsing the Aristotelian fifth element he espouses the theory that all the planets emit heat by virtue of their motion and are neither hot nor cold in themselves. Similarly the Moon, which is taken to be cold, emits heat

⁵⁶ This applies to the reasons behind the zodiacal signs' physical properties, which Ibn Ezra attributes to their visual shapes (Ta §1.4:1; Tb §2.1:11), or regarding the cardinal points of the quadrants of the horoscope, where he overtly endorses the opinion of the astrolabists (Ta §3.4:8–9).

⁵⁷ This stance is noticeable regarding the question of whether Venus and Mercury are above or below the Sun, where Ibn Ezra endorses a partially heliocentric theory (Tb §2.5:2; Ta §1.3:9), or regarding the question of whether the intensity of the planets' astrological influence hinges on their distance from Earth (Ta §5.2:5), or regarding the question of whether the Head or Tail of the Dragon should be considered to be astrologically beneficial or harmful (Tb §5.9:1–5).

⁵⁸ He obsessively returned to this topic in his nonscientific work, notably in his biblical commentaries. See Long Commentary on Exodus, 1976, 33:21; First Commentary on Genesis, 1999, 1:1; Second Commentary on Genesis, 1976, 1:1; Commentary on Ecclesiastes, 1994, 1:4; *Yesod Mora*, 1985, I, p. 319; Commentary on Psalms, 1525, 148.

but to a lesser extent, because cold is not the opposite of heat but only a lesser degree of heat, as in the case of the flesh of the ox.⁵⁹

Ibn Ezra also finds fault with a number of astrological doctrines of Indian origin that hinge on the theory that the fixed stars are motionless. This applies to the Indian version of the exaltations, which are localized in specific degrees in the signs and not in entire signs, and to the doctrines of the bright and dark degrees and of the pits, which assigns astrological properties to degrees with respect to the images of the zodiacal signs and not with respect to the equinoxes. Ibn Ezra endorses the Greco-Arabic tradition that the fixed stars move very slowly with respect to the equinoxes (a theory that had been advanced in many different versions); hence, he believes, these degrees should be regarded as constantly changing their location, by virtue of the motion of the fixed stars of the eighth orb (Ta §2.6:2; Tb §8.7:1–6). This problem launches him on a thorough discussion of three central medieval controversies—the beginning and length of the solar year, the motion of the stars of the eighth orb, and the method for demarcating the zodiacal signs—in which he presents the opinions of the Indian scientists, Hipparchus, Ptolemy and his companions, the Arab scholars, and the Ancients. Ibn Ezra also takes advantage of this occasion to expound and defend the version of the motion of the fixed stars that he considers correct, i.e., a motion of one degree in 70 years (Ta §2.12:1–14).

The Scientific Edition of the Hebrew Text

Manuscripts of *Ṭe'amim I* and *Ṭe'amim II* circulated widely from the second half of the thirteenth century to the nineteenth century. Today we have at least 32 extant manuscript copies of *Ṭe'amim I* and 25 of *Ṭe'amim II* (see Appendix 8). With one notable exception,⁶⁰ they were transmitted down the centuries in a single textual tradition, differentiated only by the variant readings that are to be expected from repeated copying. But there are several indications that in the interval of more than one hundred years between the composition of Ibn Ezra's astrological treatises

⁵⁹ Ta §1.5:11; Tb §2.1:2–4. The same theory is put forward in *Liber de Rationibus Tabularum*, 1947, p. 97.

⁶⁰ Paris, Bibliothèque Nationale de France, MS Hébr. 1058, ff. 98a–123a. See MS 7, in the lists below.

tises and the date of the earliest available manuscripts his students and admirers were actively modifying and adding to his astrological work as they copied it.⁶¹ This statement applies to the two versions of *Sefer ha-Ṭe'amim* as well. In Ta §1.2:3 Ibn Ezra writes, “at the end of the book, with God’s help, I shall refer to the secret of the change in the positions of the zodiacal constellations.” This promise seems to have been kept in the last paragraph of *Ṭe'amim II*, which begins with the following declaration: “End of the book. I shall now reveal a secret to you” (Tb §8.7:1–6).⁶² This cross-reference from *Ṭe'amim I* to *Ṭe'amim II*, which is almost certainly the work of a scribe in the first decades after the completion of *Ṭe'amim I* and *Ṭe'amim II*, appears in all the available manuscripts, a fact that must drastically lower any expectations that an exhaustive study of the manuscripts might enable scholars to determine with precision the original Hebrew texts of *Ṭe'amim I* and *Ṭe'amim II* as written by the author.

The Hebrew texts of *Ṭe'amim I* and *Ṭe'amim II* were published in uncritical editions by J.L. Fleischer in 1951 and by Naphtali Ben Menachem in 1941, respectively.⁶³ Although these editions were accompanied with enlightening introductions and have been helpful for scholars, it must be stressed that they are not free from errors and that they were brought out by scholars who were interested in Ibn Ezra’s biography and literary work more than in the astrological content.⁶⁴ The current critical edition, in addition to being accompanied by the first-ever English translation and commentary, endeavors to improve upon the previous editions and to reconstruct the Hebrew texts of *Ṭe'amim I* and *Ṭe'amim II* by means of a collation of the seven oldest, and, as far as possible, complete, copies of each text.⁶⁵

⁶¹ A telling example is a series of queries on astrology sent to Maimonides in 1193 or before by a group of Provençal scholars. Its authors, in addition to referring to Ibn Ezra himself, though anonymously, and using his idiosyncratic astrological terminology, based their questions on verbatim quotations and paraphrases from several of Ibn Ezra’s astrological treatises. See Sela, 2004b.

⁶² In *Ṭe'amim I*, the topic is explained, not at the “end of the book,” but at in a long excursus at Ta §2.12:1–14.

⁶³ *Ṭe'amim A*, 1951; *Ṭe'amim B*, 1941.

⁶⁴ See what J.L. Fleischer wrote, with remarkable frankness, in the introduction to his edition of Ibn Ezra’s first version of *Sefer ha-Ṭe'amim*. *Ṭe'amim A*, 1951, pp. 8–9: “I was not interested at all by the astrological-professional aspect of this book. Instead, I prepared photographs of the manuscripts of Ibn Ezra’s astrological works because I meant to find in them new data to explore Ibn Ezra’s biography, the chronology of his works, and new insights into his intellectual character.”

⁶⁵ An exception to this rule is MS ʾ (Jerusalem, Jewish National and University

The fourteen manuscripts used for the critical edition of *Ṭe'amim I* and *Ṭe'amim II* are as follows.

The Manuscripts of Ṭe'amim I

ב

Paris, Bibliothèque Nationale de France, MS Hébr. 1058 (IMHM: F 22230), ff. 98a–123a. This paper and vellum manuscript, written in the fourteenth century in a Sephardi script, is divided into two distinct parts. The first contains a typical collection of Ibn Ezra's astrological works, which will be described later. The second part (ff. 50–194) includes the four last chapters of a vast 35-chapter astrological and astronomical anthology, which incorporates a careful selection of more or less lengthy fragments and complete treatises from the Hebrew astrological and astronomical work of Abraham Bar Ḥiyya and Abraham Ibn Ezra. The importance of this anthology resides in the fact that it was composed no later than 1257.⁶⁶ Because this is substantially earlier than the date of any other manuscript of any scientific treatise by Ibn Ezra or Bar Ḥiyya, it incorporates the earliest available copies of all its components. A brief description of its contents follows:

Chapter 32 (ff. 50a–63b): long excerpts from Bar Ḥiyya's *Heshbon Mahlakhot ha-Kokhavim* (Computation of the motions of stars), *Ṣurat ha-Areṣ* (The shape of the earth), and *Sefer ha-Ibbur* (Book of Intercalation). At the end there is a fragment from the first version of Ibn Ezra's *Sefer ha-'Olam* and the entire tenth chapter of *Reshit Hokhmah I*.

Chapter 33 (ff. 64a–92b): the complete astrological history incorporated in the fifth chapter of Bar Ḥiyya's *Megillat ha-Megalleh*; a commentary written by the scribe of the anthology on the subject of the 120 planetary conjunctions, which is developed by Ibn Ezra in many parts of his work; fragments from the Hebrew translation of the *Book on Eclipses of the Moon and the Conjunctions of the Planets, and the Revolutions of Years*, by Māshā'allāh; and the complete second version of Ibn Ezra's *Sefer ha-'Olam*.

Library, 4° 43), written in 1782, which was included because it was used by Naphtali Ben Menachem as the basis for his edition of *Ṭe'amim II*.

⁶⁶ See f. 85b.

Chapter 34 (ff. 93a–98a): fragments from the second version of *Keli ha-Nehoshet* by Ibn Ezra; the complete tenth chapter of *Sefer ha-Ṭe'amim I* (ff. 94b–98a).

Chapter 35 (ff. 98a–124a): a smooth and clever combination of excerpts from *Ṭe'amim I* and *Ṭe'amim II*, which, avoiding repetitions and redundancies, in fact creates a new version of *Sefer ha-Ṭe'amim*; the treatise “On the storms of the stars,” ascribed here to Ptolemy but which turns to be the *Eisagoge* by Geminus, translated by Moshe Ibn Tibbon in 1246 (which provides the terminus post quem for the anthology).⁶⁷

פ

Paris, Bibliothèque Nationale de France, MS Hébr. 1055 (IMHM: F 14658), ff. 28a–38a. This is a 230×175mm vellum manuscript written in Sephardi script in the fourteenth century, during the lifetime of Kalonymos ben Kalonymos, whose name, on f. 66a, is followed by the acronym יר"צ (“may God protect him and give him life”). It contains the following works by Ibn Ezra: *Reshit Hokhmah I*, ff. 1b–27b; *Ṭe'amim I*, ff. 28a–38a; first version of *Sefer ha-She'elot*, ff. 41b–48b; *Sefer ha-Me'orot*, ff. 48b–52b.

ק

Cambridge, University Library, Add. 1517 (IMHM: F 17454), ff. 16a–22a. This is a 210×150mm paper manuscript, stained, worm-eaten, and torn at the edges, with some primitive repairs, written in Sephardi script in the fourteenth or fifteenth century. It begins with the assertion that the copyist is Kalonymos ben Kalonymos. This manuscript shows idiosyncratic features, such as the scribe's inclination to skip over, abbreviate, and paraphrase, or to use a consistent alternative terminology, such as ירה instead of לבנה for the Moon. It contains the following works by Ibn Ezra: *Reshit Hokhmah I*, ff. 1a–15a; second version of *Sefer ha-Mivharim*, ff. 15b, 47b–50a; *Ṭe'amim I*, ff. 16a–22a; *Sefer ha-Moladot*, ff. 22a–30b; first version of *Sefer ha-She'elot*, ff. 34a–38b; *Mishpetei ha-Mazzalot*, ff. 39b–44b; *Sefer ha-Me'orot*, ff. 45a–47a; first version of *Sefer ha-'Olam*, ff. 50a–53a.

⁶⁷ Vajda, 1960, p. 161.

ז

Oxford, Bodleian Library, Add. Qu. 160 [Neubauer 2518] (IMHM: F 22230), ff. 65b–87b. This is an octavo paper manuscript of 179 folios written in a Greek rabbinical script in Thebes in 1367. It contains the following astrological works by Ibn Ezra: *Reshit Hokhmah I*, ff. 13a–65b; *Ṭe'amim I*, ff. 65b–87b; *Sefer ha-Moladot*, ff. 88a–117b; *Sefer ha-Me'orot*, ff. 118a–126a; first version of *Sefer ha-Mivharim*, ff. 128b–140a; second version of *Sefer ha-'Olam*, ff. 140b–153b; first version of *Sefer ha-'Olam*, ff. 165a–167b.

ח

Paris, Bibliothèque Nationale de France, MS Hébr. 1056 (IMHM: F 14659), ff. 34b–46a. A paper manuscript written in a Sephardi hand in the fourteenth or fifteenth century. It contains the following astrological works by Ibn Ezra: *Reshit Hokhmah I*, ff. 3b–34a; *Ṭe'amim I*, ff. 34b–46a; *Sefer ha-Moladot*, ff. 46b–61b; first version of *Sefer ha-She'elot*, ff. 62b–70b; *Sefer ha-Me'orot*, ff. 70b–74a; first version of *Sefer ha-Mivharim*, ff. 74b–79b; first version of *Sefer ha-'Olam*, ff. 80a–86a.

ט

Vatican, Biblioteca Apostolica Vaticana, ebr. 47 (IMHM: F 00686), ff. 25a–34b. This manuscript, written in Sephardi script in the fourteenth or fifteenth century, displays some peculiarities, such as the consistent use of כותב (= writer) instead of כוכב (= star) to denote Mercury and of שבתי instead of שבתאי for Saturn. In some section the scribe interpolates material to flesh out terms and topics (see, i.e., Ta §2.3:3, §2.16:4). This manuscript contains the following works by Ibn Ezra: *Reshit Hokhmah I*, ff. 1b–24b; *Ṭe'amim I*, ff. 25a–34b; first version of *Sefer ha-Mivharim*, ff. 36a–40b; second version of *Sefer ha-Mivharim*, ff. 41a–44b; *Ṭe'amim II*, ff. 44b–53b; *Sefer ha-Me'orot*, ff. 54a–57a; *Sefer ha-Moladot*, ff. 57b–70a.

י

Munich, Bayerische Staatsbibliothek, Cod. Hebr. 202 (IMHM: F 01649), ff. 52b–67b. This manuscript, written in Italian script in the fifteenth century, was used by J.L. Fleischer for his edition of *Ṭe'amim I*.

It contains the following astrological works by Ibn Ezra: *Reshit Hokh-mah I*, ff. 1b–37b; *Ṭe'amim II*, ff. 37b–52b; *Ṭe'amim I*, ff. 52b–67b; *Sefer ha-Moladot*, ff. 70a–91a; first version of *Sefer ha-She'elot*, ff. 91b–101b; *Sefer ha-Me'orot*, ff. 101b–108a; first version of *Sefer ha-Mivharim*, ff. 108b–116a; first version of *Sefer ha-'Olam*, ff. 116a–124b; second version of *Sefer ha-'Olam*, ff. 138a–143b; second version of *Sefer ha-Mivharim*, ff. 144a–150a; *Mishpetei ha-Mazzalot*, ff. 150a–163b.

The Manuscripts of Ṭe'amim II

ל

Paris, Bibliothèque Nationale de France, MS Hébr. 1058 (IMHM: F 22230), ff. 98a–123a. This is part of chapter 35 of the astrological-astronomical anthology included in the second part of this manuscript. The manuscript is described above, under the manuscripts of *Ṭe'amim I*.

ד

Paris, Bibliothèque Nationale de France, MS Hébr. 1058 (IMHM: F 22230), ff. 26b–39a. This is a paper and vellum manuscript written in the fourteenth century in a Sephardi script. It contains the following astrological works by Ibn Ezra: second version of *Sefer ha-She'elot*, ff. 1a–8b; second version of *Sefer ha-Mivharim*, ff. 8b–13b; *Mishpetei ha-Mazzalot*, ff. 13b–26a; *Ṭe'amim II*, ff. 26b–39b. The second part of this manuscript, which contains an astrological-astronomical anthology (ff. 50–194) that contains fragments of *Ṭe'amim I* and *Ṭe'amim II*, is referenced here as MS ל.

ט

Vatican, Biblioteca Apostolica Vaticana, ebr. 47 (IMHM: F 00686), ff. 44b–53b. For a description of this manuscript, see above, under the manuscripts of *Ṭe'amim I*. This is the used by Naphtali Ben Menachem for his edition of *Ṭe'amim II*.

מ

Munich Bayerische Staatsbibliothek, Cod. Hebr. 202 (IMHM: F 01649), ff. 37b–52b. For a description of this manuscript, see above, under the manuscripts of *Ṭe'amim I*.

ס

Vatican, Biblioteca Apostolica Vaticana, ebr. 477 (IMHM: F 00530), ff. 121b–140a. Written in an Italian script in 1545, it contains the following astrological works by Ibn Ezra: *Reshit Hokhmah I*, ff. 22a–23a; second version of *Sefer ha-She'elot*, ff. 53a–67b; *Mishpetei ha-Mazzalot*, ff. 67b–86a; second version of *Sefer ha-'Olam*, ff. 86a–96b; first version of *Sefer ha-Mivharim*, ff. 97a–108a; first version of *Sefer ha-'Olam*, ff. 108a–121a; *Ṭe'amim II* ff. 121b–140a.

י

New York, Jewish Theological Seminary, Mic 2626 (IMHM: F 28879), ff. 143b–159b. Written in Sephardi script in the fifteenth century, this manuscript contains the following: *Reshit Hokhmah I*, ff. 33a–75b; *Mishpetei ha-Mazzalot*, ff. 75b–91a; *Sefer ha-Moladot*, ff. 91b–116b; second version of *Sefer ha-'Olam*, ff. 126b–133b; *Sefer ha-Me'orot*, ff. 134a–140a; *Ṭe'amim II*, ff. 143b–159b.

י

Jerusalem, Jewish National and University Library, 4° 43, ff. 96b–102b. This manuscript, written in a cursive Eastern script in 1782, was used by Naphtali Ben Menachem for his edition of *Ṭe'amim II*.

Editorial and Translation Principles

Even after careful scrutiny it proved impossible to construct a stemma of the manuscripts used for this critical edition, although certain affinities were detected: for *Ṭe'amim I*, between MSS פקמ, on the one hand, and לראט, on the other; for *Ṭe'amim II*, between MSS למא, on the one hand, and פטני, on the other. I decided to use MS פ (Paris, Bnf, MS Hébr. 1055) for *Ṭe'amim I* and MS פ (Paris, Bnf, MS Hébr. 1058) for

Ṭe'amim II as the copy texts of the editions, because they contain the earliest complete copies of both *Ṭe'amim I* and *Ṭe'amim II*. I selected them rather than MS ̣ of both *Ṭe'amim I* and *Ṭe'amim II* (Paris, Bnf, MS Hébr. 1055, ff. 98a–123a), because although the latter contains the earliest available copy, the text is too fragmentary to serve as a copy text. To determine readings for the Hebrew texts, I proceeded as follows. A single reading was accepted when all the manuscripts concurred and the reading did not conflict with explicit statements by Ibn Ezra elsewhere in his astrological work or with other astrological sources. When the manuscripts did not all agree, the preferred reading was the one deemed to be more consistent with other parts of Ibn Ezra's work or that supported by a majority of the manuscripts. In a few cases—where I was convinced that the reading given by all the manuscripts are copyists' errors and are in glaring or logical contradiction to other parts of Ibn Ezra's work or to relevant data available in contemporary authoritative and reliable sources—I have offered a new reading that is consistent with these sources (Ta §2.7:1, §2.14:2, §2.16:8, §4.1:2; Tb §2.2:3, §2.3:8, §5.4:4, §5.5:6, §5.8:3, etc.).

The Hebrew apparatus is intended to record, in an abbreviated manner, all the readings in the Hebrew manuscripts consulted that differ from the text printed here. A distinction is made between variants, additions, and lacunae. In addition, to differentiate between a lacuna and an illegible word, I have recorded not only the manuscripts that present a different reading but also those that coincide with the printed text; hence, where the siglum of a manuscript is omitted, it means that the MS in question is illegible at this point. With regard to orthography I have attempted to adopt a policy of uniformity, except where a variant may indicate a different reading. I have added punctuation to the Hebrew text, and, to facilitate references, have divided it into chapters, sections, and passages. Note, however, that whereas the ten chapters of *Ṭe'amim I* faithfully reflect the original ten chapters of this text, the eight chapters of *Ṭe'amim II* merely represent thematic divisions that are unwarranted by any formal feature of the text.

The translation is meant to help readers understand the two Hebrew texts with as much fidelity as possible. As already mentioned, in the final analysis these translations represent a commentary on the Hebrew text. The English is divided into the same chapters, sections, and passages as the Hebrew. The bracketed numbers in the English translation refer to the notes that follow the texts. These notes are intended to illustrate the links between *Ṭe'amim I* and *Ṭe'amim II* as well as between

them and other parts of Ibn Ezra's scientific corpus, to explain astrological or astronomical concepts and terms whenever necessary, and to identify sources. To the extent possible, Hebrew astrological terms have been rendered into the modern English technical nomenclature of astrology, a procedure that sometimes comes at the cost of losing the special flavor of Ibn Ezra's special Hebrew astrological vocabulary. Accordingly, a special effort has been made in the notes to explain this vocabulary, and especially the idiosyncratic neologism. In this translation we use "house" to denote both the zodiacal sign that serves as a planetary house as well as any of the twelve divisions of the horoscope, thereby taking over the ambiguity of the Hebrew **בֵּית** and the Arabic **بيت**, which are used indiscriminately in medieval astrological texts to denote the same two concepts. But, to avoid confusion and draw a difference between planetary house, on the one hand, and horoscopic house, on the other, I have decided that whereas the first reference in any section to a horoscopic house will be rendered as "<mundane> house," the first reference to a planetary house will be rendered as "house," with no qualifying attribute. If, however, in a particular section a reference to a planetary house occurs after a reference to a mundane house, the first occurrence of the former will be rendered as "<planetary> house."

Sigla

In the Hebrew text

<	after incipit
>	before incipit
חסר	lacuna
נח	position of words shifted
[]	folios in the copy texts
{ }	in the margin

In the translation

< >	word(s) to be added to make the meaning clear
[]	paraphrase
()	biblical sources

PART ONE

FIRST VERSION OF THE BOOK OF REASONS
BY ABRAHAM IBN EZRA

HEBREW TEXT AND ENGLISH TRANSLATION

יבורך אל מגלה נעלמים
לאברהם בנו מאיר יצו עזו
ליצחק בנו דוד אשר הוא
פקח עיני לבבך וחזה אור

א28 ומספר פלאיו הם עצומים
אשר באר דברים הם סתומים
גבר תמים ותפארת חכמים
לפניך בספר הטעמים.¹

בשם הנותן חכמה לחכמים
אחל לכתוב ספר הטעמים²
ונחלק לעשרה שערים³

§ I

1 (I) השער הראשון. חלקו הגלגל לשלש מאות ושישים מעלות בעבור⁴ שלא מצאו חשבון פחות ממנו שיש לו כל השברים חוץ⁵ מהשביעית. (2) על כן, אם תערוך זה המספר על שבעה אז תמצא החשבון שיש לו כל השברים, והוא אלפים וחמש מאות ועשרים. (3) ועוד, בחרו זה החשבון בעבור⁶ שהוא קרוב מחשבון ימות החמה⁷. (4) וחלקו מעלות הגלגל על שנים עשר בעבור שלא מצאו חשבון פחות ממנו שיש לו שברים כמהו, ועוד כי בכל שנה יש⁸ שנים עשר לבנות⁹. (5) והנה עלה בחלק כל¹⁰ מזל שלשים מעלות, וזה המספר יש לו שברים יותר משנים עשר. (6) ובעבור שאין לו רביעית הוצרכו לכפול המספר, וחלקו כל מעלה לשישים חלקים ראשונים¹¹, וכל ראשון¹² לשישים שניים, וככה עד עשיריים.

2 (I) ושמות המזלות נקראו על שם הצורות, שהם צורות הכוכבים שהם קרובים לחשב אפודת הגלגל. (2) והנה האמת היא שיהיו חלקי¹³ כל מזל שוים, א"ע"פ שיש צורה אחת גדולה מאוד, כמו צורת האריה שהיא מתחלתה¹⁴ עד סופה קרוב מארבעים מעלות, וצורת טלה כמו שבע מעלות, ולא יותר. (3) ובסוף הספר אדבר

¹ יבורך אל ... בספר הטעמים] פ; לראטמק חסר. ² בשם הנותן ... ספר הטעמים] פטר; א ספר הטעמים; מ טעמים אחרים; ק חסר. ³ ונחלק לעשרה שערים] פ; לראטמק חסר. ⁴ בעבור] פלראטמ; ק כי. ⁵ חוץ] פלראטמ; ק חסר. ⁶ בעבור] פלראטמ; ק לפי. ⁷ שנות החמה] אקמ; ל השנה; ר השנות החמה; ט שנת החמה; פ החמה. ⁸ יש] פלראטמ; מ < לו. ⁹ לבנות] לראטמ; פ חדשי לבנה. ¹⁰ כל] פלאטמק; ר חסר. ¹¹ ראשונים] פלרטמ; אק חסר. ¹² ראשון] פלראטמ; ק חסר. ¹³ חלקי] פלראק; טמ > כל. ¹⁴ מתחלתה] פלאטמק; ר מתחלת.

Blessed be God, Revealer of all things hidden,
 The number of His marvels is vast,
 To Abraham son of Meir, may God strengthen him,
 Who elucidated things previously unclear,
 To Isaac son of David,
 A pure and brilliant man among scholars.
 Open your heart's eye and see the light,
 For in front of you is the Book of the Reasons.

On behalf of He who bestows wisdom upon the wise,
 I begin to write the Book of Reasons,
 Which is divided into ten chapters.

§ 1

1 (1) First chapter. They divided^[1] the circle into 360 degrees because they did not find a smaller number that has all the fractions (from one-half to one-tenth),^[2] except for one-seventh. (2) Therefore, if you multiply this number by 7 you get the number that has all the fractions (from one-half to one-tenth), namely, 2,520. (3) In addition, this number [i.e., 360] was chosen because it is close to the number of days in the solar year. (4) They divided the degrees of the circle into 12 because they found no smaller number that has as many fractions as it does, and also because there are 12 lunar months^[3] in any (solar) year. (5) So each sign was assigned 30 degrees, and this number has more fractions than 12.^[4] (6) But since it does not have a quarter it was necessary to double it. They divided each degree into 60 minutes and each minute into sixty seconds, and similarly down to the tenths.

2 (1) The signs were named for the images, which are the shapes (formed by the) stars that are close to the ecliptic.^[1] (2) The truth is that the parts occupied by each sign ought to be equal, although there is one image that is very big, the image of Leo, which occupies around 40 degrees from its beginning until its end, whereas the image of Aries (occupies) about 7 degrees and no more than that. (3) At

בעזרת השם על סוד¹ השתנות מקומות המזלות, כי הנה בטלמיס אמר כי לב האריה² היה בזמנו על מרחק מאה ועשרים ושנים מעלות מתחלת קו³ הצדק, והנה היה בשתי מעלות מאריה, והנ⁴ היום, בשנת תתק"ח על שמונה עשרה מעלות, וחנוך הזכיר בספר הארך שהיה בחמש ועשרים מעלות מסרטן. (4) ומה שאמרו, כי מספר הכוכבים הם⁵ אלף ושנים ועשרים, אלה הם שהעין שולטת בהם. (5) והצורות השמאליות גם הדרומיות הם כמו דמיונות להיותם סימנים שידעו⁶, כי⁷ הנשר הנופל יקרא אותו בטלמיס השקד, כי יוכל לשנות השמות כפי הצורות שיראו לו בעין, שיחבר כוכב אל כוכב, כי הגלגל הוא עגול ואין בדבר תולדות⁸ שיהיה לו מקום ידוע שיוחל ממנו. (6) על כן, נניח הדבר כפי הצורות שהזכירו הקדמונים.

3 (1) ואלה השמונה וארבעים צורות⁹ הם בגלגל העליון הנקרא גלגל המזלות. (2) ולמטה ממנו שבעה גלגלים לשבעה כוכבים, יקראו משרתים בעבור שהם קרובים אל הארץ. ויקרה להם מקרים¹⁰ שלא יקרו לעליונים בתנועותיהם, שישתנו בגבהותם ובשפלותם¹¹ כנגד נקודת הארץ, ויתחבר זה עם זה אחר היותם נפרדים ובהפרד¹² הנחברים, וכל אלה כמקרה¹³ הנבראים¹⁴ אשר על האדמה. (3) ועוד, כי¹⁵ תהלוכות¹⁶ אלה המשרתים קרובות אל חשב אפודת הגלגל, ואינם ככה הצורות השמאליות גם¹⁷ הדרומיות. (4) והנה למטה מהמשרתים היא¹⁸ הלבנה, ובעבור¹⁹ שהיא קרובה אל הארץ יותר מכולם, על כן²⁰ תורה על גוף האדם ותחלת כל²¹ מעשה ומחשבה. (5) ויכלו הקדמונים לדעת אי זה משרת עליון מחבירו בעבור שני דרכים. (6) האחד²², בהתחבר²³ השני כוכבים²⁴ המשרתים השפל יסתיר העליון; ובעבור זה ידעו כי כוכב חמה למטה²⁵ מגנה. (7) והדרך האחרת מהמהלך²⁶, כי מהלך שבתאי²⁷ בגלגל | המזלות קרוב משלושים שנה וצדק בשנים עשרה²⁸ ומאדים בשנים²⁹ והשמש בשנה והלבנה בפחות משמנה ועשרים יום. (8) והנה בעבור היות המהלך השווה ולכוכב חמה²⁹ עם מהלך החמה שווה, ובהתחבר כל אחד מהם עם השמש לא יראה בעבור³⁰ כח אור השמש³¹, על כן היתה מחלוקת

¹ על סוד] פראטמק; ל חסר. ² האריה] לרמ; פאקט אריה. ³ מתחלת קו] פלאק; טמ מקו. ⁴ והנ] לר; פאטמק והנה. ⁵ [הם] פלאקט; מ חסר. ⁶ שידעו] פלאקט; ט > כדי. ⁷ [כי] פלקטמ; רא כי הנה. ⁸ תולדות] פלקטמ; א תולדת. ⁹ צורות] פלאקט; ט חסר. ¹⁰ מקרים] פלאקט; ט חסר. ¹¹ בגבהותם ובשפלותם] פ; לראטמ ובגבהותם ובשפלותם; ק ובגבהם ובשפלים. ¹² ובהפרד] פראטמק; ל והפרד. ¹³ כמקרה] ראטמ; פ כמקרי; ל במקרה; ק במקום. ¹⁴ הנבראים] פלא; טמ > כל; ק הנחברים. ¹⁵ כי] פלאטמק; ר חסר. ¹⁶ תהלוכות] פלקטמ; רא מהלכות. ¹⁷ גם] פלאק; טמ חסר. ¹⁸ היא] פלאקט; ט חסר. ¹⁹ ובעבור] פלאטמ; ק ולפי. ²⁰ על כן] פלאטמ; ק לכן. ²¹ כל] פלאקטמ; פ < דבר. ²² האחד] פלאק; מט אחד מהם. ²³ בהתחבר] פלאקט; ט חסר. ²⁴ כוכבים] פלא; מ הכוכבים; טק חסר. ²⁵ למטה] פלקטמ; א גבוה. ²⁶ מהמהלך] לאטמ; פר מהמלך. ²⁷ שבתאי] פלק; שבתאי ראטמ. ²⁸ בשנים] לטמ; פראק בשנים. ²⁹ ולכוכב חמה] פלאקט; ט ולכוכב. ³⁰ ובהתחבר ... בעבור] לראקטמ; פ חסר. ³¹ כח אור השמש] לראקט; מ כח השמש; פ חסר.

the end of the book, with God's help, I shall refer to the secret of the change in the positions of the zodiacal constellations.^[2] For, in his time, Ptolemy said that *Cor Leonis*^[3] ⟨was⟩ at a distance of 122° from the beginning of the equator,^[4] so that it was at Leo 2°; but today, in the year ⟨5⟩908 [1147/8 C.E.], it is at ⟨Leo⟩ 18°.^[5] Enoch recorded in the *Book of the Longitude*^[6] that it was at Cancer 25°.^[7] (4) As for what they said, namely, that the number of the stars is one thousand and twenty-two, this refers to those that are visible to the eye. (5) The northern constellations as well as the southern are [likened] to images so that they can be recognizable signs; Ptolemy called the ⟨constellation of the⟩ *Falling Eagle* the *Almond Tree*,^[8] changing the name according to the shape he observed when he connected one star to another, ⟨and⟩ because the circle is round and there is nothing in its nature^[9] that requires it to have a fixed beginning. (6) Therefore let us leave the matter according to the shapes recorded by the Ancients.

3 (1) The 48 constellations are in the uppermost orb, which is called the orb of the zodiacal signs.^[1] (2) Underneath it are seven orbs for seven stars, which are called “servants” [i.e., planets]^[2] because they are close to the Earth. They undergo variations in their motions that do not occur to the upper ⟨stars⟩: that is, they change ⟨their positions⟩ with respect to the center of the Earth when they are at their apogees and perigees, they enter into conjunction with one another after being separated, and they move apart after having entered into conjunction; and all these are like the variations ⟨experienced by⟩ the creatures that dwell on Earth.^[3] (3) Furthermore, the paths of these planets are close to the ecliptic;^[4] but the northern and the southern constellations^[5] are not like that. (4) Below the planets is the Moon; because it is the closest to the Earth of all ⟨the stars⟩, it gives an indication about the human body and the beginning of any action and thought.^[6] (5) The Ancients knew which planet is higher than its companion through two methods. (6) ⟨According to⟩ the first, when two planets are in conjunction, the lower hides the upper;^[7] for this reason they knew that Mercury is beneath Venus. (7) The other method is related to motion, for Saturn's motion through the zodiac^[8] takes around thirty years, Jupiter's twelve, Mars' two years, the Sun's one year, and the Moon's less than twenty-eight days.^[9] (8) So, because the mean motions of Venus and Mercury coincide with the mean motion of the Sun, and because when either of them is in conjunction with the Sun it cannot be seen, because of the strength of the Sun's light, there was a disagreement among the

בין החכמים, כי יש אומרים כי נגה וכוכב חמה למעלה מהשמש ואחרים אמרו הפך הדבר. (9) ואחרים אמרו שפעמים הם למעלה ופעמים הם למטה, ואין זה הספר מוכן לדבר בדברים האלה.¹ (10) רק דעת כל חכמי המזלות בעלי הדין הסכימה כי שניהם תחת הגלגל השמש, עד שתהיה השמש אמצעית ושלשה עליונים למעלה ממנה.² (11) והם ירחקו ממנה³ עד היותם מבט נכח, ונגה וכוכב חמה לא ירחקו ממנה כי סוף מרחק נגה⁴ שמנה וארבעים מעלות ומרחק כוכב חמה שמנה ועשרים, והנה אלה שניהם דבקים בשמש. (12) והלבנה, שהיא שפלה מהכל⁵, אין לה אור כי אם מאור השמש, ואין ככה שאר המשרתים ולא הכוכבים העליונים כי הם מאירים בעצמם.

4 (I) וטעם היות טלה ואריה וקשת בתולדת האש, יש אומרים כי זה נודע מהנסיך. (2) ויאמר יעקב אלכנדי: ידוע כי החום והקור הם הפועלים, ובעבור כי החום הוא הפועל הגדול וממזל טלה יחל הזמן להתחמם, על כן אמרו כי תולדתו כתולדת האש. (3) ואמר כי סרטן הוא⁶ תחלת התהפך הזמן, ובעבור שהוא שמאלי אמרו כי תולדתו כתולדת הפועל הקטן. (4) ולפי דעתי כי גזרו על טלה שהוא חם ויבש בעבור צורות הכוכבים הנדמות לטלה, וזה טעם אריה גם מזל קשת, כי יש שם צורת סוס. (5) ואמרו על שור שהוא קר ויבש בעבור הצורה, וככה מזל גדי.⁷ (6) ובעבור היות מזל בתולה⁸ בשלישות אחד⁹ עמהם, על כן גזרו על זה המזל שהוא קר ויבש, וטעם השלישות אפרשנו במבטים. (7) ובעבור היות תאומים מאזנים ודלי על צורת בן אדם, שהוא חם ולח ממוסך, על כן גזרו¹⁰ כי אלו המזלות כתולדת האויר, ובעבור כי סרטן ועקרב ודגים אלה הצורות הם קרים ולחים, על כן גזרו על אלה המזלות שהם ככה.

5 (I) וטעם תולדת¹¹ המשרתים קשה ונמצא¹² בספר הארבעה שערים לבטלמיוס, שאמר כי הלבנה קרה ולחה בעבור האיד העולה מן הארץ אליה ובעבור שהיא שפלה מהשמש. (2) וככה אמר על נגה וכוכב חמה, רק בעבור היות כוכב חמה

¹ ואין ... האלה] לראפט; ק ואין כונת ספר זה בזה. ² ושלשה עליונים למעלה ממנה] לראק; פ ושלשה עליונים הימנה; מט ושלשה כוכבים למעלה ממנה. ³ ממנה] פרלאטמ; ק מהשמש. ⁴ נגה] לראקטמ; פ חסר. ⁵ מהכל] פרלא; טמ מכולם; ק חסר. ⁶ הוא] פרלאקמ; ט חסר. ⁷ גדי] פלאטמק; ר חסר (בצד כתוב: בתולה). ⁸ בתולה] פרלאטמ; ק אחד. ⁹ אחד] לראטמ; פ חסר. ¹⁰ גזרו] פרלאטמ; ק אמרו. ¹¹ תולדת] לפקטמ; רא תולדות. ¹² ונמצא] לראקטמ; פ חסר.

scholars; some of them assert that Venus and Mercury are above the Sun, whereas others maintain the opposite. (9) Still others asserted that sometimes they are above and sometimes beneath;^[10] but this book [i.e., *Reshit Hokhmah*] was not intended to discuss these topics.^[11] (10) But all the astrologers^[12] (who are) experts in (astrological) judgments concur in the opinion that both are beneath the Sun's orb, so that the Sun is intermediate and the three upper (planets) are above it. (11) They move away from it until they are in opposition (to the Sun), whereas Venus and Mercury do not move away from it because the maximum elongation of Venus is 48° and of Mercury 28°, so that these two never get very far away from the Sun.^[13] (12) The Moon, the lowest of all, has no light of its own but only the light coming from the Sun; but this does not apply to the rest of the planets or the upper stars, which are themselves luminous.^[14]

4 (1) As for the reason that Aries, Leo, and Sagittarius have a fiery nature, some say that this is known by experience.^[1] (2) Ya'qub al-Kindi said: it is known that heat and cold are agents; because heat is the stronger agent and (because) the weather begins to get warmer with the sign of Aries, they said that its nature is like the nature of fire. (3) He also said that Cancer is the beginning of the reversal of the weather; because it is northern they said that its nature is like the nature of the weaker agent.^[2] (4) But in my opinion they concluded that (the sign of) Aries is hot and dry because the shape (formed by) the stars resembles a ram, and this is the explanation for Leo and also (for) the sign of Sagittarius, because of the shape of a horse there. (5) They also said that (the sign of) Taurus is cold and dry on account of the shape (of a bull), and similarly with Capricorn. (6) Because the sign of Virgo is in the same triplicity with them, they concluded that this sign is cold and dry (I shall explain the reason for the triplicity in (the discussion of) the aspects).^[3] (7) Because Gemini, Libra, and Aquarius have the shape of a human being, which is hot and moist in a mixed manner, they concluded that (the nature of) these signs is like the nature of air; because Cancer, Scorpio, and Pisces have the shape (of animals) that are cold and moist, they concluded that these signs are like that.^[4]

5 (1) The explanation of the natures of the planets is complicated and may be found in the *Tetrabiblos* by Ptolemy, who said that the Moon is cold and moist because of the vapor that ascends from the Earth to it and because it is below the Sun. (2) He said similar things about

במהירות תנועותיו מתחבר עם השמש ויכנס פעמים רבות בשנה אחת תחת גבול השריפה, על כן הוא מתהפך בתולדתו, כי פעמים¹ יהיה חם². (3) וגור על מאדים שהוא חם שורף בעבור היותו קרוב מהשמש ואורו עולה אליו. (4) וגור על שבתאי שהוא קר בעבור היותו רחוק מהשמש, ובעבור היות צדק אמצעי בין מאדים החם ובין שבתאי הקר, היתה³ תולדתו ממוסכת. (5) ואני אברהם, המחבר⁴, אומר כי זה הספר לא חברו בטלמיוס, כי יש שם דברים רבים⁵ בטלים משיקול הדעת והנסיון, כאשר אפשר בספר המולדות. (6) ואחרים אמרו כי אלה התולדות ידעום מדרך הנסיון. (7) והאמת כי אין כוכב משרת ולא עליון שהוא קר או חם, כי הם מתולדת⁶ חמישית, כאשר פירש⁷ אריסטוטליס⁸ בראיות גמורות. (8) רק בעבור היות גוף השמש גדול⁹, כי הוא גדול¹⁰ מגוף הארץ מאה וששים ושש פעמים¹¹ ואיננו רחוק מהארץ מרחק רב, על כן יוליד כח באויר בעבור תנועתו שיתחמם. (9) ובעבור כי הלבנה, א' ע"פ שהיא קרובה מהארץ, גופה הוא¹² קטן ממנה, ובעבור תנועתה, תוליד באויר¹³ לחה, כי תולדת כל דבר שהוא¹⁴ בארץ כשיתחמם מעט יתפשט. (10) ובעבור שחום השמש הוא רב ייבש מיד¹⁵, על כן הלבנה תוליד כח לחה¹⁶ במיני הצמחים ובמוח¹⁷, וזה הדבר¹⁸ מנוסה. (11) והכלל¹⁹ כי אין כוכב ולא מאור שיוליד קור, רק חום בעבור תנועתו ותולדת האור היוצא ממנו. (12) ולא גורו על הלבנה שהיא קרה רק בעבור שלא תוליד חום כהוגן כפי ממסך האדם, כאשר גורו הרופאים כי בשר שור הוא קר, וידוע כי כל | בשר הוא חם רק כפי²⁰ ממסך²¹ האדם הוא קר ומוזיק לו. (13) וככה שבתאי בעבור היותו²¹ רחוק מהארץ הרבה, ואין גופו גדול כגוף צדק. (14) על כן²² גורו עליו שהוא קר, כי בהיותו מושל על מולד אדם²³, בעבור שלא יתן חום כהוגן, יורה על מות. (15) וגורו על צדק שהוא חם ולח כתולדת האדם, וגורו על נגה שהוא קר ולח בעבור היותו²⁴ קרוב מן הארץ וגופו קטן מהארץ²⁵ כדרך הלבנה, וככה הדין²⁶ לכוכב חמה. (16) וגוף מאדים גדול

¹פעמים] פלאטמ; מ פעם. ²יהיה חם] לראקטמ; פ יורה חום. ³היתה] פלאק; טמ > על כן. ⁴המחבר] לראטמ; פק חסר. ⁵רבים] פלאטמ; רק חסר. ⁶מתולדת] פלאטמ; ק מדרך. ⁷כאשר פירש] לראטמ; פ חסר. ⁸אריסטוטליס] פמ; לד אריסטוטלוס; אקט אריסטו. ⁹גוף השמש גדול] פלאטמ; ק נח. ¹⁰כי הוא גדול] לראקמ; פט חסר. ¹¹פעמים] פלאקטמ; א פעם. ¹²הוא] לראטמ; פק חסר. ¹³באויר] פלאטמ; ק בארץ. ¹⁴שהוא] פלאקמ; ט כשהוא. ¹⁵מיד] פלאמ; ט תמיד. ¹⁶לחה] פלאקמ; ט ליחה. ¹⁷ובמוח] פלאטמ; ר חסר. ¹⁸הדבר] פלאטמ; ק חסר. ¹⁹והכלל] פלאטמ; ר וזה והכלל. ²⁰כפי] פראטמ; ל כמו. ²¹בעבור היותו] פלאטמ; ק לפי שהוא. ²²על כן] פלאטמ; ק לכן. ²³אדם] פלאק; טמ האדם. ²⁴היותו] פלאקמ; ט שהוא. ²⁵וגופו קטן מהארץ] פלאטמ; ר חסר. ²⁶הדין] פלאטמ; ק תדין.

Venus and Mercury; but because Mercury, on account of its rapid motion, enters into conjunction with the Sun and enters the domain of burning^[1] many times a year, its nature switches back and forth and sometimes it is hot. (3) He concluded that Mars is hot and burning because it is close to the Sun and its [the Sun's] light ascends to it [i.e., to Mars]. (4) He also concluded that Saturn is cold because it is far from the Sun; and because Jupiter is intermediate between the hot Mars and the cold Saturn, its nature was taken to be mixed.^[2] (5) But I, Abraham, the author, say that this book was not written by Ptolemy, because there are many things in it that have in them nothing of rational thought or experience, as I shall explain in the *Book of Nativities*.^[3] (6) Others said that they knew these natures ⟨of the planets⟩ by experience. (7) But the truth is that there is neither a planet nor an upper star that is either cold or hot, because they are made of a fifth element,^[4] as Aristotle explained with incontrovertible proofs.^[5] (8) However, because the body of the Sun is large—it is 166 times larger^[6] than the body of the Earth and is not that distant from the Earth—it generates a warming force in the air by its motion. (9) Although it is close to the Earth, the Moon generates moisture in the air because its body is smaller than the Earth's body and ⟨also⟩ because of its motion, owing to the fact that the nature of anything on Earth is to expand slightly when it is warmed. (10) The Sun's heat is so intense ⟨that the air⟩ dries up right away; for that reason the Moon generates a moisturizing power in plants and in the brain; and this has been verified by experience. (11) The general rule is that neither the planets nor the luminaries generate cold, ⟨but⟩ only heat, on account of their motion and the nature of the light emitted by them. (12) ⟨Consequently,⟩ they concluded that the Moon is cold only because it does not generate sufficient heat as compared to the complexion of human beings, just as the physicians concluded that the flesh of the ox is cold, although it is known that all flesh is hot but it is ⟨considered⟩ cold as compared to the complexion of human beings, and harms them.^[7] (13) The same applies to Saturn because it is so far from the Earth, and its body is not as large as that of Jupiter. (14) Therefore they concluded that it is cold, for when it is the lord of the nativity of some person, then, because it does not provide adequate heat, it indicates death. (15) They concluded that Jupiter is hot and moist, like the nature of human beings; they concluded that Venus is cold and moist because it is close to the Earth and its body is smaller than the Earth, like the Moon; and the same thing applies to Mercury.^[8] (16) The body of Mars is larger than ⟨the body of⟩ the lower

מאלה השפלים¹, וקרוב² מהשמש³, על כן גזרו עליו שהוא חם, ועוד בעבור שצין מראהו אדום. (17) וככה גזרו על כל כוכב עליון שהוא אדום, כמו צין השור ולב עקרב, כי תולדתם כתולדת מאדים.

6 (1) וגזרו על השמש שהוא זכר בעבור החום הרב עם היבשת שהוא מוליד⁴, ועל הלבנה להפך, נקבה⁵. (2) ואמרו כי כחה בלילה זה דבר⁶ נראה, וכח השמש ביום כי היא למטה מהארץ בלילה. (3) וגזרו על צדק שהוא מן הכוכבים הטובים, כאשר אפרש טעמו⁷ כשאניע למקומו, ושהוא זכר בעבור שיליד חום רב, והפך זה נהג. (4) וגזרו⁸ על שבתאי שהוא זכר ומכוכבי היום בעבור כי תתישר תולדתו בחום היום, והפך הדבר מאדים; על כן גזרו שהוא נקבה ומכוכבי הלילה. (5) וכוכב חמה מתהפך בעבור רוב תנועותיו; על כן אמרו כי פעם הוא זכר ופעם הוא נקבה. (6) והטעם⁹ המרחק מהשמש וכפי¹⁰ המרחק מהארץ. ודבר התלי אפרשנו במקומו.

§ 2

1 (1) השער השני. נקראו הששה¹¹ מזלות שמאליים כי השמש הולך¹² עליהם והוא¹³ בצד שמאל כנגד קו הצדק, והפך זה הדרומיים. (2) טלה. רבים החלו שנתם מתחלת¹⁴ הכנס השמש במזל גדי בעבור ששם יחלו הימים להאריך, אחר שהגיעו לקוצר שאין למטה ממנו בכל הגבולים. (3) ואחרים החלו שנתם מתחלת הכנס השמש¹⁵ במזל טלה, כי אז¹⁶ ישתה היום והלילה¹⁷. (4) ורבים¹⁸ החלו שנתם בהכנס השמש אל מזל סרטן בעבור שאז הוא בסוף השמאל, שהוא קרוב אל הישוב. (5) ורבים החלו בהכנס השמש במזל¹⁹ מאזנים כי אז ישתה היום עם הלילה²⁰, ויותר נכון להחל מהשתוות היום והלילה משאר המקומות. (6) ובעבור היות השמש, כשתכנס²¹

¹השפלים] לר; ט השנים השפלים; פאמ השנים; ק חסר. ²וקרוב] פאטמק; לר חסר. ³מהשמש] פקטמ; א אל השמש. ⁴עם ... מוליד] פרלאט; מ עם היבשה שהוא מוליד; ק יובש שמוליד. ⁵להפך] נקבה] פרלאקמ; ט שהיא נקבה בהפך. ⁶זה דבר] פרלאטמ; ק והדבר. ⁷טעמו] לראטמ; פ במקומו; ק חסר. ⁸וגזרו] פרלאטמ; ק חסר. ⁹והטעם] תיקנתי עפ"י הקשר הדברים; פרלאטמק וטעם. ¹⁰וכפי] פראטמ; ק כפי. ¹¹הששה] פרטמ; קא ששה. ¹²הולך] ראטקמ; פ הולכת. ¹³והוא] רטקמ; פא והיא. ¹⁴מתחלת] פראטמ; ק בתחלת. ¹⁵השמש] פראמ; ק שנתם. ¹⁶כי אז] פ; א שאז; ק ואז; רמ אז. ¹⁷ואחרים החלו ... והלילה] פראקמ; ט חסר. ¹⁸ורבים] פראקמ; ט ואחרים. ¹⁹במזל] ראקטמ; פ אל מזל. ²⁰עם הלילה] ראטמ; פק והלילה. ²¹היות השמש כשתכנס] פראטמ; ק שכשהשמש תכנס.

⟨planets⟩ and it is close to the Sun; therefore they concluded that it is hot, and also because its color is red. (17) Similarly they concluded that the nature of any upper star that is red, such as *Aldebaran* and *Antares*,^[9] is like Mars' nature.

6 (1) They concluded that the Sun is masculine, because of the great heat and dryness that it generates, and that the Moon, on the contrary, is feminine. (2) They said that its [i.e., the Moon's] power is by night, ⟨because⟩ this is something that may be seen [i.e., that it is above the Earth during the night], and that the power of the Sun is by day, because it is underneath the Earth during the night. (3) They concluded that Jupiter is one of the benefic stars (I shall explain the reason for this when I come to the appropriate place)^[1] and that it is masculine, because it generates great heat, and that Venus is the opposite. (4) They concluded that Saturn is masculine and one of the diurnal stars, because its nature is tempered in the heat of the day, and that Mars is the opposite; they therefore concluded that it is feminine and one of the nocturnal stars. (5) Mercury is mutable because of its many motions; they therefore said that sometimes it is masculine and sometimes feminine. (6) The reason ⟨for the alteration of Mercury's nature⟩ is its distance from the Sun and in accordance with the distance from the Earth. (7) As for the Dragon,^[2] I shall discuss this topic in its proper place.^[3]

§2

I (1) Second chapter. The six signs were designated northern because the Sun travels through them when it is on the northern side of the equator, and the opposite applies to the southern ⟨signs⟩.^[1] (2) Aries. Many peoples began their year from the moment when the Sun first enters Capricorn, because that is where the days begin to grow longer after they reached their minimum in all climates.^[2] (3) Others began their year from the moment when the Sun first enters Aries, because day and night are equal then. (4) Many peoples began their year when the Sun enters Cancer, because then it is in the farthest north, which is close to the ecumene. (5) Many peoples began ⟨their year⟩ when the Sun enters Libra, because day and night are equal then. It is more correct to begin from when day and night are equal than from any other place. (6) Because the Sun, when it enters Aries, is closer to the

בטלה, יקרב¹ אל הישוב ויתחדש² העולם, והפך הדבר³ הוא בהכנסה במאזנים, על כן ראוי שתהיה תחלת השנה במזל טלה, ועל כן⁴ הוא ראש לכל המזלות.

2 (I) וגורו⁵ עליו שהוא מזל אש, כאשר הזכרתי, והוא⁶ זכר בעבור החום, ומתולדת היום כי היום חם, ומזרחי כי פאת מזרח חמה, ומתהפך בעבור שהחלו⁷ הימים להוסיף והלילה⁸ לגרוע⁹, ושעותיו נוספות בעבור אורך קשת היום, ומצעדיו חסרים¹⁰, זה ידוע מפאת הגלגל. (2) ונקרא מעוות בעבור חסרון מצעדיו, והוא מן המזלות הטובים בעבור שיראה חוזק השמש בו, ויורה על הרעם¹¹ ועל הברק בעבור התהפך¹² הזמן וסור הקור ובא החם. (3) וזה שאמרו אם היה שמאלי מוליד חום¹³ ואם דרומי קור¹⁴ הם דברי חכמי הודו, ובטלמיוס לועז עליהם. (4) וזה שאמרו כי הוא על צורה שיש לה¹⁵ ארבע רגלים, בעבור שהוא דומה לטלה. (5) ואמרו כי איבריו כרותים¹⁶ בעבור שלא יראו איבריו¹⁷ כהוגן, זו אחר זו. (6) ואמרו שיורה על שני עינים במראה ושתי צורות בעבור התהפכו. (7) ואמרו שיש לו חצי קול בעבור שהוא¹⁸ על צורה בהמה ואינו על צורת בן אדם. (8) ואמרו כי שלו לב מזרח בעבור חומו ובעבור השתוות בו¹⁹ היום והלילה, על כן אמרו כי לו לב מזרח²⁰. (9) והנה יהיה אריה²¹ שמאל מזרח כי השמש היא שם בפאת שמאל, על כן היה קשת גב מזרח. (10) ואמרו כי חומו ממוסך²² בעבור הזמן, וככה שהוא²³ שלו²⁴ הדם. (11) ומן המטעמים המתוק, ומן העיניים | האדמדמות²⁵ וכל עין²⁶ מכורכם בעבור²⁷ היות זה²⁸ העין אמצעי בין הלובן והשחרות. (12) וחלקו²⁹ מן החיות הצאן בעבור שכוכביו בצורת טלה, ומן המתכות הזהב והברזל³⁰ והכסף והנחשת בעבור שכל אלה באים³¹ באש ותולדתם³² אש. (13) ואמרו כי בחלקו הגבול השלישי בעבור חומו שהוא³³ ממוסך. (14) ואמרו כי³⁴ בחלקו מרעה הצאן בעבור צורות הכוכבים שיש בו³⁵, ומקומות האש כי ככה תולדתו, ונהו הלסטים בעבור כי הוא בית מאדים, וכל בית מקורה שיתקנו ככה בעבור הלסטים, ובתי³⁶ התפילות בעבור כי בתחלתו³⁷

¹יקרב] פאקט; רמ תקרב. ²ויתחדש] פראקט; מ ותתחדש. ³והפך הדבר] פראטמ; ק וההפך. ⁴ועל כן] פראטמ; ק לזה. ⁵וגורו] פראקט; מ שגורו. ⁶והוא] פראקט; מ שהוא. ⁷שהחלו] פראטמ; ט < בו; ק שיחלו. ⁸והלילה] פראטמ; ט והלילות. ⁹לגרוע] פראטמ; ק לחסר. ¹⁰חסרים] ראקטמ; פ חסר. ¹¹הרעם] טק (כך כתוב בראשית חכמה, כ" פאריס 1055, עמ' 22); רפמ הרעד; א הרעש. ¹²התהפך] ראקטמ; פ חסר. ¹³חום] פאטמק; ר חסר. ¹⁴קור] פאטמק; ר > מוליד. ¹⁵לה] אקטמ; פ לו. ¹⁶שיש לה ... כרותים] פאטמק; ר חסר. ¹⁷איבריו] ראקטמ; פ חסר. ¹⁸בעבור שהוא] פאטמק; ר חסר. ¹⁹בן] ראקטמ; פ חסר. ²⁰על כן ... מזרח] פראטמ; ק חסר. ²¹אריה] פראטמ; ק חסר. ²²ממוסך] רפקטמ; א מתוסף. ²³שהוא] ראטמ; פ הוא. ²⁴שלו] פראקט; ט מ יש לו. ²⁵האדמדמות] פראטמ; ק האודם. ²⁶עין] ק; פראטמ מין. ²⁷זה] פראטמ; ק חסר. ²⁸חלקו] פראקט; ט ובחלקו. ²⁹והברזל] ראקטמ; פ חסר. ³⁰באים] פאטמ; ק חסר. ³¹ותולדתם] פאקט; מ ותולדת; רט ותולדתו. ³²חומו שהוא] פראטמ; ק נח. ³³ואמרו כי] פראטמ; ק חסר. ³⁴צורות ... בו] פראטמ; ק צורת כוכביו. ³⁵ובתי] ראקטמ; פ ובית. ³⁶בתחלתו] פראקט; ט תחלתו.

ecumene and the world is renewed then, and ⟨because⟩ the opposite happens when it enters Libra, it is therefore fitting that the beginning of the year be in the sign of Aries. Consequently it [Aries] is the first among all the signs.^[3]

2 (1) They concluded that it is a fiery sign, as I have explained,^[1] and masculine because of the heat, and that it is of the nature of the day because the day is hot, and eastern because the east^[2] is hot,^[3] and tropical because the days begin to grow longer and the night to grow shorter,^[4] and its hours grow longer because of the length of the arc of the day, and its rising times grow less (as is known) on account of the circle. (2) It is also called crooked because of the decrease in its rising times.^[5] It is one of the benefic signs because the strength of the Sun is perceptible in it. It indicates thunder and lightning because of the alteration of the weather and the retreat of the cold and approach of the heat. (3) They said that if it is northern it generates heat and if southern ⟨it generates⟩ cold. This is what the Indian scientists say, but Ptolemy laughs at them. (4) They said that it is a four-legged image because of its likeness to a ram. (5) They also said that its limbs are cut off because its limbs are not seen properly, one after the other.^[6] (6) They also said that it indicates two colors and two shapes because of its instability. (7) They said that it has half a voice because it has the form of a beast and not of a man.^[7] (8) They said that the heart of the east belongs to it because of its heat and because day and night become equal in it; consequently they said that the heart of the east belongs to it. (9) So Leo is in the northeast, because there the Sun is at the north [i.e., relative to the equator], and Sagittarius is in the southeast.^[8] (10) They also said that its [Aries'] heat is tempered because of the weather, and in like manner that the blood belongs to it. (11) Of the tastes the sweet^[9] and of the colors the reddish and any color that is saffron yellow because this color is intermediate between whiteness and blackness. (12) Its portion of the animals is sheep, because its stars are in the shape of a ram, and of the metals gold, iron, silver, and copper, because all of them can withstand fire and have a fiery nature.^[10] (13) They said that the third climate is in its portion because of its heat, which is temperate.^[11] (14) They said that pastureland for sheep is in its portion, because of the shape ⟨composed by⟩ its stars; and the places of fire, because that is its nature; and the abode of robbers, because it is the house of Mars; and any roofed house that was designed like that because of the robbers; and houses of prayer, because the equator is

קו הצדק, וככה טעם מקום הדיינים. (15) ולא אדע טעם לאותיות שלו.¹ (16) ושנותיו חמש עשרה כמספר שנות מאדים הקטנות, כאשר אפשר במקומו, וככה טעם² חדשיו. (17) וטעם הימים והשעות ראיתיו בספר אבו מעשר וניסיתיו.³ (18) וזה שאמרו שיעלה שם צורת אשה וזנב דג וראש המשולש⁴ וצורת שור⁵, בעבור שיעלו שם כוכבים דומים לאלו הצורות. (19) וככה טעם⁶ כל מה שיאמר⁷ בטלמיוס שיעלה שם⁸, רק כל מה שידברו אנשי הודו שיעלו⁹ בכל פנים לא ידענו סודם¹⁰. (20) ומה¹¹ שאמרו שהגולד בו יהיה גופו ממוסך ואזניו רפות, אלה הדברים עלה¹² בידם מהנסיון.

3 (I) וזה המזל ושור וסרטן ועקרב וגדי ודגים יורו על מומים ותחלואים, ואין ככה מזל¹³ אריה וקשת כי חומם רב בלא עיפוש. ונשאר המזלות שהם על צורת בן אדם¹⁴ שיורו על בריאות הנוף. (2) ושמו הראש בחלק זה המזל כי הוא ראש לכל המזלות והוא יורה על הראש, ושור על הצואר, ותאומים על הכתפים והזרועות והידיים¹⁵, וסרטן על הצלעות והחזה, ואריה על הלב והקרב העליון, ובתולה על הבטן, ומאזנים על המתנים, ועקרב על הערוה, וקשת על הפחדים, וגדי על הארכובות, ודלי על השוקים, ודגים על הרגלים. (3) ואמרו¹⁶ חכמי מצרים כי כאב שבתאי בור¹⁷ החזה, וצדק הלב¹⁸. (4) זה טעמו¹⁹: 'שימו הבית הראשון של הכוכב כנגד מזל טלה שהוא כמו מזל טלה²⁰, על כן יאמרו²¹ כי כאב צדק בקשת, שהוא²² הבית הראשון מבתיו, בראש, כמו טלה שיורה על הראש. (5) ועל כן²³ כאב מאדים בטלה הוא²⁴ הראש²⁵, והנה יצא בחלק דגים הרגלים כנגד מזל טלה²⁶. (6) על כן, אמרו כי כאב גנה בטלה הוא הרגליים, כי ערך מזל טלה אל ביתו הראשון, שהוא שור, כערך²⁷ דגים אל טלה²⁸. (7) והם אמרו, כפי החלוק שהחלו לעשות²⁹ מטלה, כי סרטן יורה על החזה שהוא³⁰ רביעי לטלה, והנה בית שבתאי הראשון הוא גדי, והנה מזל טלה כנגדו בית רביעי לו, על כן אמרו כי³¹ כאב שבתאי בור³² החזה, וזה טעם כל³³ כאב

¹שלו] פראקט; מ אשר לו. ²טעם] פראקט; ט חסר. ³וניסיתיו] א; פקטמר וניסיתיו. ⁴וראש המשולש] פראקט; מ וראש משולש. ⁵שור] פאטמק; ר ראש. ⁶טעם] פראטמ; ק חסר. ⁷שיאמר] פראטמ; טק שאמר. ⁸שם] פראטמ; ק חסר. ⁹שיעלו] ראמ; קט שיעלה; פ שיעלה שם. ¹⁰סודם] אקטמ; פ < לפי דעתי בדבור צ"ה מספר הפרי נתן טעם בזה; ר חסר. ¹¹ומה] פראטמ; ק חסר. ¹²עלה] פראקט; ט חסר. ¹³מזל] פראטמ; ק חסר. ¹⁴על צורת בן אדם] פראטמ; ק בצורת אדם. ¹⁵והזרועות והידיים] פראטמ; ק חסר. ¹⁶ואמרו] פאטמ; ק ומה שאמר; ר < כי. ¹⁷בור] פראקט; ט הוא. ¹⁸הלב] פראקט; ט < המובן אצלו מכל זה אם נרצה לדעת איזה מן המשרתים סבת כאב אבר מהאברים שהמזלות מורים עליהם נראה באיזה מזל אנתנו עומדים וזה המזל המורה על האבר הכואב ונדע ערכו אל זה המזל אם הוא שני לו או שלישי או ערך אחר יש לו אי זה צד שיהיה ר"ל אם לפניו אם לאחוריו ונקח הפך הצד ההוא המזל שיש לו הערך גם כן לזה המזל והמשרת שזה המזל הוא הבית הראשון שלו ממנו הוא הכאב. ¹⁹זה טעמו] פאטמ; ק טעמו כי. ²⁰שהוא כמו מזל טלה] פראטמ; ק חסר. ²¹יאמרו] פראטמ; ק אמרו. ²²שהוא] פראטמ; ק והוא. ²³ועל כן] ראטמ; ק ולזה; פ ועל. ²⁴הוא] פאטמק; ר שהוא. ²⁵פ] מביתיו. ²⁶ר פ] שראש טלה סוף דגים. ²⁷כערך] פאטמק; ר שהוא ערך. ²⁸ר פ] שראש שור הוא רגל טלה. ²⁹לעשות] פראקט; ט חסר. ³⁰שהוא] פראקט; ט כי הוא. ³¹כי] פאקמ; ט חסר. ³²בור] פראקט; ט חסר. ³³כל] פראטמ; ק בכל.

at its beginning; this is also why the place of judges \langle belongs to it \rangle .^[12] (15) I do not know the reason for its letters. (16) Its years are 15, like the number of the least years of Mars, as I shall explain in its proper place,^[13] and so too the reason for its months.^[14] (17) As for the reason for the days and hours, I saw it in Abû Ma'shar's book^[15] and I verified it by experience.^[16] (18) As for what they said, namely, that the image of a woman and the tail of a fish and the head of the triangle and the image of a bull rise there, this is because stars that are similar to these images rise there. (19) The same explanation applies to everything that Ptolemy said rises there; but as for everything the Indians said rises in any of the decans, we do not know their secret.^[17] (20) As for what they said, namely, that the body of one native in it will be mixed and his ears flaccid,^[18] they found these things through experience.^[19]

3 (1) This sign, as well as Taurus, Cancer, Scorpio, Capricorn, and Pisces, indicates deformities and diseases; but this does not apply to Leo and Sagittarius, because their heat is strong and without mold. This leaves the signs with a human shape, which indicate the health of the body.^[1] (2) They assigned the head to this sign because it is the first [lit. "head"] of all the signs and indicates the head. Taurus \langle indicates \rangle the neck, Gemini the shoulders and arms and hands, Cancer the ribs and chest, Leo the heart and upper abdomen, Virgo the belly, Libra the waist, Scorpio the genitals, Sagittarius the thighs, Capricorn the knees, Aquarius the shanks, and Pisces the feet. (3) The Egyptian scientists said that the chest is the pain of Saturn in it [i.e., in Aries],^[2] and the heart \langle is the pain \rangle of Jupiter \langle in Aries \rangle . (4) This is the reason for it: they put the first house of the planet facing Aries as if it were equivalent to Aries, and therefore say that the pain of Jupiter in Sagittarius, which is the first of its houses, is in the head, just like Aries, which indicates the head. (5) Therefore the pain of Mars in Aries is in the head. The feet were assigned to Pisces' portion with respect to the sign of Aries [i.e., the feet are the pain of Mars in Pisces]. (6) Therefore they said that the pain of Venus in Aries is the feet, because the number of \langle signs separating \rangle Aries from Venus' first house, namely, Taurus, is equal to the number of \langle signs separating \rangle Pisces from Aries. (7) They also said, in accordance with the division that they begin from Aries, that Cancer indicates the chest because it is the fourth \langle sign \rangle after Aries, and \langle we know that \rangle the first house of Saturn is Capricorn; and because Aries is the fourth with respect to it [Capricorn], they said that the pain of Saturn in it [Aries] is the chest. This is the reason for each of the pains

וכאב בכל המזלות. (8) ומה שאמרו כי בחלק זה המזל המלכים, בעבור כח השמש במזל הזה. ואמרו כי הוא יורה על בעלי המלחמות וההריגה² והאש והדם בעבור שהוא בית מאדים.

4 (I) והנה יש לי צורך עתה³ להאריך. (2) כבר חפשתי בספרי המזלות לדעת⁴ טעם הבתים⁵ ולא מצאתי דבר נכון⁶, רק שיאמרו⁷ כך נסיונו ועלה בידיו. (3) רק ראיתי בו טעם לחנוך, וזה הוא. (4) אמר חנוך⁸ כי סרטן הוא מזל העולם כי בו היה⁹, והשמש¹⁰ בחצי שמים בתחלת מזל טלה במקום ששם קו היושר¹¹, כי הוא העקר. (5) ובעבור זה יסתכלו למחברת¹² שבתאי ומאדים במזל הזה בכל¹³ שלשים שנה לדעת ממחברתם דברי¹⁴ העולם, כאשר אפרש בספר המחברות. (6) ובעבור כי זה המזל הוא שמאלי והישוב בפאת שמאל¹⁵ יראה בו כח כל כוכב שיהיה שם יותר משאר המזלות, ובעבור כי הלבנה קרובה אל הארץ שמו זה המזל בית הלבנה. (7) ויהיה המזל השני לו שהוא אריה בית השמש, כי שם יראה כחה¹⁶ בכל הישוב יותר משאר | המזלות¹⁷, כי אז יגדל החום. (8) ובעבור כי אלה הם מאורות ושבתאי יורה¹⁸ על הפך האור, על כן היו בתיו לנכח בתי המאורות¹⁹. (9) ואחרים אמרו כי שמו בחלק שבתאי גדי²⁰ ודלי בעבור שבאלה המזלות²¹ יגדל הקור כשתכנס השמש בהם. (10) ובעבור היות צדק שני לו בגלגל, על כן היה ביתו²² של צדק שני לבית שבתאי, שהוא דלי²³, והיה ביתו של צדק²⁴ האחר קודם בית שבתאי²⁵, עד שיהיה ערך בית שבתאי האחר²⁶ אל ביתו כערך בית צדק אל בית שבתאי האחר²⁷. (11) והנה היה ראוי להיות הבית השלישי מבתי שבתאי לפנים גם לאחור בתי מאדים²⁸, כאשר הוא גלגלו שלישי לגלגל שבתאי. (12) ובעבור היות השמש בגלגל הרביעי כנגד שבתאי, והוא מבט איבה כאשר אפרש בהגיעי אל המבטים, היה ראוי להיות בית השמש²⁹ על³⁰ מבט איבה עם בית שבתאי, ובעבור היות הלבנה בגלגל השביעי כנגד גלגל

¹ בכל] ראט; פ כל; קמ לכל. ² וההריגה] פאטמק; ר חסר. ³ עתה] פראמ; קט חסר. ⁴ לדעת] פלאטמ; ק לידע. ⁵ הבתים] פלאטמק; ר > נכון. ⁶ דבר נכון] פראטמ; ק חסר. ⁷ שיאמרו] פראמ; לקט שאמרו. ⁸ רק ראיתי ... חנוך] פראטמ; ק רק חנוך כתב כזה. ⁹ היה] פלאטמק; ר < פ' היה צומח כשהוא נברא. תוספת זו מופיע בנוף הטקסט בהוצאה המודפסת של ר' פליישר, עמ' 37 וגם בכ"ז ווטיקאן 390 דף 89א. ¹⁰ והשמש] פרא; קמט השמש. ¹¹ היושר] פאטמק; לר הישר. ¹² למחברת] לראקטמ; פ במחברת. ¹³ בכל] פראטמ; ק לכל; ט חסר. ¹⁴ דברי] פראקמ; ט בדברי. ¹⁵ שמאל] פראטמ; ק צפון. ¹⁶ כחה] פראטמ; ק כחו. ¹⁷ המזלות] ראט; פקמ חסר. ¹⁸ ר] פ' שהם גדי ודלי. ¹⁹ ואחרים אמרו ... גדי] פראטמ; ק ועוד כי בגדי. ²⁰ בעבור שבאלה המזלות] פראטמ; ק חסר. ²¹ ביתו] פראטמ; ק < האחר. ²² שהוא דלי] פלאטמ; ק חסר. ²³ שני לבית ... צדק] פלאטמק; ר חסר. ²⁴ האחר] פלאקמ; ט האחד. ²⁵ שבתאי שבתאי הוא גדי ובית צדק קשת בהוא קודם. ²⁶ האחר] פלאטמק; ר האחד. ²⁷ ר] פ' שדלי קודם לדגים שהוא בית צדק האחר. ²⁸ ר] ויהיה טלה שהוא לפנים דלי דגים טלה ועקרב שהוא לאחור גדי קשת עקרב. ²⁹ בית השמש] לראט; פקמ השמש. ³⁰ על] פראקמ; ל אל; ט עם.

in each of the signs.^[3] (8) As for what they said, namely, that kings are in the portion of this sign, ⟨this is⟩ because the power of the Sun is in this sign.^[4] They said that it indicates warriors, slaughter, fire, and blood because it [Aries] is the house of Mars.

4 (1) Now I need to amplify further.^[1] (2) I have searched the books of the astrologers to know the reason behind the houses but I found nothing correct. They merely say: we have verified by experience in this manner and were successful. (3) The only ⟨acceptable⟩ explanation I found for this topic is by Enoch, and it runs as follows. (4) Enoch said that Cancer is the sign of the world because it [Cancer] was there [i.e., in the ascendant], and the Sun ⟨was⟩ in midheaven at the beginning of Aries in the place of the equator,^[2] because it [Cancer] is the root.^[3] (5) For this reason they look for the conjunction of Saturn and Mars in this sign [Cancer] every thirty years, so as to know the affairs of the world from their conjunction,^[4] as I shall explain in the *Book on Conjunctions*.^[5] (6) Since this sign is northern and the ecumene is also in the north [relative to the equator], the power of any planet that is in it [Cancer] is felt more than ⟨when it is⟩ in the other signs; and since the Moon is nearest to the Earth, they made this sign the house of the Moon.^[6] (7) The sign that is next to it, Leo, was assigned to the house of the Sun, because throughout the ecumene ⟨the Sun's⟩ power is more perceptible there [i.e., in Leo] than ⟨when it is⟩ in the other signs, inasmuch as the heat increases then.^[7] (8) Because those are ⟨the⟩ luminaries and Saturn indicates the opposite of light, its [Saturn's] houses are in opposition to the houses of the luminaries. (9) Others said that Capricorn and Aquarius were assigned to Saturn's portion because the cold increases when the Sun enters these signs.^[8] (10) Because Jupiter is next to it in the ⟨order of the⟩ orbs, Jupiter's house is next to Saturn's house, which is Aquarius, and Jupiter's other house precedes Saturn's ⟨other⟩ house, such that the number of ⟨signs separating⟩ Saturn's other house from its [Jupiter's] house is equal to the number of ⟨signs separating⟩ Jupiter's house from Saturn's other house. (11) So it is fitting that the third house ⟨counting from⟩ the houses of Saturn, either forward or backward, be the houses of Mars, since its [Mars'] orb is the third ⟨counting from⟩ Saturn's.^[9] (12) Because the Sun is in the fourth orb with respect to [i.e., counting from] Saturn, which is an aspect of antagonism^[10] (as I shall explain when I come to the ⟨subject of the⟩ aspects),^[11] it is fitting that the house of the Sun be in an aspect of antagonism to the house of Saturn. And because the Moon is in the seventh orb with respect

שבתאי¹ והבית השביעי בית המלחמות, על כן היה בית הלבנה לנכח בית שבתאי.

5 (I) ויאמר חנוך²: אחר שידענו כי אלה הבתים הם בתי המאורות, חלקו העשרה בתים הנשארים על המשרתים. (2) והנה היה לכל משרת³ בית בחלק השמש⁴ ובית בחלק הלבנה⁵, רק האחד לפנים⁶ והאחר⁷ לאחור⁸. (3) על כן אמרו חכמי המזלות כי מתחלת אריה עד סוף גדי הוא חלק השמש, והוא החלק הגדול. (4) ויש לשמש כח בחלקה ככח המשרתים בגבולם, גם ככה הלבנה בחלקה⁹ הקטן, שהוא¹⁰ מראש דלי עד סוף סרטן. (5) על כן אמרו חכמי הנסיון כי כל דבר שיקנה אדם והלבנה בחלקה¹¹ הקטן¹² ימכרנו ביותר¹³ מאשר קנהו, והפך זה אם היה בחלק הגדול. (6) וכאשר תסתכל¹⁴ אל ערך¹⁵ גלגל¹⁶ שבתאי מגלגל נגה תמצא אותו הערך¹⁷ מבית זה אל בית זה¹⁸, וערך בית האחד אל בית השני כערך הבית השני¹⁹ האחד אל הבית השני האחר²⁰, וככה דרך שבתאי עם כוכב חמה²¹. (7) והנה ערך זה²² הבתים תמצאנו בכל בתי המשרתים כערך גלגל זה אל גלגל²³ זה, וערך הבית הראשון של²⁴ המשרת האחד אל הבית הראשון של המשרת השני²⁵ כערך בית המשרת השני²⁶ אל בית המשרת השני האחר²⁷. (8) וזה דבר ברור אין צורך להאריך יותר²⁸. (9) והנה היו בתי שבתאי לנכח בתי המאורות כי הוא הפך תולדתם. והיה בית צדק האחד שהוא בחלק השמש על מבט שלישי²⁹ עם בית השמש בעבור יושר תולדתו כאשר אפשר, והיה³⁰ ביתו השני שהוא בחלק הלבנה כדמות זה הערך אל ביתה. (10) והנה היו בתי מאדים על מבט רביעי³¹ עם המאורות כי מזיק הוא ומבט רביעי³² איבה, והיו³³ בתי נגה על מבט ששית עם בתי המאורות כי גם הוא כוכב טוב, רק אינו שלם

¹גלגל שבתאי] לאקטמ; פ שבתאי. ²ויאמר חנוך] פראלטמ; ק חסר. ³לכל משרת] לראש; קפמ חסר. ⁴השמש] פראלטמ; ל > הטוב מן. ⁵הלבנה] פראלטמ; ל > הטוב מן. ⁶לפנים] פראלטמ; ל בפנים והוא בחלק הלבנה הקטן. ⁷והאחר] פראקמ; ט והאחד. ⁸לאחור] פראלטמ; ל < בחלק השמש הגדול. ⁹בחלקה] פראלטמ; ק בחלק. ¹⁰שהוא] פראלטמ; ט כי הוא. ¹¹בחלקה] פאקט; לרמ בחלק. ¹²הקטן] פראלטמ; ר < שהוא מראש דלי עד סוף סרטן. ¹³ביותר] רפקמ; לאט ביוקר. ¹⁴תסתכל] פראלטמ; ל יסתכל. ¹⁵ערך] פראלטמ; ט חסר. ¹⁶גלגל] פראלטמ; ל < פ' מגלגל זה לגלגל זה, ושניהם בכלל חמשה גלגלים, ומגדי שהוא בית שבתאי עד שור שהוא בית נגה חמשה. ¹⁷תמצא אותו הערך] פראלטמ; ק תמצאנו כערך. ¹⁸ר (פ') שבית שבתאי דלי ובית האחד נגה שור שהוא רביעי לו. ¹⁹השני] לראקטמ; פ חסר. ²⁰ר (פ') שהבית האחד מנגה הוא מאזנים והבית האחד משבתי הוא גדי שהוא רביעי לו. ²¹כוכב חמה] פראקטמ; ל < כי ממאזנים עד גדי כערך דלי אל שור, מאזנים בית שני מנגה ודלי בית מן שבתאי, וזה ענין תמצא בכלם לפי רחקם. ²²זה] פראלטמ; ק חסר. ²³גלגל] לראקטמ; פ חסר. ²⁴של] פראלטמ; ר אל. ²⁵אל הבית ... השני] פראלטמ; ק אל המשרת של הבית השני. ²⁶השני] פראלטמ; א השני האחר. ²⁷אל בית ... האחר] רפקטמ; ל האחר; א חסר. ²⁸זה דבר ... יותר] פראלטמ; ק חסר. ²⁹שלישית] פראלטמ; ק רביעי. ³⁰והיה] פראלטמ; ט והוא. ³¹והיו] פראלטמ; ק והנה.

to [i.e., counting from] the orb of Saturn, and (because) the seventh (mundane) house is the house of wars, the house of the Moon is in opposition to the house of Saturn.^[12]

5 (1) Enoch said: because we know that these houses are the houses of the luminaries, they assigned the remaining ten houses to the planets. (2) Accordingly, each planet was assigned a house in the domain of the Sun and a house in the domain of the Moon, although one forward and the other backward. (3) Therefore the astrologers said that from the beginning of Leo to the end of Capricorn is the domain of the Sun, and this is the larger domain. (4) The Sun has power in its domain like the power of the planets in their terms; the same applies to the Moon in its smaller domain, which is from the beginning of Aquarius to the end of Cancer.^[1] (5) Therefore the scholars who rely on experience said that if a person buys something when the Moon is in the smaller domain, he will sell it for more than the purchase price, and the opposite occurs if it [the Moon] was in the larger domain. (6) When you observe the number of (orbs separating) the orb of Saturn from the orb of Venus you find that it is equal to the number of (signs separating) the house of the one from the house of the other; and the number of (signs separating) the first house of the one from the first house of the other is equal to the number of (signs separating) the second house of the one from the second house of the other; and similarly with Saturn and Mercury.^[2] (7) So you find that the number of (signs separating) the houses for all the planetary houses is equal to the number of (orbs separating) the orb of the one from the orb of the other, and the number of (signs separating) the first house of one planet from the first house of the other planet is equal to the number of (signs separating) the second house of one planet from the second house of the other planet. (8) This is clear and there is no need to dwell on it any longer. (9) The houses of Saturn are in opposition to the houses of the luminaries because its nature is the opposite of their natures. The first house of Jupiter, which is in the domain of the Sun, is in trine to the house of the Sun because of its temperate nature, as I shall explain;^[3] its second house, which is in the domain of the Moon, has a similar ratio [i.e., it is also in trine] to the Moon's house. (10) So the houses of Mars are in quartile to the luminaries because it is malefic and the quartile aspect is one of antagonism, and the houses of Venus are in sextile to the houses of the luminaries because it too is a benefic planet, but it is not as complete as Jupiter, inasmuch as the sextile aspect

כמו צדק כאשר הוא מבט הששית¹ חסר ממבט² השלישית. (I1) והיה בית כוכב חמה סמוך אל השמש³ כי לא ירחק ממנו. (I2) ויאמר בטלמיוס כי אם היה מקום אחד מן המשרתים עם מקום השמש או הלבנה כערך בתי⁴ אל בתי⁵ הם, אז יהיה לכוכב כח גדול, וזה הדבר⁵ מנוסה.

6 (I) וזה המזל הוא בית כבוד השמש בעבור כי שם תחל לנטות לפאת⁶ הישוב, ויראה כחה בעולם. (2) וחכמי הודו אמרו כי מעלת כבודה היא תשע עשרה מהמזל בעבור שיש שם כוכב ממסך צדק ונגה, ואם הדבר כך הנה תשתנה המעלה, כאשר אדבר⁷ על המעלות המאירות והחשוכות. (3) ואמרו כי הוא בית⁸ שנאת נגה בעבור שהוא מבט נכח עם ביתו, ומקום שפלות⁹ כוכב חמה, זה הדבר¹⁰ ידוע בדרך החשבון והמדות.

7 (I) ואמרו כי בעלי השלישות ביום השמש וצדק¹¹ בלילה¹² בעבור היות בית השמש ובית צדק תולדת אחת עם זה¹³ המזל. (2) ושמו הכח לשמש ביום כי ביום יראה כחה, ושמו צדק בלילה שיתכן להיותו למעלה מהארץ בלילה, וכל כוכב שהוא למעלה מהארץ יותר כח יש לו מההווה תחת הארץ. (3) ושמו השותף שבתאי | בעבור היותו³⁰ קר¹⁴, והמזל חם תישר תולדתו¹⁵. ויש לך לדעת¹⁶ כי זה שאמרתי קר וחם איננו אלא על הדבר שילידו, ולהקל על התלמידים יאמר ככה. (4) והוציאו מאדים¹⁷ מזה השותפות¹⁸ בעבור רוב חומו.

8 (I) והפנים הראשונים על דעת חכמי מצרים למאדים כי הוא בעל הבית, והשניים לשמש כי ביתה הוא שני לשלישות, והשלישיים לצדק¹⁹ בעבור כי הוא בעל הבית השלישי מן השלישות²⁰. (2) ואנשי הודו החלו לחלק הפנים מן מאדים בעל הבית. ושמו הפנים²¹ השניים לשמש כאשר הוא²² גלגלה שני למאדים²³, ועל זה הדרך כל הפנים עד ששב סוף דגים למאדים²⁴. (3) כי הם ששה ושלישים פנים²⁵, הוציאו

¹ כאשר הוא מבט הששית] פראטמ; ק כמו שמבט ששית. ²ממבט] לרטק; מ אל מבט; פא ממבטי. ³השמש] פראטמ; א בית השמש. ⁴בתי] פראטמ; ק ביתו. ⁵הדבר] פראטמ; ל דבר; ק חסר. ⁶לפאת] פראטמ; ק לצד. ⁷כאשר אדבר] פראטמ; ק כמו שאומר. ⁸בית] פראטמ; ט חסר. ⁹שפלות] פראטמ; ק שפל. ¹⁰הדבר] פראטמ; ק חסר. ¹¹וצדק] ר (מעל לשורה); פאטמק חסר. ¹²בלילה] הוספתי עפ"י הקשר הדברים. ראה ראשית חכמה, כ"י פאריס 1055, עמ' 3א. ¹³זה] רפמק; אט חסר. ¹⁴קר] ראטמ; פ קל. ¹⁵תולדתו] ראטמ; מ פ תולדתם. ¹⁶ויש לך לדעת] פראטמ; ק ודע. ¹⁷מאדים] פראטמ; ט התלמידים. ¹⁸השותפות] פראטמ; ק חסר. ¹⁹לצדק] פראטמ; ט לנגה. ²⁰השלישות] פראטמ; ל < שהוא קשת וכן נחלקו כל הפנים על דרך זה הפנים הראשונים לבעל הבית והשניים לבעל הבית השני מהשלישות והפנים השלישיים לבעל הבית השלישי מן השלישות על סדר באים זה אחר זה. ²¹הפנים] פראטמ; ט חסר. ²²הוא] פראטמ; ט חסר. ²³מאדים] פראטמ; ל < והשלישיים לנגה והפנים הראשונים מהשור לכותב והשניים ללבנה והשלישיים לשבתאי. ²⁴ועל זה הדרך ... למאדים] פראטמ; ט חסר. ²⁵פנים] לר; פאטמק חסר.

is incomplete in comparison to the trine.^[4] (11) The house of Mercury is adjacent to (the house of) the Sun because it does not move far away from it.^[5] (12) Ptolemy said that if the ratio of the place of a planet to the place of the Sun or the Moon is as the ratio of the planet's houses to their houses [i.e., the houses of the Sun or the Moon], then the planet will have great power;^[6] and this has been verified by experience.

6 (1) This sign [i.e., Aries] is the house of exaltation of the Sun because that is where it begins to incline towards the ecumene^[1] and its [the Sun's] power becomes perceptible in the world.^[2] (2) The Indian scientists said that the degree of its exaltation is 19° from (the beginning of) this sign, because in this place there is a star with the complexion of Jupiter and Venus;^[3] but if this was correct the degree has changed, as I shall explain when I discuss the bright and dark degrees.^[4] (3) They also said that it is the house of detriment^[5] of Venus because it is in opposition to its [i.e., Venus'] house, and that it is the perigee of Mercury, which may be known by arithmetic and geometry.^[6]

7 (1) They said that the lords of the (fiery) triplicity are the Sun by day and Jupiter by night, because the house of the Sun and the house of Jupiter have the same nature as this sign. (2) They assigned the power to the Sun by day, because its power is perceptible by day, and they assigned (it to) Jupiter by night, because it can be above the Earth at night, and any star that is above the Earth exerts more power than one that is underneath the Earth. (3) They assigned Saturn as (their) partner because it is cold, and inasmuch as the sign is hot its nature is tempered. Know that when I said cold and hot I referred only to what they generate and put it this way to make it easier for students.^[1] (4) Mars was left out of this partnership because of its great heat.^[2]

8 (1) The Egyptian scientists (assigned) the first decan^[1] to Mars, because it is the lord of the house [i.e., Aries], the second to the Sun, because its house [i.e., Leo] is the second in the triplicity, and the third to Jupiter, because it is the lord of the third house in the triplicity [i.e., Sagittarius].^[2] (2) The Indians began the division of the decans with Mars, the lord of the house. They assigned the second decan to the Sun, because its orb is second to Mars, and by the same method (they assigned) all the decans until the end [i.e., until the third decan] of Pisces, (which) is again (assigned) to Mars.^[3] (3) For there are 36 decans, and if you keep subtracting seven, on account of the planets,

שבעה שבעה בעבור המשרתים¹, כי הם חוזרים חלילה, ונשאר אחד. (4) וככה, אם רצית לדעת מדרך חשבון² אי זה הוא בעל הפנים של אותו המזל, דע כמה מרחק המזל מתחלת³ טלה, וההווה תערכנו על שלשה, ומה שיתחבר הוציאנו שבעה שבעה. (5) ותחל לספור בנשאר ממאדים בעל הבית, על דרך ש'צ'ם' ח'נ'כ'ל', אז תמצא סוף בעל⁴ הפנים, וההווה אחריו בגלגל הוא בעל הפנים. ובהגיעך אל הלבנה לעולם תחל משבתאי. (6) ודמיון זה מצאנו מולד בחמש עשרה מעלות ממזל⁵ בתולה, וכבר ידענו כי הפנים הם⁶ עשר מעלות, והנה הוא⁷ בפנים⁸ השניים מהמזל. (7) ועברו חמשה מזלות מראש טלה, ערכנו על שלשה עלו חמש עשרה. והוספנו⁹ אחד בעבור¹⁰ הפנים הראשונים שעברו ממזל בתולה, והנה הכל ששה עשר. (8) הוצאנו שבעה שבעה נשארו שניים. החלנו¹¹ לספור ממאדים והנה למאדים ושמש שנים, וראוי להיות הפנים השניים לנה, כי הוא תחת השמש.

9 (I) והגבולים שהזכיר בטלמיוס אין לסמוך¹² עליהם¹³, כי הוא אמר כי מצאם ככה בנסיחה קדמונית¹⁴. והנכון¹⁵ גבולי מצרים כי הם¹⁶ מנוסים. (2) ומספר הגבולים לכל משרת¹⁷ לכל המזלות כמספר שנותיו הגדולות.

10 (I) ובעבור כי השלישות¹⁸ ישלים בבית התשיעי¹⁹, חלקו חכמי הודו המזל על תשעה חלקים²⁰, הם הנקראים תשיעיות, גם תשעה סוף המספר. (2) והנה שמו תולדת²¹ התשיעית²² הראשונה²³ למזל הראשון, שהוא²⁴ טלה, והתשיעית השנית למזל²⁵ שור, והנה²⁶ התשיעית האחרונה²⁷ למזל קשת, שהוא סוף השלישית. (3) ואם היה המזל הצומח אריה או קשת, ישימו התשיעית הראשונה²⁸ לטלה והשנית לשור, על דרך מזל טלה, כי הוא תחלת השלישות. (4) והכלל שלעולם יחלו בשלישות ממזל מתהפך, על כן תחלת שלישות שור²⁹ מגדי, על דרך המזלות, עד שיהיה הסוף לבתולה. (5) ויחלו בשלישות תאומים³⁰ ממאזנים, שהוא המזל המתהפך, והשלישות האחרונה³¹ יחלו מסרטן שהוא המזל המתהפך³².

¹ כי הם ששה ... המשרתים] לרטא; פקמ חסר. ² מדרך חשבון] לראטקמ; פ חשבון. ³ מתחלת] פראטמ; ק מראש. ⁴ בעל] רפקטמ; א בעלי; ל חסר. ⁵ ממזל] פראטמ; טק חסר. ⁶ הם] פראטמ; לק חסר. ⁷ הוא] פאטמק; ר הם. ⁸ עשר ... בפנים] פראטמק; ל חסר. ⁹ והוספנו] פראטמ; ק והוסיף. ¹⁰ בעבור] פראטמ; ק בעד. ¹¹ החלנו] פלאטמק; ר החולנום. ¹² לסמוך] פראטמ; ט > ראוי. ¹³ עליהם] פראטמ; ק במ. ¹⁴ בנסיחה קדמונית] פראטמ; ט בנסחא קדמונית; ק חסר. ¹⁵ והנכון] רטאק; פ < אצלי. ¹⁶ כי הם] פראטמ; ק שהם. ¹⁷ משרת] פקט; ראמ > כוכב. ¹⁸ השלישות] פראטמק; ל המשלשת. ¹⁹ התשיעי] לראטמ; פ השביעי. ²⁰ תשעה חלקים] פראטמ; ט תשעים. ²¹ גם תשעה ... תולדת] לראטמ; פ חסר. ²² התשיעית] לרט; אמ התשיעיות; פק חסר. ²³ הראשונה] פראטמ; א הראשונים. ²⁴ הראשון שהוא] פראטמ; ק חסר. ²⁵ למזל] פראטמ; ק חסר. ²⁶ והנה] פראטמ; ק חסר. ²⁷ האחרונה] פראטמ; ק אחרון. ²⁸ הראשונה] לראטמ; פ הראשונים; ק ראשון. ²⁹ שור] פראטמק; ל העפר. ³⁰ תאומים] פראטמק; ל הרוח. ³¹ האחרונה] פראטמק; ל < מהמים. ³² והשלישות האחרונה ... המתהפך] פראטמ; ט חסר.

time after time, one is left over. (4) Consequently, if you wish to know the lord of the decan of a certain sign using arithmetic, find out the distance of this sign from the beginning of Aries, multiply the result by three, and keep subtracting seven from the result [i.e., cast out sevens or determine the value modulo 7]. (5) Begin counting the remainder from Mars, the lord of the ⟨first⟩ decan ⟨of Aries⟩, following the order S⟨aturn⟩, J⟨upiter⟩, M⟨ars⟩, S⟨un⟩, V⟨enus⟩, M⟨ercury⟩, M⟨oon⟩. This brings you to the end of the lord of the decan, and the one whose orb is next is the lord of the decan. And when you reach the Moon always begin ⟨again⟩ from Saturn. (6) As an illustration, ⟨suppose that⟩ we find the nativity in Virgo 15°; because we know that the decan is ten degrees, it [the nativity] is in the second decan of the sign. (7) ⟨Taking the⟩ five signs ⟨that⟩ have passed from the head of Aries ⟨to Virgo⟩ and multiplying them by three we obtain 15. Then we add one for the first decan of Virgo, which has already passed, for a total of sixteen. (8) Cast out sevens and the remainder is two. Then we begin to count from Mars so that Mars and the Sun are the two, and it is fitting that the second decan be ⟨assigned⟩ to Venus, because it is underneath the Sun.^[4]

9 (1) The terms^[1] mentioned by Ptolemy cannot be trusted, because he said that he found them in this guise in an ancient text. The correct ones are the terms of Egypt, because they were verified by experience.^[2] (2) The number ⟨of degrees⟩ of the terms assigned to any of the planets in any of the signs are the numbers of its great years.^[3]

10 (1) Because the triplicity is completed in the ninth house [i.e., the ninth sign], the Indian scientists divided the sign into nine parts, which are called ninth-parts, and also ⟨because⟩ nine is the last of the digits.^[1] (2) So they assigned the nature of the first ninth-part to the first sign, which is Aries, and the second ninth-part to Taurus, and the last ninth-part to Sagittarius, which is the end of the triplicity. (3) Even if the sign of the ascendant^[2] is Leo or Sagittarius, they assign the first ninth-part to Aries and the second to Taurus, using the same method as in the case of Aries, because it is the beginning of the triplicity. (4) The general rule is that they begin the triplicity from a tropical sign; consequently Taurus' triplicity begins with Capricorn, keeping the order of the signs, until the end ⟨is assigned⟩ to Virgo. (5) They begin Gemini's triplicity with Libra, which is a tropical sign, and ⟨they begin⟩ the last triplicity with Cancer, which is a tropical sign.^[3]

11 (I) וטעם כח שנים העשר כי חלקו המזל על תולדת שנים עשר מזלות, ויתנו החלק הראשון לבעל המזל העולה, והחלק השני לבעל המזל השני, וככה כולם. (2) והדרך האחרת שנתנו¹ שתי מעלות וחצי בכח בעל² המזל הראשון, עשו ככה כדי להשלים כח שנים העשר במעלות המזל³, וזה הוא הנכון. (3) ויש לו כח גדול⁴ בתקופת העולם.

12 (I) ואמרו חכמי הודו כי יש מעלות מאירות גם חשוכות; זה טעמם. (2) דע כי מחלוקת גדולה קדמונית והיא עומדת⁵ עד⁶ היום בין חכמי המזלות. (3) כי⁷ יש מי שישים תחילת שנתו מרגע הכנס השמש בתחלת⁸ מזל טלה, שהוא במחשבת הלב, והטעם בהכנסה אל מחברת שני הגלגלים הגדולים, אז ישתוה היום והלילה. (4) ואברכס אמר⁹ כי שנת החמה שס"ה ימים ורביעית¹⁰, רק אמר שיחסר מהרביעית, ולא ידע כמה החסרון. (5) ובטלמיוס אמר כי יחסר חלק משלוש מאות ביום, וחכמי ישמעאל דקדקו ומצאו שיחסר חלק ממאה ועשר ביום, ויש מי שאמר¹¹ חלק ממאה ושש, והאמת כי החסרון הוא חלק ממאה וששים ואחד. (6) וחכמי הודו אינם חוששים למחברת שני הגלגלים רק שנתם היא מהתחבר¹² השמש עם כוכב עליון עד שובה¹³ פעם אחרת אל מחברתו¹⁴. (7) והנה¹⁵ מחלוקת אחרת בין הקדמונים, שיש אומרים כי סדני גלגל המזלות יעלו גם ירדו שמונה מעלות, ואחרים אמרו¹⁶ כי שתי | עגולות הם בראש טלה ומאזנים¹⁷. (8) וחכמי הודו, לפי מלאכתם, עשו¹⁸ דרך נכונה, כי הם אומרים¹⁸ שכוכבי גלגל המזלות אינם¹⁹ מתנועעים. (9) והקדמונים אמרו, ובטלמיוס עמהם, כי יתנועעו מעלה אחת למאה שנה, והמדקדקים אחריהם²⁰ מצאו כי תנועתם²¹ מעלה אחת לששים ושש שנים. (10) והנכון שהתנועה לשבעים שנה. (II) והנה אם צדקו אלה שיתנועעו העליונים, כבר נכנסה תנועתם בחשבון שנת השמש²² של הודו, ואם אין להם תנועה, כאשר אומרים בעלי הסדנים, לא

¹שנתנו] פראטמ; ק חסר. ²בעל] פאטמק; ר חסר. ³במעלות המזל] רטאמ; פ במעלות המזל הראשון; ק במזלות הגלגל. ⁴גדול] פלאטמק; ר חסר. ⁵קדמונית היא עומדת] פראטמ; ק עומדת מקדם. ⁶עד] פראקמ; ט גם. ⁷כי] פראטמ; ק חסר. ⁸בתחלת] פראקמ; ט חסר. ⁹אמר] פראקמ; ט אומר. ¹⁰ורביעית] פראטמ; ק ורבע. ¹¹מי שאמר] פראמ; ט שאמר; ק אומר. ¹²מהתחבר] פראקמ; ט מחברת. ¹³שובה] פראטמ; ק שובו. ¹⁴מחברתו] פראטמ; ק מחברתם. ¹⁵והנה] פראטמ; ק ויש. ¹⁶ואחרים אמרו] פראטמ; ק ויש אומרים. ¹⁷ומאזנים] פראק; טמ וראש ומאזנים. ¹⁸אומרים] פראקמ; ט אמרו. ¹⁹אינם] פראקמ; ט חסר. ²⁰אחריהם] פראקט; מ אחרים. ²¹תנועתם] ט; ק < היא; פראמ תנועת. ²²השמש] רטפמ; א החמה.

11 (1) The reason for the power of the dodecatemoria ⟨is⟩ that they divided the sign up into the nature of the twelve signs and assigned the first part to the lord of the sign of the ascendant, the second part to the lord of the next sign, and so on for all of them.^[1] (2) Another method is that they assigned two-and-a-half degrees to the power of the lord of the first sign and they did the same to complete the power of the dodecatemoria in the degrees of the sign; and this is the correct ⟨method⟩.^[2] (3) It [the dodecatemoria] has a great power in the revolution of the world.^[3]

12 (1) The Indian scientists said that there are bright and dark degrees; here is the reason for them.^[1] (2) Know that there is an old and great disagreement that still exists among astrologers. (3) For some fix the beginning of the year at the moment when the Sun enters the beginning of the sign of Aries. This is logical, and the reason is that when it [the Sun] enters the intersection of the two great circles the ⟨length of the⟩ day equals the ⟨length of the⟩ night.^[2] (4) Hipparchus said that the solar year is $365\frac{1}{4}$ days, but he said that the quarter is deficient, although he did not know by how much. (5) Ptolemy said that the deficit is the 300th part of a day; the Arab scientists investigated closely and found that the deficit is 110th of a day; and someone said that it is 106th of a day.^[3] But the truth is that the deficit is 131th of a day.^[4] (6) The Indian scientists pay no attention to the intersection of the two circles, for their year runs from the moment the Sun enters into conjunction with an upper star until it [i.e., the Sun] returns once more to conjunction with it [i.e., with the same upper star]. (7) There is another disagreement among the Ancients, for some say that the poles of the orb of the zodiacal signs ascend and descend eight degrees, and others say that there are two circles at the head of Aries and Libra.^[5] (8) The Indian scientists drew the right conclusions from ⟨the principles of⟩ their art, for they say that the stars of the orb of the zodiacal signs do not move.^[6] (9) The Ancients said, and Ptolemy ⟨agreed⟩ with them, that they move one degree in 100 years; those who investigated closely after them found that their motion is one degree in 66 years. (10) The correct ⟨value⟩ is that the motion is ⟨one degree in⟩ 70 years.^{[7][8]} (11) Now if those who say that the upper ⟨stars⟩ move were right, their motion would have become part of the reckoning of the solar year of India; but if they have no motion, as held by those who are knowledgeable about the poles [i.e., those who say that the poles of the orb of the zodiacal signs ascend and descend], this will not jeopardize

יזיק לחכמי הודו. (I2) ואלה הדברים צריכים פירוש ארוך.¹ (I3) והכלל שחכמי הודו חלקו המזלות בשוה רק כפי מראית העין, והטעם הצורות, ובטלמיוס וחביריו כפי² הראוי מדרך הראיות. (I4) והנה בעל המזלות חייב להוציא המעלה הצומחת ומקומות המשרתים כפי חשבון לוחות חכמי הנסיון, רק אם רצה לדין מדרך הצורות והמעלות המאירות והחשוכות גם הבורות, כי טעמם כוכבים חשוכים מאד כאילו אדם³ נפל בבור, יש לו לחסר בשנה הזאת שהיא שנת תתק"ח⁴ שמונה מעלות שלמות⁵. (I5) ומקום⁶ הכוכבים הגדולים הנזכרים בכל מזל על⁷ דרך חכמי הנסיון בזמן הזה.

13 (I) שור. בעבור היותו קר אמרו כי הוא נקבה ממזלות הלילה, ודנו עליו שהוא מזל עומד בעבור שיעמוד הזמן⁸ על דרך אחד, ואין צורך להזכיר כל מה שהזכרנו במזל טלה. (2) ויורה על פריה ורביה בעבור שהוא בית נוגה, וכללו ממוסך⁹, חום עם קור, בעבור תולדתו והזמן. (3) ושלו המרה השחורה בעבור כי הוא קר ויבש, ומן המטעמים המתוק¹⁰ בעבור הזמן, שהוא חם ולח, והעפיצות והעיצור בעבור תולדתו. (4) ובחלקו מן הצמחים האילנים הגבוהים¹¹ בעבור כי הוא תולדת הארץ. (5) והוא בית נגה; על כן אמרו שיש תועלת בפריו, וכל עץ שמטעמו¹² וריחו טובים. (6) ובחלקו מהגבולים¹³, מצאו זה בדרך הנסיון. (7) ושנותיו שמונה כמספר שנות נגה הקטנות¹⁴. (8) ואמרו על זה המזל שהוא דרומי כי כן נסו, ובטלמיוס חולק על הקדמונים ואומר כי מזלות האש הם לרוח צפון ומזלות המים מזרחיים, רק הוא מודה כי מזלות העפר הם דרומיים ומזלות הרוח מערביים. (9) ויאמר יעקב אל כנדי כי מזלות האש¹⁵ הם מזרחיים נוטים אל צד¹⁶ צפון, וזה הוא הנכון.

14 (I) תאומים. אמרו עליו שיש לו שני גופות בעבור כי חציו הראשון מתולדת זמן החום והחצי השני מתולדת זמן הקיץ¹⁷, וזה טעם מזל בתולה וקשת ודיגים. (2) ובעבור

¹ ואלה הדברים ... ארוך] פראטמ; ק חסר. ² כפי] פראטמ; ק > אמרוד. ³ כאילו אדם] פראטמ; ק כאדם. ⁴ תתק"ח] פראמ; ק < באמת. ⁵ יש לו לחסר ... שלמות] פראקמ; ט חסר. ⁶ ומקום] פאק; מט ומקומות; פ ממקום. ⁷ על] פקט; ראמ > הם. ⁸ הזמן] ראקטמ; פ המזל. ⁹ ממוסך] רמק; ט < הוא; פא חסר. ¹⁰ בעבור כי ... המתוק] פראטמ; ק חסר. ¹¹ מן הצמחים האילנים הגבוהים] פראקמ; ט מהאילנים הגבוהים והצמחים. ¹² שמטעמו] רטאמ; פק שמטעמיו. ¹³ מהגבולים] רפטאמ; ק < החמישי. ¹⁴ הקטנות] פאטמק; ר הקרובות. ¹⁵ האש] ראקטמ; פ חסר. ¹⁶ צד] פראקמ; ט חסר. ¹⁷ והחצי השני ... הקיץ] פראטמ; ק חסר.

the ⟨theory of the⟩ Indian scientists. (12) But these things require a long explanation. (13) In fact, the Indian scientists divided the signs into equal parts relying on observation alone, meaning the shapes ⟨of the constellations⟩, but Ptolemy and his colleagues ⟨divided the signs⟩ according to what is appropriate by the method of ⟨giving⟩ proofs.^[9] (14) So the expert in the zodiacal signs can find out the degree of the ascendant and the positions of the planets according to the reckoning of the tables of the scholars who rely on experience. But if he wants to pass ⟨astrological⟩ judgment by the method of the shapes [i.e., the zodiacal constellations], the bright and dark degrees, and the pits (so-called because they are very dark stars, as if a man had fallen into a pit),^[10] this year, which is the year ⟨5⟩908, he should subtract eight whole degrees.^[11] (15) The positions of the large stars in each zodiacal constellation, mentioned ⟨in *Reshit Hokhmah*⟩, are given according to the method of the scholars who rely on experience and ⟨is the position of these stars⟩ in this time [i.e., in 1148].^[12]

13 (1) Taurus. Because it is cold, they said that it is feminine ⟨and one⟩ of the nocturnal signs. They concluded that this sign is fixed because the weather is uniformly stable ⟨when the Sun is there⟩.^[1] There is no need to mention everything we said about Aries. (2) It indicates procreation because it is the house of Venus. As a rule it is mixed, heat with cold, on account of its nature and the weather. (3) The black bile pertains to it, because it is cold and dry; of the tastes the sweet, because of the weather, which is hot and moist; and astringency and constipation because of its nature. (4) The tall trees are in its portion of the plants, because it has an earthy nature. (5) It is the house of Venus; hence they said that its fruits are beneficial and ⟨that⟩ any tree whose taste and smell are good ⟨is in its portion⟩. (6) As for its portion of the climates, they found this through experience. (7) Its years are eight, like the number of Venus' least years.^[2] (8) From experience they said that this sign is southern; Ptolemy disagrees with the Ancients and says that the fiery signs ⟨belong⟩ to the north and that the watery signs are eastern, but he accepts that the earthy signs are southern and the airy signs are western. (9) Ya'qub al-Kindī said that the fiery signs are eastern and are inclined to the north, and this is correct.^[3]

14 (1) Gemini. They said that this sign is bicorporal because its first half is of the nature of the hot season and its second half of the nature of the summer season (this also applies to Virgo, Sagittarius,

היות על צורת אדם¹ שאיננו מרבה בנים, על כן² אמרו שהוא עקר. והוא יורה על כל גבוה כמו השמים³ בעבור שהוא תולדת האויר. והוא בסוף השמאל, ושם מקום גבהות⁴ השמש.

15 (1) סרטן. אמרו על זה המזל⁵ שהוא ישר בעבור שיעלה בכל הגבולים יותר משלשים. (2) והנה מתחלת זה המזל⁶ עד סוף קשת⁷ הם המזלות⁸ הישרים, ומראש גדי עד סוף תאומים המזלות המעוותים, שכל אחד יעלה במעלות פחותות משלשים. (3) וכבר הזכרנו טעם⁹ למה שמו החזה במזל הזה, כי החלו לחלק¹⁰ מהראש¹¹ עד הרגל; על כן, אמרו כי שור יורה על הצואר, ותאומים על הידים והזרועות, והנה יהיה למזל¹² אריה הלב. (4) על כן, אמר בטלמיוס כי כל מי שיהיה נגה במולדו באריה יהיה לו חשק רב בנשים¹³, וטעם זה¹⁴ כי נגה יורה על המשגל, ובעבור שהוא בחלק הלב יקרה ככה. (5) ואין לדבר על שאר המזלות כי טעמים על דרך¹⁵ מזל טלה. (6) ואמרו על בתולה שתורה על האדם ועל העוף בעבור שיש לה¹⁶ שתי צורות, ואמרו כי הוא יורה על כל צמח קטן בעבור שבעל הבית הוא הכוכב הקטן שבכל הכוכבים, ובעבור שהוא בית כוכב אמרו שתורה על חכמה וספרות ואומנות.

16 (1) והנה אדבר בבתי הכבוד. (2) אמרו כי | כבוד הלבנה במעלה השלישית משור; זה דעת חכמי הודו¹⁷. (3) ובטלמיוס אומר כי כל המזל בית כבודה, והטעם כי בהתחברה עם השמש בטלה¹⁸, שהוא תחלת העולם, תראה מערבית על הארץ במזל שור. (4) וחכמי הודו אמרו בעבור היות¹⁹ המרחק ממקום כבוד השמש²⁰ כפי שתצא מאור השמש, על כן אמרו כי מעלת כבודה השלישית משור. (5) והנה יהיה מעלת קלון השמש תשע עשרה ממאונים, ומעלת קלון הלבנה השלישית מעקרב; על כן אמרו מתשע עשרה מעלות ממאונים²¹ עד המעלה השלישית מעקרב הוא מקום השריפה, ואמרו כי יתש כח כל כוכב במקום הזה. וקראוהו מקום השריפה כאלו הכוכב הוא נשרף באור²² השמש. (6) ואמרו כי מאונים בית²³ כבוד

¹אדם] פראטמ; ק > בן. ²על כן] פראקמ; ט חסר. ³כמו השמים] תיקנתי עפ"י הנוסח של ראשית חכמה, כ"י פאריס 1055, עמ' 4ב; פראקמ והשמים; ט עד השמים. ⁴גבהות] פראטמ; ק גבה. ⁵אמרו על זה המזל] פראטמ; ק חסר. ⁶המזל] פראטמ; ק חסר. ⁷קשת] פראקמ; ט > מזל. ⁸הם המזלות] פראטמ; ק כלם. ⁹טעם] ראטמ; פק חסר. ¹⁰לחלק] פראט; מ חלק; ק חסר. ¹¹מהראש] פאטמק; ר מראש. ¹²למזל] פקטמ; רא במזל. ¹³בנשים] פראקמ; ט מנשים. ¹⁴וטעם זה] פראטמ; ק וטעמו. ¹⁵על דרך] פראטמ; ק בדרך. ¹⁶לה] ראט; פקמ לו. ¹⁷זה דעת חכמי הודו] פראטמ; ק חסר. ¹⁸בטלה] ק; פראטמ חסר. ¹⁹היות] ראטמ; פק חסר. ²⁰השמש] פאטמ; ט < שהוא י"ט מטלה כי היא קרובה לתחלת צורת טלה. ²¹ומעלת קלון ... ממאונים] פאטמק; ר חסר. ²²באור] ראקמ; פט מאור. ²³בית] פראקמ; ט בבית.

and Pisces).^[1] (2) Since it has the shape of a man, who does not bear children, they said that it is barren. It indicates everything that is high, like the heavens, because its nature is airy.^[2] It is at the far north, at the place of the Sun's apogee.^[3]

15 (1) Cancer: They said that this sign is straight because it rises more than thirty (degrees) in all the climates. (2) From the beginning of this sign until the end of Sagittarius the signs are straight, and from the beginning of Capricorn until the end of Gemini the signs are crooked, for each of them rises less than thirty degrees.^[1] (3) We have already mentioned the reason they assigned the chest to this sign,^[2] namely, that they began the division from the head to the feet; hence they said that Taurus indicates the neck and Gemini the hands and the arms, and the heart was ascribed to Leo. (4) Therefore, Ptolemy said that anyone in whose nativity Venus is in Leo will have strong erotic desires towards women, because Venus indicates sexual intercourse,^[3] and this happens because the heart belongs to it [i.e. to Leo]. (5) There is no need to mention the other signs, because whatever applies to Aries applies to them. (6) They said that Virgo indicates men and birds because it is bicorporal, and that it indicates all small plants because the lord of its house is the smallest of all the planets; they said that it indicates wisdom, writing, and art, because it is the house of Mercury.^[4]

16 (1) I shall (now) discuss the houses of exaltation.^[1] (2) They said that the exaltation of the Moon is in the third degree of Taurus; this is the opinion of the Indian scientists.^[2] (3) Ptolemy says that the whole sign is its house of exaltation, for when it [i.e. the Moon] is in conjunction with the Sun in Aries, which signifies the beginning of the world,^[3] it [the Moon] is seen to the west on Earth in the sign of Taurus.^[4] (4) The Indian scientists said (that this is so) because the distance (of the exaltation of the Moon) from the place of the exaltation of the Sun^[5] is equal to (the Moon's distance from the Sun when) it [i.e. the Moon] leaves the Sun's light; hence they said that the degree of its [i.e. the Moon's] exaltation is the third (degree) of Taurus.^[6] (5) Now the degree of the dejection^[7] of the Sun is Libra 19°, and the degree of the dejection of the Moon is Scorpio 3°; hence they called from Libra 19° to Scorpio 3° "the place of burning"^[8] and said that the power of any planet is exhausted in this place. It was called "place of burning" as if the planet were burnt by the light of the Sun. (6) They also said that Libra is the house of Saturn's exaltation, because

שבתאי כי תולדתו הפך תולדת השמש, והנה בית¹ כבודו הוא בית² קלון השמש, ובית קלון שבתאי בית כבוד השמש. (7) ויאמרו חכמי הודו כי כבוד שבתאי במעלה אחת ועשרים ממאזנים כי כן נסו. (8) ויאמר חנוך כי היה כבוד שבתאי ברחוק שתי מעלות ממעלות³ נכח⁴ כבוד⁵ השמש, שלא יהיה נזק גדול לשמש. (9) וחכמי הודו אמרו כי כבוד ראש התלי שלוש מעלות מתאומים, ושם קלון הונב, ובטלמיס לועג עליהם כי ראש התלי איננו כוכב, והדין עמו. (10) ואמרו על צדק שבית כבודו הוא סרטן, כי צדק יורה על הרוחות השמאליים ובהיותו שם ירבה הרוחות, וחכמי הודו אמרו כי מעלת כבודו הוא בחצי המזל. (11) ובעבור היות מאדים מוליד רוחות דרומיות ובהיותו במזל גדי ירבו⁶, אמרו שהוא⁷ בית כבודו של מאדים. והנה הוא⁸ עם⁹ צדק מבט נכח כמו השמש עם שבתאי, כי תולדת מאדים הפך תולדת צדק. (12) ויאמרו¹⁰ חכמי הודו כי מעלת כבודו בשמונה ועשרים מעלות מגדי כי שם כוכב עליון בתולדתו¹¹. (13) ואמרו על נגה כי בית כבודו דגים כי כן נסו, והנה בית קלונו בתולה. על כן¹² יורה על כל משגל רע שאיננו הגון. (14) ובעבור כי נגה יורה על תענוגי העולם וכוכב חמה יורה על כל דבר¹³ חכמה, על כן אמרו בית כבוד כוכב חמה נכח¹⁴ בית כבוד נגה, ובית קלון זה הוא בית כבוד חבירו¹⁵. (15) ומה שאמרו על מזלות המים שאין להם קול, טעמו מהנולדים במים.

17 (I) וטעם בתי שלישות האש כבר הזכרתיו. (2) ושמו בעל השלישית הראשונה¹⁶ ביום לנגה במזלות העפר בעבור היות מזל שור לנגה. (3) ואמרו כי הלבנה תחל בלילה¹⁷ בעבור היותה בעלת כבוד זה הבית, וכחה בלילה יותר הוא נראה מהיום. (4) ושמו¹⁸ מאדים שותף עמהם בעבור כי הוא יורה על רוח דרומית ומזלות העפר הם דרומיים, והוציאו כוכב חמה ושבתאי בעבור שאין להם כח ברוחות הדרומיים. (5) ושמו בעל השלישית הראשונה במזלות¹⁹ הרוח לשבתאי בעבור היותו בעל מזל

¹ [בית] פראטמ; ק חסר. ² [בית] פראטמ; ק חסר. ³ ממעלות] פאטמק; ר ומעלת. ⁴ [נכח] לא מופיע בכתבי היד. תיקנתי עפ"י הנוסח של הקטע המקביל בגרסה השנייה של ספר הטעמים. ראה 2:7. ⁵ [כבוד] פראטמ; ק קלון. ⁶ ובהיותו במזל גדי ירבן] פראטמ; ק חסר. ⁷ [שהוא] פראטמ; ק שמול גדי. ⁸ [הוא] פראטמ; ק מאדים. ⁹ [עם] פאטמק; ר חסר. ¹⁰ ויאמרו] פראטמ; ק ואמרו. ¹¹ [בתולדתו] רפקטמ; א מתולדתו. ¹² על כן] ראקטמ; פ חסר. ¹³ [דבר] פראטמ; ק חסר. ¹⁴ [נכח] פאטמק; ר ונכח. ¹⁵ [ובית קלון ... חבירו] ראטמ; פק ובית כבוד זה הוא בית קלון חבירו. ¹⁶ הראשונה] מאקפ; ט ראשונה; ר חסר. ¹⁷ בלילה] פראטמ; ק > במזל. ¹⁸ [ושמו] פראטמ; ק חסר. ¹⁹ [במזלות] רפקטמ; א ממזלות.

its nature is the opposite of the Sun's nature; therefore its [i.e. Saturn's] house of exaltation is the Sun's house of dejection and Saturn's house of dejection is the Sun's house of exaltation.^[9] (7) The Indian scientists said that the exaltation of Saturn is Libra 21°, as they verified by experience. (8) Enoch said that the exaltation of Saturn is two degrees from the degrees that are in opposition to the exaltation of the Sun, lest great harm befall the Sun.^[10] (9) The Indian scientists said that the exaltation of the Head of the Dragon is at Gemini 3°, and there [too] is the dejection of the Tail (of the Dragon), but Ptolemy laughs at them because the Head of the Dragon is not a star; and he is correct.^[11] (10) They said that Jupiter's house of exaltation is Cancer, because Jupiter indicates the northerly winds and when it is there the winds increase; and the Indian scientists said that the degree of its exaltation is in the middle of the sign.^[12] (11) Because Mars generates southerly winds and they increase when it is in Capricorn, they said that it [i.e. Capricorn] is Mars' house of exaltation. Thus it [i.e. Mars] is in opposition to Jupiter just as the Sun is (in opposition) to Saturn, for Mars' nature is the opposite of Jupiter's nature. (12) The Indian scientists said that the degree of its [i.e. Mars'] exaltation is Capricorn 28°, because here there is an upper star with its [i.e. Mars'] nature.^[13] (13) They said that Venus' house of exaltation is Pisces, because they verified that by experience; therefore its house of dejection is Virgo. Hence it indicates any bad sexual intercourse that is indecent. (14) Because Venus indicates earthly pleasures and Mercury indicates anything related to wisdom, they said that Mercury's house of exaltation is in opposition to Venus' house of exaltation and that the latter's house of dejection is the other's house of exaltation.^[14] (15) As for what they said, namely, that the watery signs have no voice, this follows from those born in water.^[15]

17 (1) I have already discussed the houses of the fiery triplicity.^[1] (2) Venus was made lord of the first triplicity^[2] of the earthy signs by day, because the sign of Taurus belongs to Venus [i.e., Taurus is the planetary house of Venus]. (3) They also said that the Moon is the first by night because it is the lord of the exaltation of this house and because its power is more noticeable by night than by day. (4) They designated Mars as their partner because it indicates the southerly wind and (because) the earthy signs are southern; they excluded Mercury and Saturn because they have no power over the southerly winds.^[3] (5) Saturn was made lord of the first triplicity of the triplicity of the airy signs because it is the lord of Aquarius, and they accounted it

דלי, והחלו¹ ביום ממנו בעבור היותו זכר וכחו ביום. (6) ושמו בעל השלישות השניה לכוכב חמה בעבור היותו בעל מזל תאומים וכחו בלילה יותר מהיום, על כן החלו ביום ובלילה ממנו. (7) והוציאו נגה, בעל מזל מאזנים, מכח השלישות בעבור שהיא תורה על תענוגים ואלה המזלות הם ישרים, על כן שמו מקומו צדק, שהוא ישר בתולדתו. (8) ושמו השלישות האחרונה לנגה כי הם יורו על פריה ורביה וזאת תולדת נגה. (9) והחלו ממנה ביום, והשנית למאדים בעל מזל עקרב, ושמו השותף הלבנה, בעלת בית סרטן, זה הטעם אמרו הקדמונים.

18 I (1) ובטלמיוס חולק² בבתי השלישות, וכבר ניסינו דבריו ולא עלה³ בדינו, על כן נסמוך על הקדמונים⁴. (2) וכלל אומר לך: כל דבר שתמצא לבטלמיוס שדבר על הגלגלים הוא נכון ואין למעלה ממנו, רק דיניו ומשפטיו אינם | כפי חכמתו. ^{32א} רק כל⁵ מה שתמצא⁶ בדינים שאמר דורוניוס⁷ המלך או משאללה⁸ שהיה⁹ מארץ הודו, סמוך עליהם¹⁰. (3) ומה שאמרו הקדמונים על תולדת כוכבים העליונים שהם במזלות¹¹, ככה נסו. (4) רק אל יעלה בלבך כי הם מורכבים, רק טעם התולדת שוילידו בארץ כדמות אותה התולדת.

3§

I I (1) השער השלישי. עקר הדינים הם המבטים. (2) אמר יעקב אל כנדי: אחר שהמזלות הם שנים עשר, הנה יתחלקו לחצי, והוא הנכח, ולשלישית ולרביעית ולשישית, ולא יתחלק לחלקים אחרים. (3) ובעלי המדות אמרו כי הגלגל לא יתחלק רק על אלה המבטים, והראיה כי כל¹² עגול יחלקנו האלכסון, והנה מקצה¹³ האלכסון עד¹⁴ קצה האלכסון¹⁵ מבט נכח. (4) ובעבור כי בכל עגול יש לו¹⁶ שני אלכסונים, הנה יתחלק הגלגל¹⁷ לארבעה חלקים שוים, כל חלק בקצה האלכסון,

¹ והחלו] רקטמ; א והיותו; מ < ביום ממנו בעבור היותו בעל מזל דלי. ² חולק] ראקטמ; פ < עליהם. ³ עלה] פאטמק; ר עלו. ⁴ על כן ... הקדמונים] פראטמ; ק חסר. ⁵ כל] פראקמ; ט חסר. ⁶ שתמצא] רקטמ; פא שאמר. ⁷ שאמר דורוניוס] רמ; ק שאמר דורוניאוס; ט שאמר דוריינוס; א דורוניוס; פ דריינוס; ⁸ משאללה] פקטמ; רא משא אללה. ⁹ שהיה] רפקטמ; א חסר. ¹⁰ עליהם] פאטמק; ר חסר. ¹¹ במזלות] ר; פאטמק המזלות. ¹² כל] פראקמ; ט > על. ¹³ מקצה] פראקט; מ קצת. ¹⁴ עד] פאקמ; ט ועד; ר ועל. ¹⁵ קצה האלכסון] פראטמ; ק קצהו. ¹⁶ לו] פראקמ; ט חסר. ¹⁷ הגלגל] פראטמ; ק < במ.

the first by day because it is masculine and its power is by day. (6) Mercury was made lord of the first triplicity because it is the lord of Gemini and its power is greater by night than by day; consequently they accounted it the first by day and by night. (7) They excluded Venus, the lord of Libra, from the power of the triplicity because it indicates pleasures and these signs are temperate, they therefore designated Jupiter, which is temperate in its nature, instead of it.^[4] (8) They assigned the ⟨first lordship of the⟩ last triplicity [i.e., of the watery signs] to Venus, because they indicate procreation, and this is Venus' nature. (9) They accounted it the first by day, and the second ⟨lordship of the triplicity was assigned⟩ to Mars, lord of Scorpio. The Moon, the lord of the sign of Cancer, was designated as partner.^[5] This is what the Ancients said.

18 (1) Ptolemy disagrees ⟨with them⟩ regarding the houses of the triplicities. We have tested his statements empirically but were unable ⟨to confirm them⟩. Hence we ought to rely on the Ancients.^[1] (2) I ⟨now⟩ give you a general rule: anything that Ptolemy says about the orbs is correct and no one surpasses him; but his ⟨astrological⟩ decrees and judgments do not befit his wisdom.^[2] You should rely only on what Doronius the king^[3] and Mâshâ'allâh, who was from India,^[4] said about ⟨astrological⟩ decrees. (3) As for what the Ancients said about the nature of the upper stars that are in the zodiacal signs, they knew this from experience. (4) Do not imagine that they [i.e., the upper stars that are in the zodiacal signs] are composite ⟨bodies⟩. The only reason for ⟨ascribing⟩ these natures ⟨to them⟩ is that they generate these same natures on Earth.^[5]

§3

1 (1) Third chapter. The aspects^[1] are the essence of ⟨astrological⟩ judgments. (2) Ya'qub al-Kindî said: Given that there are twelve signs, they can be divided into two parts, which is opposition, and also into three, four and six parts; but they cannot be divided into other parts.^[2] (3) The geometricians said that the circle may be divided only into these aspects; the proof is ⟨as follows⟩: The diameter bisects any circle, and the aspect of opposition is from one end of the diameter to the other. (4) Given that any circle has two ⟨perpendicular⟩ diameters, a circle can be divided into four equal parts, each part at the end of a diameter^[3]

ואלה הם הנקראים יתדות כאשר אפרש, והנה זה מבט רביעית¹. (5) גם יתחלק הגלגל לשלשה חלקים שוים, כי בשומך נקודה בשלש רביעיות האלכסון ותוציא היתר משני הצדדים, אז יתחלק הגלגל לשלשה² חלקים שוים³, כי יהיה בעיגול משולש שכל קויו הם שוים, ומדת כל משולש שוה⁴, והנה זה מבט שלישית. (6) ובשומך נקודה ברביעית האלכסון⁵ יעשה שם משולש כל קויו שוים, וכל קו בחצי⁶ האלכסון, והנה הוא ששית הגלגל, וזה הוא מבט ששית.

2 (I) גם אני אברהם חפשתי וראיתי בחשבון בעצמו דרך המבטים. (2) ואין צורך להזכיר מבט הנכח כי אותו המבט יצא⁷ מדרך העגול, ועוד אזכור לו טעם בבית⁸ השביעי מדרך החשבון. (3) ושאר המבטים ככה הם. (4) מצאנו אחד עם חמשה שהם⁹ שוים כי שניהם שומרים עצמם, וששה דומים לשנים¹⁰ כי שניהם זוגות ויתחלקו לנפרדים. (4) וככה שלשה עם שבעה, כי שניהם נפרדים ויתחלקו¹¹ על נפרדים¹², וארבעה¹³ עם שמונה, וככה כל המספר עד¹⁴ אין קץ והחל¹⁵ מאי זה חשבון שתרצה. (5) והנה ראוי להיות הבית החמישי כתולדת הבית הראשון, וככה הבית התשיעי כי הוא גם¹⁶ חמישי רק הוא אחורנית; על כן, היה מבט השלישית אהבה גמורה. (6) והנה אחד עם שלשה שניהם נפרדים ואינם מורכבים, כמו שאין¹⁷ חמשה מורכב. (7) ושנים¹⁸ עם ארבעה שניהם זוגות, רק אין התולדת שלימה, כי זה יתחלק לנפרד וזה לזוג. (8) וזה הוא מבט ששית, על כן אמרו שהוא חצי אהבה. (9) והנה¹⁹ אחד עם ארבעה משונה כי זה²⁰ שרש החשבון²¹ וזה מורכב, וזה נפרד וזה זוג, וככה שנים עם חמשה וכל המספר על זה הדרך, וזה הוא מבט רביעית והוא מבט איבה. (10) ובעלי חכמת הערכים דברו גם במבטים דברים ארוכים, ואין צורך להזכירם. (11) והמבט שהוא לפני הכוכב יקרא ימני, על דרך משל בני אדם. (12) ומה שאמרו כי מבט

¹מבט רביעית] פראטמ; ק > לזה יהיה בכל קצות שם האלכסוניים. ²לשלשה] פראקמ; ט שלשה. ³שוים] פראטמ; ק חסר. ⁴ומדת כל משולש שוה] פראטמ; ק חסר. ⁵האלכסון] ראט; פקמ חסר. ⁶בחצי] פטקמ; רא כחצי. ⁷יצא] פראקמ; ט יוצא. ⁸בבית] פראמלק; ט בשער. ⁹שהם] פראקמ; ט חסר. ¹⁰שומרים עצמם וששה דומים לשנים] פראטמ; ק עומדים ושנים דומים לששה. ¹¹יתחלקו] פראקמ; מ ויחלקו. ¹²נפרדים] פראקמ; מ הנפרדים; ט < וזוגות. ¹³וארבעה] פראקמ; ט > וככה. ¹⁴עד] פראקמ; ט חסר. ¹⁵והחל] רטמ; פאק חסר. ¹⁶גם] פראקמ; ט כמו. ¹⁷שאיין] פראקמ; ט שאינם. ¹⁸ושנים] פראקמ; ט חסר. ¹⁹והנה] רטמ; פאק והיה. ²⁰זה] פראקמ; ט חסר. ²¹החשבון] פאק; רטמ חשבון.

(these are called the cardines, as I shall explain);^[4] and this is the aspect of quartile. (5) The circle can also be divided into three equal parts; for if you fix a point at three quarters of the diameter and trace the chord from both sides, the circle is divided into three equal parts, because inside the circle there is a triangle with equal sides, and the ⟨relative⟩ dimensions of any ⟨equilateral⟩ triangle are the same; this is the trine aspect.^[5] (6) When you fix a point at the fourth part of the diameter, a triangle is drawn whose sides are equal, and ⟨the length of⟩ any of its sides is half of the diameter. This is the sixth part of the circle and the aspect of sextile.^[6]

2 (1) I, Abraham, have also sought and found a method for the aspects based on ⟨the use of⟩ numbers only. (2) There is no need to mention the aspect of opposition, because this aspect can be obtained by the method of ⟨dividing⟩ the circle; but I shall also mention an explanation for it [i.e., the aspect of opposition] in the seventh chapter ⟨using⟩ numbers.^[1] (3) The other aspects are as follows. (4) We have found that one and five are kindred numbers because both preserve themselves,^[2] and six is similar to two because both are even numbers and when they are split in two the result is an odd number.^[3] (4) Three and seven likewise, because both are odd numbers and are divisible by odd numbers,^[4] and four and eight, and similarly with any number ad infinitum, beginning from any number you wish. (5) So it is fitting that the fifth ⟨mundane⟩ house should be as the nature of the first house,^[5] and similarly the ninth house because it is also fifth, but it is [i.e., counting] backwards; hence, the aspect of trine is absolute love. (6) Now one and three are both odd numbers and they are not composite, just as five is not composite.^[6] (7) Both two and four are even numbers, but their nature is not harmonious, because when the former [i.e., 2] is divided ⟨in half, the result is an⟩ odd number, and when the latter [i.e., 4] is divided ⟨in half, the result is an⟩ even number. (8) This is the aspect of sextile; and for this reason they said that it is half love. (9) Now one and four are incompatible, because the former is the basis of reckoning and the latter is composite, the former is odd and the latter is even; and similarly with two and five and with any other number in accordance with this method. This is the aspect of quartile, which is an aspect of antagonism.^[7] (10) The experts in the science of proportions^[8] also said long-winded things about the aspects, and there is no need to mention them. (11) Any aspect before a planet is called right-handed, using human language. (12) As for what they said, namely, that the

הנכח הוא התקיף, דין הוא¹ בעבור שהוא חצי הגלגל, ומבט הרביעית יותר תקיף מהשלישית א'ע"פ שהוא פחות במספר, היה זה בעבור שהוא ביתדותיו², והששית פחות מכולם בעבור מיעוט מספרו.

3 (I) ושאמרו על המצעדים שהם שוים, אין צורך לבקש טעם³ כי הוא ידוע, וככה כל מזל ששעותיו המעוותות שוות. (2) והמזלות הישרים טובים לכל עניין, על כן יש⁴ להם כח רב⁵ מהמעוותים, ובעבור כן נקראו נגידים. (3) ואשר הם בחשב האפודה נכונים, דין הוא כי שני הכוכבים הם במקום ממונה אחד. וטלה ומאזנים א'ע"פ ששניהם חמים ושונים⁶ בתולדת הפועלת יש ביניהם איבה בעבור מבט הנכח.

4 (I) וזה⁷ שאמרו, כי הגלגל יתחלק בכל רגע על ארבעה חלקים, דין הוא להיות רביעית⁸ הגלגל מקו חצי השמים עד המעלה הצומחת מזרחי והולך לפנים. (2) והוא דומה לאויר, והדם כמו האויר, ומראה העינים⁹ הלוכך, כי הוא תחלת העיניים. (3) והרביעית שבין קו חצי השמים עד המעלה השוקעת, אמרו כי מעשיו אחורנית³² בעבור שהוא מחצי הגלגל היותר. ועין¹⁰ מראו אדום בעבור רוב חומו. (4) ואין צורך להזכיר הרבעיות האחרות כי דרך אחד לכלם. (5) והמראה השחור בעבור הקור והיבשת¹¹, והירק¹² בעבור הקור עם הלחה¹³. (6) וקראו כל מה שהוא למעלה מן הארץ ימין¹⁴ דרך משל¹⁵, בעבור שיש לזה החצי יותר¹⁶ כח מהחצי¹⁷ האחר, ככח הימין על השמאל, והשני רביעים הזכרים יקראו¹⁸ ימניים בעבור רוב כחם. (7) וזה שאמרו¹⁹ חצי הגלגל העולה, זה ידוע ומפורסם²⁰, כי מצעדי המזלות בחצי היותר יהיו כמצעדי המזלות שהוא לנכחם²¹, שהוא בחצי הגלגל העולה. (8) אמר אברהם²²: יש מחלוקת בין חכמי זאת האומנות, כי יש אומרים כי מן המעלה הצומחת עד קו²³ התהום הוא מזרחי, ומקו חצי השמים עד המעלה הצומחת דרומי,

¹ דין הוא] פראטמ; ק חסר. ² ביתדותיו] רפקטמ; א ביתדות. ³ לבקש טעם] פראקמ; ט להזכיר הטעם. ⁴ על כן יש] ראקטמ; פ על שיש. ⁵ כח רב] פראטמ; ק חסר. ⁶ ושונים] פאטמק; ר < ויהיה. ⁷ וזה] פאטמק; ר ומה. ⁸ רביעית] פראטמ; ק רובע. ⁹ העינים] פראטמ; ק עיניו. ¹⁰ ועין] פראטמ; ק חסר. ¹¹ והיבשת] פרא; טמ והיבשות; ק והיבש. ¹² והירק] פראקמ; ט והירוק. ¹³ עם הלחה] פאמ; ק ולחות. ¹⁴ ימין] ראקטמ; פ חסר. ¹⁵ משל] פראקט; מ המשל. ¹⁶ יותר] פראקמ; ט חסר. ¹⁷ מהחצי] פראק; מ מחצי; ט על החצי. ¹⁸ יקראו] פאטמק; ר נקראו. ¹⁹ וזה שאמרו] פראטמ; ק ואמרם. ²⁰ ומפורסם] פראטמ; ק חסר. ²¹ לנכחם] פראקמ; ט לנכח. ²² אברהם] טק; רפ רבינו; אמ רבי. ²³ קו] פראקמ; ט חסר.

aspect of opposition is the strongest, this follows from the fact that it covers half of the circle. The aspect of quartile is stronger than trine, although it is less in number [i.e., 90° is less than 120°], because it [i.e., the aspect of quartile] coincides with its [i.e., the circle's] cardines. And sextile is less ⟨powerful⟩ than all the others because its number is small [i.e., 60°].

3 (1) As for what they said about the rising times, namely, that they are equal,^[1] there is no need to search for an explanation, because it is known; and similarly for any sign whose seasonal hours are equal. (2) The straight signs are benefic for everything, so they have more power than the crooked ⟨signs⟩; this is why they were called “governors.”^[2] (3) As for those ⟨signs⟩ that are “established” (Isa. 2:2 *et passim*) ⟨in pairs⟩ in the ecliptic,^[3] this follows because two stars occupy the place of a single ruler.^[4] As for Aries and Libra, although both are hot and are equal in their active nature, there is antagonism between them because they are in opposition.

4 (1) And from what they said, namely, that at any moment the circle is divided into four parts, it follows that the quadrant from the line of midheaven to the degree of the ascendant is eastern and advancing. (2) It is similar to the air, and blood is like air, and the color is white, because it is the first of the colors. (3) As for the quadrant between the line of midheaven and the degree of the descendant, they said that it is “retreating” because it is in the descending half of the circle. Its color is red because of its great heat.^[1] (4) There is no need to mention the other quadrants because they all have the same pattern. (5) The black appearance is because of cold and dryness, and green because of cold with moisture.^[2] (6) They termed anything that is above the Earth “southern” [lit. “right-hand”], metaphorically, because this half has more power than the other half, just as the right hand is stronger than the left hand; so both masculine quadrants were called “southern” because of their great power. (7) What they said about the ascending half circle is well known and manifest, for the rising times of the signs in the descending half ⟨circle⟩ are equal to the rising times of the opposite signs in the ascending half circle.^[3] (8) Abraham said: there is a disagreement among the scholars of this art. Some say that ⟨the quadrant⟩ between the degree of the ascendant and the line of lower midheaven is eastern, and ⟨the quadrant⟩ from the line of midheaven to the degree of the ascendant is southern, and ⟨that⟩ from the line

והנה יהיה מקו התהום אל המעלה השוקעת שמאלי, ומהמעלה השוקעת עד קו¹ חצי השמים מערבי. (9) וככה חלקוהו בעלי כלי² הנחשת, ודעתי נוטה עמהם.

5 (1) ודברי הבתים הי"ב, לא מצאתי להם בספרי הקדמונים טעמים שאזכירם. (2) רק אמרו: אין ספק כי כל רגע יתחלק הגלגל לארבעה חלקים, הם נקודות על דרך אלכסוני³ העגול. (3) וזה אמת, כי המעלה ההווה כנגד הארץ והיא עולה, יש מעלה אחרת כנגדה שהיא שוקעת, ומעלה שלישית בקו חצי השמים, ורביעית בקו התהום⁴. (4) ואמרו כי כל דבר יתחלק לשלשה חלקים, כי יחל להוסיף, ואחר כך יעמוד על דרך אחד, ואחר כך יגרע עד שלא ימצא. ובעבור זה חלקו כל נקודה מארבע הנקודות על שלשה חלקים, וקראו הארבע נקודות יתדות. (5) והבתים הסמוכים אליהם, שבמהרה⁵ ישובו גם הם יתדות, קראום סמוכים⁶. (6) ויש להם כח אמצעית כי ליתדות הכח הגדול, והראוי להיות⁷ הכח הרב⁸ ליתד שהוא בקו חצי השמים והיתד הראשון, שהיא המעלה הצומחת⁹. (7) ומשאללה אומר כי הוא תקיף מקו חצי השמים, ובטלמיוס אומר להפך¹⁰ והדין עמו, והיתד השביעי תקיף מהרביעי¹¹. (8) ובסמוכים אין למעלה מעשתי עשר, כי הוא סמוך אל¹² היתד הנכבד, והוא למעלה מהארץ והוא במבט ששית אל המעלה הצומחת. (9) ואחריו הבית החמישי: א"ע"פ¹³ שהוא תחת הארץ הוא עם המעלה הצומחת במבט שלישית, ואחריו הבית השני, והיה כן בעבור שאין לו מבט אל הצומחת. (10) וככה השמיני, רק¹⁴ בעבור היות הבית השני סמוך ליתד נכבד יותר מיתד המעלה¹⁵ השוקעת, על כן אמרו כי הבית השני טוב מהשמיני. (11) ואמרו כי הטוב בנופלים הוא התשיעי, בעבור שהוא למעלה מן הארץ והוא במבט שלישית עם המעלה הצומחת, ואחריו הבית¹⁶ השלישי: א"ע"פ שהוא תחת הארץ הוא במבט ששית עם המעלה הצומחת. (12) והנה נשארו הבית הששי והשנים עשר, רעים מכולם, כי אין לאחד מהם מבט עם¹⁷ המעלה הצומחת, והבית הששי רע מהשנים עשר בעבור היותו תחת הארץ.

¹ [קו] ראטמ; פ חסר. ² כליי] פראטמ; ק אומנות. ³ על דרך אלכסוני] פראטמ; ק חסר. ⁴ התהום] פאקמ; ר תהום; ט חצי התהום. ⁵ שבמהרה] ראטמ; פ שמהרה; ק מהר. ⁶ קראום סמוכים] פראקמ; ט חסר. ⁷ להיות] פאטמ; ק שיהיה. ⁸ הרב] פראמ; ק הגדול; ק היתר. ⁹ והיתד הראשון ... הצומחת] פאקמ; ט חסר. ¹⁰ להפך] פראטמ; ק הפך. ¹¹ מהרביעי] ראקטמ; פ מקו מהרביעי חצי. ¹² אל] ראקטמ; פ על. ¹³ א"ע"פ] פראקמ; ט חסר. ¹⁴ רק] פראקמ; ט חסר. ¹⁵ המעלה] פראטמ; ק חסר. ¹⁶ ואחריו הבית] פראקמ; ט והבית. ¹⁷ מבט עם] פראקמ; ט מביטים.

of lower midheaven to the degree of the descendant is northern, and (that) from the degree of the descendant to the line of midheaven is western.^[4] (9) This is the way in which it was divided by the experts in the astrolabe, and I tend to agree with them.^[5]

5 (1) As for the twelve (mundane) houses, I have not found any explanations of them worthy of mention in the books of the Ancients.^[1] (2) They only said: there is no doubt that at any moment the circle is divided into four parts, (the beginnings of) which are like points where the (two perpendicular) diameters intersect the circle. (3) This is true; for there is one degree facing the earth, which is rising; and another opposite it, which is descending, and a third degree at the line of midheaven, and a fourth at the line of lower midheaven. (4) They said that everything is divisible into three parts, for first it increases and then it stands in one place and then it diminishes until it vanishes. For this reason they divided each of the four points [i.e., parts] into three divisions, and they called the four points “cardines.”^[2] (5) The houses that are adjacent to them, which will soon become cardines too, they called “succedent” (to the cardines). (6) They have intermediate power, while the cardines have the greater power; the greatest power should adhere to the cardo (that is) in the line of the midheaven and to the first cardo, which is the degree of the ascendant. (7) Mâshâ'allâh said that the latter is stronger than the line of the midheaven, but Ptolemy maintains the opposite and he is correct. The seventh house^[3] is stronger than the fourth. (8) Of the succedent houses the strongest is the eleventh, because it is adjacent to the dignified cardo, which is above the Earth, and is in sextile to the degree of the ascendant. (9) Next (in power) is the fifth house: although it is beneath the Earth it is in trine to the degree of the ascendant. Next is the second (mundane house), because it is in no aspect to the ascendant. (10) The same applies to the eighth (mundane house); but because the second house is adjacent to the cardo that is more dignified than the cardo that is in the degree of the descendant, they said that the second house is more benefic than the eighth. (11) They said that the best among the falling (houses)^[4] is the ninth, because it is above the Earth and in trine to the degree of the ascendant. The third (house) is next: even though it is underneath the Earth it is in sextile to the degree of the ascendant. (12) The sixth and twelfth houses, the most malefic of all, are left over, because neither of them is in any aspect to the degree of the ascendant. The sixth house is more malefic than the twelfth because it is underneath the Earth.^[5]

6 (I) אמר אברהם: בעבור היות המעלה הצומחת שהיא יוצאה מתחת הארץ דומה לנולד כשיצא¹ מבטן אמו, על כן אמרו כי זה המזל יורה על החיים ועל הגוף, ובשאלות על כל מחשבה שהיא בסתר והיא יוצאה לאור. (2) והנה זה היתד הראשון, ולעולם² יכוננוהו³ השני יתדות, שהאחד קו הרום והאחר קו התהום; על כן אמרו כי אלה היתדות יורו על האבות. (3) והקדמונים אמרו כי הבית הרביעי הוא⁴ יורה על האב, והעשירי יורה על האם. (4) ובטלמיוס אומר הפך הדבר⁵, והדין עם הקדמונים כי ראוי להיות המזל שיוורה על האם הוא הנראה לעין. (5) ובעבור כי הבית הרביעי אין נסתר יותר ממנו, על כן אמרו שיוורה על כל מטמון, ובעבור | 33א שהוא סוף היתדות יורה על אחרית כל דבר, גם הוא יורה על הקרקעות והשדות⁶. (6) ואמרו כי הבית העשירי יורה על השררה ועל והגדולה בעבור שאין יתד גבוה⁷ ממנו; גם יורה על האומנות שהוא נודע בה ונוכח שמו בעבורה. (7) ובעבור היות הבית השביעי מפאה אחת הפך הבית הראשון, כי זה עולה וזה יורד, אמרו כי הוא יורה על הנקבה כי היא הפך הזכר. (8) ובעבור היות מצעדיו בכל מקום שוות למצעדי הבית הראשון, על כן אמרו שיוורה לעזר⁸ האיש, שהוא דומה לו מפאה אחת, ובעבור זה יורה זה הבית על השותפים, ובעבור היותו במבט נכח אל הבית הראשון יורה על המלחמות. (9) ובעבור היות הבית החמישי כתולדת הבית הראשון, כי⁹ הוא מבט שלישית והוא¹⁰ אהבה גמורה, על כן יורה על הבנים והמאכל והמשתה והמלבוש, שאלה צורך לחיי האדם¹¹. (10) ובעבור היות בית עשתי עשר מהבתים הסמוכים, והוא במבט ששית אל המעלה הצומחת, שהוא חצי אהבה, על כן יורה על האוהבים; ובעבור תוקפו, כי הוא סמוך ליתד נכבד, על כן יורה על חן וכבוד. (11) ובעבור היות הבית השני סמוך אל היתד הראשון, שיוורה על החיים¹², על כן אמרו שהוא בית העושר ובית העוזרים את הנולד. (12) ובעבור היות הבית השמיני סמוך אל¹³ היתד השביעי, שהוא הפך היתד הראשון ואינו נקשר במבט עמו, על כן אמרו שהוא בית המות. (13) ורבים אמרו¹⁴ כי בעל הבית השביעי יורה על מיתת האדם בעבור היותו הפך החיים, וזאת דעת חנוך, גם דורוניוס¹⁵,

¹ כשיצא] פראקמ; ט היוצא. ² ולעולם] ראט; פקמ חסר. ³ יכוננוהו] פקמאט; ר יכוננוהו. ⁴ הוא] פראקמ; ט חסר. ⁵ הדבר] פראטמ; ק חסר. ⁶ והשדות] פראטמ; ק חסר. ⁷ גבוה] פראקט; מ חסר. ⁸ לעזר] פאמ; ט על עזר; ק חסר; ר > להפך. ⁹ כי] פראקמ; ט חסר. ¹⁰ והוא] רטקמ; אפ היא. ¹¹ צורך לחיי האדם] פראק; מ צורך להם; ט חיי צורך האדם. ¹² החיים] פראקמ; ט האדם. ¹³ אל] ראקטמ; פ על. ¹⁴ ורבים אמרו] פראטמ; ק ויש אומרים. ¹⁵ דורוניוס] מ; אקר דורוניאוס פ דורניוס; ט דוריינוס.

6 (1) Abraham said: because the degree of the ascendant that rises from below the Earth is like the native when he emerges from his mother's womb, they said that this *mazzal*^[1] indicates life and the body; in (the doctrine of) interrogations (it indicates) any thought that is hidden and (then) emerges into the light. (2) This is the first cardo, which is always determined by the two cardines, of which the first is the line of midheaven^[2] and the other is the line of lower midheaven; they therefore said that these cardines indicate ancestors.^[3] (3) The Ancients said that the fourth house indicates the father and the tenth the mother. (4) Ptolemy maintains the opposite position, but the Ancients are correct, because it is fitting that the sign that indicates the mother be the one that is visible.^[4] (5) Because nothing is more hidden than the fourth house, they said that it indicates any buried treasure; because it is the end of the cardines it indicates the end of everything; it also indicates landed property and fields.^[5] (6) They said that the tenth house indicates dominion and greatness, because no cardo is higher than it is; it also indicates the art on account of which he [i.e., the native] attains fame and his name is known.^[6] (7) Because with respect to an edge (of the horizon) the seventh house is opposite the first house—for when one ascends the other descends—they said that it indicates the female, which is the opposite of the male. (8) Since its rising times at any place (on Earth) are the same as the rising times of the first house, they said that it indicates being a helpmate to a man.^[7] (They also said) that it [i.e., the seventh house] is similar to it [i.e., to the first house] with respect to a cardinal point; hence this house [i.e., the seventh house] indicates partners. And because it is in opposition to the first house, it indicates wars.^[8] (9) Because the nature of the fifth house is like the nature of the first house—for the former is in trine (to the latter) and signifies absolute love^[9]—it indicates sons, food, drink, and clothing, which are necessary for human life.^[10] (10) Because the eleventh house is one of the succedent houses and is in sextile to the degree of the ascendant, which is half love, it indicates lovers; because of its strength—for it is adjacent to a dignified cardo—it indicates beauty and honor.^[11] (11) Because the second house is adjacent to the first cardo, which indicates life, they said that it is the house of wealth and the house of the native's helpers.^{[12][13]} (12) Because the eighth house is adjacent to the seventh house,^[14] which is opposite the first house and is not in any aspect to it [i.e., to the first house], they said that it is the house of death. (13) Many said that the lord of the seventh house indicates the man's death because it is the opposite of life. This is the opinion of Enoch and also

גם ואלים¹ והבבליים, והדין עמהם. (I4) ובעבור היות הבית התשיעי נופל מהיתד, והשמש בהיותה שם היא נוטה מקו חצי השמים, שהוא יתד, על כן אמרו שהוא בית הדרכים ויורה על מי שהוא סר ממעלתו; ובעבור היות החכמה בנושמה כדמות גוף האדם ההולך ממקום למקום לחפש, על כן אמרו שהוא² בית החכמה, גם בית האמונה כי האמונה³ מן החכמה. (I5) וככה, אמרו על הבית השלישי שגם הוא יורה על כל⁴ חכמה קרובה, ובעבור שיביט אל הצומחת מבט ששית אמרו כי הוא יורה על האחים והקרובים והדומה להם⁵. (I6) ובעבור היות בית השנים עשר⁶ נופל, והוא בדרך המזלות לעולם משונה מתולדת המזל הצומח בתולדת הפועלת, שהיא העקר, על כן יורה על המריבות והקלון והחרפה; בעבור שאינו⁷ קשור עם הצומחת יורה על בית הסוהר, ובעבור היות מחלקי המזל הצומח בבית שנים עשר, אם לא היתה המעלה הצומחת תחלת המזל, על כן אמרו שיוורה על הבהמות שהם למרכבת האדם. (I7) והנה נשאר הבית הששי, ובעבור היותו תחת הארץ יורה על מלחמת סתר, והם התחלואים והמומים. (I8) והנה⁸ כלל בדברי הבתים, וחכמי המזלות אומרים כי יצא להם בדרך⁹ נסיון¹⁰. (I9) ודברי בעלי¹¹ השלישות שוירו על כך וכך, לא ראיתי אותם באחד מספרי הקדמונים רק בספר אנדרווגר¹² בן זאדי¹³ פרוך היהודי, ולא היה בדורו חכם במזלות כמוהו, וחכמי ישמעאל הבאים אחריו מודים לו.

4§

I (I) השער הרביעי. אמר אברהם¹⁴: כבר הזכרתי¹⁵ טעם צדק ושבתאי ושאר המשרתים; למה אמרו שהם מזיקים¹⁶. (2) ובטלמיוס אמר כי מחכמת הערכים הוציאו זה¹⁷, כי מצאו שבתאי בחשבון שנים ושלשים, וזה נלקח מערך גלגלו אל גלגל¹⁸ האדמה, ואמרו כי צדק בחשבון ארבעה ועשרים, ומאדים בחשבון עשרים ואחד ושליש¹⁹, והשמש בחשבון שמונה עשר, ונגה וכוכב חמה בחשבון ששה עשר, והלבנה בחשבון שנים עשר. (3) והנה ערך השמש אל צדק כמוהו ושלישיתו, וזה

¹ ואלים] פראמ; ק וליש; ט ואליד. ² בית הדרכים ... אמרו שהוא] פראטמ; ק חסר. ³ כי האמונה] פראקט; מ חסר. ⁴ כל] ראט; פקמ חסר. ⁵ להם] פראטמ; ק חסר. ⁶ השנים עשר] פאטמק; ר עשתי עשר, אבל בשוליים כתוב: שנים עשר צ"ל. ⁷ בעבור שאינו] פראקמ; ט ובעבור שהוא. ⁸ והנה] פראקמ; ט זה. ⁹ בדרך] רטקמ; פא מדרך. ¹⁰ נסיון] פראקמ; ט הנסיון. ¹¹ בעלי] פראקמ; ט בעל. ¹² אנדרווגר] פראט; קמ אנדרווגאר. ¹³ זאדי] פראטמ; ק זאה. ¹⁴ אמר אברהם] פט; ל אמר רבינו אברהם; א אמ' רבי' אברהם; מ אמר ר' אברהם; ק חסר. ¹⁵ כבר הזכרתי] פאטמ; ק חסר. ¹⁶ למה אמרו שהם מזיקים] פראטמ; ק בהיותם מטיבים או מזיקים כבר הזכירוהו. ¹⁷ זה] פראקמ; ט חסר. ¹⁸ גלגל] ראקטמ; פ חסר. ¹⁹ עשרים ואחד ושליש] תיקנתי עפ"י הקשר הדברים. ראה טעמים א' 4:2 וטעמים ב' 5:7 והערות על אתר. ראקטמפ עשרים. ²⁰ ושלישיתו] פא; רטמ ושלישיתו; ק שלישי.

of Doronius, Vettius Valens,^[15] and the Babylonians; and they are correct.^[16] (14) Because the ninth house falls from the *cardo*, and because when the Sun is there it declines from the line of midheaven, which is a *cardo*, they said that it is the house of journeys and indicates a person who is degraded (from his high position); and because wisdom in the soul bears a likeness to the body of a man who goes from one place to another and seeks, they said that it is the house of wisdom, and also the house of belief, because belief comes from wisdom. (15) Likewise, they said that the third house indicates any familiar wisdom^[17]; and because it is in sextile with the ascendant, they said that it indicates brothers, relatives, and the like.^[18] (16) Because the twelfth house is falling, and because it is always incompatible with the active nature of the sign of the ascendant, which is the fundamental principle, it indicates quarrels, dishonor, and shame; because it is not bound to the ascendant it indicates prison. And because parts of the sign of the ascendant may be in the twelfth house, namely, when the degree of the ascendant does not coincide with the beginning of a sign, they said that it indicates animals that men ride on.^[19] (17) The sixth house remains. Because it is underneath the Earth, it indicates hidden wars, which are like illnesses and deformities.^[20] (18) This is a general rule about the houses, and the astrologers said they learned it from experience. (19) As for the lords of triplicities (of the houses) and why they indicate what they do, I have not seen this in any of the books written by the Ancients except for the book by Andruzagar ben Sadi Faruk the Jew, who surpassed all astrologers of his generation; and the Arab scientists who lived later agree with him.^[21]

§4

1 (1) Fourth chapter. Abraham said: I have already mentioned the explanation for (the nature of) Jupiter and Saturn and the rest of the planets; why they said that they are malefic.^[1] (2) Ptolemy said that they gleaned that from the science of proportions; they found that the number of Saturn is 32, which was obtained from the ratio of its spherical surface to the spherical surface of the Earth, and they said that the number of Jupiter is 24, the number of Mars is $21\frac{1}{3}$, the number of the Sun is 18, the number of Venus and Mercury is 16, and the number of the Moon is 12.^[2] (3) So the ratio of Jupiter to the Sun is its own [i.e., the Sun's] value plus a third (of its value), which

ערך נכבד, וערך¹ הלבנה אל צדק ערך כפל², גם הוא נכבד. (4) והנה על זה הדרך³ אין⁴ למאורות ערך עם שבתאי ומאדים, על כן אמרו שהם מזיקים. (5) ויאמר | אבן³³ אבי דמינה⁵ כי שבתאי יורה על גוף האדם כאשר יורה הבית הראשון, וצדק יורה על הממון כאשר הוא גלגלו שני לגלגל שבתאי, ומאדים יורה על האחים כדרך הבית השלישי בעבור כי גלגלו שלישי לגלגל שבתאי⁶, והשמש תורה על האב כבית הרביעי כי גלגלו רביעי לגלגל שבתאי, ונגה יורה על פריה ורביה כאשר יורה הבית החמישי כי גלגלו חמישי לגלגל שבתאי, וכוכב חמה יורה על העבדים כאשר יורה⁷ הבית הששי כי גלגלו ששי לגלגל שבתאי, והלבנה תורה על הנשים כאשר יורה⁸ הבית השביעי כי גלגלה שביעי לגלגל⁹ שבתאי. (6) והנה שב שבתאי לשמש בשמיני¹⁰, על כן יורה על המות כאשר יורה הבית השמיני¹¹; והנה היה בחלק צדק הבית התשיעי שיורה על האומנות ועבודת השם כתולדת צדק; והנה שב הבית העשירי למאדים כי גם הוא יורה על השררה ועל הכח ועל הממשלה, ושב בית אחד עשר לשמש¹². (7) גם היא תורה¹³ על חן וכבוד כאשר יורה בית¹⁴ עשתי עשר¹⁵, ושב בית שנים עשר לגנה שיורה בתולדתו על התענוגים, וסוף התענוגים¹⁶ לחרפה וקלון כאשר יורה בית שנים עשר.

2 (I) שבתאי. כבר הזכרתי טעם איך הוא¹⁷ קר ויבש. ועקר¹⁸ המות קור עם יבשת¹⁹, על כן יורה על מות ועצבון ואבל, ויורה על דברים קדמונים בעבור שהוא כוכב עליון ותנועתו בהמתנה. (2) ובחלקו ארץ הודו כי הוא הגבול הראשון, ועל הכושים בעבור שחרותם, ועל היהודים בעבור היות מזלם דלי²⁰ שהוא ביתו²¹, והזקנים בעבור היותו עליון, ועובדי האדמה כי האדמה בחלקו²², ע"כ בחלקו²³ מגוף²⁴ האדם הטחול, ומעבדי העורות והמנקים בתי הכבוד²⁵ בעבור כי המרה, שהיא תולדתו, תורה על טיגוף. (3) ויורה על העופרת בעבור היותו כבד ואין בו תועלת אלא²⁶ מעט. ובחלקו מהארץ המערות וכל מקום חושך בעבור²⁷ כי בעל²⁸

¹ וערך] פראקמ; ט חסר. ² כפל] פראטמ; ק כפול. ³ על זה הדרך] פראטמ; ק בדרך זו. ⁴ אין] פראקמ; ט חסר. ⁵ אבן אבי דמינה] פרא; מ אבן אבי דמונה; ק אבי דמינה; ט אבי דמינה. ⁶ מאדים יורה ... שבתאי] פאטמ; רק חסר. ⁷ כאשר יורה] פראטמ; ק כמו שיורה. ⁸ יורה] פראקמ; מ < על. ⁹ לגלגל] פראקמ; ט חסר. ¹⁰ לשמש בשמיני] ראפקמ (מופיע מנוקד בכ"א); ט כמו שמיני לשמש. ¹¹ השמיני] פאטמ; ר חסר. ¹² לשמש] ראט; פקמ < כי. ¹³ היא תורה] ר אטמ; פק הוא יורה. ¹⁴ בית] פאטמ; ר חסר. ¹⁵ עשתי עשר] פראטמ; ק זה. ¹⁶ וסוף התענוגים] פראקמ; ט חסר. ¹⁷ איך הוא] פראקמ; ט היותו. ¹⁸ ועקר] פראטמ; ק ולפי שעקר. ¹⁹ עם יבשת] פראט; מ עם יבשות; ק ויבש. ²⁰ היות מזלם דלי] פראטמ; ק מזלם שהוא דלי. ²¹ ביתו] פראקמ; מ ביתם. ²² ועובדי האדמה ... בחלקו] פראטמ; ק חסר. ²³ ע"כ בחלקו] ראטמ; ק בחלקו; פ חסר. ²⁴ מגוף] ראקטמ; פ ומגוף. ²⁵ והמנקים בתי הכבוד] פראטמ; ק מנקי אשפות. ²⁶ אלא] פראקמ; ט רק. ²⁷ בעבור] פראקמ; ט חסר. ²⁸ בעל] פאקט; רמ חסר.

is a noble ratio, and the ratio of the Moon to Jupiter is a twofold ratio, which is also a noble ratio.^[3] (4) In this way, then, the luminaries have no ⟨noble⟩ ratio to Saturn and Mars; hence they said that they are malefic.^[4] (5) Ibn Abi Damina said that Saturn indicates the human body, just as the first ⟨mundane⟩ house does;^[5] that Jupiter indicates money, inasmuch as its orb is the second ⟨counting⟩ from Saturn's orb; that Mars indicates brothers, like the third house, inasmuch as its orb is the third ⟨counting⟩ from Saturn's orb; that the Sun indicates the father, like the fourth house, because its orb is the fourth ⟨counting⟩ from Saturn's orb; that Venus indicates procreation, inasmuch as this is the signification of the fifth house and its orb is the fifth ⟨counting⟩ from Saturn's orb; that Mercury indicates slaves, inasmuch as this is the signification of the sixth house and its orb is the sixth ⟨counting⟩ from Saturn's orb; and that the Moon indicates women, inasmuch as this is the signification of the seventh house and its orb is the seventh ⟨counting⟩ from Saturn's orb. (6) Saturn serves again in the eighth ⟨mundane house⟩, and therefore indicates death, which is the signification of the eighth house; the ninth house, which indicates art and divine worship, like Jupiter's nature, is in Jupiter's portion; Mars serves again in the tenth house because it [i.e., Mars] too indicates authority and power and government; and the Sun serves again in the eleventh house. (7) It [i.e., the Sun] also indicates beauty and honor, inasmuch as this is the signification of the eleventh house. Venus serves again in the twelfth house, because by its nature it [i.e., Venus] indicates pleasures, but the end of pleasures is shame and dishonor, which are the signification of the twelfth house.^[6]

2 (1) Saturn. I have already mentioned the reason why it is cold and dry.^[1] The essence of death is cold and dryness, so it indicates death and sadness and mourning; it indicates primordial things because it is an upper planet and it moves sluggishly.^[2] (2) The land of India, which is ⟨in⟩ the first climate, is in its portion; ⟨it is in charge⟩ of the Ethiopians on account of their blackness, and of the Jews because their sign is Aquarius, which is its house,^[3] and of the elderly because it is uppermost, and of farmers because the ground is in its portion. So its portion of the human body is the spleen, and ⟨its portion includes⟩ tanners and privy-cleaners, because ⟨black⟩ bile, which is its nature, indicates filth. (3) It indicates lead because it is heavy and because it is almost useless. Its portion of the Earth is caves and dark places, because it suits a melancholy nature to be in solitude and not to stay

המרה השחורה תולדתו להתבודד ושלא יעמוד במקום מיושב. (4) ויורה על כל חיה גדולה בעבור היותו עליון, ומכוערת בעבור כי המרה השחורה לא תעשה צורה יפה. ואילן העפצים בחלקו בעבור תולדתו¹, וכל דבר שיש בו² סם המות בעבור כי הוא יורה על מות. ויורה על הקרה בעבור שיש בה עיצור, ומן הבגדים כל בגד עב כי תולדת המרה השחורה עבה³ ולא יאהב אלא כל דבר עב. (5) ובחלקו המחשבת⁴ בעבור היותו עליון, וככה דעת הסודות⁵ ולעשות חמס ולכעוס ולפתות בעבור היותו מזיק, וככה כל אומנות מיגעת הרבה. ויורה על הדרכים הרחוקים בעבור היותו עליון. ובחלקו העצמות כי הם קרים ויבשים והם עקר הגוף. (6) וחלקו שבעה שערים⁶ שבראש⁷ על שבעה⁸ המשרתים, והם העינים למאורות, והאזנים לשבתאי וצדק שהם העליונים, והנחיריים למאדים ונה, והלשון עם הפה לכוכב חמה; ונסו זה כל חכמי המזלות ועלה בידם. (7) ויורה על השגוען כי רובו⁹ מהמרה השחורה, וככה הפילוג והצרעת, ויורה על כאב עומד ימים רבים בעבור המתנתו בהליכתו¹⁰. (8) ויורה על הזקנה, כאשר פירש בטלמיוס, כי הלבנה תשמש ארבע שנים, ואחר כן כוכב חמה עשר שנים, ואחר כן נגה שמונה שנים, ואחריו השמש תשע עשרה שנה, ואחריו מאדים שבע שנים, ואחריו צדק שנים עשרה שנה, וסוף השנים שבתאי¹¹; והביא על זה¹² כדמות ראיות מתולדת האדם. (9) וכבר אמרתי כי בעבור היותו¹³ קר יתישר כחו בפאת מזרח; על כן אמרו שהוא מזרחי. (10) ודע כי תחלת הימים מיום ראשון; והנה¹⁴ נסו חכמי המזלות כי ביום זה יש כח לשמש יותר משאר הימים, וכאשר חלקו היום על שנים עשרה | שעות תמיד נתנו השעה הראשונה לשמש, ובעלת¹⁵ היום, והשעה השנית לנגה, שגלגלו תחת גלגל¹⁶ השמש. ועל כן אמרו כי בעל השנית¹⁷ ביום ראשון הוא נגה, והוא משתתף עם השמש, בעלת היום, כי רוב הכח שלה, וככה שאר הכוכבים. והנה שבה השעה השמינית לשמש¹⁸, ועל זה הדרך יצא בחלק שבתאי יום שבת, ומהלילות¹⁹ ליל²⁰ רביעי. (II) ודבר אותיותיו וצורתו לא ראיתי בו טעם. וטעם שנותיו העצומות כי במספר הזה ישוב שבתאי למקומו על דעת

¹תולדתו] פראטמ; ק היובש. ²דבר שיש בו] פראטמ; ק חסר. ³עבה] פראטמ; ק עב. ⁴המחשבת] פאטמק; ר > כל. ⁵הסודות] ראקטמ; פ החדות. ⁶שבעה שערים] פראטמ; ק חסר. ⁷שבראש] ראקטמ; פ שברא. ⁸על שבעה] פראטמ; ק לשבעה. ⁹רובו] פראט; מ הוא; ק היה. ¹⁰בהליכתו] פראטמ; ק חסר. ¹¹וסוף השנים שבתאי] פראקמ; ט ואחריו שתי עד סוף השנים. ¹²והביא על זה] פראטמ; ק חסר. ¹³בעבור היותו] פראטמ; ק להיותו. ¹⁴והנה] פראקמ; ט וכבר. ¹⁵בעלת] ראקטמ; פ בעל. ¹⁶גלגל] פראקמ; ט חסר. ¹⁷השנית] פראקמ; ט השעה השנית. ¹⁸לשמש] פראט; ק חסר. ¹⁹ומהלילות] פראטמ; ק חסר. ²⁰ליל] ראקטמ; פ חסר.

in an inhabited place. (4) It indicates any animal that is big because it is uppermost, and ⟨any animal⟩ that is ugly because black bile does not shape any handsome image. The gall-oak is in its portion on account of its nature, as well as anything that contains a deadly poison, because it indicates death. It indicates frost because it has retention ⟨of fluids⟩ [i.e. freezing], and of garments any garment that is thick, because the nature of black bile is thick and it loves only what is thick. (5) Thought is in its portion, because it is uppermost, and so are knowledge of the arcane, violence, anger, and seduction, because it is malefic; and also all crafts that are exhausting. It indicates long journeys because it is uppermost. The bones are in its portion, because they are cold and dry and they are the mainstay of the body.^[4] (6) The seven orifices in the head were assigned to the seven planets; namely, the eyes to the luminaries, the ears to Saturn and Jupiter, which are upper ⟨planets⟩, the nostrils to Mars and Venus, and the tongue and mouth to Mercury; this was successfully verified by experience by all the astrologers.^[5] (7) It indicates madness because it stems mostly from the black bile, and also hemiplegia and leprosy. It indicates pain that lingers many days because of its sluggish motion.^[6] (8) It indicates old age, as expounded by Ptolemy, because the Moon is in charge for four years, then Mercury for ten years, then Venus for eight years, then the Sun for nineteen years, then Mars for seven years, and then Jupiter for twelve years; and the final years are ⟨under the charge⟩ of Saturn; and he [i.e. Ptolemy] furnished proofs of sorts for this, drawn from human nature.^[7] (9) I have already said that its power turns temperate in the east because it is cold;^[8] for this reason they said that it is eastern. (10) Know that the days ⟨of the week⟩ begin from Sunday; the astrologers found out by experience that the Sun has more power on this day than on any other day. When they divided the day into twelve hours they always assigned the first hour to the Sun, the lord of the day, and the second hour to Venus, whose orb is beneath the Sun's orb. For this reason they said that the lord of the second ⟨hour⟩ of Sunday is Venus and that it is in partnership with the Sun, the lord of the day, which has most of the power, and similarly with the other planets. Then the eighth hour is again under the charge of the Sun. Proceeding with this method, the diurnal part of Saturday is in the portion of Saturn, and of the nights Wednesday night ⟨is in its portion⟩.^[9] (11) I have not found the reason for its letters and shape. The reason for its greatest years, in the opinion of the Indian scientists, is that in this number ⟨of years⟩ Saturn returns to its place; the reason for the great years, in the opinion of the Egyptian scientists, is that they

חכמי הודו, וטעם השנים¹ הגדולות שהם כחשבון גבולי שבתאי במזלות על דעת חכמי מצרים², וטעם שנותיו הקטנות כי לסוף שלושים שנה ישוב קרוב ממעלתו³ הראשונה⁴, וטעם האמצעיות⁵ שלקחו⁶ חצי הגדולות וחברו⁷ עם חצי הקטנות. ושנות החלק הנקרא אלפרדאר הזכירו⁸ כן חכמי פרס בלא ראייה⁹. (12) וטעם היות כה גופו¹⁰ תשע מעלות בעבור גודל¹¹ גופו, כי הוא¹² קרוב מגוף צדק ואין אחר השמש גדולים מהם. על כן אמרו כי אור השמש חמש עשרה מעלות לפניו גם לאחריה, וללבנה שתים עשרה בעבור שאורה פחות מהשמש. ואין בכוכבים מי שיש לו אור כמוה לבד¹³ מהשמש. וככה אמרו כי אור צדק¹⁴ תשע מעלות כמו שבתאי. ובעבור שגוף מאדים קטן מהם הוא קרוב מן הארץ חסרו לו מעלה ואמרו כי אורו שמונה מעלות¹⁵, ונגה וכוכב חמה שבע מעלות. כך היתה סברת הקדמונים¹⁶, ונסו זה ועלה¹⁷ בידם.

3 (I) צדק. כבר הזכרתי טעם תולדתו. ובעבור היותו כוכב¹⁸ טוב יורה על תוספת כל טובה¹⁹ ופריה ורביה²⁰. (2) ונתנו לו מהגבולים²¹ השני, כאשר הוא שני לשבתאי, ומהגויים הפרסיים²², כי מזלם דגים²³, והבבלים, כי בית כבודו במקום גבולו שליט עליהם. (3) ונתנו לו כל מקום טהור, ובתי²⁴ התפילות כאשר הזכרתי בתולדתו, ומן הבגדים הנאים בעבור נקיותו²⁵. (4) ומראה הגוף²⁶ לבן²⁷ עם אודם כי זו התולדת הישרה²⁸, ובחלקו האזן השמאלית כבר הזכרתי בשער שבתאי, והדם כי הוא²⁹ בתולדתו³⁰. (5) ומן השנים בין הבחורות והזקנה בעבור שהוא למטה משבתאי³¹, ומן הפאות השמאלית כי הוא מוליד רוחות שמאליים, וטעם שנותיו העצומות כטעם שהזכרתי לשבתאי.

4 (I) מאדים. כבר הזכרתי טעם תולדתו. ומרוב חומו יורה על ההריגה³² ועל המריבות³³ ועל המלחמה³⁴ והכעס. (2) ובחלקו מהגבולים³⁵ השלישי כאשר הוא³⁶ שלישי לשבתאי, ובחלקו אנשי אינגלא טירא; זו דעת חנוך ולא הביא ראייה³⁷. (3) ואין

¹השנים] ראקטמ; פ שנותיו. ²מצרים] פאטמק; ר הודו. ³ממעלתו] פראקמ; ט למעלתו. ⁴וטעם שנותיו הקטנות ... הראשונה] ראקמ; בכ"ז פ הקטע הזה מופיע אחרי הדין בשנים העצומות. ⁵האמצעיות] ראקטמ; פ > שנותיו. ⁶שלקחו] פראקמ; ט שחלקו. ⁷וחברו] רפאקטמ; א וחברום. ⁸הזכירו] פראקטמ; ט אמרו. ⁹בלא ראייה] פראטמ; ק חסר. ¹⁰גופו] ראקטמ; פ גופות. ¹¹גודל] ראקטמ; פ > כח. ¹²כי הוא] פראקמ; ט והוא. ¹³לבד] פראטמ; ק חוץ; מ חסר. ¹⁴צדק] פראקמ; ט השמש. ¹⁵מעלות] ראקטמ; פ חסר. ¹⁶הקדמונים] ראקטמ; פ > החכמים. ¹⁷ועלה] ראקמ; פ על. ¹⁸כוכב] פראטמ; ק חסר. ¹⁹כל טובה] ראקמ; פ טובה; ט דבר. ²⁰ורביה] רפק; אטמ חסר. ²¹מהגבולים] ראקטמ; פ הגבול. ²²הפרסיים] פראטמ; ק פרס. ²³דגים] פראטמ; ק < שהוא ביתו. ²⁴ובתי] פראקמ; ט ובית. ²⁵נקיותו] ראקטמ; פא נקיותם. ²⁶ומראה הגוף] פראטמ; ק ומראהו. ²⁷לבן] פראקטמ; מ לובן. ²⁸זו התולדת הישרה] רא; פ הוא תולדתו הישרה; מ התולדת הישרה; ק תולדתו ישרה; ט זאת התולדת ישרה. ²⁹הוא] פראקמ; ט הם. ³⁰בתולדתו] פראטמ; ק תולדתו. ³¹ומן השנים ... משבתאי] פראקמ; ט חסר. ³²ההריגה] פראקמ; ט הרג. ³³המריבות] ראקטמ; פ מריבה. ³⁴המלחמה] ראק; פטמ המלחמות. ³⁵מהגבול] פראמ; ט הגבול; ק מהגבולים. ³⁶כאשר הוא] פראקמ; ט כמו שהוא. ³⁷ראייה] רפאקטמ; א < לדבריו.

are as the number of Saturn's terms in the signs; the reason for the least years is that after thirty years it returns approximately to its first degree [i.e., it completes its cycle], and the reason for the middle years is that they took half of the great <years> and added them to the half of the least <years>. The years of the part that is called the *fardâr* were mentioned by the Persian scientists without any proof.^[10] (12) The reason that the power of its body covers nine degrees is the size of its body, since it is almost of the size of Jupiter; and except for the Sun no planet is bigger than they are. This is why they said that the light of the Sun extends fifteen degrees before it and also after it, and <the light> of the Moon twelve <degrees>, because its light is less the Sun's. None of the stars gives as much light as the Moon, except for the Sun. They also said that the light of Jupiter is nine degrees, like Saturn's. Because the body of Mars is smaller than theirs <and> it is closer to the Earth, they subtracted one degree and said that its light is eight degrees; and Venus and Mercury are seven degrees. This was the opinion of the Ancients, and they successfully verified it by experience.^[11]

3 (1) Jupiter.^[1] I have already mentioned the reason for its nature.^[2] Because it is a benefic planet, it indicates an increase in any goodness and procreation. (2) They assigned the second climate to it, inasmuch as it is the second [counting] from Saturn; and of the nations the Persians, because their sign is Pisces, and <also> the Babylonians, because its house of exaltation in the place of its term governs them. (3) They assigned all pristine places and houses of prayer to it, as I have explained regarding its nature;^[3] and of garments the handsome, because of its cleanness. (4) The appearance of the body is white with red, because this is the temperate nature. The left ear is in its portion, <as> I have already mentioned in Saturn's chapter.^[4] The blood <is in its portion>, because it is of its nature. (5) Of the years, those between youth and old age, because it is underneath Saturn; and of the edges <of the horizon> the northern, because it generates the northerly winds.^[5] The reason for its greatest years is the same as the reason I mentioned for Saturn.^[6]

4 (1) Mars.^[1] I have already mentioned the reason for its nature.^[2] Because of its great heat it indicates slaughter, quarrels, war, and anger. (2) The third climate is of its portion, inasmuch as it is the third [counting] from Saturn. The inhabitants of England are of its portion; this is Enoch's opinion, but he did not bring any proof. (3) There is no

צורך להזכיר טעם הברול האדום והגפרית וכל כלי נשק. (4) ומרמש האדמה כל מזיק כי כן תולדתו, ואל בקס¹ בעבור² שהוא אדום, וככה הפלפל והחרדל בעבור³ שהם חמים ויבשים, והגניבה כי היא מעשה לסטים. (5) וכבר הזכרנו טעם למה יורה על האחים ולמה הנחיר הימין שלו. ובחלקו האבר כי הוא בעל בית עקרב שיורה עליו. (6) ומשנות האדם ימי⁴ הבחרות בעבור שהוא שלישי לשבתאי, ומן הפאות המערבית כי תישר⁵ תולדתו, כי היא קרה ולחה, וטעם הימים ושנותיו כמו שבתאי.

5 (I) השמש. אמר אבו מעשר: אין⁶ כוכב מזיק כמו השמש בהתחבר כוכב עמה כי לא ישאר לו כח⁷ עמה⁸, ולא יוכלו לעשות ככה שאר המזיקים; והיא טובה מאד, יותר מצדק ונגה, במבט שלישית וששית, וללבנה לבדה בכל מבט. (2) ובחלקה⁹ הנפש המרגשת – זה ידוע¹⁰ בספר הנפש לאריסטוטליס. (3) ובחלקה הגבול הרביעי כאשר גלגלה¹¹ רביעי לשבתאי. ובחלקה מהגויים אדום בעבור היות מזלם¹² אריה, שהוא ביתה¹³. ומן בני אדם¹⁴ המלכים בעבור שאין בריאה בעולם גדולה וטובה ממנה. על כן, בחלקה הזהב והאבנים היקרות וכל מה שדומה¹⁵ לזהב. (4) ומן החיים האדם כי נשמת האדם¹⁶ תלויה בכחה, והסוסים בעבור שיש לה שלישות במזל קשת, ששם צורת הסוס, והאריות בעבור ביתה, והכבשים הגדולים בעבור שמזל טלה בית כבודה. (5) ויש | לה הדעת והבינה בעבור כח הנשמה. ותורה¹⁷ על התורות והחוקים כדרך צדק, ועל האבות בעבור כי¹⁷ הוא עקר כל הגופות, והאחים האמצעיים שהם גדולים מן הילוד שהם דומים לאב. (6) ובחלקה הלב¹⁸ כי שם הרוח, והעין הימנית ביום כי היא עקר האור, ומוח הראש ששם הנשמה, וחצי כל הגוף הימני כי חלקו הגוף על שני המאורות ונתנו בחלקה¹⁹ התקיף. (7) ומהפאות מזרח כי שם יחל כחה²⁰. וטעם יום ראשון הזכרתיו. וטעם²¹ שנותיה העצומות כי במספר הזה תתחבר²² עם הלבנה בלא תוספת חלק ובלא מגרעת על דעת חכמי הודו, וטעם שנותיה הגדולות כי אלה שנות²³ חיי התולדת, וטעם הקטנות כי

¹בקס] רט; פא באקס; קמ בקאס. ²בעבור] רפטמ; אק חסר. ³שהוא אדום ... בעבור] פראטמ; ק ויתר האלות. ⁴ימי] פראטמ; ק חסר. ⁵תישר] רפ; אמ תישר; ק שם יתישר. ⁶אין] רטמ; פאק > כי. ⁷כי לא ישאר לו כח] פאקמ; ט חסר. ⁸עמה] פאמ; ק השמש; ט חסר. ⁹ובחלקה] פראטמ; ק ובחלקו. ¹⁰זה ידוע] פאטמק; ר והידוע. ¹¹גלגלה] רטמ; פאק הוא גלגל. ¹²בעבור היות מזלם] פראטמ; ק לפי שמזלם. ¹³ביתה] פראטמ; ק ביתו. ¹⁴אדם] פאטמק; ר חסר. ¹⁵מה שדומה] ט; פראמ מי שדומה; ק הדומה. ¹⁶כי נשמת האדם] רפקטמ; א חסר. ¹⁷כי] פאטמק; ר חסר. ¹⁸הלב] פראטמ; ק מהלב. ¹⁹בחלקה] פראטמ; ק בחלק שמש. ²⁰כחה] ראקטמ; פ כסה. ²¹וטעם] פראטמ; ק חסר. ²²תתחבר] ראקטמ; פ התחבר. ²³אלה שנות] ראקמ; ט אלה שני; פ שם.

need to mention the reason ⟨why it is associated with⟩ copper, sulfur, and all weapons. (4) All noxious creeping things on Earth ⟨belong to it⟩ because that is its nature, and *al-baks* because it is red, and so too pepper and mustard because they are hot and dry, and theft because it is the work of bandits.^[3] (5) We have already mentioned the reason why it indicates brothers and ⟨why⟩ the right nostril belongs to it.^[4] The penis is in its portion, because Mars is the lord of the house of Scorpio, which indicates it. (6) Of human years, youth ⟨is in its portion⟩, because Mars is the third [counting] from Saturn. Of the edges ⟨of the horizon⟩ the western, because it tempers its nature, which is cold and moist.^[5] The reason for the days and its years is the same as for Saturn.^[6]

5 (1) The Sun. Abû Ma'shar said: No planet is as malefic as the Sun when it conjoins a planet, because it [i.e., the other planet] is left devoid of power;^[1] but the other malefic ⟨planets⟩ cannot do that. It is very benefic, more than Jupiter and Venus, in trine and sextile, and to the Moon, only, in any aspect. (2) The sensitive soul is in its portion—as is made known in Aristotle's *Book on the Soul*.^[2] (3) The fourth climate is in its portion, inasmuch as its orb is the fourth [counting from] Saturn. Of the nations, 'Edom^[3] is in its portion, because their sign is Leo, which is its house. Of human beings kings, because no created object in the world is greater or more beneficial than it is. For this reason, gold and gemstones are in its portion, and anything resembling gold. (4) Of living things, human beings, because their soul depends on its power; horses, because it has the triplicity in the sign of Sagittarius, where there is the shape of a horse; and lions because of its house; and sheep because Aries is the house of its exaltation. (5) It has wisdom and understanding because of the power of the soul. It indicates ordinances and laws, like Jupiter; ⟨it indicates⟩ fathers, because it is the essence of all bodies, and the middle brothers who are older than the native and are similar to the father. (6) The heart is in its portion, because the spirit is there, and the right eye by day, because it is the principle of light, and the brain, where the soul is, and the entire right half of the body, because they divided the body between the luminaries and the stronger ⟨side⟩ was assigned to it [i.e., to the Sun].^[4] (7) Of the edges ⟨of the horizon⟩ the east, because its power begins there. I have already mentioned the reason for Sunday.^[5] The reason for its greatest years, according to the opinion of the Indian scientists, is that in this number ⟨of years⟩ it conjoins with the Moon, without any added or subtracted part; the reason for the great years is that these are the years of natural life; the

בכל תשע עשרה תתחבר הלבנה עם השמש ולא יהיה ביניהם רק חלקים מעטים לדעת חכמי הודו, וטעם האמצעיות שלקחו רביעית¹ הגדולות וחברו אותה אל חצי הקטנות. ככה אמרו וככה נסו. וכח גופה הזכרתיו.

6 (I) נגה. כבר הזכרתי תולדתו. וניסו כי הוא יורה² על הנפש המתאווה. (2) ובחלקו הגבול החמישי כי ככה גלגלו כנגד גלגל שבתאי³, ומהגויים מי שהוא על תורת ישמעאל בעבור היות מולם⁴ עקרב בגבול נגה, והיה שם בהתחברות⁵ שבתאי⁶ עם צדק. (3) ובעבור שירה על התאווה שמו בחלקו⁷ מקום הנשים, והוא יורה על תואר ויופי, והצפרדעים בעבור שהם צבועים⁸, ובעבור התאווה יורה על כל מאכל ומשקה, ועל האם בעבור היותו נקבה כי תולדתו קר ולח, וזה טעם הבנות והאחות הקטנה, כי הגדולה בחלק הלבנה⁹, שגופה גדול מגוף נגה. (4) ומשנות האדם הבחרות, כי היא במעלה השלישית כנגד הארץ, והימים והשעות הזכרתיים גם¹⁰ כח גופו, ושנותיו העצומות כי אז ישוב אל¹¹ מקומו בלא¹² תוספת חלק¹³ ובלא מגרעת על דעת חכמי הודו, והגדולות והאמצעיות והקטנות כדרך שבתאי.

7 (I) כוכב חמה. אמרו כל הקדמונים כי הלבנה תורה¹⁴ על גוף האדם והתולדת; על כן, אם היתה במולד אדם¹⁵ עם אחד¹⁶ המזיקים, יהיה לו חולי קבוע כפי המקום שיתחברו בו. (2) ובעבור שכוכב חמה למעלה ממנה, על כן יורה על הדעת ועל הדבור והנשמה. (3) ויאמר אריסטוטליס כי כל משרת שהוא קרוב אל הארץ יותר יורה על עניני האדם מהרחוק; על כן, אמר כי אין כח בארץ למי שהוא למעלה מהשמש; והנה ראינו כל הקדמונים כי ממחברת¹⁷ העליונים ידונו על הכללים, כי יותר יורו¹⁸ עליהם ממה שיוורו על הפרטים. (4) ובחלקו הגבול הששי כי ככה גלגלו כנגד גלגל שבתאי¹⁹, ובחלקו כל עוף קל בעבור שהוא כוכב קטן²⁰. ואין צורך

¹רביעית] ראטמ; ק רובע; פ רביעית הגלגל. ²וניסו כי הוא יורה] רפטמ; ק וניסו שירה; א וכחו כי הוא יורה. ³ככה גלגלו כנגד גלגל שבתאי] פראטמ; ק גלגלו חמישי לשבתאי. ⁴בעבור היות מולם] פראטמ; ק לפי שמולם. ⁵בהתחברות] פראמ; ט בעת המחברת; ק בהתחבר. ⁶שבתאי] פראקמ; ט משבתי. ⁷בחלקו] פראטמ; ק לחלקו. ⁸צבועים] ראקטמ; פ צבועות. ⁹הלבנה] פראקט; מ הגדולה. ¹⁰גם] פראטמ; ק עם. ¹¹אל] פראטמ; ק על. ¹²בלא] פראמ; קט בלי. ¹³חלק] פראקמ; ט חסר. ¹⁴תורה] פראקמ; ט תהיה מורה. ¹⁵אדם] פאטמק; ר אחד. ¹⁶אחד] פראטמ; ק חסר. ¹⁷ממחברת] ראקטמ; פ מחברת. ¹⁸יורו] ראקטמ; פ חסר. ¹⁹ובחלקו הגבול ... שבתאי] ראקטמ; פ חסר. ²⁰קטן] ראקטמ; פ חסר.

reason for the least ⟨years⟩, in the opinion of the Indian scientists, is that the Sun conjoins the Moon every nineteen ⟨years⟩, with only a few parts ⟨of a degree⟩ between them; the reason for the middle ⟨years⟩ is that they took a quarter of the great ⟨years⟩ and added it to a half of the least ⟨years⟩. This is what they said and this is what they verified by experience. I have already explained the power of its body.^{[6][7]}

6 (1) Venus. I have already explained its nature.^[1] They found through experience that it indicates the appetitive soul. (2) The fifth climate is in its portion, because that is the relationship of its orb to Saturn's orb; of the nations, those who ⟨follow⟩ the Muslim law, because their sign is Scorpio in the term of Venus, and it [i.e., Venus] was there when the conjunction of Saturn and Jupiter took place.^[2] (3) Since it indicates lust they assigned the gynaeceum to it; it indicates shapeliness and beauty. ⟨It indicates⟩ frogs, because they are highly colored. Because of desire it indicates any food and drink. ⟨It indicates⟩ the mother, because it is feminine, inasmuch as its nature is cold and moist; this is ⟨also⟩ the reason ⟨it indicates⟩ daughters and the younger sister; but the elder ⟨sister⟩ is in the portion of the Moon, whose body is bigger than Venus' body. (4) Of the years of man, ⟨it indicates⟩ youth, because it is in the third level ⟨above⟩ the Earth. I have already mentioned the days and the hours as well as the power of its body.^[3] According to the opinion of the Indian scientists ⟨the explanation for⟩ its greatest years ⟨is⟩ that then it will return to its place without any addition or subtraction; ⟨the explanation for⟩ the great and middle and least ⟨years⟩ is the same as for Saturn.^[4]

7 (1) Mercury. All the Ancients said that the Moon indicates the human body and nature; hence if it is together with one of the malefics in a man's nativity he will suffer from a chronic disease, according to the place where they conjoin. (2) Because Mercury is above it [i.e., the Moon], it indicates wisdom, speech, and the ⟨rational⟩ soul. (3) Aristotle said that any planet that is close to the Earth is more indicative of human affairs than a ⟨planet that is⟩ distant; so he said that no power is exerted on Earth by ⟨any planet⟩ that is above the Sun;^[1] but we have seen that all the Ancients pronounced judgments about general affairs on the basis of the conjunction of the upper ⟨planets⟩, because they indicate more about general than about private affairs.^[2] (4) The sixth climate is in its portion, because that is the relationship of its orb to Saturn's orb; every light bird is in its portion, because it is a small

להזכיר הניחוש ושאר הדברים, כי הכל חכמות¹. ויורה על האחים הקטנים בעבור שאין בגלגל כוכב קטן ממנו. (5) ומשנות האדם הילדות כי הוא קרוב אל הארץ. וטעמו חמוץ כי הוא קר ויבש על הרוב. (6) ודרך הימים כבר² הזכרתיו, וטעם שנותיו כדרך שבתאי, וכח גופו הזכרתיו.

8 (1) הלבנה³. כבר הזכרתי⁴ טעם תולדתה. והיא תבלה⁵ כל⁶ הגופות בעבור רוב לחותה⁷. (2) ובחלקה הגבול השביעי כי ככה גלגלה לגלגל שבתאי, ומן הארצות⁸ אל צאביה בעבור היות מזלם סרטן שהוא ביתה. (3) ומבני אדם המלחים בעבור שהיא תורה על הים⁹, שהיא קרה ולחה, והולכי דרכים בעבור מהירות מהלכה, וככה השלוחים והמשרתים בעבור היותה¹⁰ למטה מהמשרתים, והכסף והבדולח והסיד בעבור הלובן שבהם. (4) ובחלקה החמורים כי הם למטה מכל מרכבת האדם, והקישואים ואבטיחים בעבור לחותם¹¹, כי¹² יגדלו כשיוסיף אורה¹³, והפך הדבר כשיחסר אורה¹⁴. (5) ובחלקה מתולדת האדם רוב¹⁵ המחשבות וחסרון הדעת בעבור חוסר¹⁶ אורה וככה רוב השכחה, ודעת ההגדות כי היא¹⁷ חכמה קרובה. (6) וטעם שהיא נוטה עם¹⁸ כל¹⁹ תולדת, בעבור היותה שפלה ותתן כחה לכל המשרתים, ועל שנות הגמול כי היא ברקיע הראשון כנגד הארץ. כבר | הזכרתי²⁰ טעם האם^{35א} והאחיות²¹. (7) ובחלקה הריאה בעבור כי לשמש²² הלב. ומהפאות ימין מערב כי משם²³ יחל אורה להוסיף. והימים והשעות כשאר הכוכבים. (8) ולא ידעתי טעם לשנותיו העצומות גם לגדולות, רק שאמר אבו מעשר בעבור ששנות החמה הגדולות הן מאה ועשרים והלבנה לא תראה עד היות מרחקה מהשמש שנים עשרה מעלות, על כן חסרו משנות התולדת והיו שניה²⁴ מאה ושמונה שנה. וטעם שנותיה הקטנות לא ישר בעיני, על כן לא הזכרתי, וטעם האמצעיות כדרך שנות השמש האמצעיות. וכבר הזכרתי כח גופה.

¹ חכמות] ראקטמ; פ חסר. ² כבר] פראקמ; ט חסר. ³ הלבנה] פראטמ; ק ירח. ⁴ הזכרתי] פראטמ; ק זכרתי. ⁵ והיא תבלה] ראמ; ק והוא יבלה; ט היא תכלה. ⁶ כל] פאטמק; ר אל. ⁷ בעבור רוב לחותה] פראמ; ט בעבור לחותה הרבה; ק בעד לחותו הרב. ⁸ הארצות] טקמ; פ הגוים; רא חסר. ⁹ על הים] פאטמק; ר עליהם. ¹⁰ היותה] פראקמ; ט שהיא. ¹¹ לחותם] פקטמ; רא ליחתם. ¹² כי] פראמ; ט ועוד ש; ק > ועוד. ¹³ כשיוסיף אורה] פראטמ; ק כשיגדל גופו. ¹⁴ והפך הדבר כשיחסר אורה] פראמ; ק ויחסרו כשיחסר גופו; ט ויחסרו כשיחסר אורה. ¹⁵ רוב] פראקמ; ט רובו. ¹⁶ חוסר] פראקמ; ט חסרון. ¹⁷ היא] אקטמ; רפ חסר. ¹⁸ עם] פראק; טמ על. ¹⁹ כל] פראטמ; ק חסר. ²⁰ הזכרתי] פאטמק; ר חסר. ²¹ והאחיות] פאקמ; ט והאחות. ²² כי לשמש] פראמ; ט השמש; ק כי הוא לשמש. ²³ משם] פראקמ; ט שם. ²⁴ שניה] ראמ; פ שנותיה; ט שניו; ק חסר.

planet. There is no need to mention divination and the other matters, because all of them are sciences. It indicates younger brothers because there is no planet smaller than it in the heavens. (5) Of the years of man, childhood ⟨belongs to it⟩, because it is close to Earth. Its taste is sour, because it is cold and dry more often than not.^[3] (6) I have already mentioned the rule of the days; the explanation for its years is the same as for Saturn. I have already mentioned the power of its body.^{[4][5]}

8 (1) The Moon. I have already mentioned the reason for its nature.^[1] It causes all bodies to decompose on account of its great moisture. (2) The seventh climate is in its portion, because that is the relationship of its orb to Saturn's orb; of countries, al-Ṣābiya ⟨is in its portion⟩, because their sign is Cancer, which is its house. (3) Of human beings, sailors ⟨are in its portion⟩, because it indicates the sea, which is cold and moist; and wayfarers, because of its rapid motion; and similarly messengers and servants, because it is below the planets;^[2] and silver and crystal and lime, because of their whiteness. (4) Donkeys are in its portion, because they are the least of the animals men ride on; and squash and melons on account of their moisture; they grow when its light waxes, and the opposite when its light wanes. (5) Of human nature, excessive thinking and dementia are in its portion, because it is deficient in light, and similarly extreme forgetfulness; and the comprehension of homiletics, because that is a familiar wisdom.^[3] (6) The reason for its capacity to be assimilated into any nature is that it is the lowest ⟨planet⟩ and gives its power to all the planets. ⟨It indicates⟩ infancy, because it is in the first heaven above the Earth.^[4] I have already mentioned the reason ⟨it indicates⟩ the mother and sisters.^[5] (7) The lung is in its portion, because the heart belongs to the Sun. Of the edges ⟨of the horizon⟩, the southwest ⟨is in its portion⟩, because that is where its light begins to wax.^[6] ⟨The explanation for⟩ the days and hours is the same as for the other planets. (8) I do not know the explanation of its greatest and great years, other than what Abū Ma'shar said: that the great years of the Sun are 120 and the Moon cannot be seen until it is 12 degrees away from the Sun, so they subtracted them from the natural years and its years are 108.^[7] I am not satisfied with the explanation of its least years, so I will not mention it. The explanation of its middle ⟨years⟩ is the same as ⟨that⟩ of the Sun's middle years. I have already explained the power of its body.^{[8][9]}

9 (I) מקומות שמחת השבעה¹: כוכב חמה² בבית ראשון כי שניהם יורו על הנפש; הלבנה בשלישי כי שניהם יורו על דרכים קרובים והדתיים; גה בחמישי כי שניהם יורו על התענוגים; מאדים בששי כי שניהם יורו על תחלואים; השמש בתשיעי כי שניהם יורו על דרכים רחוקים והאמונות; צדק בבית י"א כי שניהם יורו על מזל טוב וכן וכבוד; ושבטאי בבית שנים העשר כי שניהם יורו על חרפה ומריבות ובית הסוהר³.

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1 (I) השער החמישי. כל הנזכר בטובת המשרתים ורעתם אין צורך⁴ לבקש טעם עליהם⁵, כי הם ידועים. (2) וטעם היות כח שבתאי בדלי יותר מגדי, והיה ראוי להיות הדבר⁶ הפוך בעבור כי גדי כתולדתו, רק בעבור היות⁷ שבתאי קר ויבש ומזל⁸ דלי חם ולח, הנה תתישר שם תולדתו ויורה על טוב. (3) וככה טעם בית⁹ עקרב למאדים, כי תולדתו חמה ויבשה, והנה אם היה¹⁰ בביתו הראשון, שהוא טלה והוא חם ויבש, יוסיף מכאוב על מכאוב, ובמזל¹¹ עקרב תתישר¹² תולדתו. (4) ועוד, כי שבתאי בדלי יותר נאה לו, כי הוא זכר כמוהו, וככה עקרב למאדים כי¹³ הוא נקבה. (5) וזה טעם כח גה במזל שור, וטעם כוכב חמה בבתולה בעבור שהוא בית כבודו.

2 (I) וטעם כח הכוכב בהיותו עולה בפאת שמאלית¹⁴ בעבור שהישוב בפאת שמאל, ובהיות הכוכב בפאת שמאל או יחוק¹⁵ ניצוץ אורו ויהיה לו כח גדול בארץ. (2) והפך הדבר כשהוא דרום, וזה הדבר יתברר מהשמש¹⁶ בהיותה בפאת שמאל¹⁷ ודרום. (3) וטעם היות הכוכב עולה בגלגל הגבהות¹⁸ שמוצקו רחוק ממוצק הארץ, הנה יש מחלוקת בין חכמי הודו ובין בטלמיס, כי¹⁹ חכמי הודו אומרים כי בהיות הכוכב במקום הגבהות דומה לאדם רוכב על סוסו, ובהיותו במקום השפל דומה לעבד

¹השבעה; ר; א < כוכבים. ²כוכב חמה; א; פ חסר. ³מקומות שמחת השבעה: ... חרפה ומריבות ובית הסוהר; רא, כך גם בהוצאת י"ל פליישר, לפי כ"י וואטיקאן 390; פ הקטע הזה נמצא בשער החמישי; טקמ חסר. ⁴צורך; פאקט; רמ צריך. ⁵עליהם; פאקט; ט אליהם. ⁶הדבר; פראטמ; ק חסר. ⁷כי גדי ... היות; פראקט; מ חסר. ⁸ימזל; פראטמ; ק חסר. ⁹בית; פראקט; ט חסר. ¹⁰והנה אם היה; פראטמ; ק וכשהיה. ¹¹ובמזל; פראטמ; ק ובבית. ¹²תתישר; פראטמ; ק יתישר. ¹³כי; פראקט; מ חסר. ¹⁴שמאלית; פרקמ; ט השמאלית; א שמאל. ¹⁵יחוק; פראקט; מ יתחוק. ¹⁶מהשמש; ראקט; פמ חסר. ¹⁷בפאת שמאל; פראטמ; ק בצפון. ¹⁸הגבהות; פראטמ; ק הגבה. ¹⁹כי; פראטמ; ק חסר.

9 (1) The places of joy of the seven ⟨planets⟩. Mercury in the first ⟨mundane⟩ house, because both indicate the soul; the Moon in the third, because both indicate short journeys and religions; Venus in the fifth, because both indicate pleasures; Mars in the sixths, because both indicate diseases; the Sun in the ninth, because both indicate long journeys and beliefs; Jupiter in the eleventh house, because both indicate good fortune and beauty and honor; and Saturn in the twelfth house, because both indicate shame and quarrels and prison.^[1]

§5

1 (1) Fifth chapter. There is no need to explain everything mentioned ⟨in *Reshit Hokhmah*⟩ about the beneficence and maleficence of the planets, because it is known.^[1] (2) The reason that Saturn has more power in Aquarius than in Capricorn, even though the contrary ought to be true, inasmuch as Capricorn is of the same nature ⟨as Saturn⟩, is simply that Saturn is cold and dry and Aquarius is hot and moist, so that its [i.e. Saturn's] nature is tempered in this place [i.e. in Aquarius] and indicates good fortune. (3) The same explanation applies to the sign of Scorpio and Mars [i.e. why Mars has more power in Scorpio than in Aries]. Its [i.e., Mars'] nature is hot and dry, so that if it were in its first house, Aries, which is ⟨also⟩ hot and dry, pain would be added to pain; but in the sign of Scorpio it is tempered. (4) In addition, it suits Saturn better to be in Aquarius, because it is masculine like the latter; and this also applies to Scorpio and Mars, because it [Scorpio] is feminine. (5) This is also the explanation for the power of Venus in Taurus; and the explanation for ⟨the power of⟩ Mercury in Virgo is that that is its house of exaltation.^[2]

2 (1) The explanation for the power of a planet when it rises in the north is that the ecumene is in the north [with respect to the equator], and when a planet is in the north its rays are stronger and it has great power on Earth. (2) The opposite happens when it is southern; this can be seen when the Sun is in the northern and in the southern cardinal point. (3) As for the explanation of ⟨the power of⟩ a planet when it rises in the circle of the apogee whose center is far from the center^[1] of the Earth,^[2] there is indeed a disagreement between the Indian scientists and Ptolemy: the Indian scientists say that when the planet is at apogee it resembles a man riding his horse^[3] and that when it is at

ההולך על הארץ. (4) ובטלמיוס אומר כי בהיות הכוכב קרוב מהארץ או יהיה¹ לו כח גדול, והפך הדבר² אם היה במקום גבהותו. (5) ולפי דעתי שדברי כולם נכונים³, כי בהיות הכוכב רחוק מהארץ או יקבל כח רב מהעליונים. (6) והנה אם היה הכוכב ממונה על דבר⁴ הנפש, שהוא דבר עליון, אז יהיה לנולד חכמה יתירה בכל ענין, ואם היה⁵ ממונה על דבר הגוף, אז תהיה קומתו דקה וקצרה ולא יהיה לו כח כהוגן. (7) ואם הכוכב יהיה⁶ במקום שפלותו⁷ והוא ממונה על הנפש, אז יורה כי הנולד יהיה כסיל ובער, ואם הוא ממונה על הגוף יורה שיהיה לו גוף⁸ גדול וחזק. וזה הדבר נסיתיו הרבה⁹ פעמים. (8) וטעם שיש לכוכב כח בהיותו במעמדו השני, בעבור כי משם יחל להיות ישר בהליכתו. (9) ואין צורך להזכיר כח הכוכבים הזכרים במזלות הזכרים¹⁰ בעבור שהם דומים להם, חוץ ממאזנים לשמש כי הוא בית קלונג.

3 (I) וזה שאמריו¹¹, כי מרעת הכוכב להיותו עם ראש התלי או זנבו, זאת דעת אנשי הודו¹². (2) והאמת כי עם הזנב הוא רע, רק עם הראש איננו כי אם טוב. (3) ומה שאמרו עם ראש התלי של לבנה או זנבו, לא דברו נכונה¹³, וככה דעת בטלמיוס¹⁴, כי מה יזיק¹⁵ מחברת גלגל הדומה למזלות¹⁶ של הלבנה עם הדומה לגלגל המזלות¹⁷ | של הכוכב לכוכב¹⁸; אלה דברי רוח¹⁹. (4) וככה, ראש התלי של³⁵ לבנה לא יזיקנה רק אם היתה נקדרת. (5) ומה שאמר חכם הודו, כי הראש טוב עם²⁰ הטובים, הוא נכון. ושאר הדברים הם ידועים ואינם צריכים טעם.

6§

I (I) השער השישי. זה שהזכירו שאור הכוכב יוסיף בעוצם²¹ גופו הוא כנגד מראה²² העין, כי בהיותו קרוב אל הארץ יראה יותר גדול מאשר יראה²³ ברחקו ממנה, וזה

¹יהיה] פראטמ; ק יש. ²והפך הדבר] פראטמ; ק וההפך. ³נכונים] פראטמ; ט נכונים. ⁴דבר] פראטמ; ט דברי. ⁵יהיה] פראטמ; מ יהיה. ⁶ואם הכוכב יהיה] פראטמ; ק וכשהכוכב. ⁷במקום שפלותו] טמ; פרא מקום שפלותו; ק במקום שפלו. ⁸לו גוף] ראטמ; פ הגוף שלו. ⁹הרבה] פ טאקמ; ר חסר. ¹⁰במזלות הזכרים] רפקטמ; א חסר. ¹¹וזה שאמרו] פראטמ; ק אמרו חכמי הודו. ¹²זאת דעת אנשי הודו] פראטמ; ק חסר. ¹³לא דברו נכונה] פראטמ; ק אינו אמת. ¹⁴וככה דעת בטלמיוס] פראטמ; ק חסר. ¹⁵יזיק] פראטמ; ט שיוזיק. ¹⁶גלגל הדומה למזלות] פראטמ. טק הדומה לגלגל המזלות. ¹⁷הדומה לגלגל המזלות] פראטמ; טק גלגל הדומה לגלגל המזלות. ¹⁸הכוכב לכוכב] פראטמ; מ הכוכב אל כוכב; טק הכוכב. ¹⁹אלה דברי רוח] פראטמ; ק וכן אמר בטלמיוס. ²⁰עם] ראטמ; פ חסר. ²¹בעוצם] טמק; ראפ ועוצם. ²²כנגד מראה] פראטמ; קט למראה. ²³יראה] פראטמ; ק חסר.

perigee it resembles a slave walking on the ground. (4) But Ptolemy says that when the planet is close to the Earth it has great power and the opposite when it is at apogee.^[4] (5) But my opinion is that all of them are right, because when a planet is far from the Earth it receives great power from the upper ⟨stars⟩. (6) So if a planet ⟨that is at apogee⟩ is in charge of the soul, which is something superior,^[5] the native will be exceedingly wise in any undertaking; and if it is in charge of the body he will be lean and short and not as strong as he should be. (7) But if a planet that is at perigee is in charge of the soul, it indicates that the native will be a fool and ignoramus; and if it is in charge of the body it indicates that he will have a large and powerful body. I have verified this by experience many times. (8) The reason that a planet has great power when it is in its second station is that this is where its motion begins to be direct. (9) There is no need to mention the power of the masculine planets in the masculine signs, because the former are similar to the latter, with the exception of Libra and the Sun, because it [Libra] is its [the Sun's] house of dejection.^[6]

3 (1) As for what they said, namely, that a planet is afflicted when it is with the Head of the Dragon or with its Tail, this is the opinion of the Indians. (2) But the truth is that ⟨when it is⟩ with the Tail it is malefic, but when it is with the Head it is only benefic. (3) As for what they said about ⟨a planet's⟩ being with the Head of the Dragon of the Moon or its Tail, they were wrong (that is also Ptolemy's opinion), for how could the intersection of the Moon's parecliptic with the parecliptic of a planet afflict the planet? That is nonsense. (4) In like manner, the Head of the Dragon of the Moon is not detrimental to it [i.e. to the Moon] unless it is in eclipse. (5) As for what one Indian scientist said, namely, that the Head is benefic with the benefics, this is correct. The rest of the things ⟨mentioned in *Reshit Hokhmah*⟩ are well known and do not require an explanation.^[1]

§6

1 (1) Sixth chapter.^[1] What they have mentioned, namely, that the light of a planet increases the size of its body, refers to what is visible to the eye: when it is closer to the Earth it appears larger than when it is far

הדבר יוכל לדעתו האדם¹ מפאת גלגל הגבהות שמוצקו רחוק ממוצק הארץ.
(2) ושאר הדברים הנזכרים ידועים.

2 (I) וטעם היות הדבק פחות משה עשר חלקים, בעבור היות² זה המספר קרוב מחצי אלכסון השמש, כי בהיות הכוכב דבק³ חלק בחלק עם השמש, תהיה הנקודה האמצעית של כוכב⁴ דביקה עם הנקודה האמצעית של⁵ השמש. (2) וזה לא יקרה לאחד⁶ מהכוכבים העליונים עד היותו במקום גבהות גלגלו הקטן⁷, אז יהיה רחוק מהארץ, ואם היה במקום גבהותו כנגד הגלגל הגדול, אז יהיה במרחק הרחוק מהארץ. (3) ומה שאמרנו, שיש כח לכוכב בהיותו דבק, היא⁸ דעת חכמי הודו, ובטלמיוס לועג עליהם. (4) רק ראיתי בספר דורוניוס⁹, שהוא ראש לבעלי הדינין, כי נסה דברי הודו, וככה אמר בספרו: אם היה כוכב חמה דבק עם השמש, אז יהיו¹⁰ בגלגל שני כוכבי חמה, והטעם שיכפל¹¹ כחו, וככה שאר המשרתים. (5) וטעם צאת שבתאי וצדק מגבול השריפה בשש מעלות בעבור גודל גופם¹², ואין גוף מאדים כמוהם; על כן נתנו למאדים עשר מעלות, ושאר הדברים ידועים.

3 (I) והשתנו הדינים בשפלים מהשמש מהעליונים ממנה. (2) כי העליונים כחם במזרח והשפלים במערב, בעבור¹³ כי השמש מהירה בהליכתה¹⁴ יותר¹⁵ מהעליונים, וכאשר תתחבר עמהם תניחם ויעלו הם מזרחיים ממנה¹⁶, ואז יגדל כחם¹⁷ בעבור מהירות הליכתה¹⁸. (3) ובהדבק השפלים עם השמש, בעבור היותם מהירים בהליכתם יותר ממנה, על כן יניחוה ויראו מערביים ממנה¹⁹, ואז יגדל כחם כי אז יהיו מהירים בהליכתם. (4) ויקרה לנה ולכוכב חמה מקרה אחד²⁰ שלא יקרה²¹ כמוהו לשאר המשרתים, כי הם יהיו דבקים עם השמש והם ישרים בהליכתם, גם יהיו דבקים עמה²² והם שבים אחורנית. (5) והיה כן בעבור שלא ירחקו מהשמש רק מרחק ידוע, וזה המרחק הוא בעבור הגלגל הקטן, רק גלגליהם הגדולים הם שוים. (6) ומפתחות הלבנה אבארם בספר העולם.

¹ יוכל לדעתו האדם] פאט; רמ נח; ק נוכל לדעת. ² היות] פראטמ; ק חסר. ³ דבק] ראקט; פמ חסר. ⁴ כוכב] ראפ; טקמ הכוכב. ⁵ של] רא; טק מן; פמ אל. ⁶ לאחד] ראקט; פמ חסר. ⁷ גלגלו הקטן] פראקט; מ הגלגל. ⁸ היא] פראקמ; ט עם. ⁹ דורוניאוס] פראק; ט דוריינוס. ¹⁰ יהיו] פראקמ; ט יש. ¹¹ שיכפל] פראקט; מ שיוכפל. ¹² גופם] פראקט; מ גופה. ¹³ בעבור] ראטמ; ק לפי; פ חסר. ¹⁴ בהליכתה] פראקמ; ט במהלכה. ¹⁵ יותר] פאטמ; ק חסר. ¹⁶ ממנה] ראטמ; ק ממנו; פ מלמטה. ¹⁷ כחם] פראמ; ק כחו; ט כחה. ¹⁸ הליכתה] פאט; מ בהליכתה; ק מהלכו; ר הליכתם. ¹⁹ יראו מערביים ממנה] ראקטמ; פ שיעמדו למערבה ממנה. ²⁰ מקרה אחד] פראטמ; ק מה. ²¹ שלא יקרה] ראקטמ; פ שאין מקרה. ²² יהיו דבקים עמה] פראטמ; ק ידבקו עמו.

from it. A person can know this from the circle of the apogee whose center is far from the center of the Earth.^[2] (2) The rest of what was mentioned (in *Reshit Hokhmah*) is well known.

2 (1) The reason why a (planet in) conjunction is less than 16 minutes (away from the Sun) is that this number is close to half the diameter of the Sun; when a planet is in full conjunction with the Sun, the center of the planet coincides with the center of the Sun. (2) This occurs only when one of the upper planets is at the apogee of its epicycle, when it is far from the Earth; and if it is (also) at apogee with respect to its eccentric circle^[1] it is at its furthest distance from the Earth. (3) As for what they have said, namely, that a planet has power when it is in conjunction, this is the opinion of the Indian scientists, but Ptolemy laughs at them. (4) In the book by Doronius, the leading expert in (astrological) judgments, I have seen that he verified by experience the statements (of the scientists) of India, and this is what he said in his book: if Mercury is in conjunction with the Sun, there will be two Mercuries in the orb,^[2] because its power is doubled, and similarly with the other planets. (5) Saturn and Jupiter emerge from the domain of burning^[3] at six degrees because of the size of their bodies, but Mars' body is not as big as theirs; for this reason they assigned to Mars 10 degrees. The other things (mentioned in *Reshit Hokhmah*) are well known.^[4]

3 (1) The (astrological) judgments about the planets that are below the Sun differ from the (astrological) judgments about the planets that are above it. (2) For the power of the upper (planets) is in the east, whereas (the power of) the lower (planets) is in the west, because the Sun's motion is quicker than that of the upper (planets); when it is in conjunction with them and passes them they rise to its east, and then their power increases because of its rapid motion. (3) When the lower (planets) are in conjunction with the Sun, (then,) because they are quicker than it is, they pass it and are seen to its west; then their power increases because of their rapid motions. (4) The same thing happens to both Venus and Mercury, but not to the other planets; namely, that they can be in conjunction with the Sun when their motion is direct and can also be in conjunction with the Sun when they are retrograde. (5) This happens because they never get more than a certain distance from the Sun, and this distance is caused by the epicycle, although their eccentric circles are the same.^[1] (6) I shall explain the keys of the Moon in the *Book of the World*.^[2]

7§

1 (I) השער השביעי. הקירוב¹. חכמי המזלות אומרים תחלת הקירוב² חמש עשרה מעלות, ובטלמיוס אומר כי תחלת הקירוב כפי כח³ אור הכוכב לפניו או לאחריו, וזה הוא הנכון בעיני. (2) וזה שאמרו, שיסתיר הקל את הכבד, הוא אמת בהיות המחברת שוה באורך וברוחב, וכל⁴ אשר יורו עליו⁵ יהיה⁶ אמת. (3) וככה תעשה: תסתכל⁷ אם היו שני הכוכבים בחשב האפודה; זאת היא מחברת אמת⁸. (4) ואם רצית לדעת למי הכח מהנחברים⁹, הסתכל ההווה מהם קרוב ממקום גבהות גלגלו הגדול, הוא ינצח את חבירו. (5) וחשוב זה הניצוח שהוא¹⁰ כחשבון ארבע כחות¹¹, וההווה מהם במקום גבהות גלגלו הקטן ינצח את חבירו בשלשה כחות¹². (6) וההווה מהם בפאת שמאל מחבירו, בין שיהיה האחר¹³ באפודת הגלגל או שיהיה דרומי, והנה השמאלי יהיה המנצח, ואם שניהם שמאליים, ההווה מהם יותר שמאלי ינצח את האחר. (7) וטעם זה, כאשר הזכרתי, כי כל מה שיהיה הכוכב קרוב אל הישוב יראה לו יותר כח. (8) ואם שניהם דרומיים מי שיש¹⁴ רחבו יותר¹⁵ מעט ינצח את אשר רחבו¹⁶ הרבה¹⁷, ואם היה המרחב ביניהם הרבה לא יראה ממעשה מחברתם כי אם פחות מחצי. (9) וזה הניצוח בפאה יש לו שני כחות, ומי שיש לו יותר¹⁸ ממשלה במקום שיתחברו בו יש לו כח אחד. | וכאשר תחשב הכחות¹⁹, אז תדע מי הוא²⁰ המנצח²¹.

2 (I) ואם שני הכוכבים²¹ הם במבט נכח והם שניהם²² בחשב²³ האפודה, הנה המבט הוא²⁴ שלם כי יש ביניהם מאה ושנים מעלות שוות. (2) ואם רחב שניהם בפאה אחת שוה, בין שיהיו שמאליים או דרומיים, אין זה מבט נכח שלם, וטעם זה²⁵ כי יש ביניהם²⁶ חסרון²⁷ ממאה ושנים מעלות כפי מרחב שניהם. (3) ואם רחב האחד שמאלי והשני²⁸ דרומי ומרחב שניהם שוה, הנה זה מבט נכח שלם²⁹ כי כפי שירד זה עלה זה. (4) ואם אין המרחב שוה³⁰ לא יהיה מבט³¹ שלם, ויהיה החסרון כפי תוספת האחד על השני, ואם האחד בחשב האפודה והשני שמאלי³² או דרומי לא יהיה מבט

¹ הקירוב] פראטמ; ק חסר. ² תחלת הקרוב] פראקמ; ט הקירוב תחלתו. ³ כח] ראקטמ; פ חסר. ⁴ וכל] פראקמ; ט ובכל. ⁵ עליו] רטמ; פאק חסר. ⁶ יהיה] פראק; טמ היו. ⁷ תסתכל] פאקט; מ הסתכל. ⁸ זאת היא מחברת אמת] אקטמ; פ זאת המחברת היא אמת. ⁹ תסתכל אם ... מהנחברים] פאטמק; ר חסר. ¹⁰ שהוא] פראקמ; ט חסר. ¹¹ כחות] אקט; רפמ כוחים. ¹² כחות] אקט; רפמ כוחים. ¹³ האחר] פראקמ; ט האחד. ¹⁴ שיש] רפט; ט שיהיה; ק חסר. ¹⁵ יותר] פראטמ; ק חסר. ¹⁶ רחבו] פראקמ; ט חסר. ¹⁷ הרבה] פראמ; טק רב. ¹⁸ יותר] ראקטמ; פ חסר. ¹⁹ הכחות] א; רפמ הכחים; ט חסר. ²⁰ וכאשר תחשב ... המנצח] פאמר; ק חסר. ²¹ ואם שני הכוכבים] פראמ; ק וכאשר. ²² והם שניהם] פראמ; ק חסר. ²³ הכחות או תדע ... בחשב] פראמק; ט חסר. ²⁴ הוא] פראטמ; ק אז. ²⁵ וטעם זה] פראטמ; ק חסר. ²⁶ ביניהם] ראקטמ; פ חסר. ²⁷ חסרון] פראמ; קט פחות ²⁸ והשני] פראקמ; ט והאחר. ²⁹ שלם] ראקט; פמ שוה. ³⁰ שוה] פראטמ; ק בשוה. ³¹ מבט] פראטמ; ק חסר. ³² שמאלי] פאטמק; ר בפאת שמאל.

§7

1 (1) Seventh chapter.^[1] “Getting close”. The astrologers say that “getting close” begins at 15 degrees, but Ptolemy says that the beginning of “getting close” depends on the light of the planet that is in front of or behind it, and this is correct in my opinion. (2) As for what they said, namely, that the lighter [i.e., quicker] ⟨planet⟩ hides the heavier [i.e., slower] one, this is true when the conjunction is in both longitude and latitude; and everything that is indicated by them comes true. (3) Do as follows: observe whether the two planets are in the ecliptic^[2]; this is a true conjunction.^[3] (4) If you wish to know which of the conjoining ⟨planets⟩ has power, look for the one that is closer to the apogee of its eccentric circle;^[4] this one will be victorious over its companion. (5) Consider this victory as equivalent to four powers;^[5] the one that is at the apogee of its epicycle will be victorious over its companion by three powers. (6) If one of them is north of its companion, whether the latter is in the ecliptic or is southern, the northern will emerge victorious; if both of them are northern, the one that is more northern will be victorious over the other. (7) The reason for this, as I have already explained, is that the closer a planet is to the ecumene, the more power it appears to have.^[6] (8) But if both are southern, the one whose latitude is smaller will be victorious over the one whose latitude is greater; if the [difference in] latitude between them is great, less than half their conjunction will be seen. (9) The victory on account of the direction ⟨with respect to the ecliptic⟩ is assigned two powers. The one that exercises more lordship in the place where they are in conjunction has one power. (10) When you add up the powers you can know which of them is victorious.^[7]

2 (1) If the two planets are in opposition and both are in the ecliptic,^[1] then the aspect is complete because there are 180 equal degrees between them. (2) If their ⟨ecliptical⟩ latitude is the same, whether northern or southern [i.e., both are northern or southern], it is not full opposition, because there are less than 180 degrees of latitude between them. (3) If the latitude of one of them is northern and of the other is southern and their latitude is the same, this is full opposition, because one has descended as the other has ascended. (4) But if the latitude is not the same then the aspect [of opposition] is not full, and the deficit is equal to the excess of the one over the other; if one is in the ecliptic and the other is northern or southern, the aspect [of opposition] is not full

שלם, ויהיה החסרון מן המבט כפי המרחב. (5) ועוד אדבר בשער העשירי על המבטים.

3 (i) ומה שאמרו¹ על המעלות שהן שוות במצעדיהם אין צורך לבקש טעם על זה² כי הוא ידוע. (2) ואלה השמות, מהילוך בדד, ושומם, והעתקה, וקבוץ³, והשבת אור, ושאר הדברים, הם כנגד משל⁴, ועל הכל מודה בטלמיוס חוץ⁵ מהנועם והתגמול⁶, ואנכי לא ידעתי.

8§

i (i) השער השמיני. כלל הדינין הנזכרים בו אין צריכין לבקש טעם עליהם כי הם נודעים⁷. (2) וטעם לשום ללבנה⁸ שותפות עם המזל העולה בעבור שהיא קרובה אל הארץ. (3) וזה⁹ שאמרו על מבט רביעית או נכח שהיא רעה גמורה, דין¹⁰ הוא כי הם יורו על איבה, ובעבור שהוא מבט¹¹ השלישית¹² והששית אהבה¹³ יקל מהרעה. (4) וזה שאמרו¹⁴, אם היה מויק בעל הדבר המבוקש¹⁵ יורה על איחור הדבר, זה אמת על שבתאי בעבור¹⁶ שהוא ממתין בהליכתו, ולא ככה מאדים¹⁷. (5) ומה שאמרו¹⁸, שהכוכב הוא חלש עד היותו בחמש מעלות מהמזל, זו דעת חכמי פרס. (6) ובטלמיוס¹⁹ לועג²⁰ עליהם והדין עמו²¹, כי אין המזלות נבדלים זה מזה, כי מחליקתם הם כפי מחשבת הלב מתחלת מחברת שני הגלגלים הגדולים או ממקום ידוע למראה²² העין אל מקום ידוע, ועל שני הדרכים אין המזלות נבדלים; וככה מה שאמרו²³, אם היה הכוכב בסוף המזל אבד כחו מהמזל הראשון. (7) ודבר הבורות כבר אמרנו כי הם כוכבים חשוכים יורו על נזק; כך²⁴ אמרו חכמי הודו²⁵. (8) וזה שאמרו²⁶ כי הכוכב הטוב בבית השמיני לא יורה על טוב ולא על רע, אמת הוא²⁷ כי לא יוסיף על החיים ועל הממון, רק יש לו טובה אחת²⁸, שינצל ממיתה משונה. (9) והעדיות²⁹ שהזכרנו הם נכונים, ובספר המולדות³⁰ אדבר על מי שהוא כשר³¹ לעדות ועל מי שאינו כשר³².

¹ שאמרו] פאטמק; ר חסר. ² על זה] פאקמ; ר זה; ט חסר. ³ וקבוץ] פראמ; קט חסר. ⁴ משל] פאטמק; ר מושל. ⁵ חוץ] פראטמ; ק חסר. ⁶ והתגמול] פאקמ; ט והגמול. ⁷ נודעים] פראמ; קט ידועים. ⁸ ללבנה] ראט; פמ הלבנה; ק לירח. ⁹ שהיא קרובה ... וזה] פראקמ; ט חסר. ¹⁰ גמורה] דין] פרא; ט מדין; ק חסר. ¹¹ שהוא מבט] פראמ; קט שמבט. ¹² השלישית] פראטמ; ק שלישי. ¹³ אהבה] ראמ; טק > מבט; פ חסר. ¹⁴ שאמרו] טפ; ק ואמרם; מ שאמ; אר שאמר. ¹⁵ המבוקש] פראט; ק הדרוש; מ המבקש. ¹⁶ בעבור] פראמ; ק כי; ט אם. ¹⁷ ולא ככה מאדים] פראמ; קט ואין מאדים ככה. ¹⁸ שאמרו] ט; ק ואמרם; פמר שאמר; א שאמ. ¹⁹ ובטלמיוס] פראקמ; ט > אבל. ²⁰ לועג] רפקטמ; א חולק. ²¹ והדין עמו] פראטמ; ק חסר. ²² למראה] פראקמ; ט למראית. ²³ מה שאמרו] ראקטמ; פ אמרו. ²⁴ כך] פראמ; ט על כן; ק חסר. ²⁵ אמרו חכמי הודו] פראטמ; ק חסר. ²⁶ וזה שאמרו] פאטמ; ק ואמרו. ²⁷ אמת הוא] פראמ; קט נח. ²⁸ טובה אחת] ראמ; פט טובה אחרת; ק טוב אחר. ²⁹ והעדיות] פראקמ; ט והעדיות. ³⁰ המולדות] פראטמ; ק חסר. ³¹ מי שהוא כשר] פראטמ; ק הכשר. ³² מי שאינו כשר] פראטמ; ק הפסול.

and the deficit from the aspect [i.e., from full opposition] is equal to the latitude.^[2] (5) I shall say more about the aspects in the tenth chapter.^[3]

3 (1) As for what they said about the degrees, ⟨namely,⟩ that their rising times are the same, there is no need to explain this, because it is well known.^[1] (2) These expressions, namely, “void of course”, “desolation”, “translation”, “collection”, “reflecting the light”, and the others, are used as a metaphor; Ptolemy accepts them all except “pleasantness” and “recompense”, but I do not know ⟨why⟩.^[2]

§8

1 (1) Eighth chapter. There is no need to find a reason for all of the judgments mentioned in this chapter ⟨of *Reshit Hokhmah*⟩, because they are well known.^[1] (2) The reason for making the Moon the partner of the sign of the ascendant is that it is close to the Earth.^[2] (3) As for what they said about the aspect of quartile or opposition, namely, that it is complete misfortune, this follows logically, because they indicate antagonism, and because trine and sextile are ⟨aspects of⟩ love, the misfortune is mitigated.^[3] (4) As for what they said, namely, that if the lord of the requested thing is a malefic ⟨planet⟩ it indicates delay in the matter, this is true for Saturn because it carries in its motion, but not for Mars.^[4] (5) As for what they said, namely, that a planet is weak until it is five degrees from ⟨the beginning of⟩ the sign, this is the opinion of the Persian scientists.^[5] (6) But Ptolemy laughs at them and he is correct, because the signs are not separated one from the other, given that their divisions, based on a mental construct, begin at the intersection of the two great circles or at a particular observable spot ⟨and end at⟩ another particular spot;^[6] following either method the signs are not separated.^[7] The same applies to what they said, namely, that if a planet is at the end of a sign it loses its power coming from that sign.^[8] (7) As for the pits, we have already said that they are dark stars that indicate harm; that is what the Indian scientists said.^[9] (8) As for what they said, namely, that a benefic planet in the eighth ⟨mundane⟩ house indicates neither good fortune nor misfortune, this is true; for it does not add to ⟨one’s length of⟩ life or wealth; but it has one benefit, namely, that ⟨the native⟩ will be saved from an unnatural death.^[10] (9) The testimonies that we have mentioned are correct;^[11] in the *Book of Nativities* I shall refer to what is fit to give testimony and to what is unfit.^[12]

9§

I (I) השער התשיעי. בטלמיוס מודה¹ כי גורל הלבנה² לבדו הוא האמת, בעבור כי יבקש מעלה שתהיה ערכה אל הלבנה, שהיא³ קרובה⁴ אל הארץ, כערך המעלה הצומחת אל השמש⁵, וזה הוא גורל הלבנה; על כן אמר שיוקח ביום ובלילה מהלבנה. (2) והאומרים⁶ כי גורל השמש⁷, שהוא גורל התעלומה בלילה, יותר חזק, זה הוא בעצמו גורל הלבנה של בטלמיוס, והוא לועג על שאר הגורלות; רק בעבור שראיתם כתובים בספר דורוניוס⁸ הזכרתים. (3) וגורל שבתאי יורה על כל דבר שיורה הוא עליו כפי תולדתו⁹, וככה כל אחד מהם. (4) והיה¹⁰ גורל העוני דבק עם כוכב חמה בעבור כי¹¹ תולדתו להתעסק בחכמה ולא בדברי העולם. (5) ובעבור כי צדק יורה על הממון, כאשר הזכרנו, על כן אמרו אנשים כי בעבור היות בתי כוכב חמה לנכח בתי צדק שיורה על הממון, על כן אין ממון לרובי החכמים. (6) וזה הדבר קרוב אל האמת, כי כל מזל שהוא עולה בפאת מזרח ברגע הלידה, לעולם יהיה בנולד תולדת בעל המזל, אפילו שיהיה¹² ממשפחה שאינה ראויה למעלה גבוהה. (7) ודמיון זה שיוולד לאדם שהוא משרת פורני בן והיה¹³ מזלו אריה; א"ע"פ שתהיה השמש במקום רע, תראה בתולדת הנוול שררה שישים¹⁴ משרת תחתיו. (8) וככה, אם היה בעל המזל הצומח כוכב חמה, א"ע"פ | שאין במשפחתו¹⁵ חכם וכוכב חמה במקום רע¹⁶, יהיה מבין בדבריה¹⁷ העולם; כי אם היה במקום טוב יהיה חכם א"ע"פ שלא היה אביו חכם.

2 (I) וטעם גורלות הבתים מטעם הבתים; כי הנה לבית ראשון יש לו גורל החיים, והבית הראשון יורה על החיים¹⁷. (2) ונלקח זה הגורל מהמרחק¹⁸ שיש בין שני העליונים בעבור היותם עיקרים, וכל משרת זולתם, אם יהיה ממונה על החיים, יתן¹⁹ הכח לאחד מהם²⁰. (3) וככה, גורל המסעד²¹ יורה על חזק הגוף, גם הבית הראשון יורה על זה. (4) והוציאוהו²² מהמרחק שיש בין שני הגורלות, שהם גורלי המאורות,

¹ מודה [פרלקטמ; א אומר. ² הלבנה] רפטקמ; ל ללבנה; א לבנה. ³ שהיא [פרלאמ; קט חסר. ⁴ קרובה] פרא; לקמ הקרובה. ⁵ אל השמש [פרלאטמ; ק חסר. ⁶ והאומרים] פרלאמ; ט והאומר; ק ואי. ⁷ השמש [פרלאטמ; ק הלבנה. ⁸ דורוניוס] מ; פרלאק דורוניאוס; ט דוריונוס. ⁹ תולדתו [לראקט; מ תולדתם. ¹⁰ והיה] לרמ; פאקט והנה. ¹¹ בעבור כי [פרלאמ; ט כי; ק לפי. ¹² שיהיה] פרלאקמ; ט חסר. ¹³ והיה [פאקט; רמ ויהיה. ¹⁴ שישים] פרלקטמ; א ושים. ¹⁵ וכוכב חמה במקום רע] לראקטמ; פ ואין כוכב חמה במקום טוב. ¹⁶ בדבריו [פרלאקמ; ט בכל דברי. ¹⁷ יורה על החיים] פרלאקמ; ט יש לו החיים ויורה עליהם. ¹⁸ זה הגורל מהמרחק [פרלאטמ; ק מהגורל המרחק. ¹⁹ יתן] פראמטק; ל יהיה. ²⁰ מהם [פלאטקמ; ר > הבתים. ²¹ המסעד] ראמ; פ המצעד; קט המעמד; ל חסר. ²² והוציאוהו] פרלקטמ; א והוציאו.

§9

1 (1) **Ninth chapter.** Ptolemy acknowledges that the lot of the Moon alone is true, because he seeks a degree whose ratio to the Moon, which is close the Earth, is as the ratio of the degree of the ascendant to the Sun, and this is the lot of the Moon; therefore, he said that it [the lot of the Moon] should be taken by day and by night from the Moon.^[1] (2) As for those who say that the lot of the Sun, which is the lot of the absent by night, is stronger (than the lot of the Moon), (they are actually referring to) Ptolemy's lot of the Moon itself; and he laughs at all the other lots;^[2] I have mentioned them only because I saw them recorded in Doronius' book.^[3] (3) The lot of Saturn indicates everything that is indicated by Saturn itself in accordance with its nature, and the same applies to each of them [i.e. to the other planets]. (4) The lot of poverty is attached to Mercury, because its nature is to be engaged with wisdom and not with worldly affairs. (5) Because Jupiter indicates money, as we have mentioned,^[4] some people said that, given that the houses of Mercury are in opposition to the houses of Jupiter, which indicates money, most scholars do not have money. (6) This is close to the truth, for when any sign rises in the east at the time of birth, the native is always endowed with the nature of the lord of the sign, even if he comes from a family that is not worth of high status. (7) As an illustration, a baker's servant^[5] begets a son whose sign is Leo [i.e., the planetary house of the Sun]; even if the Sun is in a malefic place, lordship will appear in the native's nature and he will have a servant under him. (8) Likewise, if Mercury is the lord of the sign of the ascendant, even though none in his family is wise and Mercury is in a malefic place, he will understand worldly affairs; for if it is in a fortunate place he will be wise even though his father was not wise.^[6]

2 (1) The reason for the lots of the (mundane) houses stems from the reason of the houses; the first house has the lot of life, and the first house indicates life. (2) This lot is taken from the distance between the two upper (planets) [i.e. Saturn and Jupiter], because they are fundamentals; if any other planet except for them is in charge of life it gives the power to one of them. (3) Likewise, the lot of firmness indicates strength of body, as the first house indicates that too. (4) It is cast from the distance between the two lots, which are the lots of the luminaries, because they indicate the body, as I have mentioned,^[1] for the whole right side (of the body) belongs to the Sun and the

כי הם יורו על הגוף כאשר הזכרתי, כי כל צד הימין לשמש והשמאלי ללבנה. (5) גם גורל הדעת לקחוהו מהמרחק שיש בין² כוכב חמה ומאדים, בעבור כי כוכב חמה יורה על החכמה ומאדים על המהירות. (6) וככה שאר הגורלות; אין צורך להזכירם.

3 (1) וגורל המלוכה הוציאוהו חכמי פרס, וככה גורל מספר ימי³ המלכים, ואין בטלמיוס מודה להם, והשני גורלות⁴ לעולם⁵ יוצאים⁶ בבתי⁷ שהם לכוכב אחד; טעמים ידוע מדרך החשבון. (2) כבר הזכרתי כי מרחק⁸ בית⁹ כל כוכב מבית הלבנה כמרחק ביתו האחר¹⁰ אל בית השמש, ואין מקום שיהיה הערך שווה תמיד אלא מחמש עשרה מעלות משני בתי המאורות. (3) כי אם היה כוכב¹¹ בתחלת¹² בתולה בחמש מעלות ראשונות, יצא הגורל האחר¹³ בחמש מעלות אחרונות ממזל¹⁴ תאומים, כי ראוי להיות המרחק מחצי בתי המאורות עשרים מעלות, וככה הכל. (4) ומה שאמר חנוך על גורל הגשם בכל יום הוא נכון, וטעמו כי תולדת המזל כתולדת בעליו.

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1 (1) השער העשירי. אמר אברהם: הקדמונים וחכמי דורנו כולם השתבשו במבטים. (2) והנה מצאנו במבטים¹⁵ לחנוך דברים שיש¹⁶ ראיות גמורות על בטולם¹⁷, וככה על תקון הבתים השנים עשר, עד שימצא פעמים¹⁸ בגבול החמישי בית מששים מעלות ואחר¹⁹ מעשרים, ולפי דעתי שחנוך לא יאמר כזה²⁰. (3) גם נמצא²¹ בספר ארבעה שערים²² שבטלמיוס אומר שאם היה הכוכב²³ בתחלת²⁴ הבית העשירי, נתן למבטו הרביעית²⁵ תשעים מעלות, ולשלישית מאה ועשרים במעלות גלגל היושר, ואם היה הכוכב במעלה הצומחת, נתן למבטו השלישית מאה ועשרים מעלות²⁶ במצעדי הארץ. (4) וזאת טעות גדולה, כי הנה²⁷ אם היה²⁸ מרחב מקום הנולד שמונה וארבעים²⁹ מעלות, והמעלה הצומחת תחלת³⁰ גדי, הנה יהיה מבט השלישית³¹ על זה הדרך³² בתחלת סרטן, ואין ספק על דעת כל החכמים כי שם מבט הנכח. (5) גם

¹ והשמאלי לרטאקם; פ וכל צד שמאלי. ² שיש בין פרלאט; ק שבין. ³ מספר ימי פרלאט; ק מספר שני; ט ימי מספר. ⁴ גורלות לאקטם; פ גורל. ⁵ לעולם תיקנתי ע"פ הנוסח של ראשית חכמה, כ"י פאריס 1055, עמ' 225; פא של העולם; קטמ העולם; ר של לעולם; ל שלעולם. ⁶ יוצאים לרפראקם; ט היוצאים. ⁷ בביתם פרלאט; קט לבתים. ⁸ מרחק פרלאט; ט מרחב. ⁹ בית פרלאט; קט חסר. ¹⁰ האחר פרלאט; ק האחד. ¹¹ כוכב פרלאט; ט חסר. ¹² בתחלת פרלאט; ק בראש. ¹³ בחמש מעלות ... האחר פרלאט; ק חסר. ¹⁴ ממזל פרלאט; ק חסר. ¹⁵ והנה מצאנו במבטים לראקט; פמ חסר. ¹⁶ דברים שיש פרלאט; ט שיש; ק חסר. ¹⁷ על בטולם פרלאט; ט על בטול דבריו; ק בבטולם. ¹⁸ פעמים לראקט; פ פעם. ¹⁹ ואחר ראקט; פטמ ואחד; ל ואחת. ²⁰ כזה פרלאט; ט זה. ²¹ נמצא טק; לרמפא נמצאו. ²² ארבעה שערים פרלאט; ק הארבעה. ²³ הכוכב פרלאט; מ כוכב. ²⁴ בתחלת פרלאט; ק מראש. ²⁵ הרביעית פרלאט; ק הרובע. ²⁶ גלגל היושר ... מעלות לראקט; פמ חסר; ט מופיע בשוליים. ²⁷ הנה פרלאט; ק חסר. ²⁸ היה פרלאט; מ < הבית העשירי נתן למבטו. ²⁹ שמונה וארבעים פרלאט; ט פ"ד. ³⁰ תחלת פרלאט; ק ראש. ³¹ השלישית פראטם; ל שלישי; ק השליש. ³² על זה הדרך פרלאט; ק בדרך זו.

left to the Moon. (5) Also the lot of wisdom is cast from the distance between Mercury and Mars, because Mercury indicates wisdom and Mars swiftness.^[2] (6) Similarly with the rest of the lots; there is no need to mention them.^[3]

3 (1) The lot of kingship was cast by the Persian scientists, and similarly the lot of the number of days of kings, but Ptolemy does not agree with them. These two lots are always cast in the houses of a single planet;^[1] they can be explained arithmetically. (2) I have already mentioned that the distance between the house of a planet and the house of the Moon is equal to the distance between the other house of the planet and the house of the Sun;^[2] there is no place where the ratio is always equal, except from the fifteenth degree in both houses of the luminaries. (3) For if the planet is in the beginning of Virgo, in the first five degrees, then the other lot is cast at the last five degrees of Gemini, since it is fitting that the distance from the middle of the houses of the luminaries be 20 degrees, and similarly with all.^[3] (4) What Enoch said about the lot of rain every day is true, and the explanation is that the nature of the sign is like the nature of its lord.^[4]

§ 10

1 Tenth chapter. Abraham said: All of the Ancients and the scholars of our generation are confused about the aspects. (2) There are incontrovertible proofs that some statements made by Enoch regarding the aspects are incorrect, and likewise regarding the correction of the twelve ⟨mundane⟩ houses, to such an extent that sometimes one may find in the fifth climate one house of 60 degrees and another house of 20 degrees; in my opinion Enoch did not make such statements. (3) In the *Tetrabiblos*, too, we find that Ptolemy says that if a planet is at the cusp of the tenth house, he gives its aspect of quartile 90 degrees and ⟨its aspect of⟩ trine 120 degrees at *sphaera recta*,^[1] and if the planet is at the degree of the ascendant he gives its aspect of trine 120 degrees at the rising times for the country.^{[2][3]} (4) This is a great mistake, because if the latitude of the native's ⟨birth⟩ place is 48 degrees, and the degree of the ascendant is at the beginning of Capricorn, then the aspect of trine, according to this procedure, would be the beginning of Cancer; but in the opinion of all the scholars there is no doubt that that is the aspect of opposition. (5) Māshâ'allāh, too, made incorrect statements

משאללה הזכיר במבטים דברים אשר לא כן; והאמת מה שאומר לך, כי המבטים הם ראויים להיותם על חלוק הבתים, וככה אמר יעקב אלכנדי רק לא נתן דרך להוציאם.

2 (I) ועתה שים לבך¹: דע כי תקון הבתים על שני² דרכים. (2) הדרך³ האחד במעלות גלגל המזלות, שהם ישרות בין שיהיה המזל העולה ראש טלה, או חציו, או ראש סרטן, או חציו, בכל הגבולים. (3) והכלל שתתן לכל בית ובית שלשים מעלות, ותחל מהמעלה הצומחת. (4) והדרך⁴ השני להיות הבתים מתוקנים כפי מרחב הארץ ומצעדי המזלות עליה. (5) כי אם היה המזל הצומח⁵ תחלת סרטן בגבול החמישי, לעולם יהיה בחצי השמים פחות מחצי דגים, שהוא הבית התשיעי, והפך זה אם היה המזל הצומח ראש גדי⁶, והיה כן בעבור היות אלה⁷ שניהם סוף⁸ צפון ודרום. (6) והנה כל חכמי המזלות מודים כן, גם חכמי כלי הנחושת, כי יש⁹ ראיות רבות על זה¹⁰. (7) וכל חכמי המזלות הסכימה דעתם¹¹ על ארבעה¹² יתדות שהם תחלת¹³ הבית הראשון, והרביעי, והשביעי, והעשירי, והמחלוקת היא בתקון הארבעה הבתים שהם השני, והשלישי, והחמישי, והששי, כי לעולם יהיו¹⁴ הארבעה בתים שהם לנכח אלה למעלה מן הארץ מעלותם שוות בכל התיקונים.

3 (I) וככה, הסכימה דעת כלם על הניהוגים¹⁵ שהם על שני דרכים. (2) הניהוג¹⁶ האחד במעלות גלגל המזלות הישרות, והניהוג¹⁷ | השני משתנה, כי אם היתה המעלה שתרצה לנהג¹⁸ אותה, או¹⁹ אחד המאורות שיהיה שם, בתחלת הבית העשירי או הרביעי, לעולם תנהג במעלות גלגל היושר. (3) ואם המעלה שתרצה לנהג היא הצומחת, תנהגה במצעדי הארץ. (4) וככה, אם רצית לנהג המעלה השוקעת, לעולם²⁰ תנהגה בנכח מעלתה²¹, שהיא הצומחת. (5) ואם לא היתה המעלה שתרצה לנהג באחד היתדות הנוכרות²², הסתכל מרחק מקו חצי השמים, אם היתה המעלה

¹ועתה שים לבך] פרלאטמ; ק חסר. ²על שני] פרלאטמ; ק בשני. ³הדרך] פראמ; לקט חסר. ⁴והדרך] פרלאטמ; ק חסר. ⁵הצומח] פרלאטמ; ק עולה. ⁶ראש גדי] רקטמ; פא גדי; ל < שכל מזל בתולה ורב מאזנים עברו חצי השמים. ⁷והיה כן בעבור היות אלה] פרלאטמ; ק וזה כי. ⁸סוף] פלאמ; קט בפאת; ר חסר. ⁹יש] פרלאמ; קט חסר. ¹⁰על זה] פרלאטמ; ק בזה. ¹¹חכמי המזלות הסכימה דעתם] פרלאטמ; ק החכמים הסכימו. ¹²על ארבעה] פרלאטמ; ק בארבע. ¹³תחלת] לראטמ; פ מתחלת; ק ראש. ¹⁴יהיו] לרקטמ; פא < אלה. ¹⁵וככה הסכימה דעת כלם על הניהוגים] פרלאטמ; ק וכן הניהוגים הסכימו כולם. ¹⁶הניהוג] פרלאטמ; ק חסר. ¹⁷והניהוג] פרלאטמ; ק חסר. ¹⁸לנהג] פרלא; טמ לנהוג; ק לנהגה. ¹⁹או] פרלאקמ; ט חסר. ²⁰לעולם] לראקטמ; פ חסר. ²¹מעלתה] לר; פאטמק המעלה. ²²הנוכרות] פרלאטמ; ק חסר.

about the aspects; the truth is what I shall tell you, namely, that the aspects should be arranged according to the division of the houses; this is what Ya‘qub al-Kindī said but he did not provide any instructions to work them out.^[4]

2 (1) Now pay attention: know that there are two methods for correcting the houses. (2) The first method is in degrees of the zodiac, which are equal whether the degree of the ascendant is the head of Aries, or its middle, or the head of Cancer, or its middle, in any of the climates. (3) The general rule is that you should assign 30 degrees to any ⟨mundane⟩ house and begin from the degree of the ascendant. (4) The second method is to correct the houses according to the latitude of the country [i.e., of the native] and the rising times of the zodiacal constellations there. (5) For if the degree of the ascendant in the fifth climate is the beginning of Cancer, then less than the middle of Pisces, which is the ninth house, will always be at midheaven; the opposite happens if the degree of the ascendant is the head of Capricorn. This is so because these two [i.e., the beginnings of Cancer and Capricorn] are ⟨in⟩ the extremes of the north and of the south [i.e., in the tropics].^[1] (6) All the astrologers agree about that, as well as the experts with the astrolabe, because there are many proofs for that. (7) All the astrologers agreed that the four cardines are the cusps of the first, fourth, seventh, and tenth houses; but they disagree about the correction of the four houses—the second, third, fifth, and sixth—because the degrees of four houses that are diametrically opposed to these and are above the Earth are always the same in any of the corrections.^[2]

3 (1) In like manner, all agreed that the directions^[1] are ⟨reckoned⟩ by two methods. (2) The first ⟨method of⟩ direction uses equal zodiacal degrees, and the second ⟨method of⟩ direction follows several different procedures: if the degree you want to direct^[2], or one of the luminaries that happens to be there, is at the cusp of the tenth house or the fourth, you should always direct in sphaera recta degrees. (3) But if the degree you want to direct is the ascendant, you should calculate the direction in rising times for the country.^[3] (4) In like manner, if you want to direct the degree of the descendant, you should always calculate it as ⟨if it were⟩ the diametrically opposed degree, which is the ascendant. (5) If the degree you want to direct is in none of the above-mentioned cardines, find its distance from midheaven, given that the degree is in the quadrant between midheaven and the degree of the ascendant.^[4]

ברביעית¹ שהיא בין קו חצי השמים ובין המעלה הצומחת. (6) ואין צורך להזכיר אלה הניהוגים, כי כבר הזכירם² ר' אברהם הנשיא בספרו.

4 (I) וככה, המבטים ראויים להיות על שני³ דרכים. (2) הדרך⁴ האחד במעלות גלגל המזלות הישרות⁵, ששים מעלות למבט ששית לפניו גם לאחריו, ולמבט רביעית⁶ תשעים לפניו גם לאחריו⁷, ומבט שלישית מאה ועשרים לפניו גם לאחריו. (3) וכבר⁸ הזכיר הנשיא הנזכר⁹ דרך להוציא מעלת הכוכב אם היה לו מרחב. (4) והנה ראוי מי¹⁰ שירצה לנהוג תחלת¹¹ בית אל¹² מבט כוכב, שיחל מהבית הנחלק במעלות¹³ ישרות, ויתן לכל מעלה שנה, ויהיו מבטיו במעלות ישרות. (5) והדרך האחרת¹⁴ המבט המתוקן כפי תקון הבתים, כי אם היה הכוכב במעלה הצומחת, הנה מבט רביעיתו בתחלת קו חצי השמים וקו התהום, שהם תחלת הבית העשירי והרביעי המתוקנים במצעדי המזלות. (6) והכלל: אם היה בתחלת יתד, מבטו בשאר היתדות מבט¹⁵ רביעית ונכח. (7) ואם היה במעלה הצומחת והיה מבטו מבט ששית, בתחלת הבית השלישי הוא המבט השמאלי, והימני בתחלת בית עשתי עשר, ומבטו¹⁶ מבט שלישית השמאלי בתחלת הבית החמישי, והימני בתחלת הבית התשיעי. (8) והכלל שהוא ראוי להיות מבטו¹⁷ מבט שלישית הימנית נכח מבט¹⁸ ששית השמאלית, ומבטו מבט שלישית¹⁹ השמאלי נכח מבט ששית הימנית, ואם היה הכוכב בחצי הבית, ראוי להיות מבטו בחצי כל בית ובית המתוקן כפי המצעדים.

5 (I) והנה²⁰ אתן לך דרך להוציא תקון הארבעה בתים. (2) הסתכל כמה מעלות ישרות יש בין המעלה הצומחת ובין קו התהום, וקח שלישיתם והוסיפם על המעלה הצומחת במעלות ישרות. (3) ובקש בלוח הארץ השעות המעוותות הכתובות לנכח המעלה שיצא שם החשבון. (4) וכפול השעות וחלקיו²¹ והוסיפם על מצעדי המזלות שהם כנגד המעלה הצומחת. (5) ובקש המחובר אם יצא כנגד המעלה שיצא שם החשבון, שם תחלת²² הבית השני. (6) ואם המחובר יהיה במעלות נוספות על המעלה

¹ ברביעית] פרלאמ; ט ברביעי; ק חסר. ² הזכירם] לראקטמ; פ הזכיר. ³ על שני] פרלאטמ; ק בשני. ⁴ הדרך] פרלאמ; קט חסר. ⁵ הישרות] פאטמק; ר חסר. ⁶ רביעית] פלא; ק רובע; רט חסר. ⁷ ולמבט רביעית ... לאחריו] פלאק; רט חסר. ⁸ וכבר] פראטמ; ל וככה; ק וכן. ⁹ הנזכר] פרלאט; ק חסר. ¹⁰ מי] רטפלאק; ל > כל. ¹¹ תחלת] לראט; פ תחלה; ק ראש. ¹² אל] לראקט; פ חסר. ¹³ במעלות] פרלאק; ט למעלות. ¹⁴ והדרך האחרת] פרלאטמ; ק והשני. ¹⁵ מבט] לראקטמ; פ חסר. ¹⁶ ומבטו] פרלאטמ; א ומבט. ¹⁷ שהוא ראוי להיות מבטו] פרלאטמ; ק חסר. ¹⁸ מבט] לראקטמ; פ חסר. ¹⁹ ומבטו מבט שלישית] לראט; ק ומבט שליש; פמ ומבטו מבט ששית. ²⁰ והנה] פרלאטמ; ק חסר. ²¹ השעות וחלקיו] לראקט; מ השעה וחלקיו; פ השעה וחלקיה. ²² שם תחלת] פרלאטק; מ בתחלת.

(6) There is no need to mention these directions, because R. Abraham, the Nasi, has mentioned them in his book.^[5]

4 (1) In like manner, there are two methods for ⟨reckoning⟩ the aspects.^[1] (2) The first method is in equal zodiacal degrees, 60 degrees for sextile before it or behind it, 90 degrees for quartile before it or behind it, and 120 degrees for trine before it or behind it. (3) The aforementioned *Nasi* recorded a method for calculating the degree of a planet from its latitude.^[2] (4) So if someone wants to direct the cusp of a house to the aspect of a planet, he should begin from the house, divided into equal degrees, and assign a year to each degree; then its aspects will be in equal degrees. (5) The other method is to correct the aspect according to the correction of the houses, because if the planet is in the degree of the ascendant, its aspect of quartile coincides with the line of midheaven and the line of lower midheaven, which are the cusps of the tenth and the fourth houses corrected according to the rising times of the zodiacal signs. (6) This is the general rule: if it is at the beginning of a *cardo*, its aspects of quartile and opposition are at the other *cardines*. (7) And if it is in the degree of the ascendant and its aspect is sextile, ⟨then⟩ the left ⟨sextile⟩ aspect is at the cusp of the third house, and the right one is at the cusp of the eleventh ⟨house⟩, and its left aspect of trine is at the cusp of the fifth house, and the right one at the cusp of the ninth house. (8) The general rule is that its right aspect of trine should be diametrically opposed to the left aspect of sextile, and its left aspect of trine should be diametrically opposed to the right aspect of sextile; if the planet is in the middle of the house, its aspect should fall in the middle of the respective houses, when the houses are corrected according to the rising times.^[3]

5 (1) Now I will give you a method for calculating the correction of the four houses. (2) Find out how many equal degrees there are between the degree of the ascendant and the line of lower midheaven; take one third of them and add it to the degree of the ascendant in equal degrees. (3) Then, on the latitude plate ⟨of the astrolabe⟩,^[1] find the seasonal hours recorded opposite the degree obtained by this reckoning. (4) Double the hours and the minutes and add them to the rising times of the signs opposite the degree of the ascendant. (5) Then check whether the result is equal to the ⟨number of⟩ degrees given by the reckoning; ⟨if it is⟩ this is the ⟨location of the⟩ cusp of the second house. (6) But if the result yields more degrees than the degree

שיצא שם החשבון, גרע שתי מעלות או אחת, ודע כמה השעות המעוותות שהם לנכח¹ המעלה² שיצא שם החשבון אחר החסרון. (7) וככה תעשה עד שתמצא המעלה, גם החלק שהוא תחלת הבית. (8) ואם יצא המחובר פחות, עשה³ הפך הדבר⁴, שתוסיף מעלה על המעלה שיצא שם החשבון, ועשה כמשפט. (9) וראוי להיות המרחק מתחלת הבית השני אל תחלת קו התהום במעלות גלגל⁵ היושר ארבע שעות מעוותות שהם לנכח מעלת הבית השני, שהיא תחלת הבית השמיני. (10) וככה תוציא תחלת הבית השלישי, להוסיף שתי השלישיות⁶ הנזכרות על⁷ המעלה הצומחת, ותוסיף או תגרע עד שתמצא המעלה והחלק. (11) וראוי להיות המרחק בתחלת הבית השלישי במצעדי המזלות בארץ⁸, מהמעלה⁹ הצומחת, ארבע שעות מעוותות שהם לנכח המעלה שהיא תחלת הבית, והיא תחלת הבית התשיעי¹⁰. (12) ככה ראוי להיות המרחק¹¹ מתחלת זה הבית עד קו התהום שתי שעות מעוותות במעלות גלגל היושר. (13) גם ככה תעשה להוציא¹² תחלת¹³ | הבית החמישי, שתבקש המעלות¹⁴ הישרות שהן בין קו התהום ובין המעלה השוקעת¹⁴, ותחלקם על שלשה ותוסיף השלישית¹⁵ על מעלת קו התהום, ודע המעלה שיצא שם¹⁶ החשבון, וקח השעות המעוותות וחלקיהם¹⁷ שהם כנגד נכח המעלה והוסיפם על המעלות¹⁸ שתמצא בלוח גלגל היושר כנגד קו התהום. (14) והנה אם יצא החשבון במעלה הראשונה, שם תחלת הבית החמישי, ואם לא תוסיף מעט או תגרע עד שתמצא המעלה והחלק. (15) וראוי להיות תחלת הבית החמישי רחוק מהמעלה השוקעת ארבע שעות מעוותות¹⁹ שהם נמצאות²⁰ לנכח המעלה ששם תחלת הבית²¹ במצעדי לוח הארץ. (16) גם תוסיף השתי שלישיות²² הנזכרות על קו התהום להוציא תחלת הבית הששי, וראוי להיותו רחוק מקו התהום במעלות גלגל היושר ארבע שעות מעוותות שהם נמצאות לנכח המעלה שהיא תחלת הבית הששי²³. (17) וככה²⁴, ראוי להיותו רחוק במצעדי המזלות בלוח²⁵ הארץ שתי שעות מעוותות שהם לנכח המעלה שהיא תחלת הבית הששי²⁶, גם

¹לנכח] פראמ; קט כנגד; ל כנגד לנכח. ²המעלה] פראקט; מ המעלות. ³עשה] למפראקט; ל עשרה. ⁴הדבר] לראקטמ; פ חסר. ⁵גלגל] פראטמ; ק חסר. ⁶שתי השלישיות] פראטמ; ק שני שלישים. ⁷על] פראקט; מ אל. ⁸בארץ] פראטמ; קט חסר. ⁹מהמעלה] פראקט; ט במעלה. ¹⁰הבית והיא תחלת הבית התשיעי] פראטמ; ק הבית התשיעי. ¹¹המרחק] לראקטמ; פ זה המרחק. ¹²תעשה להוציא] פראטמ; ק תמצא. ¹³זה הבית ... תחלת] פראטמ; ר חסר. ¹⁴השוקעת] פראקטמ; ט הצומחת. ¹⁵השלישית] פראטמ; ק השליש. ¹⁶שם] פראטמ; ל לך. ¹⁷וחלקיהם] פראטמ; ט וחלקיה; ק וחלקם. ¹⁸והוסיפם על המעלות] לראפטמ; ק חסר. ¹⁹מעוותות] פראטמ; ק < וחלקם. ²⁰נמצאות] פראטמ; ק כנגד. ²¹הבית] פראקטמ; א < הי"א. ²²השתי שלישיות] פראטמ; ק השני שלישים. ²³הבית הששי] ל; א הבית הי"ב; רפאטמ הבית. ²⁴וככה] פראמ; ק גם; ט גם כן. ²⁵המזלות בלוח] פראטמ; ק חסר. ²⁶הבית הששי] ל; הבית פאטמ; ר חסר.

obtained by the calculation,^[2] subtract two degrees or one, and find (on the plate) the seasonal hours opposite the degree obtained by the calculation after the subtraction. (7) Proceed similarly until you find the degree and the minute that correspond to the cusp of the house. (8) But if the result is less (than the degree obtained by the calculation), do the opposite; that is, add a degree to the degree that was calculated and proceed according to the rule. (9) The distance from the cusp of the second house to the beginning of the line of lower midheaven, at *sphaera recta*, is four seasonal hours, which comes out to be opposite the degree of the second house, namely, the cusp of the eighth house. (10) In this manner you can calculate the cusp of the third house; that is, add the aforementioned two-thirds to the degree of the ascendant, and then add or subtract until you find the degree and the minute. (11) The distance of the cusp of the third house, according to the rising times of the signs for the country, from the degree of the ascendant, should be four seasonal hours, (which comes out to be) opposite the degree that is the cusp of the (third) house, i.e., the cusp of the ninth house. (12) Similarly, the distance from the cusp of this house to the line of lower midheaven, at *sphaera recta*, should be two seasonal hours. (13) Proceed in the same manner to calculate the cusp of the fifth house; namely, calculate the equal degrees between the line of lower midheaven and the degree of the descendant, divide them by three, and add the third part to the degree of the line of lower midheaven. Then find out the degree that was obtained by this reckoning, and take the hours and minutes opposite this degree and add them to the degrees you find in the *sphaera recta* table (at the point) facing the line of lower midheaven. (14) Now, if the reckoning gives the first degree, the cusp of the fifth house is in this place; otherwise add or subtract a little till you find the degree and minute. (15) The distance between the cusp of the fifth house and the degree of the descendant should be four seasonal hours, (which comes out to be) opposite the degree of the cusp of the (fifth) house, according to the rising times on the latitude plate (of the astrolabe). (16) Add also the aforementioned two-thirds to the line of lower midheaven to calculate the cusp of the sixth house; its distance from the line of lower midheaven should be four seasonal hours in *sphaera recta* degrees, which comes out to be opposite the degree of the cusp of the sixth house. (17) Likewise, its distance (from the degree of the descendant), according to the rising times of the signs on the latitude plate (of the astrolabe), should be two seasonal hours, which are opposite the degree of the cusp of the sixth house; you should

כן ראוי שתקח המצעדים¹ שהם לנכח המעלה עד הזורחת². (18) וזה הכלל: לעולם יהיו המצעדים לקוחים אם היו³ בחצי הגלגל העולה כאשר הם, ואם בחצי הגלגל היריד ילקחו לנכחם, וככה לעולם ילקחו השעות המעוותות מהמעלות שהם למעלה מהארץ. (19) וכבר הזכרתי בספר כלי הנחושת כי אם היה לך כלי שלם אין צורך ליגיעה הזאת, כאשר פירשתי שם⁴. (20) ועוד אתן לך בספר המולדות, בדברי על התקופות, דרך אחרת שתהיה שווה עם זאת שהזכרתי.

6 (1) והנה ככה⁵ תעשה המבטים, ואין צורך⁶ לעשות כי אם שלשה לבדם, והם השמאליים⁷ מבט ששית ורביעית ושלישית⁸. (2) והנה הסתכל כמה מעלות ישירות הוא⁹ רחוק הכוכב מתחלת הבית, וההווה ערוך אותו על שלשים, ואם היו עם מעלתו¹⁰ חלקים נוספים והיו יותר משלושים, הוסף מעלה אחת, ואם פחות הניחם. (3) וחלק המחובר על מספר מעלות הבית הישירות שהם בין תחלת בית מתוקן עד תחלת בית מתוקן, ומה שיעלה¹¹ בחשבון שמרנו. (4) גם קח כמה¹² מספר מעלות הבית ששם מבטו, איזה מבט שתרצה, ודע כמה מספר המעלות¹³ שהם בין תחלת הבית המתוקן ובין תחלת הבית המתוקן שהוא אחריו. (5) וערוך זה המספר על המספר השמור וחלק המחובר על שלשים¹⁴, והעולה בחשבון הוסיפו על תחלת הבית אשר שם המבט. (6) אז תמצא המעלה שהיא קרובה¹⁵ אל מבטו¹⁶, ותוסיף או תגרע עד שתתקנה¹⁷.

7 (1) וככה תעשה: הסתכל אם היה הכוכב בין קו חצי השמים ובין המעלה הצומחת, דע¹⁸ כמה מרחקו מקו חצי השמים שתחסר המעלות הנמצאות בלוח גלגל היושר כנגד מעלתו מהמעלות¹⁹ הנמצאות באותו הלוח כנגד קו חצי השמים, וההווה ביניהם יקרא המרחק. (2) חלקו על השעות המעוותות שהם כנגד מעלת הכוכב בלוח הארץ והעולה²⁰ הם שעות, ואם ישאר שלא יתחלק ערוך אותם על ששים, והעולה²¹ ערוך אותם²² על ששים פעם אחרת. (3) והשב מעלות השעה המעוותות חלקים ששים²³, ושם עם²⁴ העולה החלקים, וחלק עליהם החשבון הראשון, והעולה

¹ שהם לנכח ... המצעדים] פלאטמק; ר חסר. ² המעלה עד הזורחת] לראק; פמ המעלה הזורחת; ט המעלה עד התחלת הזורחת. ³ היו] לראקטמ; פ חסר. ⁴ כאשר פירשתי שם] פראטמ; ט כאשר פירשתי לך שם; ק חסר. ⁵ ככה] פראטמ; ט חסר. ⁶ צורך] פראטמ; ק צריך. ⁷ כי אם שלשה לבדם והם השמאליים] פראטמ; ק רק שלשה והם השמאליים; ט כי אם; בשוליים כתוב: ג' שמאליים לבדם והם. ⁸ ורביעית ושלישית] פראטמ; ק ורובע ושליש. ⁹ הוא] פראטמ; ק חסר. ¹⁰ מעלתו] לראקטמ; פ מעלותיו. ¹¹ ומה שיעלה] פראטמ; ק והעולה. ¹² גם קח כמה] לראקטמ; פ גם כן כמה; א גם ככה. ¹³ המעלות] פראטמ; ט מעלות הבית. ¹⁴ שלשים] פראטמ; ק חסר. ¹⁵ שהיא קרובה] פראטמ; ק הקרובה. ¹⁶ מבטו] פראטמ; א מבט. ¹⁷ שתתקנה] פראטמ; ט תקן אותה; א חסר. ¹⁸ דע] לראקט; פאמ חסר. ¹⁹ הנמצאות בלוח ... מהמעלות] לראקט; פמ חסר. ²⁰ והעולה] פראטמ; ט < שם. ²¹ ערוך אותם ... והעולה] פראטמ; ק חסר. ²² אותם] לפקט; ר אותו; אמ חסר. ²³ ששים] למ; פראקט חסר. ²⁴ עם] פלאטמק; ר חסר.

also take the rising times opposite the degree until the ascendant. (18) This is the general rule: the rising times should be always taken as they are if they correspond to the ascending semicircle, but if ⟨they correspond⟩ to the descending semicircle they should be taken opposite them; in like manner the seasonal hours should always be taken from the degrees that are above the Earth [i.e., above the horizon].^[3] (19) I have already mentioned in the *Book of the Astrolabe* that if you have a complete astrolabe there is no need to go to such great pains, as I have explained there.^[4] (20) In the *Book of Nativities*, when I discuss the revolutions, I will give you another method that is as good as the one I have mentioned ⟨here⟩.^[5]

6 (1) So proceed in the following manner to calculate the aspects; you have to calculate only three of them, namely, the left aspects of sextile, quartile, and trine.^[1] (2) Find the distance in equal degrees between the planet and the cusp of the house and multiply the result by 30; if there are additional minutes along with the degrees and the minutes are more than 30, then add one degree, but drop them if there are less ⟨than 30⟩. (3) Divide the result by the [size of the] house in equal degrees, namely, from the cusp of the corrected house to the cusp of the ⟨next⟩ corrected house, and set down the result obtained. (4) Also take the number of degrees of the house in which the aspect lies—any aspect you wish—and calculate the number of degrees between the cusp of the corrected house and the cusp of the following corrected house. (5) Then multiply this number by the number that you set down before, divide the result by 30, and add the result of the calculation to the cusp of the house wherein the aspect lies. (6) You will obtain the degree that is closest to its aspect, and add or subtract until you correct it.

7 (1) Proceed as follows: observe whether the planet is between the line of midheaven and the degree of the ascendant, then determine its distance from the line of midheaven by subtracting the degrees ⟨found⟩ in the sphaera recta table opposite its [i.e. the planet's] degree from the degrees in the same table opposite the line of midheaven; the difference between them is called the “distance.” (2) Divide this by the seasonal hours opposite the planet's degree in the latitude plate ⟨of the astrolabe⟩; the result is ⟨in⟩ hours; if something remains that is indivisible [i.e., less than 60] multiply it by 60, and then multiply the result by 60 again. (3) Convert the degrees of the seasonal hour into equal minutes, add the result to the ⟨remaining⟩ minutes, and then

יהיו חלקי שעה¹ מששים. (4) והנה יש לך להוסיף על אלה השעות וחלקיהם למבט ששית ארבע שעות שלמות, ולמבט רביעית שש², ולמבט שלישית שמנה. (5) והנה אם יצא המבט, שהוא מבט³ ששית, באותה הרביעית⁴ ששם הכוכב, בקש המעלה שאמרתי לך שיצא שם המבט⁵, וקח השעה המעוותת בלוח הארץ והסתכל אם היה המרחק במצעדי גלגל היושר מקו חצי השמים כשעות הכוכב וארבע שעות עמהם; הנה, חשבונך אמת כי שם המבט. (6) ואם לא, תוסיף מעלה אחת או שתיים כפי הצורך, | כי⁶ לא תמצאנה מיד. (7) ואם המבט יצא ברביעית שהיא בין המעלה^{38א} הצומחת ובין קו התהום, הסתכל כמה שעות הם ראיות להיות המרחק מהמעלה הצומחת.

8 (1) והנה אתן לך דמיון: כאילו היה הכוכב רחוק מקו חצי השמים שעה אחת גם⁷ שבעה עשר חלקים. (2) והנה ראוי להיות מרחק מבט ששית מקו חצי השמים⁸ חמש שעות גם שבעה עשר חלקים, ואם מבט רביעית, ראוי⁹ להיות מבט רביעית¹⁰ רחוק מהמעלה הצומחת¹¹ במעלות לוח הארץ שעה אחת גם שבעה עשר חלקים מהשעות¹² הנמצאות לנכח המעלה בלוח הארץ, ומבט שלישית יהיה רחוק מהמעלה הצומחת שלש שעות גם שבעה עשר חלקים, כדרך¹³ המבט הרביעית שהזכרתי. (3) וראוי להיותה המעלה ששם מבט¹⁴ השלישית רחוקה מקו התהום שתי שעות גם ארבעים ושלשה חלקים במצעדי גלגל היושר, רק השעות תהיינה לקוחות לנכח המעלה בלוח הארץ, כי לעולם יש בין יתד ליתד¹⁵ שש שעות מעוותות. (4) ואם היה הכוכב שתרצה לעשות מבטיו¹⁶ ברביעית שהיא בין הצומחת ובין קו התהום, דע כמה מרחק הכוכב מהמעלה הצומחת¹⁷. (5) וככה תעשה: חסר¹⁸ המעלות¹⁹ הנמצאות בלוח הארץ כנגד המעלה הצומחת מהמעלות הנמצאות בלוח הארץ²⁰ כנגד מעלת²¹ הכוכב, וחלק העולה על השעות המעוותות שהם נמצאות לנכח מעלת הכוכב בלוח הארץ, או תמצא שעות המרחק, והוסף על המבטים שעות כדרך²² שהוספת ברביעית הראשונה. (6) והנה אם יצא המבט באותה הרביעית בעצמה²³, קח מצעדי המזלות בלוח הארץ הנמצאות כנגד המעלה והסתכל אם הוא מרחק

¹שעה] לראם; קט השעה; פ העולה. ²ולמבט רביעית שש] פראטם; ק חסר. ³שהוא מבט] פראטם; ק חסר. ⁴הרביעית] פראטם; ק הרובע. ⁵שיצא שם המבט] פראטם; ל שיש שם המבט; ק ששם הכוכב. ⁶כי] פלאטם; ר חסר. ⁷גם] פראטם; ט חסר. ⁸שעה אחת ... השמים] פלאטם; ק חסר. ⁹ראוי] לראטם; פא > והנה. ¹⁰מבט רביעית] לראטם; ק מבט רובע; פ חסר. ¹¹המעלה הצומחת] פמ; לראטם חסר. ¹²מהשעות] פראטם; קט מהמעלות. ¹³כדרך] לראטם; פ וכדרך. ¹⁴מבט] לראטם; פקט המבט. ¹⁵ליתד] פראטם; ק למטה. ¹⁶מבטיו] פראטם; ק מבט. ¹⁷המעלה הצומחת] פראטם; ק מהצומחת. ¹⁸וככה תעשה: חסר] פראטם; קט חסר. ¹⁹המעלות] פראטם; טק מן המעלות. ²⁰כנגד המעלה ... הארץ] פראטם; אטק חסר. ²¹מעלת] פראטם; ט מעלות. ²²כדרך] לראטם; פ בדרך; ק כמו. ²³בעצמה] פראטם; ק עצמה.

divide them by the first calculation; the result is in minutes. (4) Add to these hours and minutes four complete hours for an aspect of sextile, six ⟨hours⟩ for quartile, and eight ⟨hours⟩ for trine. (5) If the aspect, which is sextile, comes out in the same quadrant where the planet is, determine the degree where the aspect comes out, as I have told you, take the seasonal hour from the latitude plate ⟨of the astrolabe⟩, and find out whether the distance from the line of midheaven, in rising times at *sphaera recta*, is the same as the hours of the planet plus four hours; if so, your calculation is correct because the aspect is in this place. (6) Otherwise, add one degree or two, as much as you need, because you will not find it immediately. (7) If the aspect comes out in the quadrant between the degree of the ascendant and the line of lower midheaven, determine how many hours the distance from the degree of the ascendant should be.

8 (1) Now I will give you an illustration. Suppose that the planet is one hour and 17 minutes distant from the line of midheaven. (2) The sextile aspect should be 5 hours and 17 minutes distant from the line of midheaven; as for the quartile aspect, measuring by the graduations [lit. degrees] on the latitude plate ⟨of the astrolabe⟩, it should be one hour and 17 minutes from the point [lit. degree] that is directly opposite the point on the latitude plate ⟨of the astrolabe⟩; and the trine aspect should be three hours and 17 minutes away from the degree of the ascendant, in the same manner as the aspect of quartile that I have just mentioned. (3) The trine aspect should be two hours and 43 minutes away from the line of lower midheaven in *sphaera recta* rising times, but the hours should be taken directly opposite the degree on the latitude plate ⟨of the astrolabe⟩, because there are always six seasonal hours from one *cardo* to another. (4) If the planet whose aspects you wish to calculate is in the quadrant between the ascendant and the line of lower midheaven, find out the distance of the planet from the degree of the ascendant. (5) Then proceed as follows: subtract the degrees ⟨read off⟩ on the latitude plate ⟨of the astrolabe⟩ directly opposite the degree of the ascendant from the degrees ⟨read off⟩ on the latitude plate opposite the degree of the planet, then divide the result by the seasonal hours ⟨read off⟩ on the latitude plate opposite the degree of the planet; then find the hours of the distance and add the hours to the aspects in the same manner that you added for the first quadrant. (6) If the aspect comes out in the same quadrant, take the rising times of the signs on the latitude plate ⟨of the astrolabe⟩, which are opposite the

בלוח הארץ מהמעלה הצומחת כמספר שעות המרחק עם תוספת המבט; גם זה תעשה בשעות שהם לנכח המעלה. (7) ואם היה המבט ברביעית שהיא בין קו התהום ובין השקעת, חסר המצעים הנמצאים בלוח גלגל היושר כנגד קו התהום מהמצעים הנמצאים¹ כנגד קו המבט, וחלק העולה על השעות הנמצאות בלוח הארץ לנכח המעלה. (8) והנה אם היו כשעות המרחק אחר תוספת² המבט, הנה שם המבט³ באמת, ואם לא תוסיף מעט או תגרע או תמצא מעלת המבט מיד. (9) והנה הזכרתי דרך להוציא המבטים אם היה הכוכב או אחד המאורות בחצי הגלגל העולה, רק אם היה⁴ בחצי הגלגל היורד חשוב כי הכוכב לנכח מעלתו ועשה כדרך שהראיתיך, או תמצא המבטים⁵. (10) ואין ביניהם הפרש, רק שאלה שיצאו שמאליים הם ימיניים והימיניים שמאליים, בעבור שלקחת מעלת נכח הכוכב.

9 (I) והנהוגים שהזכרתי, שהוא⁶ מהאלפים והמאות והעשרות, זאת דעת חכמי פרס והודו, ובטלמיוס לועג עליהם. (2) רק ניהוג הזמן הנקרא אלפרדאר הוא מנוסה, גם ניהוג מזל לכל שנה דבר ידוע ומנוסה⁷, ודעת כל⁸ הקדמונים הסכימה על זה ועממהם בטלמיוס⁹. (3) ומה שאמרנו¹⁰, כי העליונים יעתקו משלישות אל שלישות לתשע מאות וששים שנה, הוא על דרך קירוב¹¹, כי פעמים יוסיף גם פעמים¹² יגרע. (4) גם זה שהזכרתי במאתים וארבעים שנה, שהם שנים עשרה פעמים שיתחברו, יש פעמים שיתחברו שלוש עשרה פעמים¹³, וזה יקרה¹⁴ בעבור מהירות הליכת¹⁵ שני עליונים או המתנתם, ועוד אפשר זה¹⁶ בספר העולם בעזרת אלהי עולם¹⁷. והנה הספר נשלם¹⁸.

¹ בלוח גלגל ... הנמצאים] לראקטמ; פ חסר. ² תוספת] פלאטמק; ר חסר. ³ הנה שם המבט] פראקטמ; ל חסר. ⁴ היה] פראקטמ; ל תהיה. ⁵ המבטים] לראקטמ; פ במבטים. ⁶ שהוא] לראטמ; פ שהם; ק חסר. ⁷ מנוסה] פראטמ; ק חסר. ⁸ ודעת כל] פראטמ; ק וכל. ⁹ הסכימה על זה ועממהם בטלמיוס] פראטמ; ק ובטלמיוס הסכימו בו. ¹⁰ ומה שאמרנו] פראטמ; ט ומה שאמרנו; ק ואמרנו. ¹¹ קירוב] לראקטמ; פ הקירוב. ¹² גם פעמים] פראטמ; ט פעמים; ק או. ¹³ שיתחברו יש ... פעמים] פלאטמק; ר חסר. ¹⁴ יקרה] לראקטמ; פ חסר. ¹⁵ הליכת] פראטמ; ט חסר. ¹⁶ אפשר זה] פא; ט אפשרם; ק אפשר. ¹⁷ בעזרת אלהי עולם] פאמ; קט חסר. ¹⁸ והנה הספר נשלם] ר. פ והנה הספר נשלם תהלה לאל עולם; א והנה נשלם הספר; ק ונשלם; נשלם ספר הטעמים. השבח לשוכן מרומים. באמת ובתמים; מ והנה הספר נשלם.

degree ⟨of the aspect⟩, and find out whether the distance from the sign of the ascendant on the latitude plate is equal to the number of hours of the distance added to the aspect; proceed likewise regarding the hours opposite the degree. (7) If the aspect is in the quadrant between the line of lower midheaven and the descendant, subtract the rising times in the sphaera recta table opposite the line of lower midheaven from the rising times opposite the line of the aspect, and then divide the result by the hours on the latitude plate ⟨of the astrolabe⟩ opposite the degree ⟨of the aspect⟩. (8) If they are equal to the hours of the distance after the addition of the aspect, then the aspect is truly in this place; otherwise add a little or subtract and then you should find the degree of the aspect right away. (9) I have mentioned the method to calculate the aspects if the planet or one of the luminaries is in the ascending semicircle [i.e., above the horizon]; but if it is in the descending semicircle [i.e., below the horizon] assume that the planet is opposite its degree [i.e., if the planet is above the horizon, assume that it is in the opposite degree below the horizon] and proceed in the same way that I have already shown and you will find the aspects. (10) There is no difference between them, except that those that came out on the left are right and the right ones are on the left, because you took the degree opposite the planet.

9 (1) As for the directions that I have mentioned, namely, of thousands, hundreds and decades,^[1] this is the opinion of the scientists of Persia and India, but Ptolemy laughs at them.^[2] (2) Only the direction of the period called the *fardâr* has been verified by experience;^[3] the annual direction of a sign is also known and has been verified. All the Ancients concur in this opinion, including Ptolemy.^[4] (3) As for what we have said, namely, that the upper ⟨planets⟩ [i.e., Saturn and Jupiter] move from triplicity to triplicity in 960 years, this was said by way of approximation, since sometimes ⟨this period⟩ is longer and sometimes shorter. (4) Also, as for what I have mentioned, that 240 years are the time of 12 conjunctions, sometimes they conjoin 13 times, because of the rapid motion or lagging behind of the two upper ⟨planets⟩.^[5] I shall explain this topic further in the *Book of the World*,^[6] with the assistance of the God of the Universe. The book has been completed.

PART TWO

NOTES TO THE FIRST VERSION
OF THE BOOK OF REASONS

§ 1.1

^[1]**1: They divided.** The third-person plural is how Ibn Ezra usually introduces verbatim quotations from *Reshit Hokhmah I* into *Ṭe'amim I*. The most prominent expression of this type is *they said ...* (see § 1.2:4, § 1.4:5, § 1.6:2 *et passim*). By means of this stylistic feature (they said ...; they divided ...; they concluded ...; they put ...; etc.), Ibn Ezra seems to want to convey the idea that, although he drew on specific astrological sources, he considers the astrological lore compiled in *Reshit Hokhmah I* to be the product of a collective and cumulative enterprise. He expresses this idea at the end of the first chapter of *Reshit Hokhmah I*. See Rh, I, viii:17–18: *“ואני אוכיר לך בספר הזה כל מה שהסכימה פרס והודו ויון שראשם בטלמיס”* (“In this book I will mention everything about which the opinions of the Ancients among the Babylonians, and of the scientists of Persia, India and Greece, whose chief is Ptolemy, agree on”).

^[2]**1: 〈From half to one tenth〉, Hebrew מהצי עד עשירית.** This addition appears explicitly at Rh, I, vi:6, on which *Ṭe'amim I* is commenting.

^[3]**4: Lunar months, Hebrew לבנות, lit. moons.** For a similar terminology, see 'Ibbur, 1874, p. 7a.

^[4]**1–5: They divided the circle ... more fractions than 12:** Quotes from and comments on Rh, I, vi:4–8. The introduction to the second chapter, on division, of *Sefer ha-Mispar*, an arithmetical textbook written by Ibn Ezra ca. 1146 (see Sela-Freudenthal, 2006, n. 17, pp. 30–31), provides a virtually identical account of the division of the degrees of the circle into 360, 12, and 30 parts. See Mispar, 1895, pp. 12–13. The advantage of this method is explained in *Sefer ha-Mispar* as follows: *“והנה חכמי המזלות כאשר יכפלו מעלות על מעלות יהיה המחובר מעלות שהם אחדים שלמים; וככה, כאשר יחלקו מעלות על מעלות יהיה העולה בחלוק מעלות שהם אחדים שלמים”* (“So, when the astrologers multiply degrees by degrees, the result is given in degrees that are whole numbers; similarly, when they divide degrees by degrees the result of the division is given in degrees that are whole numbers”). For a similar explanation by Ibn Ezra, see 'Ibbur, 1874, p. 3a. See also *Sefer ha-Middot*, 1.49 (Middot, 2006, pp. 101, 179).

§ 1.2

^[1]**1: Ecliptic, Hebrew חשב אפודת הגלגל, lit. band of the girdle of the orb.** This Hebrew expression was coined by Ibn Ezra to designate the ecliptical component of the astrolabe's *rete*, a stereographic projection of the ecliptic, the sun's annual path in the sky, and of a number of the brighter fixed stars. See Neḥoshet A, bnf 1061, f. 164a; Neḥoshet B, Mant. 10, ff. 37a, 40a, 40b, 43b, 48a; Neḥoshet C, Pinsker 26, ff. 59a, 61a, 61b, 63a. Ibn Ezra also employs two other cognate Hebrew expressions to designate the same thing: (i) אפודת הגלגל, lit. vest of the circle (Ta §7.1:6; Tb §4.5:3); (ii) חשב האפודה, lit. band of the girdle (Ta §3.3:3, §7.1:3, §7.2:1, §7.2:4). He derived these three expressions from Ex. 28:8, which speaks of the girdle of the ceremonial vestments of the High Priest Aaron. In his commentary on this verse, Ibn Ezra suggests that the high priest's vestments included some sort of graphical representation of the zodiac and the equator. See Long Commentary on Exodus, 1976, pp. 186–187; Short Commentary on Exodus, 1976, pp. 323–324. See also Yesod Mora', 1985, p. 336. For Ibn Ezra's explanations of this expression and its usage in his work, see Sela, 2003a, pp. 137–139.

^[2]**3: At the end ... zodiacal constellations.** Surprisingly, this statement points to Tb §8.7:1, which begins as follows: “End of the book: I shall now reveal a secret to you,” and continues with an account of the motion of the fixed stars (Tb §8.7:1–6). In *Ṭe'amim I* this topic is not addressed at the “end of the book” but at §2.12:1–15. This suggests that the material related to the motion of the fixed stars was mixed up in the earliest renderings of the texts of *Ṭe'amim I* and *Ṭe'amim II*, prior to their crystallization in the second half of the thirteenth century, which is the date of the earliest extant manuscripts.

^[3]**3: Cor Leonis, Hebrew לב האריה, lit heart of the lion.** For this star, see Tb §8.7:9 and note.

^[4]**3: Equator, Hebrew קו הצדק, lit. line of justice.** This term (see §2.12:3,6; §8.1:6; Tb §1.2:5–6; §4.9:5; §8.7:5) is defined in 'Ibbur, 1874, p. 10a, as “the place of intersection of the two higher circles.” In 'Olam A, bnf 1056, f. 86a, the same term appears to be identical with the beginning of the zodiacal sign of Aries and different from the beginning of the zodiacal constellation of Aries. For the distinction between zodiacal signs and constellations, see below, §1.2:1–3 and note.

See also Mivḥarim B, bnf 1058, f. 10a. To denote the same meaning, in Ta §2.4:4 Ibn Ezra uses the similar Hebrew expression קו הישר. See Glossary, s.v. “equator”.

^[5]3: **Ptolemy said that *Cor Leonis* ... it is at <Leo> 18°.** Virtually identical statements, emulating Ptolemy in *Almagest* VII:2 (see *Almagest*, 1984, p. 328), representing an attempt to calculate the rate of the motion of the fixed stars by comparing the location of *Cor Leonis* in Ptolemy’s time and his own, were made by Ibn Ezra in his commentary on Amos 5:8 and in *Liber de rationibus tabularum*. See Commentary on Amos [5:8], 1989, pp. 213–214: “ויהנה בימי בלטימיוס החכם ואין לו רק אלף” (“In his time, roughly a thousand years ago, the scholar Ptolemy found that *Cor Leonis* was located at <Leo> 2° and now this star is at <Leo> 18°”). For this commentary, see Sela, 2003a, 257–273. See also *Liber de Rationibus Tabularum*, 1947, p. 82: “Similiter invenimus quod Ptholomeus probavit in suo tempore cor leonis in 3° gradu leonis esse fere, hodie vero invenitur probatione in 18° gradu leonis.”

^[6]3: **Enoch recorded in the *Book of the Longitude*.** Enoch, or Hermes, is a legendary figure to whom the so-called Hermetic writings, which include significant astrological material, are ascribed. Abū Ma’shar was probably responsible for the creation of the triple Hermes (Kitāb al-Ulūf, 1968, pp. 14–19; Tabaqāt al-’Umam, 1991, pp. 19, 36), a myth to which Ibn Ezra subscribes in ‘Olam A, bnf 1056, ff. 83b, 85a. On the basis of the position of *Cor Leonis* ascribed here to Enoch (Cancer 25°), it turns out that Ibn Ezra believed that Enoch lived 1,700 years before his own time. Ibn Ezra frequently mentions Enoch’s astrological and astronomical work, usually in an approving tone, in *Ṭe’amim I*, *Ṭe’amim II* (see Appendix 5: Authorities and Sources) and throughout his scientific oeuvre. See Sela, 2003a, pp. 184–185; *Astrological History of Māshā’illāh*, 1971, p. 89 n. 13. The *Book of the Longitude* ascribed here to Enoch is mentioned in *Categories of Nations* by Sa’id al-Andalusī, a philologist, natural philosopher, historian and judge who lived in al-Andalus in the eleventh century (Tabaqāt al-’Umam, 1991, p. 19). This work is in all likelihood the same as Hermes’ *Book of Latitude and the Book of Longitude and the Key of the Stars* in Milan, Ambros., ar. C. 86. This work was evidently known by twelfth-century Latin writers, since it was referred to (1) in a preface to a variant text of Raymond of Marseilles’ *Iudicia*, which refers to “librum quem Mercurius rex Egipti de fide

Trinitatis (!) qui et longitudinis et latitudinis intitulator composuit” (London, British Library, Royal 12.E.XXV and Oxford, Bodleian Library, Digby 57), and (2) in the preface to the twelfth-century cosmology, *Liber Hermetis de sex rerum principiis*, recently re-edited by Paolo Lucentini and Mark D. Delp (Hermes Latinus, II, Turnhout, 2006), p. 147: “Hermes Mercurius Triplex...Virgam auream, Librum longitudinis et latitudinis, Librum electionis et Ezich id est canones super adaequationem planetarum et super astrolapsus, et alia multa opere luculento complevit.” I am grateful to Prof. Charles Burnett for this information.

[7] **1–3: The signs were named ... it was at Cancer 25°.** In this passage Ibn Ezra wants to highlight that although the zodiacal signs were named for the images projected by the asterisms of the zodiacal constellations (§1.2:1), the signs differ from the constellations in two main respects. First, in their size (§1.2:2): whereas a zodiacal sign refers to one of the 30° arcs along the ecliptic, a zodiacal constellation is one of the twelve groups of asterisms, of different sizes, located in the zodiac, that is, the belt centered on the ecliptic. Second, in their ecliptical longitude (§1.2:3): whereas the positions of the zodiacal signs are fixed, the zodiacal constellations constantly move away from the equinoxes on account of the slow motion of the fixed stars (as in the case of *Cor Leonis*). Identical arguments, interspersed with virtually the same supporting evidence, are put forward in *Liber de Rationibus Tabularum*, 1947, p. 84: “Sententia Ptholomei est ut dividamus gradus circuli firmamenti, qui sunt 360, per 12 equalia ... et quia figura arietis continetur infra 30 gradus prime distinctionis, tota illa distinctio aries dicitur. Nec cum audieris caput arietis ociose cogites quia caput illius figure ibi sit, immo potius quod ibi est initium prime distinctionis, nam figura arietis non optinet de circulo nisi vix 7 gradus, et distant eius cornua ab initio illius distinctionis 22 gradus, et ita intelligendum est quod dicit Ptholomeus se invenisse cor leonis in 3° gradu leonis, quia dicit se invenisse illud distans a primo puncto prime distinctionis 123 gradus. Secundum hoc etiam debes intelligere quod dicunt magistri probationum qui asserunt illud hodie esse 18 gradu, qui distat ab intersectione 138 gradus.”

[8] **5: Ptolemy called the *Falling Eagle* the *Almond Tree*.** Vega (Alpha Lyrae), mentioned as “the bright star on the shell, called Lyra,” No. 1 in the constellation of Lyra in Ptolemy’s star catalogue. See *Almagest*, 1984, VII:5, p. 349. The name of the star alludes to the

shell of the tortoise from which, in Greek myth, the infant Hermes constructed the first lyre. *Almond Tree* is a later ascription, accounted for by the shell that encloses this fruit. The attribution by Ptolemy of the same name (*amigdala*) to the same star appears in the twelfth-century in *Epitome totius astrologiae* (*Ysagoge* and *Liber quadripartitus*). Epitome, 1548, p. C(i): “Est ibi Aquila Cadens ... quam Amigdalam Ptolomeus dicit.” See Smithuis, 2004, Chapter 3, 4.

^{[9]5: Nature, Hebrew תולדת. This biblical neologism (Gen. 2:4 *et passim*) is defined by Ibn Ezra (long commentary on Exodus 23:25) as “a power (*koah*) that protects the body and which man receives from Heaven.” The widespread use of *toledet* in *Ṭe’amim I* and *Ṭe’amim II* (and throughout Ibn Ezra’s oeuvre, in fact) is in sharp contrast with the complete absence of the stock Hebrew word *ṭeva*’, borrowed from its Arabic cognate *ṭiva’a* and widely used by Ibn Ezra’s contemporaries, such as Abraham Bar Ḥiyya, Maimonides, Judah Ibn Tibbon, and Samuel Ibn Tibbon. A cursory analysis of its numerous occurrences in *Ṭe’amim I* and *Ṭe’amim II* suggests that Ibn Ezra construed *toledet* as meaning nature and its variegated phenomena, such as the four elements and their qualities, the quintessence, the planets and the stars, man and its physical configuration, the whole numbers, the planetary and mundane houses of the horoscope, etc. (see Glossary s.v. “nature”). For Ibn Ezra’s motives and the uses and meanings he gave to the term *toledet*, see Sela, 2003a, pp. 130–137.}

§ 1.3

^{[1]1: The 48 constellations ... uppermost orb ... zodiacal signs:}

Follows Rh, II, vi:10, where the uppermost orb is made identical with the eighth orb. Notice, however, that at Rh, II, lxxxv:3 and at Tb §1.2:5,7 the uppermost orb is placed above the orb of the zodiacal signs. For Ibn Ezra’s ambiguous attitude towards the position of the uppermost orb, see Tb §1.2:5 and note.

^{[2]2: “Servants”, Hebrew משרתים: For this neologism coined by Ibn Ezra, see Tb §1.2:1 and note.}

^{[3]2: They undergo variations ... dwell on Earth. Here Ibn Ezra conveys an idea that is common all through his work: the planets}

exhibit disordered motions, a feature which makes them similar to the creatures of the sublunary world and entails the risk of blurring the proper borders between the super- and sublunary worlds. Ibn Ezra usually resolves the contradiction by arguing that the planets' erratic motion is only an apparent visual phenomenon, the result of our observing them from the center of the universe, that is, from the earth. See *Yesod Mora'*, 1985, XII, p. 341; *Commentary on Psalms*, 1525, 19:2,3; *Long Commentary on Exodus*, 1976, 3:15; *Short Commentary on Exodus*, 1976, 3:13; *Rh*, I, v:20–vi:1 *et passim*. For a discussion, see Sela, 1999, pp. 258–265.

^[4]**3: Ecliptic, Hebrew חֶשֶׁב אֶפֹּרֶת הַגִּלְגַּל, lit. the band of the girdle of the orb.** See above, §1.2:1 and note.

^[5]**3: The Northern and the southern constellations.** This is a reference to the 15 constellations that are north of the zodiac and the 21 constellations that are south of the zodiac, whose stars are listed at *Rh*, I, vi:17–30, vii:1–7.

^[6]**1–4: The 48 constellations ... action and thought:** This passage, following *Rh*, II, vi:10–12, vii:15–18, offers a top-to-bottom description of the universe, which, in contrast to *Tb* §1.2:1–5, includes only eight orbs. A similar separate treatment of the Moon (§1.3:4), in the context of a presentation of the universe, is found in the introduction to *Sefer ha-Me'orot*, where Ibn Ezra also refers to the irregular motions of the planets. See *Me'orot*, München 202, ff. 102b–103a.

^[7]**6: The lower hides the upper:** Corresponds closely to *Tb* §1.2:3; see note there.

^[8]**7: Zodiac, Hebrew גִּלְגַּל הַמְּזֻלֹּת, lit. the circle of the zodiacal constellations.** Here Ibn Ezra refers to the great circle of the ecliptic, which represents the apparent annual path of the sun in the heavens, is usually divided into 360°, and along which are located the 12 mundane houses and zodiacal signs. See Glossary s.v. “zodiac” and “orb of the zodiacal signs”. For an additional closely related although not identical meaning of the term *zodiac*, see above, §1.2:1 and note.

^[9]**7: The other method ... twenty-eight days:** Corresponds to *Tb* §1.2:2.

^[10]**9: Still others asserted ... sometimes beneath.** Corresponds to Tb §2.5:2. See note there.

^[11]**9: This book was not intended to discuss these topics.** This is a reference to Rh, II, vii:15–17, where the relative positions of the planets and their orbs is provided (Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon), without any discussion about the relative positions of Venus and Mercury. Cf. Tb §2.5:1–2. This is also an allusion to the fact that whereas *Reshit Hokhmah I* presents raw astrological concepts, *Te'amim I* is intended to provide the *reasons* for them.

^[12]**10: Astrologers, Hebrew חכמי המזלות, lit. scholars of the zodiacal signs.** This is a new coinage by Ibn Ezra, widely employed in both versions of *Sefer ha-Te'amim* (see glossary) and throughout his oeuvre to refer predominantly to astrologers, but also to astronomers, mathematicians, and calendrists. For the multiple uses of this expression in Ibn Ezra's work, see Sela, 2001a, pp. 84–86.

^[13]**5–11: The Ancients knew ... Venus and Mercury ... away from the Sun.** While commenting on Rh, II, vii:15–18, and as a sequel to the previous description of an eight-orb universe, Ibn Ezra indulges in a fairly long deduction of the existence of these orbs in a definite order and from top to bottom. Two main arguments are provided, the same as in Tb §1.2:2–3: (a) the various cycles of the planets; (b) the occultations of the planets. The values for the elongation of Venus and Mercury are similar, although not identical, to those offered in *Liber de Rationibus Tabularum*, 1947, p. 122; the account of the disagreement about the positions of Venus and Mercury with respect to the Sun is based on *Almagest IX:1* (*Almagest*, 1984, IX:1, p. 419): “But concerning the spheres of Venus and Mercury, we see that they are placed below the sun's by the more ancient astronomers, but by some of their successors these too are placed above the sun's, for the reason that the sun has never been obscured by them [Venus and Mercury] either.” A similar briefer account of this disagreement can be found in Tb §2.5:1–2, where it was inserted to achieve an astrological objective, and in Ibn Ezra's long commentary on Exodus 20:13, to explain the rationale behind the seventh, eighth, and ninth of the Ten Commandments. See Tb §2.6:6 and note; Long Commentary on Exodus, 1976, 20:13, p. 140. Notice that at Ta §1.3:9 Ibn Ezra informs about a theory according to which Mercury and

Venus “sometimes they are above and sometimes beneath” the sun; Ibn Ezra endorses this partially heliocentric theory in Tb §2.5:2. See note there.

[14] **12: Themselves luminous.** Ibn Ezra conveys a similar opinion about the light of the planets in his commentary on Psalms 148:3, in *Sefer ha-Me’orot* (where the planets, except the Moon, are called “stars of light”), and in his answer to three queries about the calendar posed by David b. Joseph of Narbonne. See *Me’orot*, München 202, f. 102b; *Three Queries*, 1847, p. 2. Cf. Bouché-Leclercq, 1899, p. 89 n. 2.

§ 1.4

[1] **1: Experience, Hebrew ניסיון.** This recurrent term has been rendered here as “experience” but in fact goes further and refers to the method employed by the astrologers, indicates that their science is based on induction and analogies (Tb §1.3:2), mathematical calculations (Ta §2.2:17), knowledge accumulated in books over the generations (Ta §2.4:2), and astronomical observation (Ta §2.12:14–15), rather than on deduction from theoretical principles. See Glossary, s.v. “experience”.

[2] **2–3: Ya‘qub al-Kindî ... smaller agent.** Corresponds closely to Tb §2.1:6–9; see note there.

[3] **6: I shall explain ... the aspects.** See below, Ta §3.1:5; §3.2:5.

[4] **1–7: As for the reason that Aries ... these signs are like that.** This passage comments on Rh, II, vii:18–21, where a succinct account of the nature of the triplicities is offered. Ya‘qub al-Kindî’s account (Ta §1.4:2–3) is somewhat amplified in Tb §2.1:6–10. There is a similar reference to heat and cold as the two agents in Abû Ma’shar’s *Great Introduction*. See *Kitâb al-Madḥal*, 1996, II:5, v, pp. 76–77. Ibn Ezra’s own opinion about the nature of the triplicities (§1.4:4–7) corresponds closely to that conveyed by him in Tb §2.1:11–14; see note there. For signs in the form of human beings or animals, see Tb §2.3:9 and note.

§1.5

^[1]**2: Domain of burning.** Refers to the “place of burning”. See below, Ta §2.16:5 and note.

^[2]**1–4: The explanation of the natures ... taken to be mixed.**

Although Ibn Ezra claims that he is drawing on Ptolemy’s *Tetrabiblos* (see *Tetrabiblos*, 1980, I:4, 34–39), his account may be grounded on a section of Abû Ma’shar’s *Great Introduction* devoted to the nature of the planets. In this section (see *Kitâb al-Madḥal*, 1996, IV:1, v, pp. 137–140), Abû Ma’shar not only declares that his source is Ptolemy’s *Tetrabiblos*, but also offers a criticism of Ptolemy’s account of the nature of the planets that is consistent with, although not identical to, Ibn Ezra’s own approach to the same subject (Ta §1.5:7–17). What is more, at the beginning of this section Abû Ma’shar reveals that Ptolemy, the astrologer, was an Egyptian king, a notion to which Ibn Ezra subscribes throughout his work. See Sela, 2003a, pp. 296–313, and Tb §5.5:6, §7.1:1, which mentions “Ptolemy the King.” Similar accounts of the nature of the planets may be found in manuals of astrology, either separately (*Art of Astrology*, 1934, par. 381, pp. 231–232) or as part of the description of the general astrological properties of the planets (*Abbreviation*, 1994, pp. 61–69; al-Qabîṣî, 2004, II:1–51, pp. 63–89). The same topic is developed by Ibn Ezra in *Liber de Rationibus Tabularum*, 1947, p. 97 and Tb §5.1:4; §5.2:6 *et passim*.

^[3]**5: I shall explain in the *Book of Nativities*.** This is a reference to the first version of *Sefer ha-Moladot* (see Sela-Freudenthal, 2006, n. 31, p. 35). See *Moladot*, bnf 1056, f. 54a: וְבַטְלָמְיוֹס אָמַר בְּסֵפֶר הַד' שְׁעָרִים כִּי לְעוֹלָם נִסְתַּכֵּל בְּדַבְרֵי הַבֵּן מִהַבִּית ה' וּמִבֵּית י"א. וְכָל הַבָּאִים אַחֲרָיו וּמֵאֲשָׁא אֵלֶּה עֲמָהֶם מְלַעֲיָיִם עָלָיו וְהַדִּין עִמָּהֶם. הַזִּכְרֵתִי לָךְ זֶה בַּעֲבוּר שְׁלֹא תִסְמַךְ עַל כָּל דְּבָרֵי הַסֵּפֶר כִּי אֵין בּוֹ מִמֶּשׁ. כִּי הַזֶּה הַזִּכִּיר בְּסֵפֶר שֶׁאִם הִיא הַשֶּׁמֶשׁ וְהַלְבָּנָה בְּמִזְל שִׁישׁ ל' ב' גּוֹפּוֹת, אוֹ הַלְבָּנָה אוֹ הַשֶּׁמֶשׁ אִם מִזְל הַצּוּמָח שִׁישׁ ל' ב' גּוֹפּוֹת הַנוֹלָד לֹא יִהְיֶה לְבָדּוֹ בְּבִטָּן, כִּי תֹאמְרִים יְהִי, וְזֹאת טַעוּת גְּדוֹלָה. ("Ptolemy said in the *Tetrabiblos* that regarding children we should always observe the tenth and eleventh (mundane) houses. All those who came after him, including Mâshâ'allâh, laugh at him; and they are right. I have mentioned this so that you will not rely on everything written in that book [i.e., the *Tetrabiblos*], because it has no substance. For he mentioned in his book that if the Sun and the Moon are in a bicorporal sign, or if the Moon or the Sun are in an ascending sign which is bicorporal, then the

native will not be alone in the womb, for they will be twins, and this is a great error.”) See also below, Ta §2.18:2, where the attack on Ptolemy’s astrological doctrines is resumed.

^[4]**7: Made of a fifth element, Hebrew מתולדת המישיה, lit. of a fifth nature.** A similar argument is offered in Abû Ma’shar’s *Great Introduction*. See Kitâb al-Madhal, 1996, IV:3, v, p. 147. See also Tb §2.1:1, Ta §2.7:3 and note. For the Hebrew neologism *toledet*, i.e. nature, see above §1.2:5 and note.

^[5]**7: Aristotle explained with incontrovertible proofs.** See *De Caelo* I:2–3.

^[6]**8: 166 times larger:** The same ratio appears in Ptolemy’s *Planetary Hypotheses*, 1967, 7, 9. The other comparisons of the size of the Earth and of the other planets made in this section (§1.5:13,15,16), as well as their distance from the Earth (§1.5:9,13, 15, 16), are consistent with the values given in Ptolemy’s *Planetary Hypotheses*.

^[7]**7–12: But the truth ... and harms them.** Corresponds closely to Tb §2.1:1–4; see notes there. The elements of this passage—the statements that stars are neither cold nor hot, that they generate heat only as a consequence of their motion and of the nature of their light, the reference to human complexion, the comparison with bovine flesh and the statement that all flesh is hot—may be found in a passage of *Liber de rationibus tabularum* that comments on Ptolemy’s opinion about the nature of the Moon. *Liber de Rationibus Tabularum*, 1947, p. 97: “Bene autem cognovimus omnes stellas in se neque calidas neque frigidas esse. Motu tamen et lumine effectivas esse caloris. Sed quia corpus lune parvum est nec equiparatur soli in effectum caloris nec reddit calorem sufficientem complexioni humane, ideo in comparatione dicta est frigida et humida. Qua ratione magistri philosophice carnem bovinam frigidam dicunt, cum tamen omnis caro calida et humida sit.”

^[8]**13–15: The same applies to Saturn ... applies to Mercury.** Corresponds to Tb §5.3:2–3. See also below, Ta §4.2:1.

^[9]**17: Aldebaran and Antares, Hebrew עין השור ולב עקרב.** Alpha Tauri and Alpha Scorpionis in Ptolemy’s star catalogue (*Almagest*,

1984, pp. 362, 372). Arabic: *Al-dabarân* and *Qalb al-‘aqrab*. For their identification in star lists compiled by Ibn Ezra, see Goldstein, 1985, pp. 192–199.

§ 1.6

^[1]3: **When I come to the appropriate place.** See below, Ta §4.3:1.

^[2]7: **Dragon, Hebrew תלי.** This name recalls the cosmological fate of *Tiamat*, a mythological dragon slain by *Marduk*, a solar god, thus shaping the heavens with its head and its tail, in the Babylonian creation myth. See Bouché-Leclercq, 1899, pp. 40, 97; Tester, 1987, pp. 120–121. Subsequently astronomers employed this myth to explain celestial phenomena: the Head of the Dragon and its Tail (Hebrew: ראש התלי וזנבו; Arabic: *Ras wa dhanav al-tinnûn*; Latin: *caput draconis et cauda*) represented the nodes of the planets, that is, the points where the planets cross the ecliptic from south to north and from south to north, respectively. In the Middle Ages, Indian, Persian and Arabic astrologers assigned specific astrological characteristics and influence to the nodes of the Moon. To denote this concept Ibn Ezra employed the Hebrew word תלי (*teli*). He could have borrowed this word from a variety of sources such as *Baraita de-Mazzalot* (Baraita de-Mazzalot, 1928, ch. 14), *Baraita de-Shemu’el* (Baraita de-Shmu’el, 1901, ch. 1, 2, 4, 5, 8), *Sefer Yeširah*, a mystical treatise interspersed with some scientific material that was well known to him (“תלי בעולם כמלך על כסאו” [“*Teli* is in the world like a king on his throne”]), or commentaries on *Sefer Yeširah* (Shabbetai Donnolo’s *Hakhmoni*, Sa’adiah Ga’on’s *Tafsîr Kûtâb al-Mabâdi*, the commentaries by Dunam Ibn Tamim and Judáh ben Barzilai al-Bargeloni). For the place of the *teli* in Hebrew literature prior to Ibn Ezra’s times, see Sharf, 1976, pp. 33–51.

^[3]7: **In its proper place.** See below, Ta §5.3:1–5.

§ 2.1

^[1]1: **The six signs ... the southern.** Quotes from and comments on Rh, II, viii:25–26.

[2] **2. Climate, Hebrew גבול, lit. border** (Arabic *'iqlim*, Latin *clima*). Ibn Ezra took this word from Psalms 74:17, identifying it in his commentary there with the concept of the seven climates. Commentary on Psalms, 1525, 74:17: *וְהַזְכִּיר כִּי הַשְּׁבַע גְּבוּלוֹת הֵם נִצְבִּים לְעוֹלָם וְלֹא יִתְחַלֵּף הַיָּיִשׁוּב, וְטַעַם קִיץ וְחוֹרֶף בַּעֲבוּר הַיּוֹם רֹב הַיָּיִשׁוּב בַּפֶּאֱת שְׁמָאֵל וְקִצְתוֹ בַּפֶּאֱת דְּרוֹם, וְטַעַם לְהַזְכִּיר זֶה עִם גְּבוּלוֹת אֶרֶץ כִּי בַּהֲיוֹת בַּמָּקוֹם אֶחָד קִיץ הוּא בַּמָּקוֹם אֲחֵר* “*וְהַזְכִּיר*” (“And he mentioned that the ‘seven climates’ are fixed forever, and the ecumene will not change. The reason for writing ‘summer and winter’ is that most of the ecumene is in the north and only a slight part is in the south. The reason for mentioning this together with the climates is that when it is summer in one place it is winter in the other.”) This coinage is widely used in *Ṭe’amim I* (see Glossary, s.v. “climate”) but is not found in *Ṭe’amim II*. For the usage of this word in Ibn Ezra’s work, see Sela, 2003a, pp. 107–112.

[3] **2–6: Many peoples began ... among all the signs.** Corresponds to Tb §2.2:1. See also Mishpetei haMazzalot, bnf 1058, f. 14a and Kitāb al-Madḥal, 1996, II:5, v, pp. 76–79. Notice that Ibn Ezra’s position in this passage, to the effect that “it is fitting that the beginning of the year be in the sign of Aries” conflicts with the normative Jewish start of the year, which occurs close to the moment when the Sun enters the sign of Libra. Ibn Ezra endorses an opinion that is more harmonious with his Jewish background in *’Iggeret haShabbat*, 1894/5, pp. 68–70.

§2.2

[1] **1: As I have explained:** See above, §1.4:1–4.

[2] **1: East, Hebrew פֶּאֶת מִזְרֵחַ, lit. eastern edge (of the horizon).** Ibn Ezra uses the Hebrew term *פֶּאֶת*, lit. corner or side, in a number of senses, such as the four cardinal points (Ta §2.2:1, §4.2:9 *et passim*), directions on the horizon that are intermediate between the cardinal points or that are given with respect to the cardinal points (Ta §3.6:7, §4.8:7 *et passim*), directions relative to the equator or the ecliptic (Ta §2.2:9, §7.1:9 *et passim*), etc.

[3] **1: Masculine because ... is hot.** For masculine signs, see Tb §2.3:11 and note. According to introductions to astrology, the diurnal signs are identical with the masculine signs (Aries, Gemini, Leo, Libra,

Sagittarius and Aquarius) and the nocturnal are identical with the feminine signs (Taurus, Cancer, Virgo, Scorpio, Capricorn, Pisces). See Tetrabiblos, 1980, I:12, pp. 69–71; Art of Astrology, 1934, par. 349, p. 211–212; Kitâb al-Madḥal, 1996, II:8–9, v, pp. 83–84. For eastern signs, see below, Ta §2.2:8.

^[4]**1: Tropical because ... grow shorter.** Corresponds to Tb 2.3:1–2; see Tb 2.3:1–4 and note.

^[5]**1–2: Its rising times grow ... in its rising times.** See Tb §2.3:5 and note.

^[6]**4–5: They said that it is a four-legged ... one after the other.** For the signs whose limbs are cut off or “deformed”, see below, Ta §2.3:1, and Tb §2.3:17 and note. For the four-legged signs, see Tetrabiblos, 1980, I:12, p. 71, and al-Qabîṣî, 2004, I:24, p. 33, where the four-legged signs do not include Aries.

^[7]**7: Half a voice ... not of a man.** Corresponds to Tb §2.3:13. See note.

^[8]**8–9: They said that the heart ... Sagittarius is in the south-east.** This passage comments on Rh, II, ix:4 (Aries “has the heart of the east and the eastern wind”), Rh, II, xix:28–29 (Leo “has the left of the east and the eastern wind”) and Rh, II, xxviii:19 (Sagittarius “has the right of the east and the eastern wind”). In contrast to these partial and limited accounts, a comprehensive and detailed discussion of the signs’ cardinal points and of their positions on the horizon relative to the cardinal points is offered in Tb §2.2:1–7; see note there. Ta §2.13:8–9 presents the opinions of Ptolemy and Ya‘qub al-Kindî concerning the signs’ cardinal points.

^[9]**11: Of the tastes the sweet.** See Tb §2.2:7 and note. Notice that Abû Ma‘shar, both in his *Great Introduction* (Kitâb al-Madḥal, 1996, VI:1, v, p. 216) and in the *Abbreviation* (Abbreviation, 1994, p. 15), states that Aries’ taste is “bitter.”

^[10]**12: Of the metals ... fiery nature.** Corresponds to Tb §2.3:18; see note there.

[11] **13: They said ... is temperate.** Although *Reshit Hokhmah I* assigns one of the seven climates to each sign, and *Te'amim I* comments on that in the cases of Aries (§2.2:13) and Taurus (§2.13:6), Arabic introductions to astrology ascribe a list of geographical places but not a specific climate to each of the signs. See, for example, Kitâb al-Madḥal, 1996, VI:9, v, pp. 247–250; Art of Astrology, 1934, par. 365, p. 220.

[12] **14: Houses of prayer ... place of judges (belongs to it).** Comments on Rh, II, ix:9–10, where these two characteristics of Aries are ascribed to Ptolemy. The version of *Reshit Hokhmah I* in MS Vatican 49, f. 2b, reads as follows: “In the opinion of Ptolemy, Aries is in charge of the house of worship because it begins at the equator (lit. the line of justice) and the place of the judges” (ועל דעת בטלמיוס בחלקו בית התפלות כי) (בתחלתו קו צדק ומקום הדיינים). Cf. Tb §2.4:13 (“In the equator originate the houses of divine worship”) and note. As for the ascription of the place of judges to Aries, note that, besides the fact that Aries begins at the equator, here Ibn Ezra employs the Hebrew term קו הצדק, lit. “line of justice”, for the equator. See above, §1.2:3 and note, and Glossary s.v. “equator”.

[13] **16: As I shall explain in its proper place.** See below, Ta §4.4:6 cf. §4.2:11.

[14] **16: Its years are 15 ... for its months.** Comments on Rh, II, ix:11. Similar values are offered in Kitâb al-Madḥal, 1996, VI:9, v, p. 247 and Art of Astrology, 1934, par. 372, p. 224.

[15] **17: I saw it in Abû Ma'shar's book.** *Te'amim I* comments here on Rh, II, ix:11–12 and refers specifically to Kitâb al-Madḥal, 1996, VI:9, v, p. 247, where precise arithmetical rules are given for the calculation of the “days and hours” of some sign. Ibn Ezra thus reveals that the *Great Introduction* by Abû Ma'shar is one of the main sources of *Reshit Hokhmah I*, a fact which is not indicated by any explicit reference in the latter work. For the dependence of *Reshit Hokhmah I* on the *Great Introduction*, see below, Ta §5.1:1, §6.1:1, §7.1:1 and notes; see also Smithuis, 2004, ch. 5.

[16] **17: I verified it by experience.** The contents of Kitâb al-Madḥal, 1996, VI:9, v, p. 247, namely, the passage “in Abû Ma'shar's book” mentioned in Ta §2.2:17 (see previous note), enable us to get a better

grasp on the meaning of the stock phrase “verifying by experience,” frequently employed by Ibn Ezra in *Ṭe’amim I*, *Ṭe’amim II* (see Glossary, s.v. “experience”), and elsewhere to denote that he, or other astrologers, have tested the accuracy of some astrological doctrine. In this particular case, it means that Ibn Ezra had followed the arithmetical rules prescribed by Abû Ma’shar’s in the *Great Introduction* for the calculation of the “days and hours” of some sign, and, after performing the calculations, had found that the values given by Abû Ma’shar are correct. The Latin translation of the passage (Kitâb al-Madḥal, 1996, VI:9, v, p. 247) runs as follows: “Dies autem eius et hore extrahuntur unicuique signo duobus modis diversis. Primo: ut multiplices annos eiusdem signi minores xii quousque reddantur menses. Post hec duplicabis ipsos menses, et adde postea desuper numerum similem numero annorum planetarum minorum, et quod collectum fuerit divides per x, et quod exierit erunt dies, quod vero remanserit erunt partes de x unius diei. Et quod collectum fuerit erunt dies eiusdem signi et eius partes. Secundus autem modus est ut accipias annos planetarum minores et pones eos menses; post hoc proicias dimidium eius, deinde proicias de secundo dimidio similitudinem planete minorum, post hoc divides residuum per xxiiii horas et quod exierit erunt dies, quod vero remanserit erunt hore. Et quod collectum fuerit erunt dies et hore eiusdem signi per modum secundum.”

^[17]**18–19: The image of a woman ... we do not know their secret.** This passage deals with the association of each of the three decans of each of the twelve signs with the images of the stars that rise together with the corresponding decan. For the doctrine of the decans, see below, Ta §2.8:1–8 and notes; Tb §2.9:4 and note. *Reshit Hokmah I* offers three different approaches for each decan—the first anonymous, and then those of the Indians and Ptolemy—which are for the most part quotations from Abû Ma’shar’s *Great Introduction*. Thus, for Aries, see Rh, II, ix:12–29, x:1–2 and cf. Kitâb al-Madḥal, 1996, IV:1, v, p. 216–217; for Taurus, see Rh, II, xii:4–24 and cf. Kitâb al-Madḥal, 1996, IV:1, v, p. 218–219. See also Art of Astrology, 1934, par. 450, p. 262–263. As for the present passage, *Ṭe’amim I* quotes from Rh, II, ix:12–13, but the reference to the images of the woman, the tail of a fish, the head of the triangle, and the bull is ultimately a verbatim quotation from the approach of the Persians, Babylonians and Egyptians to the first decan of Aries as offered in Kitâb al-Madḥal, 1996, IV:1, v, p. 216: “Et ascendit in prima facie eius mulier ... et cauda tructe marine ... et

initium trianguli et caput althemor, quod est thorail.” The same applies to the references to Ptolemy and the Indians (§2.2:19), which are the other two approaches mentioned in *Reshit Hokhmah I* as well as in *Kitâb al-Madḥal*, 1996, IV:1, v, p. 216–217. As for the “secrets” mentioned in this passage, the version of *Ṭe’amim I* in MS ̔ (Paris, Bnf, MS Héb. 1055), f. 29b, adds the following: “in my opinion sentence 96 of *Sefer ha-Peri* (*Centiloquium*) gives an explanation for that.” Note that MS ̔ also includes the translation of *Sefer ha-Peri* by Kalonymus ben Kalonymus.

[18] **20: The body ... ears flaccid.** Quotes from Rh, II, x:2–3 and refers to the physical appearance of a native whose ascendant is in some decan.

[19] **1–20: They concluded ... things through experience.** The entire section is a telling example of Ibn Ezra’s explanatory strategy in *Ṭe’amim I*. It consists of a series of verbatim quotes from a whole and almost continuous section in *Reshit Hokhmah I* describing the astrological properties of Aries (Rh, II, viii:27–ix:13, ix:17, x:2–3). These quotes, usually headed by the customary formula “they said” or “they concluded” (see above §1.1:1 and note), are accompanied by brief explanations, which in some cases correspond to those offered in *Ṭe’amim II*. For a comparison showing how quotations from Rh, II, viii:27–x:3 are embedded in Ta §2.2:1–20, see Appendix 2, example II.

§2.3

[1] **1: This sign ... the health of the body.** For the deformed signs and signs with human images see Tb §2.3:9, §2.3:17 and notes.

[2] **3: The chest is the pain of Saturn in it.** The underlying idea here is that the planets indicate pains in the human body, and that in every sign the planet has a limb that is special to it. See al-Qabîṣî, 2004, I:37, p. 37. In the following lines Ibn Ezra expands on this doctrine and explains the mechanism by which the pains of the planets are allocated in the zodiacal signs. See Ta §2.3:3–7 and Tb §4.10:1–7 and notes.

[3] **2–7: They assigned the head ... each of the signs.** This passage is divided into two parts, each of them commenting on two astrological properties of Aries as presented without explanation in the separate

section on Aries in *Reshit Hokhmah I*: (a) Ta §2.3:2 corresponds to Tb §2.4:20–21 (see note there), comments on Rh, II, x:11–14, and offers a complete account of the distribution of the parts of the body amongst the zodiacal signs—the doctrine of “melothesia”; (b) Ta §2.3:3–7 corresponds closely to Tb §4.10:1–7, comments on Rh, II, x:14–16, and gives an explanation of the doctrine of “pains,” that is, the mechanism by which the pains of the planets are allocated in the zodiacal signs. By contrast, *Reshit Hokhmah I* eschews explanations and records the pains of the planets in the signs in the separate sections devoted to each of the signs. Likewise, al-Qabîṣī, 2004, I:37–48, pp. 39–41 offers lists of the pains of the planets in the signs without any explanation of the mechanism of distribution, although it differs somewhat from the lists in *Reshit Hokhmah I*. For an explanation of the mechanism of distribution, see Tb §4.10:1–7 and note.

^{[4]8: The power of the Sun is in this sign.} See below, Ta §2.6:1. Cf. Art of Astrology, 1934, par. 362, p. 219.

§2.4

^{[1]1: Now I need to amplify further.} The next two sections (§2.4:1–12, §2.5:1–12) correspond to Tb §5.1:1–10, §6.1:1–7 and offer an explanation of the planetary houses (Hebrew בתיים, lit. houses, Arabic *buyūt al-kawâkib*, Latin *domicilia*). The explanation of the planetary houses in *Ṭeʿamim I* is a telling example of Ibn Ezra’s method of digression, resembling the *excursus* pattern in his biblical commentaries: instead of commenting on a quote from *Reshit Hokhmah I*, as is usual throughout *Ṭeʿamim I*, he prepares the reader for a long discussion, and, following some methodological remarks, provides an eclectic account of the topic that includes sporadic disclosure of his sources.

^{[2]4: Equator, Hebrew קו הישר, lit. line of straightness.} In *Ṭeʿamim I* and *Ṭeʿamim II* Ibn Ezra uses the Hebrew expression קו הצדק, which has virtually the same literal meaning as קו הישר. See Glossary s.v. “equator”; see also Ta §1.2:3 and note.

^{[3]4: Cancer is the sign of the world ... the root:} This passage, which corresponds to Tb §2.4:9, is a succinct description of the “thema mundi,” the horoscope of the creation of the world, where Cancer

was the ascendant and the Sun was in midheaven, at the beginning of the sign of Aries. For references to this horoscope in Ibn Ezra's work, see Ibn al-Muthannâ's Commentary, 1967, pp. 152, 299; *Liber de Rationibus Tabularum*, 1947, pp. 88, 89. For the "thema mundi" in Greek and Latin sources and its connection to the placing of the planets in their houses, see Bouché-Leclercq, 1899, pp. 185–188, Tester, 1987, pp. 94, 119–120. MS ר (Oxford, Bodleian Library, Add. Qu. 160), f. 69b, adds in the margin further information about Cancer's role: "היה צומח כשהוא נברא" ("it was rising when it was created") meaning that Cancer was the ascendant when the world was created. Cancer's role at creation is also mentioned in *Kitâb al-Madḥal*, 1996, V:7, v, p. 192: "Et iam novimus quod cum fuerit primum minutum Arietis in medio celi super lineam equalitatis, erit primum minutum Cancer ascendens. Ideoque dixerunt antique quod Cancer sit Ascendent Mundi."

^{[4]5: For this reason ... from their conjunction.} Both Ta §2.4:4–5 and Tb §2.4:9–10 mention that if Cancer is the sign where these Saturn-Mars conjunctions are observed every 30 years "to know the affairs of the world," this is because of Cancer's role at creation. Besides Ibn Ezra's two versions of *Sefer ha-'Olam* (see next note), these conjunctions were also studied by Abû Ma'shar and Al-Bîrûnî: *On the Great Conjunctions*, 2000, I, pp. 123–137, 529–543; *Art of Astrology*, 1934, par. 250, p. 151.

^{[5]5: As I shall explain in the *Book on Conjunctions*.} This is a reference to the first version of *Sefer ha-'Olam* (see Sela-Freudenthal, 2006, n. 35, p. 36). See 'Olam A, bnf 1056, f. 82b: "והשמר לא תשכח להסתכל בכל שלשים שנה אל מחברת שבתי עם מאדים במזל סרטן שהוא מזל העולם" ("Be careful and don't forget to observe every thirty years the conjunction of Saturn and Mars in the sign of Cancer, which is the sign of the world"). The same conjunction is also mentioned in the second version of *Sefer ha-'Olam*: 'Olam B, bnf 1058, f. 87b. Notice the inconsistency regarding the name of *Sefer ha-'Olam*: whereas in the current passage, probably following Abû Ma'shar's *Kitâb al-qirânât*, it is designated *Book on Conjunctions* (ספר המחברות), in §6.3:6, §10.9:4 and Tb §6.2:1 it is called *Sefer ha-'Olam* (ספר העולם).

^{[6]4–6: Enoch said that Cancer ... the house of the Moon.} Corresponds closely to Tb §2.4:6–11, §2.5:3. The sign of Cancer is also labeled "the sign of the world" in 'Olam A, bnf 1056, f. 82b (see

previous note). In addition to *Te'amim I*, this attribution is ascribed to Enoch in *Reshit Hokhmah I* and in *Liber Nativitatum*, a treatise ascribed to Ibn Ezra. See Rh, II, xviii:16–17; *Nativitatum*, Erfurt, f. 53a: “Dicit Enoc in libro suo quod signum mundi vel seculi est Cancer.” Cf. Kitāb al-Madḥal, 1996, V:7, v, p. 192.

^[7]**6–7: Since this sign ... heat increases then.** Corresponds to Tb §2.5:3–4.

^[8]**8–9: Because those are ⟨the⟩ luminaries ... enters these signs.** Corresponds to Tb §2.6:1–2.

^[9]**10–11: Because Jupiter is next ... third ⟨counting from⟩ Saturn’s:** Corresponds to Tb §2.6:3–4.

^[10]**12: Aspect of antagonism, Hebrew מבט איבה** *meḇet ʾaibeh*. Ibn Ezra generally uses this term to denote the aspect of quartile, considered to be hostile or unfavorable. The angular distance between two planets in quartile is 90°, namely, the distance between the beginning of a sign and the fourth sign next to it. Here Ibn Ezra widens this meaning to include the distance between a planet’s orb and the fourth orb next to it. See Glossary s.v. “aspect of antagonism”.

^[11]**12: When I come to the ⟨subject of the⟩ aspects.** See below, Ta §3.2:9.

^[12]**12: Because the Sun ... the house of Saturn.** Corresponds to Tb §2.6:2.

§2.5

^[1]**1–4: Enoch said ... the end of Cancer.** This is a reference to the solar planetary houses (Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn) and the lunar planetary houses (Cancer, Gemini, Taurus, Aries, Pisces, Aquarius). Corresponds closely to Tb §2.3:6–8, §5.1:3, §5.2:11, §8.1:1–4. The claim that the Sun and the Moon have power in their halves as the planets have in their terms, which is also mentioned in Tb §2.3:8, correspond closely to al-Qabîṣî, 2004, I:10, pp. 21–22. See especially Tb §2.3:6–8 and note.

^[2]**6: When you observe ... Saturn and Mercury.** Corresponds to Tb §2.6:5–6.

^[3]**9: As I shall explain.** See below, Ta §4.3:4.

^[4]**9–10: The houses of Saturn ... to the trine.** Corresponds to Tb §2.5:6–9.

^[5]**11: The house of Mercury ... away from it.** Corresponds to Tb §2.5:5.

^[6]**12: Ptolemy said ... have great power.** Cf. Tetrabiblos, 1980, I:17, pp. 79–81.

§2.6

^[1]**1: Towards the ecumene, Hebrew לפאת הישוב, lit. towards the side of the inhabited part of the Earth.** Since the ecumene is in the northern hemisphere (relative to the terrestrial equator), here Ibn Ezra means that when the Sun enters Aries it begins to be in the northern part of the ecliptic (with respect to the celestial equator).

^[2]**1: This sign ... in the world.** Quotes from and comments on Rh, II, x:18. Corresponds to Tb §2.7:1; see note there.

^[3]**2: The Indian scientists ... Jupiter and Venus.** Quotes from and comments on Rh, II, x:18. Corresponds closely to Tb §2.7:4.

^[4]**2: But if this was correct ... dark degrees.** Here Ibn Ezra asserts that the exaltation of the Sun was Aries 19° when the Indian scientists established this value, but has moved since then because of the slow motion of the fixed stars of the zodiac with respect to the equinoxes. See below, Ta §2.12:1–15.

^[5]**3: Detriment, Heb. בית שנאה, lit. house of hate** (Arabic *wabāl*, Latin *alienation*). This is a reference to the opposite of the planetary house or the seventh sign from the planetary house of each planet. Corresponds to Tb §2.4:10, where the same term is called בית רעה, lit. house of evil.

^[6]3: **They also said ... geometry.** Quotes from and comments on Rh, II, x:18–19.

§ 2.7

^[1]3: **Know that when I said ... make it easier for students.** Ibn Ezra was very concerned about the risk that some astrological tenets might blur the rigid borders that Aristotelian cosmology established between the sublunary and supralunary realms. He returned obsessively to this issue not only in *Ṭe'amim I* and *Ṭe'amim II* (Ta §1.5:7; §2.18:3–4; Tb §2.1:1–5; Tb §8.7:8), but also in *Liber de rationibus tabularum*, in his biblical exegesis, and in his theological monographs. See *Liber de Rationibus Tabularum*, 1947, p. 97; first and second commentary on Genesis 1:1; commentary on Ecclesiastes 1:4; commentary on Psalms 148; long commentary on Exodus, 1976, 33:21; *Yesod Mora'*, 1985, I, p. 319.

^[2]1–4: **They said that the lords ... its great heat.** Quotes from and comments on Rh, II, x:19–21. Corresponds closely to Tb §2.8:1–4. For the triplicities, see Tb §2.8:1 and note.

§ 2.8

^[1]1: **Decan, Hebrew דַּפְּנִים, lit. faces** (Arabic *wujūh*, Latin *facies*). Each of the twelve zodiacal signs is divided into three equal divisions called decans, and each decan is assigned to a planet that functions as lord of the corresponding decan. The term is widely used in Ibn Ezra's astrological work although his approach to this topic varies from work to work:

(a) In *Ṭe'amim I* the methods of allocation of the lords of the decans devised by the Egyptian and Indian scientists is explained; notice, however, that in Ta §2.8:1 Ibn Ezra assigns to the Egyptian scientists the method that Abū Ma'shar and Al-Bīrūnī assign to those of India, and in Ta §2.8:2 he assigns to the scientists of India the method that Abū Ma'shar and Al-Bīrūnī assign to the Egyptian scientists. See *Kitāb al-Madḥal*, 1996, V:15–16, v, pp. 202–203; *Art of Astrology*, 1934, par. 449, 451, pp. 262–263; Cf. al-Qabīṣī, 2004, I:20, IV:18, pp. 29, 131.

(b) In *Reshit Hokhmah I* there are lists of lords of the decans according to both the Egyptian and Indian scientists in each of the sections allocated to each of the twelve signs (for Aries, see Rh, II, x:21–23); note, however, that according to the Levy-Cantera edition the lords of the decans in these lists are at odds with those produced by the two methods of allocation described in *Ṭe'amim I*. See, i.e. Rh, xiii:12–14, xv:30–xvi:1 *et passim*.

(c) In *Ṭe'amim II* (Tb §2.9:4–6) the two methods of allocation are presented along the same lines as in *Ṭe'amim I*, but neither the Egyptian nor the Indian scientists are mentioned.

(d) *Mishpeṭei ha-Mazzalot* lists lords of the decans of all the twelve signs according to only one of the aforementioned two methods, which turns out to be the one that *Ṭe'amim I* assigns to the Egyptian scientists. See *Mishpeṭei ha-Mazzalot*, bnf 1058, f. 15b.

For the decans, see also Ta §2.2:18–19, Tb §2.9:4 and notes.

^{[2]1:} **The Egyptian scientists ... in the triplicity.** Corresponds to Tb §2.9:4. According to Abû Ma'shar (*Kitâb al-Madḥal*, 1996, V:15, v, p. 202) and Al-Bîrûnî (*Art of Astrology*, 1934, par. 449, p. 263), the method assigned to the Egyptian scientists in the current passage is that of the Indian scientists.

^{[3]2:} **The Indians began ... <assigned> to Mars.** Corresponds to Tb §2.9:6. According to Abû Ma'shar (*Kitâb al-Madḥal*, 1996, V:15, v, p. 202), the method described in the current passage is that of the Egyptians and Babylonians, and according to Al-Bîrûnî (*Art of Astrology*, 1934, par. 449, p. 262) it is that of the Persians and Greeks.

^{[4]3–8:} **For there are 36 decans ... underneath the Sun.** A similar procedure to find the lords of the decans according to the method of the Egyptian scientists is found in al-Qabîṣî's *Introduction to Astrology*. See al-Qabîṣî, 2004, I:21, p. 31.

§2.9

^{[1]1:} **The terms, Hebrew הַגְּבוּלִים** (Arabic *ḥudūd*, Latin *fines*). For this term, see Tb §2.9:1 and note.

^{[2]1:} **The terms ... verified by experience.** Corresponds closely to Tb §2.9:2. The two methods mentioned here—Egyptian and Ptolemaic—are enumerated separately in *Reshit Hokhmah I* for each sign (Rh, II, x:23–27 *et passim*). The three main points of this passage—the Egyptian and Ptolemaic methods, the ancient manuscript from which Ptolemy derived his own terms, and the preference for the Egyptian method—are explicitly mentioned in Tetrabiblos, 1980, I:20–21, pp. 91–107 cf. Kitâb al-Madḥal, 1996, V:8, v, pp. 196–200.

^{[3]2:} **The number ⟨of degrees⟩ ... its great years.** Corresponds closely to Tb §2.9:3; see note there. The rule is later corroborated for the particular case of Saturn. See below, Ta §4.2:11. The same rule occurs in Abû Ma'shar's *Great Introduction*. See Kitâb al-Madḥal, 1996, V:8, v, p. 197. Ptolemy writes in Tetrabiblos, 1980, I:20, p. 93 about a doctrine according to which the sum of the terms of each planet determines the life-span of those born under its influence. See Bouché-Leclercq, 1899, p. 408. In addition, the idea that the great years of the Sun, namely, 120 years, correspond to the natural life-span of human beings is echoed in Ta §4.5:7 and Tb §5.1:10 as well as in Ibn Ezra's commentary on Genesis 6:3.

§2.10

^{[1]1:} **Nine is the last of the digits.** Corresponds closely to Tb §2.9:9 (“there are a total of nine digits”). The same corroborating idea, based on the feature that the Indian decimal positional system employs nine digits—the zero is a symbol whose position in the number gives value to the nine digits—may be found elsewhere in Ibn Ezra's work. See, for example, the long commentary on Exodus 3:15, 20:13; 'Eḥad, 1985, p. 403.

^{[2]3:} **The sign of the ascendant, Hebrew המול הצומח, lit. the rising or growing sign.** See Glossary s.v. “ascendant”.

^{[3]1–5:} **Because the triplicity ... a tropical sign.** This section deals with the ninth-parts, Hebrew תשיעיות, Arabic *nawbahra*, Latin *novenarii*. Corresponds closely to Tb §2.9:9; see note there.

§2.11

^[1]**1: The reason ... all of them.** Refers to the second of the two methods that are presented in *Reshit Hokhmah I* for the division of the signs into dodecatemoria, Hebrew כח שנים העשר, lit the power of the twelve (Arabic *ithna ashriyât*, Latin *duodecatemorion*). See Rh, II, xi:2–5: “רק חנוך והקדמונים חלקו כח שנים עשר על דרך אחרת, כי הם אמרו כי המעלה הראשונה על תולדת המזל בעצמו, והמעלה השנית על תולדת המזל שהוא שני לו, והנה תשוב מעלת שלש עשרה גם מעלת חמש ועשרים על תולדת המזל בעצמו” (“But Enoch and the Ancients divided the power of the dodecatemoria by another method, because they said that the first degree (of the sign) is assigned to the nature of the sign itself, the next degree to the nature of the sign that is adjacent to it, and thus the thirteenth and the 25th degree are again assigned to the sign itself”). The same method is ascribed to Enoch and the Ancients by Abû Ma‘shar’s in *Kitâb al-Madhal*, 1996, V:18, v, p. 205.

^[2]**2: Another method ... the correct (method).** Corresponds to Tb §2.9:7–8 and refers to the first of the two methods mentioned in *Reshit Hokhmah I*. See Rh, II, x:28–29, xi:1–2, *et passim*. This method occurs usually in contemporary introductions to astrology. See Mishpetei ha-Mazzalot, bnf 1058, f. 15b; *Kitâb al-Madhal*, 1996, V:18, v, pp. 204–205; *Art of Astrology*, 1934, par. 456, pp. 267–269; al-Qabîsî, 2004, IV:15, p. 129; *Abbreviation*, 1994, p. 59.

^[3]**3: It has a great power in the revolution of the world.** Corresponds to Tb §2.9:7; see note there. For the “revolution of the world” see below, §2.16:3 and note. The role of the dodecatemoria in general astrology is amply documented in both versions of Ibn Ezra’s *Sefer ha-‘Olam*. See ‘Olam A, bnf 1056, f. 83a: “אמר דורניאוס המלך כי מצא בספר הסודות של חנוך שצוה שיסתכל אדם לעולם בתקופת שנת המחברת שבתי וצדק במחברת הגדולה או האמצעית או הקטנה אל מקום המשרתים בתחלת הכנס השמש בטלה ויראה באיזה מזל יפול כח שנים העשר מן הכוכב המזיק או הטוב ... ודע כי כח שנים העשר יותר חזק במחברת הגדולה מן האמצעית וכן האמצעית מן הקטנה, והקטנה יותר מתקופת כל שנה ואם היה כח שנים העשר לכוכב טוב” (“Doronius, the King, said that he found in the *Book of the Secrets* by Enoch that he instructed that in the revolution of the year in which there is a conjunction of Saturn and Jupiter (whether a great, middle, or small conjunction), a man should always observe the location of the planets at the moment when the Sun first enters

⟨the sign of⟩ Aries and find out in which sign the power of the dodecatemoria from the malefic or benefic planet falls. ... Know that the power of the dodecatemoria is stronger in a great than in a middle conjunction, and similarly in a middle conjunction ⟨stronger⟩ than in a small conjunction, and in a small ⟨conjunction⟩ stronger than in the revolution of any year, and if the power of the dodecatemoria is assigned to a benefic planet, then good will befall the state.”) See also ‘Olam B, bnf 1058, f. 90a. For “revolution of the year,” see Tb §6.3:1–5 and note.

§2.12

^[1]**1: The Indian scientists said ... reason for them.** The bright and dark degrees, Hebrew *מעלות מאירות וחשוכות* (Arabic *al-darajāt al-mudīyah wa’l-muzlimah*, Latin *gradus lucidos et tenebrosos*), are two categories of degrees in each of the zodiacal signs. They are endowed with astrological influence and are usually mentioned in contemporary introductions to astrology. See Kitāb al-Madḥal, 1996, V:20, v, p. 207; Art of Astrology, 1934, par. 458, p. 270; al-Qabīṣī, 2004, I:50, p. 43; Abbreviation, 1994, pp. 139–141. They are listed separately in *Reshit Hokhmah I*, alongside other categories of degrees, in the sections allocated to each of the twelve signs. For the bright and dark degrees in Aries, see Rh, II, xi:5–10. This entire section (§2.12:1–15) is devoted to revealing the “reasons” behind them in a comprehensive discussion that corresponds to Tb §8.7:1–6. To Ibn Ezra’s mind, these “reasons” have to do less with their astrological properties than with the eminently astronomical problem of locating them in the zodiac: since the position of the bright and dark degrees is given with respect to the images of the zodiacal constellations, an adjustment is necessary when the astrologer comes to locate them in the zodiac using astronomical tables that take account of the motion of the fixed stars (and the zodiacal signs) with respect to the equinoxes. Hence the remainder of this section consists of a relatively long excursus that discusses the following topics: (i) the beginning and the length of the solar year (§2.12:2–6); (ii) the motion or immobility of the fixed stars (§2.12:7–12); (iii) the division of the zodiac (§2.12:13); (iv) the use of astronomical tables to locate the bright and dark degrees (§2.12:14–15). These topics are explained in the following notes.

^[2]**2–3: Know that there is ... equals the ⟨length of the⟩ night:** Here and in the following lines (§2.12:2–6) *Te’amim I* offers a simplified

account of the controversy about the beginning and the length of solar year. Ibn Ezra presents similar and usually longer accounts of this controversy in many and different parts of his work. These accounts, based usually on calendarics but in some cases also dealing with astronomical and astrological issues, usually present a confrontation between Greek, Arabic, Persian, Indian, and Jewish methodologies and provide rich information about the scientific contributions of individual scholars. See *Liber de Rationibus Tabularum*, 1947, pp. 74–76, 79; ‘Ibbur, 1874, p. 8a; Commentary on Leviticus, 1976, 25:9, pp. 93–94; ‘Iggeret haShabbat, 1894/5, pp. 64–65; Three Questions, 1847, pp. 1–2; Moladot, bnf 1056, f. 59a–59b; ‘Olam A, bnf 1056, f. 81a–81b. For an analysis of some of these texts, see Sela, 2003a, pp. 273–286. Because the underlying problem in the current passage is finding the position of the bright and dark degrees with respect to the equinoxes, the center of gravity of the controversy is placed on the question of whether the beginning of the solar year should be fixed when the Sun reaches the vernal equinox.

[3] **5: Someone said that it is 106th of a day.** From *Sefer ha-Moladot* (Moladot, bnf 1056, f. 59b), we learn that the deficit of the 106th part of a day is the value proposed by Yaḥyâ b. Abî Maṣṣûr, al-Marwâdhî, Ibn al-Muqaffa’, and al-Battânî.

[4] **5: The truth is that the deficit is 131th of a day.** From the first version of *Sefer ha-‘Olam* (‘Olam A, bnf 1056, f. 81a) we learn that the deduction of the 131th part of a day, endorsed by Ibn Ezra in Ta §2.12:5, in Tb §8.2:10, and in *Sefer ha-‘Olam*, is the value obtained by al-Šûfî and later by al-Zarqâl.

[5] **7: Another disagreement ... head of Aries and Libra.** This is a reference to two well-known versions of the theory of *trepidation*: (a) around the poles of the orb of the zodiac, and (b) in two small wheels around the equinoxes. For these theories, see *Liber de Rationibus Tabularum*, p. 77; ‘Ibbur, 1874, p. 10a; Dreyer, 1953, 276–279, Evans, 1998, 274–280; Sela, 2003a, pp. 221–222. For an account in a Hebrew source contemporary with Ibn Ezra, see Abraham Bar Ḥiyya, *Šurat ha’Ares*, 1546, 196–200. It is worth noting that the proponents of the to-and-fro motion around the poles of the orb of the zodiac are identified in *Liber de rationibus tabularum* (*Liber de Rationibus Tabularum*, p. 77) and in Ibn Ezra’s *Sefer ha-‘Ibbur* (‘Ibbur, 1874, p. 10a) in very similar terms:

doctores ymaginum or *magistri ymaginum* in the former, חכמי המזלות בעלי המשפטים והצורות, i.e. astrologers who are experts in the judgments and the images, or אנשי הצורות, i.e. those who trust in imagines, in the latter. These are, in all likelihood, identical with the חכמי הצורות, i.e., scholars of the images, who are engaged in חכמת הצורות, the science of the images, which according to Tb §8.3:2 “is forbidden by the law of God because it resembles idolatry.” They are also mentioned by Ibn Ezra in Tb §2.3:10 (see note there); §5.6:4; §5.7:8.

[6]8: Indian scientists drew ... signs do not move. This is the only account of the controversy about the motion of the fixed stars in which Ibn Ezra credits the scientists of India with maintaining their immobility. He appears to infer this theory from a previous statement, according to which the Indian scientists measure the length of the year from the recurrent conjunction of the Sun with a fixed star, ignoring the moment when the Sun passes through the equinoxes (Ta §2.12:6; see also Tb §8.7:2). Notice also that in Tb §7.7:1 the doctrine of the dark and bright degrees and of the pits is made a direct consequence of the Indian methodology for the beginning of the solar year.

[7]9–10: The Ancients said ... <one degree in> 70 years. A similar statement is made by Ibn Ezra in *Liber de rationibus tabularum*, where we learn that Al-Battānī proposed 1° in 66 years and al-Šūfī 1° in 70 years. See *Liber de Rationibus Tabularum*, p. 78: “antiqui vero et Ptholomeus dicunt quod 100 annis unum gradum pretereunt Albateni vero probavit quod 66 annis uno gradu moventur; Azofi vero 70 annis uno gradu.” Cf. ‘Olam A, bnf 1056, f. 81b; ‘Iggeret haShabbat, 1894/5, p. 65; Tb §1.2:4. For an account of these theories, see *Liber de Rationibus Tabularum*, 1947, 76–79; Šurat ha’Araš, 1546, 196–200; Dreyer, 1953, 202–206; Evans, 1998, 248, 259–262.

[8]10: The correct <value> is that the motion is <one degree in> 70 years. As mentioned above, this is the rate proposed by al-Šūfī for the motion of the eighth orb (*Liber de Rationibus Tabularum*, 1947, p. 78: “Azofi vero 70 annis uno gradu”). This is the value that Ibn Ezra also endorses in Tb §1.2:4 as well as in all the four versions of the *Book of the Astrolabe*. See Neḥoshet A, bnf 1061, f. 159a; Neḥoshet B, Mant. 10, f. 39a; Neḥoshet C, pinsker 26, f. 63a; *Astrolabio*, vesp. a II, f. 39°; *Astrolabio*, Arundel 377, f. 66°; *Astrolabio*, 1940, 20. In his long commentary on Exodus 34:22, however, Ibn Ezra seems to

endorse, to some extent, the version of trepidation that propounds a motion in two small wheels around the equinoxes (see above, §2.12:7 and note): **“ואל תסמוך על תקופת שמואל, רק על תקופת רב אדא. אעפ”י שהיא צריכה לשני תיקונים ... והתקון השני בעבור תנועת גלגל קטן בראש טלה”** (“You should not rely on the length of the solar year as propounded by [the talmudic sage] Samuel, but rather on the length of the solar year as propounded by R. Adda, although it requires two corrections. ... The second correction is because of the motion in the small wheel around the head of Aries.”). This seems to be Ibn Ezra’s stance also in *Tbbur*, 1874, p. 10a.

^[9]**13: The Indian scientists divided ... method of (giving) proofs.** Corresponds closely to a passage in *Liber de rationibus tabularum*. See *Liber de Rationibus Tabularum*, 1947, pp. 83–84: “De partitione circuli in 12 partes secundum duas sententias. Sciendum est ergo quod partitio circuli firmamenti per 12 secundum duas sententias facta est, altera secundum cogitationem, altera secundum sensum visus est sententia; ea quidem que secundum cogitationem sententia est ea Ptholomei sententia est, que vero secundum visum est antiquorum et indorum est, et utraque harum vera est et ad artem tota admodum necessaria. Sed ea que Ptholomei est stare potest per se, altera vero sine illa nequaquam, nam sententia Ptholomei est scientia et ratio altera vero probatio iudiciorum.” See also the continuation of this passage up to p. 86. Similar ideas are conveyed in Ibn Ezra’s long commentary on Exodus 28:6. See also below, §8.1:6, where Ptolemy’s methodology, as compared to that of the Persian scientists, is presented as “based on a mental construct” (**במחשבת הלב**).

^[10]**14: The pits (so called ... fallen into into a pit).** Corresponds to Tb §8.7:2–3. The pits (Hebrew **בורות**, Arabic *âbâr*, Latin *gradus putei*), a category of zodiacal degrees that diminish fortune, are usually mentioned in contemporary introductions to astrology alongside the bright and dark degrees. See Kitâb al-Madḥal, 1996, V:21, v, pp. 207–208; al-Qabîṣî, 2004, I:51, p. 45; Abbreviation, 1994, pp. 141–143. The pits are characterized by Al-Bîrûnî in *Art of Astrology*, 1934, par. 459, p. 271 as the degrees “in which the planets are enfeebled in their action, being neither able to affect good if lucky nor evil if unlucky.” The pits are listed in the second chapter of *Reshit Ḥokhmah I* in the separate sections allocated to each zodiacal sign. For instance, see Rh, II, xi:11–12 for the pits of Aries.

[12] **15: The positions of the large stars ... in this time [i.e., in 1148].** This is a reference to the fact that in the second chapter of *Reshit Hōkhmah I* Ibn Ezra not only gives the positions of large stars in each of the twelve zodiacal constellations but also keeps emphasizing that these positions correspond to the date of composition of *Reshit Hōkhmah I*, namely, the year 5908 A.M. For example, in the final part of the section on Aries, just after he mentions the pits of this sign, we read (Rh, II, xi:13–14): **וַיֵּשׁ בּוֹ מִן הַכּוֹכָבִים הַגְּדוֹלִים שֶׁהֵם מִן הַכְּבוֹד הָרָאשׁוֹן הַכּוֹכֵב הַנִּקְרָא** “**וַיֵּשׁ בּוֹ מִן הַכּוֹכָבִים הַגְּדוֹלִים שֶׁהֵם מִן הַכְּבוֹד הָרָאשׁוֹן הַכּוֹכֵב הַנִּקְרָא**” (‘There [in Aries] we find, of the large stars of the first magnitude, a star that is designated ‘End of the River’ and it is at Aries 16° at the present time.’)

[¹] **I. Taurus ... stable** **⟨when the Sun is there⟩**. Quotes from and comments on Rh, II, xi:16–17. For feminine and nocturnal signs, see above §2.2:1 and note. For fixed signs, see Tb 2.3:1–4 and note.

[3] **8–9: From experience they said ... this is correct.** Quotes from and comments on Rh, II, xi:22–23. Ptolemy’s account of the cardinal points of the watery and airy signs is presented here incorrectly. Cf. Tetrabiblos, 1980, I:18, pp. 82–87. It is not clear on which account Ibn Ezra bases his agreement with Ya‘qub al-Kindi’s position, but this passage reflects that there was significant disagreement about the cardinal points of the triplicities from Antiquity until Ibn Ezra’s time. For Antiquity, see Bouché-Leclercq, 1899, pp. 199–206. For an explanation of why Taurus is as a southern sign and a general account of the cardinal points of the signs, see Tb §2.2:1–7 and note.

§2.14

[¹]1: **Gemini ... Virgo, Sagittarius, and Pisces.** Quotes discontinuously from and comments on Rh, II, xiv:7–8, xxii:6, xxviii:13–14, xxxiv:27–28. See Tb 2.3:4 and note.

[²]2: **Since it has the shape ... nature is airy.** Quotes discontinuously from Rh, II, xiv:12–17 and comments on it.

[³]2: **At the place of the Sun's apogee.** Quotes and comments on Rh, II, xv:26–27, where Ibn Ezra also states that the Sun's apogee in 1148—the date of composition of *Reshit Hokhmah I*—is Gemini 27°. Ibn Ezra provides an identical value for the year 1160 in his Hebrew translation of *Ibn al-Muthannâ's Commentary on the Astronomical Tables of al-Khwârizmî* (Hebrew Translations of Ibn al-Muthannâ's Commentary, 1967, pp. 150, 300), where he adds that in the time of Hipparchus and Ptolemy the Sun's apogee was at Gemini 5°. Additional information about the Sun's apogee is provided in 'Olam a, bnf 1056, f. 81a.

§2.15

[¹]1–2: **Cancer ... than thirty degrees:** Quotes from and comments Rh, II, xvii:1. See Tb §2.3:5 and note.

[²]3: **We have ... to this sign:** See above, §2.3:2. Quotes from and comments on Rh, II, xviii:11–12.

[³]4: **Venus indicates sexual intercourse.** Cf. Tetrabiblos, 1980, III:14, pp. 369–371.

[⁴]6: **They said that Virgo ... house of Mercury.** Quotes from Rh, II, xxii:11, xxiii:12–14 and comments on it.

§2.16

[¹]1: **Houses of exaltation, Hebrew בתי הכבוד, lit. houses of honor** (Arabic *ashrâf*, Latin *exaltatio*). The entire section (Ta §2.16:1–14) is an excursus that deviates from the previous method—based on

fairly continuous quotes from *Reshit Hokhmah I*, accompanied by commentaries on them—and embarks on a freestanding discussion of the houses of exaltation. It continues and stands in contrast to Ta §2.6:1–2, where the exaltation of the Sun was explained in the section studying the properties of Aries. Here Ibn Ezra offers three approaches to the houses of exaltations—those of Ptolemy, the Indian scientists, and Enoch—and expands considerably upon the limited information given in *Reshit Hokhmah I*, which merely states the degree of exaltation in the separate sections allocated to the signs. This excursus corresponds closely to the parallel discussion of the houses of exaltation in Tb §2.7:1–14, as will be shown in the following notes. Although similar discussions, in the form either of lists alone or of lists accompanied by theoretical explanations, may be found in contemporary introductions to astrology, this section is a unique approach to the subject. See Kitāb al-Madḥal, 1996, V:5–7, v, pp. 187–196; Abbreviation, 1994, pp. 15–23; Art of Astrology, 1934, par. 443, p. 258; al-Qabīṣī, 2004, I:15, p. 25.

[2]2: They said that the exaltation of the Moon ... Indian scientists. Quotes from Rh, II, xiii:9 and reveals its source: the Indian scientists.

[3]3: Signifies the beginning of the world. This is a reference to *tequfat ha-‘olam* (תְּקוּפַת הָעוֹלָם) “the revolution of the world”, a special horoscope to forecast world affairs that is cast annually when the sun (in a geocentric system) enters the sign of Aries. The revolution of the world is mentioned above in §2.11:3; see note there. According to Indian cosmological theories, which Ibn Ezra recounts in some of his scientific works, the world undergoes long and recurrent cycles of creation and destruction; creation occurs when all the planets meet in conjunction in the head of Aries. See Liber de Rationibus Tabularum, 1947, p. 88: “et medius cursus omnium planetarum secundum indos sumptus est a diebus Acintdeindi, qui dixerunt Dominum omnes planetas in capite Arietis creasse ... et secundum eos omnis planeta revertitur ad punctum sui loci sine fraccionis superadictione.” There is a very similar statement in Ibn Ezra’s Hebrew translation of *Ibn al-Muthannā’s Commentary on the Astronomical Tables of al-Khwārizmī*. See Hebrew Translations of Ibn al-Muthannā’s Commentary, 1967, pp. 152, 299: “God created the seven planets, their apogees and nodes in the first part of Aries and commanded them to go around, giving each of them a fixed motion until they come together again where God created them. When

they return there, God will do what he wishes with them. (The Hindus) said that the time from the beginning of their motion until their return to the point where they began is 1,577,916,450,000 days.” For a similar account in Arabic sources, see Kennedy–Van der Waerden, 1963, pp. 316–317. This is an idea briefly acknowledged by Ibn Ezra in *Mishpetei haMazzalot*, bnf 1058, f. 13b: **וְהָנָה בַּהֲכֹנֶס הַשֶּׁמֶשׁ בְּתַחֲלִילַת טַלָּה** “וְהָנָה בַּהֲכֹנֶס הַשֶּׁמֶשׁ בְּתַחֲלִילַת טַלָּה” (“The true revolution occurs when the sun enters the head of Aries, and then the world is renewed”).

[4]3: **Ptolemy says ... sign of Taurus.** Corresponds to Tb §2.7:3 and refers to Ptolemy’s explanation of the Moon’s exaltation, which is not mentioned in *Reshit Hokhmah I*. See Tetrabiblos, 1980, I:19, p. 89: “And since the moon, coming to conjunction in the exaltation of the sun, in Aries, shows her first phase and begins to increase her light and, as it were, her height, in the first sign of her own triangle, Taurus, this was called her exaltation.”

[5]4: **The exaltation of the Sun:** MS ט (Vatican, Biblioteca Apostolica Vaticana, ebr. 47) f. 28a, adds here: “which is Aries 19°, since it is close to the beginning of the image of the ram.”

[6]4: **The Indian scientists ... ⟨degree⟩ of Taurus.** Corresponds to Tb §2.7:4 and continues the account of the Indian scientists as conveyed above in §2.16:2.

[7]5: **Degree of the dejection, Hebrew מעלת קלון, lit. degree of dishonor** (Arabic *hubūṭhā*, Latin *servitus*). A planet is said to be in its degree of dejection or “dishonor” if it is in the degree and sign opposite its exaltation or “honor” (כבוד). Corresponds to Tb §2.4:10 *et passim*. See glossary s.v. “dejection”.

[8]5: **“Place of burning”, Hebrew מקום השריפה** (Arabic *al-tariqah al-muḥṭariqah*, Latin *via combusta*). This term, usually called “the burnt path” and denoting the interval from Libra 19° to Scorpio 3°, is commonplace in introductions to astrology. Ibn Ezra provides an explanation of this curious name in Ta §2.16:5. See also Kitāb al-Madḥal, 1996, VII:6, v, p. 306; Art of Astrology, 1934, par. 514, p. 317; al-Qabīṣī, 2004, III:29, p. 105; Abbreviation, 1994, p. 55. Here there is a terminological link between *Ṭe’amim I* and *Mishpetei haMazzalot*, which employs the same Hebrew phrase (מקום השריפה) as *Ṭe’amim I*. See *Mishpetei*

haMazzalot, bnf 1058, f. 14b. By contrast, Tb §2.7:5 has דרך החושך “path of darkness” and Rh, II, lii:13 has דרך השריפה “path of burning”.

^[9]**6: They also said... house of exaltation.** Corresponds to Tb §2.7:2; see note there.

^[10]**6–8: Libra is the house ... befall the the Sun.** Three approaches are offered here about Saturn’s exaltation. The first (Ta §2.16:6) corresponds to Ptolemy’s opinion in *Tetrabiblos* I:19 and is repeated in Tb §2.7:2; see note there; see *Tetrabiblos*, 1980, I:19, p. 89: “Saturn again, in order to have a position opposite to the sun, as also in the matter of their houses, took, contrariwise, Libra as his exaltation and Aries as his depression. For where heat increases there cold diminishes, and where the former diminishes cold on the contrary increases.” The second opinion, advanced by the scientists of India (Ta §2.16:7), is quoted from Rh, II, xxv:19. The third explanation, Enoch’s (Ta §2.16:8), is repeated in Tb §2.7:7.

^[11]**9: Indian scientists scientists ... he is correct.** Corresponds closely to Tb §2.7:9–10. The exaltations of the Head and the Tail of the Dragon are mentioned in Rh, II, xv:27, xxix:25. A similar reference to Ptolemy, deriding the idea of considering the Head and the Tail of the Dragon as stars, appears in *Mishpetei haMazzalot*, bnf 1058, f. 14b: “הקדמונים אמרו כי תאומים בית כבוד ראש התלי, וכבוד הזנב במזל קשת, ותלמי” “הקדמונים אמרו כי תאומים בית כבוד ראש התלי, וכבוד הזנב במזל קשת, ותלמי” (“The Ancients said that Gemini is the house of exaltation of the Head of the Dragon, and that the exaltation of the Tail is in Sagittarius, but Ptolemy mocks them, and he is right.” See also Ta §5.3:3. A similar criticism is made by Ibn Sînâ. See Ibn Sînâ, 1884, pp. 395–396.

^[12]**10: They said that Jupiter’s house ... middle of the sign.** Corresponds closely to Tb §2.7:6; see note there. Two opinions are given regarding Jupiter’s exaltation: the first is based on Ptolemy’s explanation in *Tetrabiblos* I:19; the second is quoted from Rh, II, xviii:17.

^[13]**11–12: Because Mars generates ... with [i.e. Mars’] its nature.** Although Ptolemy and Abû Ma’shar (who follows Ptolemy) base some of their explanations of the exaltations on the connection between planets and winds, the first opinion offered by Ibn Ezra about Mars’ exaltation (Ta §2.16:11), which is based on the assertion that Mars

generates southern winds and that these winds abound when Mars is in Capricorn, appears neither in Ptolemy's *Tetrabiblos* nor in Abû Ma'shar's *Great Introduction*. The second opinion (Ta §2.16:11), which comments on a quote from Rh, II, xxxii and presents the approach of the Indian scientists, corresponds closely to Tb §2.7:7, where the same opinion is attributed to Enoch.

^[14]**13–14: They said that Venus' house ... other's house of exaltation.** Cf. Tb §2.7:7–8

^[15]**15: As for what they said... born in water.** Here Ibn Ezra is noting implicitly that fish are mute, thereby equating the watery signs with the dumb signs: Cancer, Scorpio, Pisces. See Tb §2.3:14 and note.

§2.17

^[1]**1: I have already discussed the houses of the fiery triplicity.** See above, §2.7:1–4. For the triplicities, see Tb §2.8:1 and note. As in the case of the exaltations (Ta §2.6:1–2, §2.16:1–15), the lords of the fiery triplicity are treated in the section devoted to Aries (Ta §2.7:1–4), whereas the lords of the remaining triplicities are discussed comprehensively in a separate section (Ta §2.17:1–9). The accounts in Ta §2.17:1–9 and Tb §2.8:1–12 correspond closely with each other, as will be shown in the following notes.

^[2]**1: Lord of the first triplicity, Hebrew בעל השלישית הראשונה.** For this special use of the term “triplicity”, see Tb §2.8:9 and note ad loc. See also below, Ta §2.17:5, 6, 9.

^[3]**2–4: Venus was made lord ... southerly winds.** Quotes from and comments on Rh, II, xiii:10–11 *et passim*. Corresponds closely to Tb §2.8:5–7.

^[4]**5–7: Saturn was made lord ... instead of it.** Quotes from and comments on Rh, II, xv:29–30 *et passim*. Corresponds to Tb §2.8:8–10.

^[5]**8–9: They assigned ... as partner.** Quotes from and comments on Rh, II, xviii:21–22 *et passim*. Corresponds to Tb §2.8:11–12.

§2.18

^[1]**1: Ptolemy disagrees ... on the Ancients.** See Tetrabiblos, 1980, I:18, pp. 83–87; I:20, p. 93. Corresponds to Tb §6.9:1.

^[2]**2: Anything that Ptolemy says ... befit his wisdom.** For a similar criticism of Ptolemy's astrological work, see above, §1.5:5 and note. For Ibn Ezra's attitude towards Ptolemy, see Sela, 2003a, pp. 240–256.

^[3]**2: Doronius the king.** This astrologer, in all likelihood identical with Dorotheus of Sidon, is crowned a king by Ibn Ezra in various places in his astrological work. See especially the introduction to the second version of *Sefer ha-She'elot*, where both Doronius and Ptolemy are made kings. She'elot B, bnf 1058, f. 1b. See also 'Olam a, bnf 1056, f. 83a; 'Olam B, bnf 1058, f. 90b.

^[4]**2: Mâshâ'allâh, who was from India.** Mâshâ'allâh, one of the early 'Abbâsîd astrologers who introduced the Sassanian version of the predictive art to the Arabs, was a Jew from Basra, Iraq. See Pingree, 1974, p. 159. This curious notice about Mâshâ'allâh's Indian origins is also mentioned at Rh, IX, lxvii:14. It is probably related to the fact that Mâshâ'allâh was well acquainted with the work of Indian scientists, such as Kanaka, who visited the courts of al-Manṣûr and Hârûn al-Rashîd. The astrological work of Kanaka is mentioned in *Reshit Hokhmah I* and other parts of Ibn Ezra's work.

^[5]**4: Do not imagine ... natures on Earth.** See above, §2.7:3 and note.

§3.1

^[1]**1: The aspects, Hebrew המבטים** (Arabic *nazar*, Latin *aspectus*). The aspects are usually angular relationships between planets, but sometimes they are also angular relationships between zodiacal signs and other celestial objects that play some astrological function. The aspects of trine and sextile, 120° and 60°, are considered harmonious or favorable; the aspects of opposition and quartile, 180° and 90°, are considered disharmonious or inauspicious. Ta §3.1:1–6, §3.2:1–12 comments

on Rh, III, xxxix:4—xl:4, and corresponds closely to Tb §4.6:1–6, §4.7:1–6, §4.8:1–5. Not only are the almost identical theoretical treatments of this subject in *Te'amim I* and in *Te'amim II* idiosyncratic in comparison with contemporary introductions to astrology, they are also a telling example of Ibn Ezra's eclectic explanatory methodology and of the means by which he sought to provide scientific foundations for astrological doctrines. See Kitāb al-Madḥal, 1996, VII:5, v, pp. 292–293; Abbreviation, 1994, p. 41; Art of Astrology, 1934, par. 373, p. 225; al-Qabīṣī, 2004, I:18, p. 27; Tetrabiblos, 1980, I:13, pp. 73–75.

^[2]**2: Ya'qub al-Kindī said ... into other parts.** Corresponds to Tb §4.8:1. For Ya'qub al-Kindī's position on the aspects, see also Tb §2.1:10.

^[3]**4: Given that any circle ... end of a diameter.** Corresponds closely to Tb §4.6:5 and Mishpeṭei haMazzalot, bnf 1058, f. 20a.

^[4]**4: As I shall explain:** See below, Ta §3.5:4–7.

^[5]**5: The circle can also ... the trine aspect.** Corresponds closely to Tb §4.6:2 (see note there) and Mishpeṭei haMazzalot, bnf 1058, f. 20a.

^[6]**6: When you fix ... aspect of sextile.** Corresponds closely to Tb §4.6:3 (see note there) and Mishpeṭei haMazzalot, bnf 1058, f. 20a.

§3.2

^[1]**2: I shall also mention ... ⟨using⟩ numbers.** See below, §7.2:1–4.

^[2]**4: One and five are kindred numbers because both preserve themselves.** Here 1 and 5 are said to “preserve themselves” because squares of integers whose last digit is either 1 or 5 are always integers whose last digit is respectively either 1 or 5. Ibn Ezra refers to the same property in Mispar, 1895, p. 2; 'Eḥad, 1985, p. 401 and *Sefer ha-Middot*, 1.14 (Middot, 2006, pp. 84, 207).

^[3]**4: Six is similar to two ... the result is an odd number.** When 6 or 2 is divided by two, the result is an odd number: $6/2 = 3$; $2/2 = 1$.

^[4]**4: Three and seven likewise ... divisible by odd numbers.** 3 and 7 are odd and prime numbers; hence they are divisible only by themselves or by 1, namely, by odd numbers.

^[5]**5: The *⟨mundane⟩* fifth house ... the first house.** See below, §3.5:9.

^[6]**6: Composite, Hebrew מורכבים.** Composite numbers are the product of the multiplication of integers that are greater than 1. Thus, 1, 3, 5, and 7, namely, prime numbers, are not composite. For this term, see 'Eḥad, 1985, p. 400.

^[7]**1–9: I, Abraham have also sought ... an aspect of antagonism.** Corresponds closely to Tb §4.7:1–8. The approach that Ibn Ezra attributes to himself exploits arithmetical features of the integers and draws the following conclusions: pairs of integers separated by the constant 4 (1 and 5, 2 and 6, etc.) are harmonious; pairs separated by the constant 2 (1 and 3, 2 and 4, etc.) are also harmonious but to a lesser degree; and pairs separated by the constant 3 (1 and 4, 2 and 5, etc.) are disharmonious. Consequently, the trine aspect, which is based on an interval of four signs, is of “complete love” and zodiacal signs that are in trine have “one nature” (as in the case of the signs of a triplicity); the sextile aspect, based on an interval of two signs, is of “half love”; but the quartile aspect, based on an interval of three signs, is of “antagonism.” An identical explanation of the aspects is offered in *Sefer ha-'Eḥad* (Book of the Unit), a theoretical mathematical monograph written by Ibn Ezra prior to 1148 (see 'Eḥad, 1985, p. 400). Most interestingly, similar mathematical arguments, marked by Pythagorean hues, are expounded several times in his biblical commentaries (see short commentary on Exodus 3:13, long commentary on Exodus 3:15 and 33:21) and theological monographs (see haShem, 1985, III, pp. 422–423; IV, p. 423; V, pp. 424–426; 'Eḥad, 1985, p. 399, *Yesod Mora'*, 1985, XI, pp. 338–341) to explicate secret meanings behind the values of the letters of the Tetragrammaton. The underlying idea is that similar mathematical principles underpin both physical and supernal actualities.

^[8]**10: Science of proportions, Hebrew חכמת הערכים.** Ibn Ezra mentions the science of proportions, in close association with arithmetic (*חכמת החשבון*) and geometry (*חכמת המדות*), in the long commentary on Daniel 2:2 and the long commentary on Exodus 31:3. The science of

proportions is presented in the *Epistle on Music of the Ikhwân al-Ṣafâ* (see below, §4.1:2 and note) as closely connected to the art of musical harmony (Epistle on Music, 1978, p. 12).

§3.3

^[1]1: **The rising times ... they are equal.** Quotes from Rh, III, xxxix:26 and comments on it. Reference is made to the pairs of signs—Aries and Pisces, Virgo and Libra, Taurus and Aquarius, Leo and Scorpio, Gemini and Capricorn, and Cancer and Sagittarius—which have the same rising times. See *Almagest*, 1984, II:8, pp. 100–103; Evans, 1998, pp. 110–111. See also Tb §2.3:5 and note.

^[2]2: **Governors, Hebrew גוידים.** Comments on Rh, III, xxxix:29–31, where the “governors” are described as stars that are located in the straight signs. For the straight and crooked signs, see Tb §2.3:5 and note.

^[3]3: **“Established” (in pairs) in the ecliptic, Hebrew בחשב האפודה נכונים**, lit. **established in the band of the girdle.** This is a reference to Rh, III, xxxix:31–33, xl:1–2, where the term is explained as follows: *‘והמזלות שהם בחשב האפודה נכונים כל שנים מזלות שהם בתים לכוכב אחד, כמו טלה ועקרב למאדים ושור ומאזנים לנגה ותאומים ובתולה לכוכב חמה וקשת ודגים לצדק וגדי ודלי לשבתאי. וא’ע’פ שיש ללבנה בית אחד ולשמש בית אחד, בעבור כי שניהם מושלים, יהיו נחשבים בתיהם כאילו הם למושל אחד.*” (“The signs that are ‘established in the ecliptic’ are the pairs of signs that are the planetary houses of a single planet, such as Aries and Scorpio, (which are the houses) for Mars, Taurus and Libra for Venus, Gemini and Virgo for Mercury, Sagittarius and Pisces for Jupiter, Capricorn and Aquarius for Saturn. Even though the Moon and the Sun have only one planetary house each, since they are rulers (Gen. 1:16,18), their houses [Cancer and Leo] are considered as belonging to one ruler.”) al-Qabîṣî, 2004, I:14, p. 23, refers to these signs as follows: “if two signs are the houses of the same planet they are said to be agreeing in the belt of the zodiac.” In *Art of Astrology*, 1934, par. 377, p. 228, the signs are designated “concordant in itinere” and in *Abbreviation*, 1994, p. 27, as “agreeing in the path”. For the expression “band of the girdle” (*חשב האפודה*), see above, note on §1.2:1, s.v. “ecliptic”.

^[4]**3: Two stars occupy the place of a single ruler.** Here Ibn Ezra briefly refers to the special case of the pair Cancer and Leo, which according to Rh, III, xxxix:xl:1–2 (see quote in previous note), are still considered to be “established in the zodiac,” even though they are respectively the houses of the Moon and of the Sun rather than the two houses of the same planet. Hence, the “two stars” mentioned in the passage are the Moon and the Sun; they “occupy the place of a single ruler” because their planetary houses, Cancer and Leo, are considered to be “established in the zodiac,” so that they should have been the houses of a “single ruler.”

§3.4

^[1]**1–3: They said ... of its great heat.** Quotes from and comments on Rh, III, xl:5–17. For the properties of the quadrants, see Kitâb al-Madḥal, 1996, VI:27–33, v, pp. 264–268.

^[2]**5: The black appearance ... cold with moisture.** Quotes from and comments on Rh, III, xl:13, 17. For the colors of the quadrants, see Kitâb al-Madḥal, 1996, VI:29, v, p. 265.

^[3]**6–7: They termed anything ... ascending half circle.** Quotes from and comments on Rh, III, xl:20–25.

^[4]**8: Some say that <the quadrant>... line of midheaven is western.** This opinion diverges from the position presented in Rh, III, xl:6,10,14,17 as well as in Kitâb al-Madḥal, 1996, VI:31, v, pp. 266–267.

^[5]**9: This is the way ... agree with them.** The same position is endorsed by Ibn Ezra in the third version of his *Keli ha-Nehoshet* (Book of the Astrolabe). See Nechoset C, f. 60a: **קו בין קו הרביע שהוא בין קו מזרח ו בין קו תהום חצי השמים ובין קו מזרח הוא דרומי, והרביע שהוא בין קו מזרח ו בין קו תהום הוא מזרחי, והרביע שהוא בין קו תהום ו בין קו מערב הוא צפוני, והרביע שהוא בין קו מערב ו בין קו תהום הוא מערבי.** (“Know that the quadrant between the line of midheaven and the line of east is southern, and the quadrant between the line of east and the line of lower midheaven is eastern, and the quadrant between the line of lower midheaven and the line of west is northern, and the quadrant between the line of west and the line of midheaven is western.”)

§3.5

^[1]**1: As for the twelve <mundane> houses ... books of the Ancients.** Comments on Rh, III, xl:26–27. Corresponds closely to Tb §3.1:1. The mundane houses (Hebrew בתיים, Greek *topoi*, Arabic *buyât*, Latin *domicilia*) are twelve divisions of the ecliptic, calculated with respect to a specific latitude or horizon, and held to govern a variety of human relationships and experiences. The astrological indications of each of the twelve mundane houses are usually given in ascending order in contemporary introductions to astrology: see Kitâb al-Madḥal, 1996, VI:26, v, pp. 258–260; Abbreviation, 1994, pp. 29–31; Art of Astrology, 1934, par. 461–473, pp. 275–278; al-Qabîṣî, 2004, I:57–68, pp. 49–55. The same rule applies also to Rh, III, xli:10–xlii:2 and Mishpeṭei haMazzalot, bnf 1058, f. 16a–17a. By sharp contrast, *Ṭe’amim I* and *Ṭe’amim II* not only present striking similarities but also adopt an analogous idiosyncratic presentation: instead of the customary ascending order, they present the twelve mundane houses in three stages: (1) the first, fourth, tenth, and seventh house, which are the houses whose cusps coincide with the four cardines (Ta §3.6:1–8; Tb §3.1:2–10); (2) the fifth, eleventh, second, and eighth houses, which are called “succedent to the cardines” (Ta §3.6:9–13; Tb §3.2:1–6); and (3) the ninth, third, twelfth and sixth houses, which are called “falling from the cardines” (Ta §3.6:14–18; Tb §3.3:1–7). For these and other similarities between *Ṭe’amim I* and *Ṭe’amim II*, see the following notes.

^[2]**4: They said that everything ... four points “cardines”.** Comments on Rh, III, xl:27–29 and corresponds closely to Tb §3.1:11. The four cardines, Hebrew יתדות, lit. pegs (Arabic *autâd*, Latin *anguli*), are the cusps of the first, fourth, seventh, and tenth mundane houses. The cusp of the first house coincides with the ascendant, namely, the intersection of the ecliptic with the eastern half of the local horizon; the cusp of the fourth house coincides with lower midheaven, that is, the intersection of the ecliptic with the lower half of the local meridian; the seventh house coincides with the descendant and the tenth house with upper midheaven. For a definition see Art of Astrology, 1934, par. 247, pp. 149–150.

^[3]**7: Seventh house, Hebrew יחד שביעי, lit. seventh cardo:** Ibn Ezra is in the habit of applying the word “cardo” to the mundane

houses whose cusps correspond to the cardines. See below, Ta §3.6:12. See also Tb §3.2:5, §6.2:3, 9.

^[4]**11: Falling (houses), Hebrew גופלים**. This is a reference to the third, sixth, ninth, and twelfth mundane houses. These houses are given the same designation in Tb §3.1:12, but in Rh, III, xli:1 they are called “weak” (Hebrew חלשים).

^[5]**5–12: The houses that are adjacent ... it is underneath the Earth.** Comments on Rh, III, xl:29—xli:9.

§3.6

^[1]**1: Mazzal, Hebrew מול**. Ibn Ezra is punning on this Hebrew word, which usually denotes zodiacal sign but here stands for the first mundane house. Notice that although both the zodiacal signs and the mundane houses divide the zodiac into twelve parts, in most cases they neither coincide nor have similar sizes. For a similar case, see Tb §3.2:2.

^[2]**2: Line of midheaven, Hebrew קו הרום, lit. line of height.** This is an unusual and alternative rendering of the Hebrew expression קו חצי השמים, i.e., line of midheaven. See Glossary s.v. “midheaven”.

^[3]**1–2: Because the degree ... cardines indicate ancestors.** Refers to the first mundane house and corresponds to Tb §3.1:2–4. Quotes from and comments on Rh, III, xli:10–11.

^[4]**3–4: The Ancients said ... that is visible.** Corresponds closely to Tb §3.1:7–8. As for Ptolemy’s diverging opinion regarding the tenth and tenth mundane houses, to the best of my knowledge there is nothing like that in the chapter on parents (III:4) or elsewhere in the *Tetrabiblos*.

^[5]**5: Because nothing ... property and fields.** Quotes from and comments on Rh, III, xli:24–27.

^[6]**6: They said ... is known.** Comments on Rh, III, xlii:13–15.

[7]8: **Helpmate to a man, Hebrew עזר האיש**. See below, Ta §3.6:11, s.v. “Native’s helpers”, and note there.

[8]7–8: **Because with respect ... it indicates wars**. Quotes from and comments on Rh, III, xlii:4–6. Corresponds closely to Tb §3.1:9–10.

[9]9: **Absolute love**: See above, §3.2:5.

[10]9: **Because the nature ... for human life**. Corresponds closely to Tb §3.2:1–2.

[11]10: **Because the eleventh ... indicates beauty and honor**: Quotes from and comments on Rh, III, xlii:15–16. Corresponds closely to Tb §3.2:3.

[12]11: **Because the second ... the native’s helpers**. Quotes from and comments on Rh, III, xli:16–17. Corresponds to Tb §3.2:4.

[13]11: **Native’s helpers, Hebrew העוזרים את הנולד**. Ibn Ezra is playing here on the Hebrew root עזר “help”: whereas in §3.6:11 the expression הנולד את העוזרים means the “native’s helpers,” describing a feature of the second mundane house, in §3.6:11 the expression עזר האיש, derived from Gen. 2:18, 20 (עזר כנגדו), means a “helpmate to a man” and represents a characteristic of the seventh mundane house, which indeed indicates woman.

[14]12: **Seventh house, Hebrew יתד שביעי, lit. seventh cardo**: See above, §3.5:7 and note.

[15]13: **Vettius Valens, Hebrew ואליס**. Vettius Valens, a Greek astrologer contemporaneous with Claudius Ptolemy, is also mentioned by Ibn Ezra at Rh, IX, lxix:15, in an enumeration of the lots of the seventh mundane house. See also Bouché-Leclercq, 1899, p. xiii; Tester, 1987, pp. 46–49.

[16]12–13: **Because the eighth ... they are correct**. Quotes from and comments on Rh, III, xlii:7–9. Corresponds closely to Tb §3.2:5–6.

^[17]**15: Familiar wisdom, Hebrew חכמה קרובה.** This term is the opposite of חכמה חיצונית or חכמה נוכרית, that is, “external wisdom” or “foreign wisdom”. The latter was borrowed from Arabic encyclopedias of science and philosophy, where it expressed the idea that the sciences are divided into “Arab” and “non-Arab” or “foreign” disciplines (see Peters, 1968, pp. 104–115, esp. 109). It was used by medieval Jewish intellectuals to denote the sciences of Greco-Arabic origin that they were introducing into Jewish culture. Thus “familiar wisdom”, by contrast, denotes the body of knowledge that is close to one’s own law or religion. Notice that whereas according to Rh, III, xli:21 the third mundane house indicates the “wisdom of the Torah and laws” (חכמת התורה) (ודינים) and a very similar wording appears in Mishpetei haMazzalot, bnf 1058, f. 16a (חכמת התורות והמשפטים) and in Tb §3.3:3 (בית התורות), in the same context Al-Bîrûnî mentions “expertness in religious law” (Art of Astrology, 1934, par. 461, p. 276), and both al-Qabîṣî and Abû Ma’shar refer to “jurisprudence and religion” (al-Qabîṣî, 2004, I:59, p. 51; Abbreviation, 1994, p. 31).

^[18]**14–15: Because the ninth ... and the like.** Refers to the third and ninth mundane houses and corresponds to Tb §3.3:1–3. Quotes from and comments on Rh, III, xli:20–24, xlii:9–13.

^[19]**16: Because the twelfth ... men ride on.** Corresponds to Tb §3.3:5. Quotes from and comments on Rh, III, xlii:18–21.

^[20]**17: The sixth house ... illnesses and deformities.** Quotes from and comments on Rh, III, xlii:1–3. Corresponds to Tb §3.3:6, where Ibn Ezra writes that the sixth indicates “diseases, which resemble hidden enemies.”

^[21]**19: As for the lords ... agree with him.** Comments on Rh, III, xli:10—xlii:21, where, besides the indications of each of the twelve mundane houses, the indications of each of the three lords of the triplicities of each mundane house are specified. Regarding the lords of the triplicities of each mundane house, *Reshit Hokhmah I* corresponds very closely to a complete section of al-Qabîṣî’s *Introduction to Astrology*, which, for its part, repeatedly adduces Al-Andarzagar’s *Nativities* as its source. See al-Qabîṣî, 2004, I:57–68, pp. 49–55. Al-Andarzagar is certainly identical with Andruzagar ben Sadi Faruk the Jew, who is mentioned in the current passage and frequently elsewhere in Ibn

Ezra's oeuvre. See Moladot, bnf 1056, ff. 51b, 52b, 54b, 55b, 56b; Mivḥarim A, München 202, f. 109a; 'Olam A, bnf 1056, f. 85b, 86a; Astrolabio, vesp. a II, f. 40^{ro}; Astrolabio, Arundel 377, f. 68^{vo}.

§4.1

[1] **1: I have already ... they are malefic.** See above, §1.5:1–17.

[2] **2: Ptolemy said that they gleaned ... the Moon is 12.** Corresponds closely to Tb §5.5:6. The two lists in Ta §4.1:1 and Tb §5.5:6 are virtually identical to a list of cosmological orbs and their corresponding numbers that is part and parcel of the *Canobic Inscription*, an early work by Ptolemy, predating the *Almagest* and containing a list of parameters of his mathematical astronomy. In addition, the *Canobic Inscription* presents, next to each of the components, the Greek name of a corresponding musical note, along with three additional parameters that do not appear in *Ṭe'amim I* or *Ṭe'amim II*:

sphere of fixed stars	[meta] hyperbolaion	36
Saturn	nete hyperbolaion	32
Jupiter	diezeugmenon	24
Mars	nete synemmonon	21 ^{1/3}
Sun	paramese	18
Venus and Mercury	mese	16
Moon	hypate meson	12
fire and air	hypate hypaton	9
water and earth	proslambanomenos	8

The list in the *Canobic Inscription* is followed by the number of means—arithmetic ($a+c = 2b$), geometric ($a*c = b^2$) and harmonic ($1/a + 1/c = 2/b$)—as well as of the musical concords—fourth ($4/3$), fifth ($3/2$), octave ($2/1$), octave+fifth ($3/1$), double octave ($4/1$), tone ($9/8$)—that are found in the list. See Swerdlow, 2004, pp. 166–167.

One substantial difference between the lists in *Ṭe'amim I* and *Ṭe'amim II* and that in the *Canobic Inscription* is related to Mars: whereas the *Canobic Inscription* gives a value of $21^{1/3}$, *Ṭe'amim I* has 20 and the reading of *Ṭe'amim II* is uncertain (some manuscripts have a lacuna, whereas others give a value of 6, which is clearly a scribal error). However, given that, according to Tb §5.5:7 (see note there) the Saturn-Mars ratio is a

“good” or “noble” one, one may conclude that in the lists of *Ṭe’amim I* and *Ṭe’amim II* Ibn Ezra assigned the value $21\frac{1}{3}$ to Mars, as in the *Canobic Inscription*.

The lists in the *Canobic Inscription* and in both versions of *Sefer ha-Ṭe’amim* pertain to the tradition of the Pythagoreans who, according to *De caelo* 2.9, “starting from the observation that the stars’ speeds, as measured by their distances, are in the same ratios as musical concordances, assert that the sound given forth by the circular movement of the stars is a harmony.” There is, however, a substantial difference regarding the astronomical import of the numbers in the lists: whereas both versions of *Sefer ha-Ṭe’amim* assert that the numbers represent the ratio of the planets’ orbs to the orb of the Earth, the *Canobic Inscription* says nothing substantial in this regard. Chapter 3.14 of Ptolemy’s *Harmonics* is entitled “By which least numbers the fixed tones (notes) of the perfect system may be compared to the primary spheres in the universe”; this is presumably where Ptolemy explained the relation between the musical tones and certain astronomical properties of the planets. But the contents of this chapter are unfortunately lost. N. Swerdlow, after a careful analysis of the available data, concludes that “it appears that there is nothing of astronomical significance or with an astronomical basis in the tones and numbers of the *Canobic Inscription*.” See Swerdlow 2004, pp. 165–170.

Where then, did Ibn Ezra obtain these lists and the information that the numbers somehow correspond to ratios between the orbs of the planets and the orb of the Earth? Since both versions of *Sefer ha-Ṭe’amim* state explicitly that Ptolemy is the originator of the lists, it may be that Ibn Ezra had access to some now-lost part of Ptolemy’s writings. It is more plausible, though, that he derived the information from some Arabic work—closer to his time and cultural climate—that referred to Ptolemy’s list. This source is in all likelihood the *Epistle on Music of the Ikhwân al-Ṣafâ’*, or another work on which this *Epistle* drew for the information related to the list. The *Epistle*, which is part of the *Rasâ’il Ikhwân al-Ṣafâ’*, a comprehensive encyclopedia compiled in Baghdad in the tenth century, reports that Pythagoras “heard the music produced by the rotation of the spheres and the heavenly bodies” and that “he was thus able to deduce ... the principles of music and the relations to notes.” It adds that Nicomachus, Ptolemy, Euclid, and other philosophers were the heirs of Pythagoras’ tradition (*Epistle on Music*, 1978, p. 38). Elsewhere the *Epistle* offers the following information (*Epistle on Music*, 1978, p. 45–46): “The mathematician philosophers have

advanced the theory that a harmonious proportion exists between the diameters of the celestial spheres and those of earth and air. The proof of this is that if we express the diameter of the earth by 8, that of the sphere of air by 9, then the diameter of the sphere of the moon by 12, that of the sphere of Mercury by 13, that of the sphere of Venus by 16, that of the sphere of sun by 18, that of the sphere of Mars by 21.5, that of the sphere of Jupiter by 24, that of the sphere of Saturn by $27\frac{1}{7}$, and that of the sphere of the fixed stars by 32; based on these figures, the diameter of the earth and that of the moon will be in the proportion 3:2, the diameter of the moon and that of the air will be in the proportion of 4:3; the diameter of Venus compared with that of the Earth will be in the double proportion of 16:8 (2:1)."

Ibn Ezra found scriptural support for the Pythagorean theory of the music of the spheres in the text of Ps. 93:4, which he glossed as follows: **וְזֶה לְאוֹת, כִּי לְגַלְגָּלִים קוֹלוֹת ... וְאוֹלֵה הַקּוֹלוֹת - לֹא יִשְׁמְעוּ הַחֲרָשִׁים, כֹּאֲשֶׁר** "וְזֶה לְאוֹת, כִּי לְגַלְגָּלִים קוֹלוֹת ... וְאוֹלֵה הַקּוֹלוֹת - לֹא יִשְׁמְעוּ הַחֲרָשִׁים, כֹּאֲשֶׁר" ("This indicates that the orbs have sounds ... and these sounds cannot be heard by the deaf, to the same extent that the blind cannot see the awful works of God" (alluding to Isa. 42:18). See also his commentary on Job 38:7.

[3]3: The ratio of Jupiter ... a noble ratio. The notion of "noble" ratio is explained in the *Epistle on Music of the Ikhwân al-Ṣafâ* as follows (Epistle on Music, 1978, pp. 34–35): "Some of these proportions are superior and noble, others less so. Among the noble and superior proportions we include: that which is equal (octave), that of 4:3 (fourth), that of 3:2 (fifth), that of 5:4 (natural third) and that of 9:8 (tone). Now if we establish the tuning of these notes according to the noble proportions mentioned and if they are plucked in successive and coordinated movements, they will then produce successive and coordinated notes, notes high and light, or low and heavy." For the Greek and Ptolemy's explanation of these ratios, see Swerdlow, 2004, pp. 130–150. As explained by Ibn Ezra, the number of Jupiter, 24, is equal to the Sun's number, 18, plus a third of the Sun's number, 6; that is, $24 = 18 + 6$; so the ratio Jupiter-Sun, 24:18, is equivalent to the ratio 4:3, which represents the musical concord of a fourth and is indeed a "noble" ratio. The same happens with Jupiter and the Moon: the ratio of Jupiter's number, 24, to the Moon's number, 2, is 2:1; this represents the musical concord of the octave, which is also one of the noble ratios.

^[4]**4: The luminaries ... they are malefic.** Corresponds closely to Tb §5.5:7, where the notion of “noble ratio” (Hebrew: ערך נכבד) is designated “good ratio” (ערך טוב). The ratio Saturn-Sun is 32:18 (16:9) and the ratio Saturn-Moon is 32:12 (8:3); Mars-Sun is $21\frac{1}{3}$:18 and Mars-Moon is $21\frac{1}{3}$:12; none of those ratios is a “noble” or “good” ratio. A similar explanation of the maleficence of Saturn and Mars is given in the *Epistle on Music of the Ikhwân al-Ṣafâ* (Epistle on Music, 1978, pp. 46): “As for Mercury, Mars and Saturn, they do not have a proportion. That is why these heavenly bodies are called maleficent.”

^[5]**5: As the first house does.** See, above, §3.6:1.

^[6]**5–7: Ibn Abi Damina said ... the twelfth house.** Corresponds closely to Tb §5.4:3–6. The same doctrine is mentioned in Kitâb al-Madḥal, 1996, VI:26, v, pp. 260–262, without mentioning a specific source. Ibn Abi Damina, an unidentified astrologer, is not referred to elsewhere in Ibn Ezra’s work. See below, Ta §4.9:1, where a different method for the allocation of the planets to the mundane houses is offered.

§4.2

^[1]**1: Why it is cold and dry.** See above, §1.5:13–14. Cf. Tb §5.3:2–3.

^[2]**1: The essence of death ... it moves sluggishly.** Quotes from Rh, IV, xlii:25 and comments on it. Corresponds to Tb §5.3:7.

^[3]**2: The Jews because their sign is Aquarius, which is its house.** Comments on Rh, IV, xlii:27. Ibn Ezra repeatedly refers in his astrological treatises and biblical commentaries to Aquarius as the sign of Israel, which molded the history of the Jewish people in connection with a Saturn-Jupiter conjunction that occurred in the sign of Aquarius prior to the Exodus from Egypt. See Olam B, bnf 1058, f. 89a: יְצִיטוֹל “דְּלִי הוּא מִזְלֵ יִשְׂרָאֵל” (“The sign of Aquarius is the sign of Israel.”) Liber de nativitatibus, 1484, f. e1r: “Sciendum etiam quod adunatio Iovis et Saturni qui in Aquario ante exitu iudeorum de Egypto.” See also long commentary to Exodus 32:1; 33:21; commentary on Esther 3:7. The problematic association between Saturn and the Jews is already present in Roman and early Christian literature and may be readily

found in works by medieval Arabic astrologers. See *Cornelii Taciti Historiarum Libri*, Oxford 1967, *Historiae* V, 4; *De Consensu Evangelistarum*, S. Augustini, ed. J.-P. Migne, *Patrologiae Latinae*, Tomus 32, Turnhout 1969, lib. I, caput xxi–xxii, col. 1055; *Art of Astrology*, 1934, par. 433–434, p. 253; *On the Great Conjunctions*, 2000, I, pp. 44–45; al-Qabîsî, 2004, II:4, p. 65 (quoting Mâshâ'allâh); *Memorias de 'Abd Allah*, 1980, p. 315. Abraham Ibn Ezra was the first Jewish thinker, as far as we know, to be concerned with the astrological elements of the Saturn-Jews myth and to make a significant contribution towards its further development and absorption within medieval Jewish society. See esp. Ibn Ezra's long commentary on Exodus 20:13. For a comprehensive survey of this connection in Ibn Ezra's work, see Sela, 2004a. See also Zafran, 1979. As for the connection between Saturn, Aquarius, the Saturn-Jupiter conjunctions, and the Jews, Ibn Ezra seems to have drawn on the doctrine of the *mighty fardâr* or *dawr*, a cycle of 360 years ruled by a planet and a sign, which was further divided into four quarters, on the analogy of the solar year. See *Kitâb al-Ulûf*, 1968, p. 60; *On the Great Conjunctions*, 2000, I, pp. 587–592; *Art of Astrology*, 1934, par. 518, pp. 321–322. In an astrological history connected to Abû Ma'shar's *Thousands* and based on a sequence of *mighty fardârât*, the eighth *fardâr* in this sequence, covering the years 860 to 500 BC, is referred to as the period in which Moses appeared and is described as ruled by the sign of Aquarius and the planet Saturn. See *Kitâb al-Ulûf*, 1968, pp. 68–69. Moreover, a clear connection between the *mighty fardâr* and the Saturn-Jupiter conjunction may be found in Abû Ma'shar's *Kitâb al-qirânât*. See *On the Great Conjunctions*, 2000, I, 1, [25], pp. 20–25: “One observes when the conjunction (of Saturn and Jupiter) shifts from one triplicity to another. If the conjunction indicates a change of religions and dynasties, that moment is made the starting-point of the period whose length is equivalent to the number of degrees of the sphere [that is, the period of the *mighty fardârât*].” For the connection between Saturn and the Jews, see also below, Ta §4.2:10 and note.

[4]2–5: **The land of India ... of the body.** Quotes verbatim and almost continuously from Rh, IV, xlii: 27—xliii:26 and comments on it.

[5]6: **Seven orifices ... the astrologers.** Corresponds to Tb §5.3:1.

^[6]**7: It indicates madness ... its sluggish motion.** Quotes from and comments on Rh, IV, xlv:10–11. Corresponds to Tb §5.3:6.

^[7]**8: It indicates old age ... from human nature.** Comments on Rh, IV, xlv:12. See Tetrabiblos, 1980, IV:10, pp. 442–447: “For up to about the fourth year, ... the moon takes over the age of infancy. ... In the following period of ten years, Mercury [is dominant]. ... Venus, taking in charge the third age, that of youth, [is in charge] for the next eight years. ... The sun ... [is in charge] for the period of nineteen years. ... After the sun, Mars, fifth in order, assumes command of manhood for the space of fifteen years. ... Sixth, Jupiter, taking as his lot the elderly age, again for the space of his own period, [is in charge for] twelve years. ... Finally to Saturn falls as his lot old age, the latest period, which lasts for the rest of life.” Corresponds closely to Tb §6.9:2; cf. Tb §5.3:14.

^[8]**9: I have already said ... it is cold.** See above, §2.7:3.

^[9]**10: Know that the days (of the week) ... Wednesday night (is in its portion).** Comments on Rh, IV, xlv:13 and corresponds closely to Tb §5.1:12. For the doctrine that assigns each of the planets to a day of the week and hours of the day, see Art of Astrology, 1934, par. 390, pp. 237–238; Bouché-Leclercq, 1899, pp. 477–486. Notice that in Hebrew Saturn is called *Šabbetai* because it is the planet in charge of Shabbat, the seventh (and holiest) day in the week. This is an additional connection between Saturn and the Jews. See above, §4.2:2 and note.

^[10]**11: I have ... any proof.** Quotes from and comments on Rh, IV, xlv:14–17. Corresponds to Tb §5.3:13. For the years of the part of the *fardār*, see below, Ta §10.9:2 and note., and Tb §6.6:1 and note.

^[11]**12: The reason ... by experience.** Comments on Rh, IV, xlv:17. Corresponds closely to Tb §4.2:1–4; see note there. Besides the term אור, i.e. “light”, *Ṭe’amim I* follows *Reshit Hokhmah I* and employs the expression כח הגוף, “power of the body”, which was borrowed from Abû Ma’shar. See Kitâb al-Madḥal, 1996, VII:3, v, p. 281; Abbreviation, 1994, p. 35.

§4.3

^[1]**1: Jupiter.** This section consists of a series of annotations on verbatim quotations from Rh, IV, xlv:19–22, 25–26, xlv:6, 16, 21–24. Cf. Tb §5.4:1–19.

^[2]**1: I have ... its nature.** See above, §1.5:15.

^[3]**3: As I have explained regarding its nature.** See above, §4.1:6.

^[4]**4: I have already mentioned in Saturn's chapter.** See above, §4.2:6.

^[5]**5: Of the edges ... northerly winds.** Comments on Rh, IV, xlv:24. See also Mishpetei haMazzalot, bnf 1058, f. 21b–22a. For the connection between the planets and the points of the compass, see Art of Astrology, 1934, par. 389, pp. 236–237, where three methodologies are reported. The first, which Al-Bîrûnî gleaned from Nayrîzî's *Book of Nature*, is virtually identical with Ibn Ezra's approach.

^[6]**5: I mentioned for Saturn.** See above, §4.2:11.

§4.4

^[1]**1: Mars.** This section quotes verbatim from Rh, IV, xlv:2–3, 7–8, 9–11, 20, 23, xlvii:4–5, 7–8 and comments on it. Corresponds loosely to Tb §5.5:1–12 and Mishpetei haMazzalot, bnf 1058, f. 22a.

^[2]**1: I have ... its nature.** See above, §1.5:16.

^[3]**4: Theft because it is the work of bandits.** Here Ibn Ezra employs two different Hebrew roots, the first of biblical origin to denote “theft” (גניבה), and the second of Greek and talmudic origin to denote “bandits” (לסטים).

^[4]**5: We have already mentioned ... nostril belongs to it.** See above, §4.1:5, §4.2:6.

^[5]6: **Of the edges ⟨of the horizon⟩ ... is cold and moist.** Comments on Rh, IV, xlvii:8. See above, §4.3:5 and note.

^[6]6: **The reason for the days ... for Saturn.** See above, §4.2:10–11.

§4.5

^[1]1: **Abû Ma'shar said ... devoid of power.** For the idea that the Sun is a malefic when it conjoins a planet, see Kitâb al-Madḥal, 1996, VII:9, v, p. 314: “Sol ... et ipse impedit ipse cum sibi coniunctus fuerit aut ei appropinquaverit ultra modum”; Mishpeṭei haMazzalot, bnf 1058, f. 22b: “אמרו כל הקדמונים: אין כוכב רע שיוכל לעשות הרע כמו השמש” “לנושרף, כי יבטל מעשה הכוכב” (“All the Ancients said: no malefic planet can cause more harm than the Sun ⟨causes⟩ to a burned ⟨planet⟩, because it cancels the action of the planet.”) For the concept of a “burned” planet, see Tb §4.3:2.

^[2]2: **The sensitive soul ... Aristotle's *Book on the Soul*.** Corresponds to Tb §5.1:2. Here Ibn Ezra is probably referring to a super-commentary on this work, but see *De anima* 405^{a29}–405^{b1}.

^[3]3: **'Edom, Hebrew אדום:** This is a generic reference to the Christian lands. On the connection between 'Edom [i.e. Christendom], the Sun, and the sign of Leo, see 'Olam B, bnf 1058, f. 89a: “רק דבר מנוסה הוא” “שארית ושמם לאדום, ובו היתה המחברת שילוד לאיש שחושבים שהוא אלוה” (“It has been proven by experience that Leo and the Sun are assigned to 'Edom [i.e. Christendom], and that there [i.e. in Leo] a conjunction ⟨of Saturn and Jupiter⟩ occurred which ushered in the birth of the person whom they deem to be God.”)

^[4]6: **The stronger was assigned to it.** See above, §2.5:3. Corresponds to Tb §5.1:3, §8.1:4.

^[5]7: **I have already ... for Sunday.** See above, §4.2:10.

^[6]7: **I have already ... its body.** See above, §4.2:12.

^[7]1–7: **The Sun ... power of its body.** Quotes verbatim from Rh, IV, xlvii:15–20, 25–31, xlviii:2–6 and comments on it.

§4.6

^[1]1: **I have already explained its nature.** See above, §1.5:15.

^[2]2: **Those who ⟨follow⟩ Muslim law ... Saturn and Jupiter took place.** As for the connection between Islam, a specific conjunction of Saturn and Jupiter, and the sign of Scorpio, see ‘Olam B, bnf 1058, f. 89a: **וְהַמַּחְבֵּרֶת הָיְיָה טָרֶם קֹם נִבְיָא הִשְׁמַעְאִלִים לִפִּי דְבָרָם**: “The conjunction ⟨of Saturn and Jupiter⟩, which preceded the rise of the Muslims’ prophet occurred, according to them, in the sign of Scorpio.” For this Saturn-Jupiter conjunction, see also *On the Great Conjunctions*, 2000, I, pp. 127, 155; *Astrological History of Māshā’allāh*, 1971, pp. 48–52; *Art of Astrology*, 1934, par. 433–434, p. 253.

^[3]4: **I have already mentioned ... of its body.** See above, §4.2:10, §4.2:12.

^[4]1–4: **Venus ... for Saturn.** Quotes verbatim from Rh, IV, xlvi:8–11, 17, 24–25, xlix:1–5 and comments on it. See above, §4.2:11.

§4.7

^[1]3: **Aristotle said ... above the Sun.** See *De Caelo*, II:7, 10; *Meteorologica* I:3, but Ibn Ezra is probably following a super-commentary.

^[2]3: **The Ancients pronounced judgments ... about private affairs.** This is a reference to the Saturn-Jupiter conjunctions, the main macro-astrological technique employed by Arab astrologers. See below, Ta §10.9:3–4 and note.

^[3]5: **Its taste is sour ... more often than not.** For the tastes of the planets, see Tb §5.2:22 and note.

^[4]6: **I have ... power of its body.** See above, §4.2:10, §4.2:11, §4.2:12.

^[5]1–6: **Mercury ... power of its body.** Quotes verbatim from Rh, IV, xlix:9–10, 16, 20, 22, 28, l:6–12 and comments on it.

§4.8

^[1]**1: I have already mentioned the reason for its nature.** See above, §1.5:9–12.

^[2]**3: Servants, because it is below the planets, Hebrew והמשרתים** **מהמשרתים למטה היותה בעבור**. This puns on the Hebrew word **משרתים**, which literally means “servants” but functions in Ibn Ezra’s idiosyncratic scientific nomenclature as a technical designation for the planets. See Tb §1.2:1 and note, and Glossary s.v. “planet”.

^[3]**5: Familiar wisdom.** See above §3.6:15 and note.

^[4]**6: <It indicates> infancy ... above the Earth.** Corresponds to Tb §5.2:17. See note there.

^[5]**6: I have already mentioned ... mother and sisters.** See above, §4.1:5 cf. Ta §4.6:3.

^[6]**7: Of the edges <of the horizon> ... begins to wax.** Comments on Rh, IV, li:3. See above, §4.3:5 and note.

^[7]**8: Abû Ma’shar said ... its years are 108.** This explanation appears neither in Abû Ma’shar’s *Great Introduction* (cf. Kitâb al-Madḥal, 1996, V:8, v, p. 311) nor in his *Abbreviation* (cf. *Abbreviation*, 1994, p. 81). It corresponds closely to Tb §5.2:15, where Abû Ma’shar is not mentioned as the source.

^[8]**8: I have already explained the power of its body.** See above, §4.2:12.

^[9]**1–8: The Moon ... power of its body.** Quotes verbatim from and comments on Rh, IV, l:13–26, 31, li:3–8.

§4.9

^[1]**1: Places of joy ... quarrels and prison.** Corresponds to Tb §4.12:1–6. For the doctrine of the joys of the planets in the mundane houses, see Kitâb al-Madḥal, 1996, VI:27, v, p. 264; *Art of Astrology*,

1934, par. 469, p. 277; al-Qabîṣî, 2004, I:70, p. 55; Abbreviation, 1994, p. 31. This doctrine is mentioned only once in Rh, V, lii:18, without connection to the account of the planets or of the mundane houses. See above, §4.1:5–7, where a different method for the allocation of the planets to the mundane houses is offered.

§5.1

^[1]**1: Fifth Chapter ... because it is known.** The fifth chapter of *Reshit Hokhmah I* (Rh, V, li:9–liii:18), dealing with the good fortune, misfortune, powers and weaknesses of the planets, is an almost verbatim translation into Hebrew of Kitâb al-Madḥal, 1996, VII:6, v, pp. 304–308. Thus the corresponding section of *Ṭe'amim I*, although quoting from *Reshit Hokhmah I* and referring to it, is a commentary on the relevant parts of the *Great Introduction* by Abû Ma'shar, as specified in the following notes.

^[2]**2–5: The reason that Saturn ... its house of exaltation.** Comments on Rh, V, li:28–30, which quotes from Kitâb al-Madḥal, 1996, VII:6, v, p. 305. See also Abbreviation, 1994, p. 53; Art of Astrology, 1934, par. 511, p. 515, par. 441, p. 257; al-Qabîṣî, 2004, I:14, p. 23; Carmen Astrologicum, 1976, I:1, p. 162.

§5.2

^[1]**3: Center, Hebrew מוצק, lit. solid, stable, or strong.** Ibn Ezra frequently used the peculiar neologism *muṣaq* throughout his work and avoided altogether the standard Hebrew word *merkaz*, which derives from the Arabic *markaz* and was freely employed by contemporaneous Jewish writers. In his commentaries on Job 38:16 and 38 Ibn Ezra explained that *muṣaq* denotes the center point of the circle; in his commentary on Job 37:10 he even asserted that it is equivalent to the earth, which stands as a point in the middle of the orbs. See Sela, 2003a, pp. 113–116.

^[2]**3: Rises in the circle of the apogee whose center is far from the center of the Earth, Hebrew עולה בגלגל הגבהות שמוצקו רחוק ממוצק הארץ.** This literal expression is a reference to a planet when

it reaches the apogee of its eccentric circle. Identical expression are employed in Rh, V, lii:1–2 and Ibn al-Muthannâ's Commentary, 1967, p. 297. Cf. Tb §4.1:1 and see also Glossary s.v. “eccentric circle”.

^[3]**3: As for the explanation ... riding his horse.** Corresponds to Tb §4.1:1 and Rh, VIII, lxvi:9.

^[4]**4: But Ptolemy says ... is at apogee.** Cf. Tetrabiblos, 1980, I:4, pp. 35–39. See above, §4.7:3.

^[5]**6: Superior, Hebrew עליין**. This plays on the Hebrew word עליין, namely, uppermost. Whereas in §5.6:5 the word עליינים describes the stars of the superlunary domain that exert astrological influence on the Earth, in §5.6:6 the word עליין characterizes the human soul, which according to Ibn Ezra is of the nature of the angels (see Ibn Ezra's long commentary on Exodus 3:15).

^[6]**1–9: The explanation for the power ... its [the Sun's] house of defection.** Comments on Rh, V, lii:1–3, which quotes from Kitâb al-Madḥal, 1996, VII:6, v, p. 305. See also Abbreviation, 1994, p. 53; al-Qabîṣî, 2004, p. 101.

§5.3

^[1]**1–3: As for what they said ... require an explanation.** Comments on Rh, V, lii:28–29—liii:1–4, which quotes from Kitâb al-Madḥal, 1996, VII:6, v, p. 307. See also Abbreviation, 1994, p. 57; al-Qabîṣî, 2004, II:48, p. 89; Kitâb al-Mawâlîd, 1971, 149. It corresponds closely to Tb §5.9:1–5. See note there.

§6.1

^[1]**1: Sixth Chapter.** The sixth chapter of *Reshit Hokhmah I*, dealing with the conditions of the planets in themselves and with respect to the Sun, corresponds to Kitâb al-Madḥal, 1996, VII:1, VII:2, v, pp. 273–281. See also Abbreviation, 1994, pp. 32–39.

^[2]**1: What they have mentioned ... center of the Earth.** Comments on Rh, VI, liii:23–31, which corresponds to Kitâb al-Madḥal, 1996, VII:1, v, pp. 273–276. See above, §5.2:3 and note.

§6.2

^[1]**2: Eccentric circle, Hebrew הגלגל הגדול, lit. the great circle:** For this meaning, see ‘Olam B, bnf 1058, f. 93 b: “גלגלו הגדול הנקרא גלגל” המוצק” (“Its great circle, which is called the eccentric circle.”) See also Moladot, bnf 1056, f. 51b: “גבהותו בגלגלו הגדול שמוצקו רחוק ממוצק הארץ” (“Its apogee in its great circle whose center is far from the center of the Earth.”) See Glossary s.v. “eccentric circle”.

^[2]**4: Two Mercuries in the orb.** Corresponds to Tb §4.3:3.

^[3]**5: Domain of burning.** Refers to the “place of burning.” See above, §1.5:2, §2.16:5 and note.

^[4]**1–5: The reason why a ⟨planet in⟩ conjunction ... are well known.** Comments on Rh, VI, liv:28–lv:23, which corresponds to Kitâb al-Madḥal, 1996, VII:2, v, pp. 276–278. Corresponds closely to Tb §4.3:1–11.

§6.3

^[1]**1–5: The ⟨astrological⟩ judgments ... circles are the same.** Comments on Rh, VI, lv:24–lvi:8, which corresponds to Kitâb al-Madḥal, 1996, VII:2, v, pp. 278–280.

^[2]**6: I shall explain ... in the *Book of the World*:** Comments on Rh, VI, 9–24, which corresponds to Kitâb al-Madḥal, 1996, VII:2, v, pp. 280–281. The keys or centers of the Moon, variously given as 8 or 12, are phases of the Moon that are considered to have influence on the weather, particularly on rain. Reference is here made to ‘Olam A, bnf 1056, f. 84b, although the keys of the Moon are also described in detail in ‘Olam B, bnf 1058, f. 90a. See also On the Great Conjunctions, 2000, I, p. 481.

§7.1

^[1]**1: Seventh Chapter.** The seventh chapter of *Reshit Hokhmah I*, defining a series of astrological scenarios in which more than one planet participate, is an almost verbatim Hebrew translation of Kitâb al-Madḥal, 1996, VII:5, v, pp. 292–304.

^[2]**3: Ecliptic, Hebrew חשב האפודה, lit. band of the girdle.** See above, §3.3:3, §1.2:1 and note. See Glossary, s.v. “ecliptic”.

^[3]**1–3: “Getting close” ... a true conjunction.** Comments on Rh, VII, lvi:31–lvii:5, which is a translation of Kitâb al-Madḥal, 1996, v, VII:5, p. 293. See Abbreviation, 1994, p. 41.

^[4]**4: Eccentric circle.** See above, §6.2:2 and note.

^[5]**5: Powers, Hebrew כחות.** This word conveys the notion of quantifiable astrological influence or of a scale of astrological powers. See Mishpetei haMazalot, bnf 1058, ff. 22a–22b: “ועתה אפרש לך כחות המשרתים. הסתכל מה ממשלה יש לכל משרת בחמישה מקומות השררה, גם במקום המשרת בעצמו. ותן לבעל הבית חמישה כחות, ולבעל הכבוד ארבעה, ולבעל השלישות שלשה, ולבעל הגבול שנים, ולשר הפנים אחד.” (“I now explain you the powers of the planets. Observe the sway which every planet exerts in the five places of domination and in the place where the planet is as well. Assign five powers to the lord of the house, four powers to the lord of exaltation, three powers to the lord of triplicity, two powers to the lord of the term, one power to the lord of the face.”) For similar examples in Ibn Ezra’s work, see Rh, I, viii:13–15; ‘Olam B, bnf 1058, f. 89a; Moladot, bnf 1056, f. 48a. For an example in an Arabic introduction to astrology, see al-Qabîṣî, 2004, I:22, p. 33: “Knowledge of the powers ... the lord of the house has five powers, the lord of the exaltation has four, the lord of the triplicity has three, the lord of the term has two, the lord of the decan has four.”

^[6]**7: The more power it appears to have.** See above, §5.2:1.

^[7]**4–10: If you wish to know ... of them is victorious.** Corresponds to Tb §4.4:1–3; see note there.

§7.2

^[1]**1: Ecliptic, Hebrew האפודה, lit., band of the girdle.** See above, note on §1.2:1, s.v. “ecliptic”.

^[2]**1–4: If the two planets ... equal to the latitude.** Comments on Rh, VII, lviii:10–14. Corresponds closely to Tb §4.5:1–4. Cf. Kitâb al-Madḥal, 1996, VII:5, v, pp. 292–293.

^[3]**5: I shall say ... in the tenth chapter.** See below, Ta §10.1:1–5, §10.4:1–8, §10.6:1–6, §10.7:1–7, §10.8:1–10.

§7.3

^[1]**1: As for what ... is well known.** Comments on Rh, VII, lviii:20.

^[2]**2: These expressions ... I do not know** ⟨why⟩. Comments on Rh, VII, lviii:28—lix:11. Corresponds to Kitâb al-Madḥal, 1996, VII:5, v, pp. 299. There is no trace of these names in Ptolemy’s *Tetrabiblos*.

§8.1

^[1]**1: Eighth chapter ... are well known.** Whereas the eighth chapter of *Reshit Hokhmah I* consists of 120 astrological “judgments” related to the doctrines of nativities and interrogations (Rh, VIII, lxii:9—lxvii:5), the eighth chapter of *Te’amim I* comments on a miscellany of them, as specified in the following notes.

^[2]**2: The reason for making ... to the Earth.** Quotes from Rh, VIII, lxii:17–18 and comments on it.

^[3]**3: As for what they said ... misfortune is mitigated.** Quotes from Rh, VIII, lxiii:24–25 and comments on it. See above, §3.2:5, 8, 9.

^[4]**4: As for what they said ... but not for Mars.** Quotes from Rh, VIII, lxiii:25–26 and comments on it. See above, §4.2:1.

^[5]**5: As for what they said ... the Persian scientists.** Quotes from Rh, VIII, lxiv:3 and comments on it. Here Ibn Ezra is probably referring to the Babylonian method, which shifted the equinoctial points by 8° or 10° with respect to the Greek approach that was accepted by later astronomers and astrologers. See Neugebauer, 1969, p. 188; Evans, 1998, pp. 104, 213–214, 485 n. 15.

^[6]**6: But Ptolemy laughs ... another particular spot.** Ptolemy's methodology is virtually identical with that presented in Ta §2.12:13 (see note there), in a comparison with the approach of the scientists of India for the division of the zodiacal signs. Notice here the contrast between **מחשבת הלב** “mental construct”, which represents Ptolemy's methodology, and **מקום ידוע למראה העין** “a particular observable spot”, which represents the methodology of the Indian scientists. The same distinction corresponds to the contrast between “secundum cogitationem” and “secundum visum” (Liber de Rationibus Tabularum, 1947, pp. 83–84) and between **דרך הראיות** “method of giving proofs” and **מראית העין** “observation” (Ta §2.12:13). See also Liber de Rationibus Tabularum, 1947, p. 84: “Sententia Ptholomei est ut dividamus gradus circuli firmamenti, qui sunt 360, per 12 equalia, et exhibunt 30 gradus equales qui vocantur signum et est eorum initium a puncto intersectionis duorum circulorum maiorum.”

^[7]**6: The signs are not separated.** By means of this expression Ibn Ezra seems to convey the idea that according to Ptolemy's method for dividing the signs, which is based on rational thinking, the signs are an arbitrary and mental construct rather than physical entities.

^[8]**6: The same applies ... from that sign.** Quotes from Rh, VIII, lxiv:13–14 and comments on it.

^[9]**7: As for the pits ... the Indian scientists said.** Quotes from Rh, VIII, lxiv:28 and comments on it. See above, §2.12:14 and note.

^[10]**8: As for what they said ... unnatural death.** Quotes from Rh, VIII, lxiv:29–30 and comments on it.

^[11]**9: The testimonies ... are correct.** Refers to Rh, VIII, lxv:18—lxvi:5.

[12]9: **In the *Book of Nativities* I shall refer to what is fit to give testimony and to what is unfit.** Although here Ibn Ezra is employing halakhic terminology (כשר = fit; פסול = unfit), the meaning is clearly astrological. This passage refers to Moladot, bnf 1056, ff. 48a–48b, which begins as follows: עדים: עדות ככב שהוא נשרף כשרים, ועתה אפרש לך עדיות וכשרותם ופסלותם. העדיות: עדות כל ככב שב אחורנית לטוב באור השמש אם לטוב פסולה אם לרע קימת. עדות כל ככב שב אחורנית לטוב ולרע פסולה ... (“Take care to pass judgment only by means of two fit witnesses. Now I will explain the testimonies, which are fit and which are unfit. Testimonies: a testimony given by a planet burned by the rays of the Sun, if it indicates good, is unfit; if it indicates evil it comes to pass; the testimony given by every retrograde planet is unfit, whether it indicates good or evil.”)

§9.1

[1]1: **Ptolemy acknowledges ... from the Moon.** See Tetrabiblos, 1980, III:10, pp. 275–277: “Take as the Lot of Fortune always the amount of the number of degrees, both by night and by day, which is the distance from the sun to the moon, and which extends to an equal distance from the horoscope in the order of the following signs, in order that, whatever relation and aspect the sun bears to the horoscope, the moon also may bear to the Lot of Fortune, and that it may be as it were a lunar horoscope.” Corresponds to Tb §7.1:1. For a similar statement about Ptolemy, see *Art of Astrology*, 1934, par. 476, p. 282.

[2]2: **As for those who say ... the other lots.** Comments on Rh, IX, lxvii:15–16. This is a reference to Māshā'allāh's *Book of the Experiments* (ספר הנסיונות), as recorded in Rh, IX, lxvii:14–16.

[3]2: **I saw them recorded in Doronius' book.** This is not the Arabic translation translated and edited in *Carmen Astrologicum*, 1976, where no systematic treatment of the lots is noticeable.

[4]5: **As we have mentioned.** See above, §4.1:5.

[5]7: **A baker's servant, Hebrew משרת פורני, lit. a servant who tends an oven.** The word פורני derives from the Latin *furnus* “oven”. For the term in Hebrew, see Babylonian Talmud Pesahim 31b; Beiṣah

34a; Kiduṣim 62a; Avodah Zarah 35b, etc. Ibn Ezra employs a similar illustration in the introduction to *Sefer ha-Moladot* (Moladot, bnf 1056, f. 46a), where he compares the astrological fate of a man who tends a furnace and a prince born at the same time and in the same city. See following note.

^[6]7–8: **As an illustration ... his father was not wise.** Ibn Ezra expanded on the same two ideas of this illustration in the second and fifth rules of the introduction to *Sefer ha-Moladot*, which he completed just after the first version of *Sefer ha-Ṭe'amim*. See Moladot, bnf 1056, f. 46a: מִפְּאֵת הַגְּבוּלִים ... וְכִכָּה אִם הִיא הַשְּׁלִיט עַל הַמּוֹלֵד כִּכָּב: חֲמָה לֹא נִדִּין שִׁיחִיה חֲכָם בְּכָל מִינֵי חֲכָמָה, כִּי לֹא יִתְכַּן לִהְיוֹת חֲכָם בְּאַרְץ כּוֹשׁ בְּעֶבְרַת הַתְּגֵבֶר חוּם הַשֶּׁמֶשׁ, ע"כ לֹא יִהְיֶה תוֹלְדוֹ יִשְׂרָאֵל רַק נִדִּין שִׁיחִיה מִבֵּין כְּנֻד אֲנָשִׁי מַחֲזוּז ... וְהַדְרֵךְ הַזֶּה מִפְּאֵת הַמִּשְׁפָּחָה, כִּי אִם הָיוּ ב' נוֹלָדִים בְּרֹגַע א' בְּמִדְיָנָה אַחַת, וְהָאֶחָד בֶּן מִשְׁנָה וְהַב' בֶּן מִשְׁרַת פּוֹרְנִי, וְיֵשׁ בִּכְחַת הַמּוֹלֵד לַעֲלוֹת לַמַּעֲלָה גְבוּהָה "The second rule is related to the climates. ... Thus, if the lord of the nativity is the planet Mercury, we will not judge that (the newborn) will be wise in any science, inasmuch as it is impossible for a wise person (to be born) in Ethiopia, because of the increased heat of the sun (there); therefore, his temperament will not be balanced and we will judge that he will be cleverer than his countrymen. ... The fifth rule is concerned with the (social rank of the) family. If two children are born at the same moment in the same country, one of them the son of a duke and the other the son of a baker's servant, and the horoscope of each predicts that they will rise to higher rank and supreme power, then the son of the duke will become king and the son of the servant will become a merchant.")

§9.2

^[1]4: **As I have mentioned.** See above, §4.5:6.

^[2]1–5: **The reason for the lots ... Mars swiftness.** Comments on Rh, IX, lxxviii:6–11 and corresponds to Tb §7.2:1–3. See Kitāb al-Madḥal, 1996, VIII:4, v, pp. 335–337; Art of Astrology, 1934, par. 476, p. 283. Cf. al-Qabīṣī, 2004, V:4, p. 141, where additional lots are assigned to the first mundane house.

[3]6: **Similarly with the rest ... to mention them.** Refers to Rh, IX, lxviii:11—lxxi:16 and corresponds to Tb §7.2:4–31.

§9.3

[1]1: **The lot of kingship ... a single planet.** Quotes from and comments on Rh, IX, lxxii:2–20. Corresponds to al-Qabīṣī, 2004, V:17, pp. 151–153: “The lot of the duration of the rule is taken at the time of the accession of the king from the Sun to the fifteenth degree of Leo, and cast out from the Moon; then it is taken from the Moon to the fifteenth degree of Cancer and cast out from the Sun.” The same lot is also studied by Abû Ma‘shar in *The Book of Religions and Dynasties*; see On the Great Conjunctions, 2000, II, 5:12, p. 151. See also Art of Astrology, 1934, par. 478, p. 290.

[2]2: **I have already mentioned ... of the Sun.** See above, §2.5:1–2.

[3]2–3: **There is no place where the ratio ... similarly with all.** Here Ibn Ezra attempts to give an arithmetical explanation of why one should begin counting degrees precisely “from the fifteenth degree in both houses of the luminaries” (Cancer and Leo) in order to cast out the lots of the number of days of the kings in the two houses of a single planet (i.e., Virgo and Gemini for Mercury). His brief, but not very clear, answer, is that “there is no place where the ratio is always equal,” thereby denoting the idea that only if one begins counting degrees from Cancer 15° and from Leo 15° is the symmetry of both lots in both planetary houses of a single planet preserved. Two points are useful for understanding Ibn Ezra’s meaning. First, the picture is clarified at §9.3:3, where he explains that if one lot is cast at Virgo 5° the other is cast at Gemini 25°, and not at Gemini 5°, thereby making clear that the counting of the degrees is *clockwise* from Cancer 15° and *counterclockwise* from Leo 15°, so that “that the distance from the middle of the houses of the luminaries ⟨is⟩ 20 degrees, and similarly with all.” Second, it is implied that the count should begin from the *same* degree in both Cancer and Leo, and that only Cancer 15° and Leo 15° meet the requirement of preserving the symmetry. Note in this regard that whereas pairs such as Cancer 29° and Leo 1°, Cancer 1° and Leo 29°, etc., preserve the symmetry but have different values, pairs like Cancer 0° and Leo 0°, Cancer 30° and Leo 30°, Cancer 14° and Leo 14°, etc.,

have the same values but do not preserve the symmetry. Thus the only pair of degrees in Cancer and Leo that both preserves the symmetry and has the same value is Cancer 15° and Leo 15° .

^[4]**4: What Enoch said ... the nature of its lord.** Comments on Rh, IX, lxxii:32–lxxiii:9. See *Art of Astrology*, 1934, par. 479, p. 291.

§ 10.1

^[1]**3: Sphaera recta.** See Tb §1.2:7 and note.

^[2]**3: In the *Tetrabiblos* ... rising times for the country.** See *Tetrabiblos*, 1980, III:10, pp. 287–307.

^[3]**3: Rising times for the country, Hebrew מַצְעֵי הָאָרֶץ.** Ibn Ezra uses this expression to denote the entry in a set of astronomical tables where the rising times for specific terrestrial latitudes (representing different countries or cities in the ecumene) are given. For an example of such tables, see *Almagest*, 1984, II:8, pp. 100–103; Evans, 1998, pp. 110–111. See also below, §10.3:3; §10.5:11, 15, 17.

^[4]**1–5: All of the Ancients ... instructions to work them out.** A similar discussion of the aspects, with the participation of Ptolemy, Enoch, Mâshâ'allâh and the Ancients, is found in the fourth Latin version of Ibn Ezra's *Book of the Astrolabe*. See *Astrolabio*, Arundel 377, f. 67^{ro}: “Sed magistri probationum Ptolomeo super hoc non consentiunt et iudicant respectus sine uariatione in omni loco secundum gradus equales quomodo cumque se habet planeta uel in qualibuscumque sit signis ... et de hoc quidem genere scilicet secundo dissentiunt Ptolomeus, Enoc, Mesella, Albumassar et posterī omnes.” For Ya'qub al-Kindī's approach, see above, §3.1:2.

§ 10.2

^[1]**1–5: Now pay attention ... of the south [i.e., in the tropics].** An identical twofold methodology for calculating the mundane houses is noticeable in *Mishpetei ha-Mazzalot* and in the Latin version of Ibn Ezra's *Book of the Astrolabe*. See *Mishpetei haMazzalot*, bnf 1058,

f. 16a: 'וככה תעשה: ראה המעלה הישרה העולה מהמזל ותן לבית הראשון ל' מעלות ישרות, וככה לכל הבתים. וזה החלוק יקרא חלוק המישור ויש לו שלישית כח במשפטי המזלות. ועשה תחלת כל הבתים בדרך המצעדים, כאשר הראתיך בספר הלוחות, ולא תחוש אם יצא בית אחד קטן ואחר גדול מאד, או שיהיו שני בתים במזל אחד. והנה שני שלישיות הכח לכוכב ההווה בחלוק המצעדים.' ("Proceed as follows: observe the equal ascending degree of the sign and assign 30 equal degrees to the first <mundane> house; do likewise for all the houses. This division is called "planar division" and it has one-third of the power in the judgments of the zodiacal signs. Calculate the cusps of all the houses by the method of the rising times, as I showed it to you in the Book of the Tables, and do not be disturbed if one house comes out small and another very large, or if two houses fall into one sign. The planet that is calculated by the 'division of the rising times' has two-thirds of the power.") See *Astrolabio*, 1940, p. 22: "Unus autem modus equationis domorum est ut cuique domui XXX gradus tribuantur, incipiendo a gradu oriente. Iudiciorum quidem auctores huius equationis domibus tertiam uirtutis iudiciorum secundum domos attribuunt. Alteri uero que est secundum cuiusque terre latitudinem, duas tertias." Ibn Ezra presents a similar twofold method for calculating the lots in Rh, IX, lxxiv:27–lxxv:4.

[2]6–7: **All the astrologers agree ... the corrections.** The problem of calculating the twelve mundane houses is discussed in similar lines in the four versions of Ibn Ezra's *Book of the Astrolabe*. See Neḥoshet A, bnf 1061, f. 158a–158b; Neḥoshet B, Mant. 10, f. 46b–47a; Neḥoshet C, Pinsker 26, f. 64b–65a; *Astrolabio*, 1940, pp. 17–18.

§ 10.3

[1]1: **Directions, Hebrew ניהויים** (Greek, *aphesis*; Arabic, *tasyr*; Latin: *ductus*). For this term and the astrological procedure underlying it see Tb §8.6:2 and note.

[2]2: **Direct, Hebrew לנהו**. This verb denotes the calculations associated with the procedure of direction (see previous note). It is explained in al-Qabīṣī, 2004, IV:11, p. 121 as follows: "This is that you move an indicator to a position on the ecliptic, and you <want to> know what is <the distance> between the two in equatorial degrees—that is, what

is rotated of the time-degrees of the equator with regard to the position from which it is moved until it is in the position to which it is moved.”

[³3: **Rising times for the country, Hebrew מצעדי הארץ**. See above, §10.1:3 and note.

[⁴1–5: **In like manner ... degree of the ascendant**. Quotes from Rh, X, lxxv:9–21 and comments briefly on it. A similar twofold methodology for calculating the directions is found in the Latin version of Ibn Ezra’s *Book of the Astrolabe*. See Astrolabio, 1940, p. 25: “Ductus bifarii sunt, et est unus modus cum gradibus equalibus ... alteri modo que est secundum latitudinem terre.”

[⁵6: **R. Abraham, the Nasi, has mentioned them in his book**. This is a reference to the section headed סדר חשבון תהלוכות הכוכבים בכל בתי הרקיע, “procedure for calculating the processions of the stars in all the heavenly houses”, in chapter XX of Abraham Bar Ḥiyya’s *Heshbon Mahalkhot ha-Kokhavim* (Computation of the motions of stars). This chapter depends on chapter LIV of Al-Battani’s *Ẓij al-Sābi*. Ibn Ezra was in all likelihood aware of this, since he explicitly mentions “the book by Al-Battani” as one of his sources in Rh, X, lxxv:22. See Heshbon Mahalkhot haKokhavim, 1959, pp. 112–117; cf. Opus Astronomicum, 1903, pp. 129–131.

§10.4

[¹1: **There are two methods for <reckoning> the aspects**. As in Ta §10.2:1, §10.3:1, and §10.4:1, as well as in the Latin version of Ibn Ezra’s *Book of the Astrolabe*, Ibn Ezra applies the same twofold methodology to the mundane houses, the aspects, and the directions. See Astrolabio, 1940, p. 22: “Tria sunt coherentia et quidque illorum trium duobus modis subsistit, et in uno modo subsistendi omnes sapientes consentiunt, in altero uero dissentiunt; tria autem hec sunt, equatio domorum, respectus planetarum et ductus.”

[²3: **The aforementioned Nasi ... its latitude**. This is a reference to another section of chapter XX of Bar Ḥiyya’s *Heshbon Mahalkhot ha-Kokhavim*. See Heshbon Mahalkhot haKokhavim, 1959, pp. 111–112.

[3] 1–8: **In like manner ... rising times.** Comments on Rh, X, lxxv:9–21.

§ 10.5

[1] 3: **Latitude plate (of the astrolabe), Hebrew לוח הארץ**. In all three versions of *Sefer Keli ha-Nehoshet* (Book of the Astrolabe), as well as in the Latin version, Ibn Ezra informs us that a standard astrolabe is equipped with seven thin plates—symbolically representing the seven climates of the ecumene—on which is engraved a stereographic projection of the heavens for these particular geographical latitudes. See *Nehoshet A*, bnf 1061, f. 150a; *Nehoshet B*, Mant. 10, f. 36a; *Nehoshet C*, Pinsker 26, f. 59b; *Astrolabio*, vesp. a II, f. 38^v°; *Astrolabio*, arundel 377, f. 64^v°; *Astrolabio*, 1940, 10. In Hebrew these plates are referred to as לוח הארץ “plate of the country”. See *Nehoshet B*, Mant. 10, ff. 45a, 48b; *Nehoshet C*, Pinsker 26, ff. 62a, 65b; cf. *Nehoshet A*, bnf 1061, f. 163a.

[2] 6: **If the result yields more degrees than the degree obtained by the calculation.** Here Ibn Ezra compares two values: (a) “the result” (המחובר), which corresponds to the result of the calculation in § 10.5:3–4; and (b) “the degree obtained by the calculation” (המעלה שיצא השם החשבון), which corresponds to the degree that comes out from the calculation in § 10.5:2.

[3] 1–18: **Now I give you a method ... above the Earth [i.e., above the horizon].** A similar method is offered in *Mishpetei haMazza-lot*, bnf 1058, f. 26a–26b and *Liber de Rationibus Tabularum*, 1947, pp. 160–161.

[4] 19: **Book of the Astrolabe ... I have explained there.** In *Nehoshet C*, Pinsker 26, f. 64b, that is, in the third version of *Keli ha-Nehoshet*, written in 1148 (see Sela-Freudenthal, 2006, n. 28, p. 34) and before *Reshit Hokhmah I* (see Sela, 2003a, pp. 30–31; Sela-Freudenthal, 2006, n. 28, p. 34), we read: “המבטים אלה לא תוכל לעשותם כהוגן כי אם במעשה” “(You would not be able to calculate adequately these aspects unless you use (astronomical) tables, and you would be able to correct them by means of an astrolabe that is complete or semi-complete.”) According to the third version of

Keli haNehoshet, the *rete* of a complete astrolabe divides each zodiacal sign into 30° and its plate has 90 arcs of equal azimuth (גשרים), but the *rete* of the semi-complete astrolabe divides each zodiacal sign into 15° and its plate has 45 arcs of equal azimuth. See *Nehoshet C*, Pinsker 26, ff. 59a–59b.

[5]20: **Book of Nativities ... I have mentioned** (here). The equivalent method, as explained in the section devoted to תקופות השנים “revolutions of the years” in *Sefer ha-Moladot*, consists of adding $87^\circ 15'$ to the revolution of each year. The same method is described in Tb §6.3:1–5. See *Moladot*, bnf 1056, ff. 58b–59b: “תקופות השנים ... והאמת שהוא בדוק ומנוסה מהיום יותר מר' שנה, ולא נשתבש בו אפילו חלק אחד, שתהיה בין תקופה ותקופה פ"ז מעלות גם ט"ז חלקים ... והכנס בלוח הארץ שהיה שם הנולד וקח המצעדים שתמצא כנגד המעלה הצומחת, והוסף עליהם החשבון הנשאר, ובקש כחשבון המחובר במצעדי המזלות בלוח הארץ, וקח מה שתמצא כנגד המספר ממעלות ישירות מגלגל המזלות, או תדע המעלה הצומחת בתחילת השנה, ומהמעלה הצומחת תוכל להוציא השעה המעוותת ... וזה הדרך תצא שוה עם דרך תוספת” (“Revolutions of the years: ... By now it has been tried and tested for more than 200 years and there has not even been an error of one minute, that there are 87° and $15'$ between one revolution and another. ... Take the plate (of the astrolabe) for the country where the native was born and take the rising times you find for the ascendant, add the remainder to them, and find the sum in the rising times of the signs on the plate (of the astrolabe) for the country, take what you find opposite the number of equal degrees of the zodiac, from which you know the ascendant at the beginning of the year, and from the ascendant you can find the seasonal hour. ... **This method is equivalent** to the method of adding 87 (degrees) 15 (minutes), as I have explained.”)

§10.6

[1]1: **So, proceed in the following manner ... quartile and trine.**

A similar method for the calculation of the aspects is given in *Mishpetei haMazzalot*, bnf 1058, f. 25b–26a.

§ 10.9

[1]1: As for the directions ... thousands, hundreds and decades.

Comments on Rh, X, lxxv:27–lxxvi:10. This refers to a system of four cycles called *Intihâ't*, utilized in general prognostications to determine the dominant zodiacal or planetary influence at any particular moment in time. These are the mighty *intihâ'*, which moves one zodiacal sign every 1000 solar years, the big *intihâ'*, which moves one sign every 100 solar years, the middle *intihâ'*, which moves one sign every 10 solar years, and the small *intihâ'*, which moves one sign every solar year. The astrological impact of these cycles is proportionate to the length of their periods; thus, the mighty *intihâ'* indicates prophets and law-givers, the big *intihâ'* indicates revolutions in dynasties and religious disputes, and so on. See Kitâb al-Ulûf, 1968, pp. 60, 63–64; Art of Astrology, 1934, par. 516–517, pp. 319–321; Kennedy, 1964, pp. 26–28.

[2]1: This is the opinion ... Ptolemy laughs at them. This is the typical way in which Ibn Ezra denotes that Ptolemy does not mention the *Intihâ't* in the *Tetrabiblos*. As indicated by Ibn Ezra, this technique is of Sassanian origin (See Kitâb al-Ulûf, 1968, pp. 57–59). Notice that Ibn Ezra does not mention these cycles in the two versions of *Sefer ha-'Olam*, which study general astrology. He was probably acquainted with it through Abû Ma'shar's *Kitâb al-Ulûf*, or a later work based on it.

[3]2: Only the direction ... verified by experience. Comments on Rh, X, lxxvi:6–9. This is a reference to the small *fardâr*, which has a period of 75 years, distributed to the seven planets and to the Head and Tail of the Dragon in the order of their exaltations, beginning with Aries. See Kitâb al-Ulûf, 1968, pp. 62–63; Art of Astrology, 1934, par. 438, 517, p. 255, 321; Kennedy, 1964, pp. 28–29. It corresponds to Tb §5.1:13, §6.6:1. Ibn Ezra expands considerably on the subject with respect to general astrology in both version of *Sefer ha-'Olam*, and with respect to genethliology in *Sefer ha-Moladot*. See 'Olam A, bnf 1056, f. 82a; 'Olam B, bnf 1058, f. 91a; Moladot, bnf 1056, ff. 60a–60b. For the latter quote, see Tb §6.6:1 and note.

[4]2: The annual direction ... including Ptolemy. For the direction of the sign each year, see above, § 10.9:1 and note. For Ptolemy subscribing to the direction of the sign each year, see *Tetrabiblos*, 1980, IV:10, p. 453.

^[5]**3-4: The upper ⟨planets⟩ ... two upper ⟨planets⟩.** Comments on Rh, X, 13-21, where Ibn Ezra not merely describes, as is usual, the periods of the three well-known types of Saturn-Jupiter conjunctions but instructs the astrologer to “direct” them (‘לנהיג המהברת’). For this special type of directions, see *Art of Astrology*, 1934, par. 517, p. 320: “The degrees at which Saturn and Jupiter meet in conjunction, together with the ascendant of that time, and the ascendant of the year of the conjunction, all move in the direction of the succession of the signs through a whole sign in a complete year.”

^[6]**4: I shall explain this topic further in the *Book of the World*:** This is a reference to the various types of Saturn-Jupiter conjunctions, as expounded in ‘Olam A, bnf 1056, f. 81a. Cf. ‘Olam B, bnf 1058, f. 88b.

PART THREE

SECOND VERSION OF THE BOOK OF REASONS
BY ABRAHAM IBN EZRA

HEBREW TEXT AND ENGLISH TRANSLATION

I §

I (I) הנה נא² הואלתי לשום מוסד³ לספר ראשית חכמה⁴. (2) ואמנם ידעתי כי כל נוצר ילאה לעמוד בסוד השם הנכבד והנורא, כדברי⁵ אגור: ולא למדתי חכמה ודעת קדושים, שהם המלאכים. (3) על כן אמר: מי עלה שמים וירד, והטעם שלא נדע⁷ דעת שלמה מלאכת⁸ שמים. (4) כי מי עלה שמה וברדתו הודיע⁹ לבני אדם דברי אמת? (5) והשם אמר לאיוב: הידעת חוקות שמים?¹⁰ (6) ואולם¹¹, חכמי לב חפשו דור אחר דור ובסלם¹² חכמת המדות¹³ עלתה נפשם אל¹⁴ השמים, גם נסו פעמים רבות ועלה בידם.

2 (I) והנה¹⁵ ראינו כי הגלגלים הם שבעה, בעבור שבעה משרתים, כל אחד בגלגלו. (2) והמשלים תנועתו בימים מעטים הוא למטה מן המשלים תנועתו בימים רבים מימי¹⁶, בעבור היות עגולה בתוך עגולה ולעולם העליונה תהיה גדולה¹⁷. (3) ועוד, כי¹⁸ ראינו כאשר יתחבר אחד מהמשרתים עם חברו יסתיר השפל את¹⁹ העליון, והמשרתים יסתירו כוכבי המזלות. (4) על כן ידענו שצבא השמים, שהוא ההמון הרב שחלקו חכמי המזלות הצורות על שמנה וארבעים, הוא למעלה מגלגלי המשרתים, ומצאנו שהוא מתנועע²⁰ ממערב למזרח מעלה אחת בשבעים שנה. (5) ובעבור שראינו בכל יום גלגל המזלות²¹ וגלגלי השבעה כוכבים הולכים²² ממזרח למערב

¹ אחל ספר הטעמים בעזר שוכן אפדני מרומים] פ; ט בשם יוצר כל יצורים אחיל טעמים אחרים; מ בשם שוכן מרומים אחל ספר הטעמים; אי ספר הטעמים; גל אמר החכם אבן עזרא בספר הטעמים. ² נא] למטא; פי חסר. ³ מוסד] פלמטני; א מוסר. ⁴ ראשית חכמה] למטא; פ בראשית. ⁵ כדברי] פלמא; ט כדבר. ⁶ וירד] פלמנאי; ט חסר. ⁷ נדע] פלמטי; אנ נודע. ⁸ מלאכת] לפטמנ; א מלאכי; י כמלאכי. ⁹ וברדתו הודיע] למטני; פ והודיע; א וברדתו. ¹⁰ שמים] פטנאיל; מ השמים. ¹¹ ואולם] טמאיל; פנ ואמנם. ¹² ובסלם] פיטמנל; א חסר. ¹³ המדות] פיטמנל; א חמסת. ¹⁴ אל] פלמטא; נ עד. ¹⁵ הנה] למטנאי; פ חסר. ¹⁶ מימי] פלמאנ; ט חסר; י ממנו. ¹⁷ ולעולם העליונה תהיה גדולה] פלמנאי; ט חסר (מופיע בשוליים). ¹⁸ כי] פלמנאי; ט חסר. ¹⁹ את] פלמינאי; ט חסר. ²⁰ שהוא מתנועע] למטנאי; פ ומתנועע. ²¹ בכל יום גלגל המזלות] לאנ; טי בכל יום שגלגל המזלות; פ שגלגל המזלות בכל יום. ²² הולכים] פינא; טל ההולכים.

I begin the Book of Reasons with the help of Him who dwells in the Heavens, who will redeem me.

§ 1

1 (1) Behold now, I wish^[1] to lay the foundation of the *Book of the Beginning of Wisdom*. (2) I certainly knew that all ⟨intelligent⟩ creatures will take pains to learn the secret of the Glorious and Awe-Inspiring Name (Deut. 28:58),^[2] as Agur ⟨son of Yaqe⟩ said: I have not learned wisdom, that I should have the knowledge of the holy (Prov. 30:3), who are the angels.^[3] (3) This is why he asked: “Who has ascended to heaven and come down again?” (Prov. 30:4). This means that we never have complete knowledge of the workings of the heaven (Jer. 7:18 *et passim*).^[4] (4) For, who has ascended there and after coming down informed men of the truth? (5) And God asked Job: “Do you know the ordinances of heaven?” (Job 38:33) (6) However, the wise searched generation after generation, and their souls ascended to heaven by the ladder of geometry; they also tested it often by experience and achieved their purpose.^[5]

2 (1) Behold, we have seen that there are seven orbs, because there are seven planets,^[1] each of them in its orb.^[2] (2) And the one that completes its motion in a few days is beneath the one that completes its motion in more days than it does, because when one circle is inside another circle the uppermost ⟨circle⟩ is always the larger.^[3] (3) Moreover, we have seen that whenever one of the planets enters into conjunction with its companion, the lower hides the upper,^[4] and the planets⟨, in their turn,⟩ hide the stars of the zodiacal constellations.^[5] (4) Therefore we know that the host of heaven,^[6] that is, the immense multitude ⟨of stars⟩ that the astrologers^[7] have divided into 48 constellations,^[8] is above the orbs of the planets; we have found that it [the host of heaven] moves from west to east ⟨at a rate of⟩ one degree in 70 years.^[9] (5) Because every day we observe that the orb of the zodiacal signs and the orbs of the seven planets move from east to west, in a direction opposite to their ⟨own⟩ motion, we know that there is a sort

הפך תנועתם, ידענו שיש כדמות¹ גלגל עליון² על כלם שהכל³ יתנועעו בתנועתו. (6) והוא מתחבר בשני מקומות, שהוא ראש טלה ומאונים, עם גלגל המזלות, ואז ישתוו⁴ היום והלילה. (7) ומראש טלה תטה לעולם השמש לצד צפון כנגד הגלגל הישר, הוא העליון, כי מהלך השמש על קו המזלות. (8) על כן יקראו המזלות⁵ צפוניים | והאחרים דרומיים.

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3 (I) וידענו שיש⁶ ראיות גמורות כפי דעת האדם על המשרתים ומדתם, ומדת הגלגלים הקטנים, ומרחקם מן הארץ, ומקום גבהותם ושפלותם. (2) רק על משפטי המזלות אין עליהם⁷ ראיות⁸ שלמות, רק הם כדמיונות⁹ ויש מהם נסיונות¹⁰, כמו שיש בחכמת הרפואות דברים שהם הפך¹¹ התולדת. (3) גם יש בחכמת המזלות ראיות ומבחרים¹², כאשר חלקו גלגל המזלות על ש'ס¹³ מעלות¹⁴, בעבור היות למספר הזה שברים רבים.

2§

I (I) מזלות האש. חכמי התושייה¹⁵ נתנו ראייה כי המזלות¹⁶ אינם מורכבים מן המוסדים¹⁷ הארבעה, רק הם תולדת חמישית בפני עצמה. (2) וככה¹⁸ השמש איננה חמה, רק נקראה כן¹⁹ בעבור שתוליד חום, וכל הכוכבים יולידו חום. (3) רק המוליד חום²⁰ מעט כנגד ממסך האדם הישר²¹ בממסכו נקרא²² קר, כבשר השור והעז, כי כל בשר הוא חם. (4) על כן אנו אומרים שיש²³ חם קר, וככה משפט הלח והיבש. (5) אמר דורוניוס²⁴: אנוהו וקדמוניו נסיונו כי²⁵ אם היה המזל העולה במולד אדם²⁶ טלה, ושם הממונה על המולד, והלבנה בטלה או באריה או קשת, שהמרה האדומה מתגברת על הנולד²⁷, ועל זה הדרך הכל. (6) ויאמר יעקב, הנקרא²⁸ אל כנדי, כי ארבע תקופות הן בלי ספק. (7) ובעבור שהשמש בהכנסה במזל²⁹ טלה תהיה קרובה³⁰ מהישוב ויתחמם³¹ האויר, שמו חכמי המזלות תחלת התקופה³² לתולדת

¹ כדמות] פלמטאי; נ חסר. ² עליון] מטנאיפ; ל חסר. ³ שהכל] למטנאי; פ שכלם. ⁴ ואז ישתוו] פלמטני; א ואם ישתנו. ⁵ המזלות] פלמטאי; נ חסר. ⁶ שיש] פלמטאי; נ שם. ⁷ עליהם] פלמטאי; ט להם. ⁸ ראיות] למטנאי; נ חסר. ⁹ כדמיונות] פלמטני; א דמיונות. ¹⁰ נסיונות] פלמטאי; ט כנסיונות ¹¹ הפך] פלמטאי; נ בהפך. ¹² ומבחרים] למאי; ט במבחנים; פ מבחרים; נ במבחרים. ¹³ ש'ס] פלמטאי; מ חסר. ¹⁴ מעלות] פמטי; אנ חסר. ¹⁵ התושייה] למאי; פטני התכונה. ¹⁶ המזלות] פלמטאי; נ חסר. ¹⁷ המוסדים] למטאי; פי היסודות. ¹⁸ וככה] פלמטאי; נ חסר. ¹⁹ נקראה כן] למטאי; אנ נראת כן; פ נראה כי. ²⁰ רק המוליד חום] פלמטני; א חסר. ²¹ הישר] למטנאי; פ כושר. ²² נקרא] פמטאי; נ נקראת. ²³ שיש] פמטאיל; נ < שם. ²⁴ דורוניוס] פלמ; טי דוריינוס; א דורינוס; נ דורינוס. ²⁵ כי] למאי; פטני חסר. ²⁶ אדם] פלמטאי; נ האדם. ²⁷ הנולד] פלמטני; א המולד. ²⁸ יעקב הנקרא] פלמטאי; ט חסר. ²⁹ במזל] פלמטאי; ט חסר. ³⁰ קרובה] פלמטאי; נ קרוב; ט חסר. ³¹ ויתחמם] פלמטאי; ט ותחמם. ³² התקופה] למטנאי; פ תקופה.

of uppermost orb above all ⟨the other orbs⟩,^[10] and all ⟨the orbs⟩ are driven by its motion. (6) It [the superior orb] intersects the orb of the zodiacal signs^[11] in two places, namely, the head of Aries and the head of Libra, and then day and night are equal. (7) From the head of Aries the Sun always inclines to the north of the sphaera recta, namely, the uppermost ⟨orb⟩,^[12] because the path of the sun is along the line of the zodiacal constellations. Hence ⟨some of⟩ the zodiacal constellations are called northern and others southern.

3 (1) We know that there are conclusive proofs in accordance with what men can comprehend about the planets and their dimensions, the dimensions of their epicycles, their distance from the Earth, and the places of their apogees and perigees. (2) There are no solid proofs about the ⟨astrological⟩ judgments^[1] of the zodiacal signs, but only analogies and experiences,^[2] just as there are things in the science of medicine that are opposed to nature.^[3] (3) In astrology,^[4] too, there are [both] proofs and [arbitrary] choices, as when they divided the zodiac into 360 degrees, because this number has many fractions.^[5]

§ 2

1 (1) Fiery signs. The philosophers proved that the zodiacal signs are not compounded of the four elements but they are ⟨composed of⟩ a fifth and distinct element.^[1] (2) Similarly, the Sun is not hot, but is called so because it generates heat, and all the stars generate heat. (3) But a ⟨star⟩ that generates a small amount of heat, as compared to the complexion of a human being, whose complexion is temperate, is said to be cold, like the flesh of the ox and the goat, even though all flesh is hot.^[2] (4) So we say that there is ⟨something that is⟩ hot ⟨that is also⟩ cold, and similarly with the rule about the moist and dry.^[3] (5) Doronius said: we and our predecessors have found by experience that if Aries is the sign of the ascendant^[4] in a person's nativity, and ⟨if⟩ the planet that is the lord of the nativity is there [i.e., in Aries], and ⟨if⟩ the Moon is in Aries or in Leo or in Sagittarius, ⟨then⟩ the red bile dominates the native, and in the same way everything ⟨else⟩.^[5] (6) Ya'qub, who is called al-Kindī, said that undoubtedly there are four ⟨beginnings of the⟩ seasons.^[6] (7) Because the Sun is close to the ecumene when it enters the sign of Aries, and the air becomes warmer then, the astrologers assigned the beginning of the ⟨first⟩ season to the nature

החום¹; על כן אמרו שהיא² של³ האש, כי החום הוא הפועל והוא יותר נכבד⁴ מהקור. (8) ושמו ראשית התקופה השנית למים, שהוא כנגד הקור, שהוא הפועל⁵ השני. (9) והתקופה השלישית לאויר בעבור השתוות היום והלילה⁶, והרביעית לארץ⁷. (10) ואחר שנחלקו אלה⁸ ארבעתם ככה חלקו הנשאר על דרך המבטים, כי המזלות⁹ שהם מביטים מאהבה¹⁰ גמורה הם¹¹ בתולדת אחת, ומחצי אהבה הם¹² מחצי התולדת, והטעם שהוא יהיה¹³ בתולדת הפועל שוה¹⁴ לא בפועל¹⁵, ומבט רביעית הפך¹⁶ הדבר. (11) ולפי דעתי ששמו טלה חם בעבור צורת טלה, וכן צורת¹⁷ שור, ותאומים חם ולח¹⁸ בעבור שהוא על¹⁹ צורת בן אדם, וסרטן קר ולח לפי²⁰ שככה תולדתו, ואריה חם וככה הוא. (12) ושמו בתולה קרה ויבשה בעבור היותה נקבה, והיבושת²¹ בעבור חלוק המבט כמו חבריו. (13) ומאזנים על²² צורת בן אדם בידו²³ מאזנים, על כן הוא²⁴ חם ולח, ועקרב הוא²⁵ קר ולח, וככה הוא סרטן²⁶. (14) וקשת הוא²⁷ חם ויבש בעבור צורת הסוס שיש בו, וגדי ככה הוא, ודלי על צורת אדם בידו דלי, ודגים כמשמעו.

2 (I) מזלות מזרח. ידענו שאין לעגולה תחלה²⁸, רק בעבור השתוות²⁹ היום והלילה בהכנס השמש במזל טלה, ואז יתחדש³⁰ כל העולם, שמו נקודת ראש טלה תחלה; והשמש עולה בבוקר³¹ בפאת מזרח, והנה יהיה³² בחצי השמים, שהוא צד ימין, גדי, ובתחלת מערב³³ מאזנים, ויהיה | סרטן בתחלת היתד³⁴ השפל והוא הצפוני. 27א (2) ואחר שהתחלקו³⁵ אלה ככה, הנה המזלות יהיה כל אחד בתולדת חברו. (3) ויאמרו כי טלה הוא³⁶ בחצי המזרח, וכי³⁷ אריה הוא מצפון וקשת מימין, כי הוא מהמזלות המזרחיים³⁸. (4) ושמו בתולה בחצי דרום בעבור היותה קרוב³⁹ למאזנים, כי סוף בתולה ראש מאזנים וסוף שור רחוק מטלה, ושמו שור משמאלו בעבור היות

¹ החום] פמטנאי; ל חום. ² שהיא] למנטא; פי שהיה. ³ של] פלמאני; טי מזל. ⁴ נכבד] פלמטאי; נ קרוב. ⁵ הפועל] פלמט; א הפעול; י הפעול. ⁶ בעבור השתוות היום והלילה] פלמטאי; נ חסר. ⁷ לארץ] פלמטאי; נ לעפר. ⁸ אלה] פלמאני; י אלו; ט חסר. ⁹ המזלות] פלמטני; א מזלות. ¹⁰ מאהבה] פלמאני; ט אהבה. ¹¹ הם] פלמאני; ט חסר. ¹² הם] פלמאני; ט הוא. ¹³ שהוא יהיה] פמטי; נ שהוא שיהיה; א שהיא. ¹⁴ שוה] פלמאני; ט שנה. ¹⁵ לא בפועל] למאי; ט ולא בפועל; פ לו בפועל; נ חסר. ¹⁶ הפך] פלמאני; ט > הוא. ¹⁷ צורת] מטאני; פ צורה. ¹⁸ ולח] פמאני; ט חסר. ¹⁹ שהוא על] ט; נ שהוא; א ששם; פטמ שהם. ²⁰ לפי] פמי; נ בעבור; אט חסר. ²¹ והיבושת] פמטי; א והיבושת; נ והיבשה. ²² על] פמטאי; נ בעבור. ²³ בידו] פמאני; ט גורו. ²⁴ על כן הוא] פמאני; ט חסר. ²⁵ הוא] פמאי; טנ חסר. ²⁶ סרטן] נ; פמאטי חסר. ²⁷ וקשת הוא] מא; טני וקשת; פ חסר. ²⁸ תחלה] למטאי; פ חסר. ²⁹ השתוות] למטא; פ התוות; נ השתנות; י השוות. ³⁰ יתחדש] למטאני; פי יחדש. ³¹ בבוקר] פלמטני; א חסר. ³² והנה יהיה] למטאני; פי ויהיה. ³³ מערב] פלמטני; א מעקרב. ³⁴ היתד] פלמטני; א חסר. ³⁵ שהתחלקו] פלמטאי; נ שהתליקו. ³⁶ הוא] למאני; פטי חסר. ³⁷ וכי] למטאני; פי וכן. ³⁸ המזרחיים] הוספתי עפ"י הקשר הדברים; למטנאיפ חסר. ³⁹ קרוב] פלמאני; ט קרובה.

[i.e., quality] of heat. Accordingly, they said that it [i.e., the beginning of the season] belongs to fire, because heat is the active ⟨agent⟩ and is more influential than cold. (8) They assigned the beginning of the second season to water, which corresponds to cold, which is the second agent.^[7] (9) The ⟨beginning of the⟩ third season ⟨was assigned⟩ to air, because day and night are equal ⟨then⟩, and the ⟨beginning of the⟩ fourth ⟨season⟩ to earth.^[8] (10) Once these four were thus distinguished, they distinguished the rest according to the aspects,^[9] meaning that the signs that are aspecting in complete love have one nature [i.e. quality] ⟨in common⟩,^[10] and ⟨those that are⟩ in an aspect of half love have half a nature ⟨in common⟩, and the reason is that they have the same active nature but not the ⟨same⟩ passive ⟨nature⟩^[11]; and the opposite holds for the quartile aspect.^[12] (11) In my opinion, they made ⟨the sign of⟩ Aries hot because the shape ⟨formed by the stars resembles⟩ a ram, and similarly ⟨Taurus has⟩ the shape resembling a bull, and Gemini ⟨they made⟩ hot and moist because it has the shape of a man, and Cancer ⟨they made⟩ cold and moist because that is its nature, and ⟨they made⟩ Leo hot and it is like that.^[13] (12) They made Virgo cold and dry because it is a female; the dryness is because of the division of the aspect, as ⟨in the case of⟩ its companions.^[14] (13) Libra has the image of a man holding a balance in his hand, so it is hot and moist; Scorpio is cold and moist, the same as Cancer. (14) Sagittarius is hot and dry because it includes the image of a horse, and Capricorn is the same. Aquarius' image is that of a man holding an urn,^[15] and Pisces' image corresponds to its meaning: fish.^[16]

2 (1) Eastern signs. We know that the circle has no beginning, but the head of Aries was made the beginning because day is equal to night when the Sun enters the sign of Aries, and then all the world is renewed;^[1] and the Sun rises in the morning at the eastern edge ⟨of the horizon⟩, hence Capricorn is in midheaven, which is the southern side, and Libra is in the beginning of the west, and Cancer is in the beginning of the *cardo* of lower midheaven, which is the north. (2) After these ⟨signs⟩ have been distinguished in this manner, each of the signs is ⟨assigned a position⟩ according to the nature of its companion [i.e. the tropical or central sign in the triplicity]. (3) ⟨Therefore⟩ they said that Aries is in the middle of the east, and that Leo is north of it and Sagittarius is south of it, because it is one of the eastern signs. (4) They located Virgo in the middle of the south because it is close to Libra, for the end of Virgo is the head of Libra and the end of Taurus is distant

השמש בפאת שמאל כאשר הוא בשור יותר מבתולה, וגדי בפאת דרומי¹ בעבור שהוא מהמזלות הדרומיים. (5) ומאזנים בחצי מערב בעבור² שהוא³ עם קו הצדק, ותאומים משמאל⁴ כי השמש שם בפאת שמאל, ודל⁵ בפאת ימין. (6) ודגים בחצי צפון בעבור היותו קרוב אל טלה, כי סוף דגים בתחלת טלה, ולא כן עקרב שרחוק יהיה מראש מאזנים, וסרטן משמאלו כי כן הוא, ועקרב יותר דרומי מדגים. (7) וטעם המטעמים בעבור תולדתם, כי כל⁶ חם ויבש הוא ככה⁷, וככה כולם⁸.

3 (1) המתהפכים. בעבור שישתנה הזמן בהכנס השמש במזל טלה⁹, והנה אחר שהיה האויר¹⁰ קר ולח יהיה חם, נקרא מתהפך. (2) וככה סרטן, שתסור הלחות ותהיה במקומה היבשות¹¹, וככה מאזנים, יסור¹² החום ויתהפך¹³ אל הקור, וככה בגדי, שתסור היבשות¹⁴ ותתהפך הלחות¹⁵. (3) ונקראו האחרים עומדים, והם שור אריה עקרב דלי, בעבור שהם אמצעיים ויעמוד האויר במם על תולדת אחת. (4) ונקראו האחרים שני גופים¹⁶, והם¹⁷ תאומים בתולה קשת דגים, בעבור שהם בסוף התולדת¹⁸ הראשונה והם אמצעיים עם¹⁹ התולדת הבאה. (5) מזלות ארוכים. נקראו כן בעבור המזל שיעלה²⁰ בכל מקום בשוב ביותר²¹ משלשים מעלות, כל אחד מהם, והקצרים הפך זה, כמו שכתוב בספר הלוחות²². (6) החלק הגדול²³. עוד אדבר על זה. (7) רק בעבור²⁴ אריה בית השמש וסרטן בית הלבנה²⁵, והם השני מאורות המושלים²⁶, יש לכל אחד בית אחד, ולחמשה המשרתים בית שיביט אל בית²⁷ השמש והבתים אחריו, והפך זה עם בית הלבנה. (8) על כן גדי²⁸ מפאת חלק השמאל, וכאשר תסתכל²⁹ מעלות גלגל המזלות בכל הישוב תמצא שאותם שהם מראש אריה עד סוף גדי³⁰ רבים מן המעלות שהם מראש דלי עד סוף סרטן, ולשמש כח בחלקו וללבנה בחלקה³¹ נכח³² הכוכבים בגבוליהם. (9) מזלות הצורות. בעבור שאלה הצורות

¹דרומן] למאנ; פטי דרומי. ²מהמזלות הדרומיים ... בעבור] מלפטא; נ חסר. ³שהוא] לאמ; פי שהם; טנ חסר. ⁴משמאל] למטא; פני מהשמאל. ⁵ודלי] לפי; מטאנ ובלדי. ⁶כל] פלמטא; נ ל כל. ⁷ככה] אנ; מלפטי חסר. ⁸וככה כולם] פלמאי; ט וככה מכולם; נ חסר. ⁹במזל טלה] פלמאני; ט בטלה. ¹⁰שהיה האויר] פמטאיל; נ שהאויר יהיה. ¹¹היבשות] פמטני; לא היבשת. ¹²יסור] למטנ; פאי יסיר. ¹³ויתהפך] מטנאיפ; ל ויהפך. ¹⁴היבשות] פי; למ היבשת; ט היבשות; א היבש; נ היבשה. ¹⁵הלחות] פלמטאני; נ ללחות. ¹⁶שני גופים] פמטנאי; ל גופים שנים. ¹⁷והם] למטאני; פ חסר. ¹⁸התולדת] למטאנ; פי תולדת. ¹⁹עם] פלמאני; ט בעבור. ²⁰שיעלה] למטאנ; פי שיעלו. ²¹ביותר] פלמטאני; נ יותר. ²²בספר חלוחות] מטנאיפ; ל < והנה בקו השווה בעלות אופן המפריש שלשים מעלות יעלה עם הגדי והסרטן שלשים ושתיים מעלות ושם (צ"ל שש) עשרה ראשונים וכן עם התאומים והקשת ואלה הם ארוכים. ויעלה האריה והדלי עם שלשים מהאופן המפריש עשרים ותשע מעלות חמשים וארבע ראשונים וכן השור והעקרב עשרים ותשע מעלות חמשים ראשונים אך הטלה והמאזנים והבתולה והדגים לא יעלו עמו רק עשרים ושמונה מעלות חמשים ראשונים ואלה נקראו מזלות קצרים. ובכל מרחב ומרחב עד סוף הצפון יוסיפו הארוכים ארך והקצרים קצר. ²³החלק הגדול] פטמאנ (מופיע בבירור במנותק מ"ספר הלוחות"); השווה הוצאת נ. בן מנחם, עמ' 5: "כמו שכתוב בספר הלוחות החלק הגדול". ²⁴בעבור] פלמטאנ; י < היות. ²⁵בית הלבנה] פלמטני; א חסר. ²⁶המושלים] פלמאי; נ > הגדולים; ט חסר. ²⁷בית] פלמטאנ; י חסר. ²⁸גדי] מטנאיפ; ל חסר. ²⁹תסתכל] למטאני; פ הסתכל. ³⁰גדי] תיקנתי עפ"י הקשר הדברים; פלמטאני דגים. ³¹בחלקה] פטני; למא בחלקו. ³²נכח] פמטאנ; ל ונכח; י ככח.

from Aries, and they located Taurus north of it [i.e., Virgo] because the Sun is farther north [with respect to the equator] when it is in Taurus than when it is in Virgo, and ⟨they located⟩ Capricorn south of it [i.e. Virgo] because it is one of the southern signs. (5) Libra is in the middle of the west because it is at the equator,^[2] and Gemini is in the north because when the Sun is there [in Gemini] it is in the north [with respect to the equator], and Aquarius is in the south. (6) Pisces is in the middle of the north because it is close to Aries, for the end of Pisces is the beginning of Aries, but this does not apply to Scorpio, which is distant from the head of Libra, and Cancer is north of it [i.e. Pisces], because it is like that, and Scorpio is more southern than Pisces.^[3] (7) The reason behind the tastes is their natures, since anything that is hot and dry is like that, and the same applies to all.^[4]

3 (1) Tropical ⟨signs⟩. Because the weather changes when the Sun enters Aries, hence, inasmuch as after the air was cold and moist it turns hot, ⟨Aries⟩ is called tropical. (2) Similarly with Cancer, since moistness departs and is replaced by dryness, and similarly with Libra, since heat departs and is transformed into cold, and similarly with Capricorn, since dryness departs and is transformed into moistness. (3) The other ⟨signs⟩ are called fixed—namely, Taurus, Leo, Scorpio, and Aquarius—because they are intermediate and the air in them keeps them in one nature. (4) The others are called bicorporal—namely, Gemini, Virgo, Sagittarius, and Pisces—because they are at the end of the first nature and are intermediate with respect to the next nature.^[1] (5) Long signs. They are called this because each of these signs rises more than 30 degrees anywhere in the ecumene, and the short ⟨signs⟩ are just the opposite,^[2] as is written in the *Book of the Tables*.^[3] (6) The larger domain. I shall say more about that ⟨in due course⟩.^[4] (7) Actually, because Leo is the house of the Sun and Cancer is the house of the Moon, and ⟨because⟩ they are the two ruling luminaries (Gen. 1:16), each of them has one house, and the five planets have a house that “aspects” the house of the Sun and the houses that are next to it, and, just the opposite, ⟨another house that “aspects”⟩ the house of the Moon ⟨and the houses that are next to it⟩. (8) So Capricorn is in the left side, and when you observe the degrees of the zodiac throughout the ecumene you find that the ⟨degrees⟩ from the head of Leo to the end of Capricorn are more than the degrees from the head of Aquarius to the end of Cancer; the Sun has power in its portion and the Moon in its portion, like the planets in their terms.^[5] (9) Signs ⟨with⟩ shapes.

בדמות בן אדם, וככה חצי קשת הראשון צורת חצי אדם בידו¹ חץ. (10) על כן יורה על כאשר הם כדמותם, וחכמי הצורות² נסו ככה וככה משפט שהם על צורת בהמה. (11) הזכרים החמים. הם הזכרים כי הזכר לעולם חם מהנקבה. (12) היופי³. שהם על צורת האדם הם יפים, ולא כן דלי בעבור היותו בית שבתאי, גם גדי כמו צורה שלימה⁴, וככה | דגים, ולא כן⁵ טלה והאחרים. (13) הקול. המזלות שהם על צורת האדם יש להם קול שלם, שהאדם הוא המדבר לבדו, והבהמות יש להם קול⁶ ואין להם דבור. (14) סרטן ועקרב ודגים אין להם קול אף כי דבור, על כן⁷ הם אלמים, והטעם שירורו על מיעוט דברים. (15) הכח. אריה⁸ כי⁹ הוא גבור¹⁰ בבהמה, גם בתולה בעבור הכוכב הגדול שיש בו הנקרא¹¹ זנב האריה, ולאריה כח גדול בזנבו. (16) ודלי בעבור היותו בית שבתאי והוא בית זכר, ולא כן גדי כי הוא בחלק¹² הנקבות והוא קר, ושבתאי תקיף מכל המשרתים שהוא עליון¹³. (17) המומים¹⁴. דבר זה ידעוהו חכמי המזלות בדרך הנסיון, או כי המזלות שהם על צורת בן אדם¹⁵ אין בהם¹⁶ מום, גם קשת עמהם, וזה הוא הנכון בעיני¹⁷. (18) המתכות. הם המזלות בעבור שכולם יכנסו באש. (19) האילנים¹⁸. זה נודע בדרך הנסיון¹⁹. (20) המטר. יש באריה צורה ונקראת ספינה²⁰, על כן תורה על המים, ומזל²¹ דלי בעבור המים, והטעם כי כאשר המטר יתחיל באחת מאלה יהיה רב ותקיף מאד, וזה הדבר²² מנוסה. (21) המעוותים. נקרא²³ כן בעבור עלותם בכל הישוב פחות משתי שעות ישרות, והפך זה הישרים²⁴. (22) המלכים. בעבור היות²⁵ תולדת האש²⁶ להיות גבוהה²⁷ היו מזלות האש, והאוויר לסגנים²⁸, ויותר טלה בעבור כבוד השמש בו²⁹, ומזלות המים לבינוניים, ומזלות העפר שאין למטה המנה³⁰ לעבדים. (23) הנביאים. מזלות האש מבקשים שררה בכח, ומזלות צורת בן אדם³¹ הם ממוסכים ישרים.

¹ בידון] פלמטני; א ביה. ² וחכמי הצורות] פלמטא; י וחכמי חצי הצורות. ³ היופי] פלמטא; י היפים. ⁴ שלימה] פלמטא; ט > בהמה (מעל לשורה). ⁵ כן] פלמטא; י חסר. ⁶ שהאדם הוא ... קול] פלמאני; ט חסר. ⁷ אף כי דבור על כן] ל; פמאנ אף כי דבור לא כן; ט אף כי דבור לא כן; י ודבור. ⁸ אריה] למטאני; פי האריה. ⁹ כי] פלמאטי; נ חם. ¹⁰ גבור] למטאני; פ < מלחמה. ¹¹ הגדול שיש בו הנקרא] פלמאני; ט שבו. ¹² בחלק] פלמטני; א בחלקי; י בתחלת. ¹³ שהוא עליון] למטאני; פ כי הוא העליון. ¹⁴ המומים] מטנאפ; ל > מקום הכוכבים הגדולים הטובים והרעים ומעלת המזלות המאירות והחשוכות והאמצעיות ומעלות זכרים או נקבות והמעלות שהם בורות הכוכבים והמעלות המוסיפות חן וכבוד וכל זה כתוב בלוח החקוק למען ירוץ קורא בו. ראה הלוחות בכ"י ל, עמ' 103 - 104, תחת הכותרת: "לוח מעלות המאירות החשוכות והאמצעיות ומעלות זכרים או נקבות ובורות הכוכבים ומעלות המוסיפות חן וכבוד ומקום הכוכבים הגדולים". ¹⁵ בן אדם] פלמטני; א אדם. ¹⁶ בהם] למטי; פאנ בה. ¹⁷ בעיני] מטפאני; י אשר נראה בעיני. ¹⁸ האילנים] למא (בכתב גדול ובוטט, כמו בהתחלת פרק חדש); פני ואולם; ט ואולי. ¹⁹ בדרך הנסיון] לא; פמטני בניסיון. ²⁰ ספינה] פלמטני; א צפינה. ²¹ מזול] פלמאני; ט ויחל. ²² וזה הדבר] לפאני; מ ודבר זה; והדבר היה. ²³ נקרא] למטאני; פי נקרא. ²⁴ והפך זה הישרים] פלמאטי; נ חסר. ²⁵ בעבור היות] מפני; א בהיות; ט בעבור; ל בהיות היות. ²⁶ תולדת האש] פלמאני; ט ראש. ²⁷ להיות גבוהה] למא; פטי גבוהה; נ חסר. ²⁸ היו מזלות האש והאוויר לסגנים] למאפי; ט היו מזלות האש ראש לסגנים; נ והאוויר לסגנים. ²⁹ ויותר טלה בעבור כבוד השמש בו] למא; פטי חסר. ³⁰ שאין למטה הימנה] לא; י שאין למטה ממנה; מ כי אין למטה המנה; ט אין למטה מהם; פ לאין למטה הימנה; נ לאין למטה ממנה. ³¹ ומזלות צורת בן אדם] למ; ט ומזלות צורת אדם כי; פ ומזלות צורות כן; א ומזלות צורת כן; נ המזלות וצורתיהן.

〈They were called this〉 because these shapes have a human image, such as the first half of Sagittarius, which has the shape of half a man with an arrow in his hand. (10) Hence, 〈such a sign〉 gives an indication about things that resemble its shape, and the scholars of the images^[6] verified by experience such and such an 〈astrological〉 judgment about 〈the constellations that have〉 the shape of an animal.^[7] (11) Masculine 〈and〉 hot. These are the masculine 〈signs〉 because the male is always hotter than the female.^[8] (12) Beauty. 〈The signs〉 that have the shape of a human being are handsome, except for Aquarius, because it is the house of Saturn; Capricorn, too, which is like a whole image, and similarly with Pisces but not Aries and the others.^[9] (13) Voice. The signs that have the shape of a man have a complete voice, for man is the only speaker; animals have a voice but do not have speech. (14) Cancer, Scorpio, and Pisces have neither voice nor speech; therefore they are mute, meaning that they indicate brevity of speech.^[10] (15) Power. 〈This refers to〉 Leo, because it is the mightiest among the animals, and also 〈to〉 Virgo, on account of the big star in it [i.e., in Virgo], which is called the *Tail of the Lion*,^[11] and a lion has great strength in its tail.^[12] (16) 〈This also refers to〉 Aquarius, because it is the house of Saturn and it is a masculine house, but not to Capricorn, because it belongs to the feminine 〈signs〉 and is cold. Saturn is the strongest of the planets inasmuch as it is uppermost. (17) Deformities. Astrologers discovered this through experience, or because the signs that have a human shape have no deformities, and Sagittarius is included among them; this is the correct 〈explanation〉 in my opinion.^[13] (18) Metals. These are the signs 〈that are so called〉 because all of them can withstand fire.^[14] (19) Trees. This is known through experience.^[15] (20) Rain. There is a constellation in Leo called “Ship,” so it indicates water; so too Aquarius, on account of the water. The reason is that when it begins to rain 〈and the Moon is〉 in any of these 〈constellations〉, it will be abundant and very strong; and this has been verified by experience. (21) Crooked. They are so named because they rise anywhere in the ecumene in less than two equal hours, and the opposite applies to the straight 〈signs〉.^[16] (22) Kings. Because the nature of fire is to rise, the fiery signs 〈were assigned to the kings〉, and the airy to the nobles—particularly Aries, because the exaltation of the Sun is in it—and the watery signs to the commoners, and the earthy signs, the lowest of all, to the slaves.^[17] (23) Prophets. The fiery signs seek power by force, and the signs with a human shape are mixed and temperate.

4 (I) הרופאים. למאדים ולנגה שותפות בחכמת הרפואות¹, ויהיה כן בעבור שמאדים יורה על הפצעים² ונגה³ על כל⁴ עקרים שיש להם ריח טוב. והנה עקרב הוא בית מאדים וביתו יורה על⁵ התחלואים⁶ בעבור שהוא הששי⁷, כאשר אפשר. (2) מאזנים⁸ עם שור. ויאמר תלמי כי אלה שניהם חסרי⁹ דעת בעבור שהבית¹⁰ הששי¹¹ יורה על התחלואים¹² והמומים והחסרון, והנה בעל המזל הצומח, שיוורה על הנולד, הוא בעל מום וחסרון. (3) בעלי¹³ כנפים. יש בבתולה כוכבים בדמות כנפים גם כן בדגים. (4) השמים¹⁴. תאומים¹⁵ הוא ממזלות הרוח ואין מזל¹⁶ במזלות גבוה¹⁷ ממנו בעבור¹⁸ שהוא סוף צפון¹⁹, ולא כן סרטן כי הוא²⁰ מתולדת המים, והשמים הוא²¹ אויר. (5) השדים. אמרו כי דלי²² מזל שדים בעבור שהוא בית שבתאי, כי הוא יורה על המרה השחורה המראה²³ השדים, ואמרו כי דלי ככה ולא גדי, בעבור הראות כח שבתאי בו. (6) מזל העולם. בעבור היות הלבנה קרובה אל הארץ תורה על כל דבר שיקרה בעולם. (7) גם היא דומה באורה לולד בצאתו מרחם אמו ויגדל עד זמן ידוע²⁴, ואחר כן יחל אורה²⁵ להחסר²⁶. (8) ובעבור היות סרטן ביתה | שמוהו²⁷ מזל העולם, כי כל מה שיוורה הכוכב ככה יורה ביתו. 28א (9) ועוד, כי²⁸ אם שמנו השמש בתחלת טלה, שם תוקף²⁹ גבורתו, אז יהיה המזל העולה סרטן. (10) על כן יסתכלו³⁰ בכל³¹ מחברת שבתאי עם מאדים, בכל³² שלשים שנה, במזל הזה בעבור שהוא בית רעת³³ שבתאי, שהוא המזיק הגדול, ובית קלוגו של מאדים, שהוא המזיק הקטן³⁴, ובית כבוד³⁵ הכוכב הטוב, שהוא צדק, ובית הטוב מן הכוכב³⁶ הקטן, והיא³⁷ הלבנה. (II) על כן, אם³⁸ זה המזל במבט³⁹ רע בתחלת השנה, הוא⁴⁰ רע לכל העולם. (12) הגלגל. ידוע כי בהיות השמש בשלשה⁴¹ המזלות הראשונים יהיה האויר לח וחם⁴², וזה יועיל לדעת תולדת⁴³ הנולדים⁴⁴, וככה שאר המזלות. (13) בתי עבודת השם. בעבור היות טלה ומאזנים מזלות טובים וממוסכים יותר מכל המזלות מפני⁴⁵ השתוות בהם⁴⁶ היום עם הלילה⁴⁷, על כן יורו על דבר⁴⁸ הצדק, ומהצדק בתי עבודת השם⁴⁹; וכל מה שיהיה המזל העולה קרוב אל תחלת המזל⁵⁰ אז הוא יותר טוב, הלא תראה כי בעלות ראש⁵¹ טלה בכל מקום⁵² יהיה

¹ הרפואות] פלמטא; י הרפואה. ² הפצעים] למאפטי; נ פצעים. ³ ונגה] פלמטא; י מורה. ⁴ כל] למטאני; פ חסר. ⁵ על] פלמטא; א חסר. ⁶ התחלואים] פלמאטי; נ > פצעים. ⁷ הששי] פלמאטי; נ לטלה. ⁸ מאזנים] פלמא; י מאזנים; ט יש קו מעל מאזנים ומעל לשורה כתוב: בית ונגה. ⁹ חסרי] טאני; פלמ חסרי. ¹⁰ שהבית] פלמטא; י הבית. ¹¹ הששי] למטא; פ הששית. ¹² התחלואים] פלמטא; ל חלאים. ¹³ בעלי] מטאני; פלי בעל. ¹⁴ השמים] פלמא; ט חסר. ¹⁵ תאומים] ט; פלמא חסר. ¹⁶ מזל] פלמטא; י חסר. ¹⁷ גבוה] למאני; פ נאה; ט גדולה. ¹⁸ בעבור] פלמאני; ט חסר. ¹⁹ צפון] למאפטי; נ דרום. ²⁰ כי הוא] למטאני; פ שהוא. ²¹ הוא] פלמאני; ט חסר. ²² דלי] פלמטא; י כל. ²³ המראה] פלמטא; א חסר. ²⁴ ידוע] למאפטי; נ חסר. ²⁵ אורה] פלמטא; נ אור; י חסר. ²⁶ להחסר] לטאני; מפ להחסר. ²⁷ שמוהו] פלמאטי; נ חסר. ²⁸ כן] פלמטא; ל חסר. ²⁹ תוקף] פטאני; למ תקף. ³⁰ יסתכלו] פלמטא; ל יתחברו. ³¹ בכל] למטא; נ חסר. ³² בכל] פלמטא; פ ל כל. ³³ רעת] פלמטא; י רעה. ³⁴ הקטן] מטאני; ל הקטן. ³⁵ כבוד] פלמאטי; ל הכבוד; נ חסר. ³⁶ הכוכב] למטאני; פ חסר. ³⁷ והיא] למטא; פאי והוא. ³⁸ אם] פלמטא; י < היה. ³⁹ במבט] למטאני; פ במזל. ⁴⁰ השנה הוא] פלמטא; י השנה והוא. ⁴¹ בשלשה] פלמאטי; ט בשלשת; נ בנ. ⁴² וחם] מטני; לא חסר. ⁴³ תולדת] לפטאני; מ תולדות. ⁴⁴ הנולדים] למא; ט החיים; פנ החלאים; י החולאים. ⁴⁵ מפני] פלמטא; י בעבור. ⁴⁶ בהם] פלמאטי; נ חסר. ⁴⁷ עם הלילה] פלמא; טי והלילה. ⁴⁸ דבר] פלמאטי; נ > כל. ⁴⁹ השם] פלמטא; ל חסר. ⁵⁰ המזל] למטאני; פ < העולה. ⁵¹ ראש] פלמטא; ל חסר. ⁵² בכל מקום] טנ; לימא בכל יקום; פ חסר.

4 (1) Physicians.^[1] Mars and Venus have a partnership in the science of medicine,^[2] because Mars indicates wounds and Venus all the essences with a pleasant smell. Scorpio is the ⟨planetary⟩ house of Mars and its house indicates diseases because it is the sixth, as I shall explain.^[3] (2) Libra and Taurus. Ptolemy said that these two are foolish because the sixth ⟨mundane⟩ house indicates diseases, deformities, and foolishness,^[4] but the lord of the sign of the ascendant,^[5] which gives an indication about the native, is deformed and foolish. (3) Winged. There are stars in Virgo that resemble wings, and in Pisces as well.^[6] (4) Heavens. Gemini is one of the airy signs and no sign is higher than it is because it is ⟨in⟩ the extreme north; not so Cancer, because it is of a watery nature, and the heavens are air.^[7] (5) Demons. They said that Aquarius is the sign of demons because it is the house of Saturn, since it indicates the black bile which makes the demons visible, and they said that Aquarius is like that but not Capricorn, since the power of Saturn is perceptible in it.^[8] (6) Sign of the world. Because the Moon is close to the Earth, it [i.e. the Moon] indicates anything that occurs in the world. (7) In its light, it is also similar to the fetus that emerges from its mother's womb and grows until a certain time, and then its light begins to wane. (8) And because Cancer is its house, it [i.e. Cancer] was made the sign of the world, because anything that is indicated by the planet is also indicated by its house. (9) In addition, if we place the Sun at the beginning of Aries, where it attains its strongest power, then the sign of the ascendant is Cancer.^[9] (10) For this reason they observe this sign in any conjunction of Saturn and Mars, ⟨which occurs⟩ every 30 years,^[10] because it [i.e. Cancer] is the house of detriment^[11] of Saturn, which is the large malefic ⟨planet⟩, and the house of dejection^[12] of Mars, which is the small malefic ⟨planet⟩, and the house of exaltation of the benefic planet, namely, Jupiter, and the planetary house^[13] of the small planet, namely, the Moon. (11) Therefore, if this sign is in a malefic aspect at the beginning of the year, misfortune is expected for all the world.^[14] (12) The circle. It is known that when the Sun is in the three first signs the air is moist and hot, and this is useful for knowing the nature of the natives, and similarly with the other signs.^[15] (13) Houses of divine worship. Because Aries and Libra are more benefic and temperate than the other signs, inasmuch as day and night are equal in them, they indicate justice, and the houses of divine worship [i.e., Aries and Libra] begin at the equator;^[16] the closer the sign of the ascendant is to the beginning of the sign [i.e. Aries or Libra], the better, which you may surely observe since when the head of Aries rises anywhere the head of Capricorn is at

ראש גדי בתחלת הבית העשירי, וככה מאזנים לאחור. (14) המשגל. אלה הם¹ על צורת טלה, ושור ואריה יש להם תאווה גדולה, ובעבור דמות הצורות דנו אותם ככה. (15) העקרים. כל מזלות שהם על צורת האדם² הם עקרים בעבור כי³ בני אדם מולידים⁴ בנים מועטים. (16) הבינוניים, שהם על צורת בהמות ואשר⁵ הם במים, יולידו רבים. (17) מזל הים סרטן, בעבור שהוא בית הלבנה, והלבנה תורה על⁶ המים בתולדתה; על כן⁷, כל שנה⁸ שיהיה⁹ שבתאי¹⁰ בתחלתה במזל הזה יבא נזק ליורדי הים. (18) והיה דגים על כל הנהרות¹¹ בעבור כי צדק, שהוא¹² בעל הבית, יש בו¹³ לחות, ומזלות המים ודגים לאות. (19) ויהיה עקרב לאות על הבארות בעבור שהוא מזל המים, ומאדים יבש והבארות יפסקו ויבשו טרם הנהרות. (20) מזל טלה. בעבור היותו תחלת המזלות שמוהו להיות לאות על הראש, כי כל נולד שיהיה הפקיד עליו במזל טלה¹⁴, ואם הוא עם¹⁵ כוכב מזיק, לא יהיו¹⁶ לו רעות¹⁷ בראש. (21) וחלקו כל¹⁸ מזל על אברי בני האדם¹⁹ עד²⁰ היות דגים²¹ לאות על הרגלים²².

5 (I) הבתים²³. יש מחליקת גדולה בין החכמים אם נגה וכוכב חמה למעלה מהשמש או למטה ממנה, והיה זה הספק בעבור שלא יוכל אדם²⁴ לראותם בהיותם נחברים²⁵ עם השמש, ועוד בעבור היות גלגל המוצק שוה לכל אחד²⁶ מהם. (2) ולפי דעתי שדברי כולם אמת²⁷, כי פעם הם²⁸ למטה ופעם הם למעלה, וזה צריך פירוש ארוך. (3) והנה שמו²⁹ סרטן³⁰ בית³¹ הלבנה כי הוא³² המזל הגבוה³³ בכל הישוב, ונסו פעמים אין קץ להם³⁴ כי בהכנס הלבנה במזל הזה יבא גשם בזמן הגשם. (4) ויהיה מזל אריה³⁵ בית השמש כי בהכנסה שמה³⁶ יראה כחה³⁷, והאור³⁸ אז הוא³⁹ חם ויבש. (5) והנה היה⁴⁰ אחרי⁴¹ השמש כוכב חמה⁴², כי היא ברוב⁴³ למעלה ממנה, | וכאשר²⁸ לא ירחק כוכב חמה⁴⁴ מהשמש כי אם פחות ממזל, על כן היה ביתו סמוך אל בית השמש. (6) ויהיה⁴⁵ מאזנים בית נגה, כי הוא על מבט חצי אהבה עם בית השמש, והוא כוכב⁴⁶ טוב הקטן⁴⁷, על כן⁴⁸ היה⁴⁹ בית צדק על מבט שלישי, שהוא אהבה, כי הוא הטוב הגדול. (7) והנה בית מאדים על המבט הרביעי⁵⁰ עם הבית, שהוא מבט

¹ [הם] למטני; פ שהם. ² [האדם] למטני; פאי אדם. ³ [בעבור כי] למאי; ט כי; פ בעבורם. ⁴ [מולידים] פלמאטי; נ חסר. ⁵ [ואשר] למטאני; פ ואדם. ⁶ [על] פלמאני; ט חסר. ⁷ [כן] פלני; מטא חסר. ⁸ [שנה] פמטני; לא השנה. ⁹ [שיהיה] פלמטני; י שתהיה. ¹⁰ [שבתאי] למאפטי; נ חסר. ¹¹ [הנהרות] לפיטאני; מ הנקרות. ¹² [שהוא] פלמאני; ט הוא. ¹³ [בן] פלמאני; ט לו. ¹⁴ [במזל טלה] פמאני; ל מזל טלה; ט בטלה. ¹⁵ [עם] למא; פטני חסר. ¹⁶ [לא יהיו] פלמאטי; נ יזיק. ¹⁷ [רעות] למטאני; פ ריעות. ¹⁸ [כל] למאפטי; נ על כל. ¹⁹ [בני האדם] פלמאני; נ בני אדם; ט אדם. ²⁰ [עד] תיקנתי עפ"י הקשר הדברים; למטאני; פ על. ²¹ [היות דגים] פלמטני; א מזל דגים. ²² [הרגלים] פלמאני; ט ברגלים. ²³ [הבתים] מטאני; ל > ואמר עוד אבן עזרא בענין. ²⁴ [אדם] פלמטני; א חסר. ²⁵ [נחברים] למטאני; פ נעברים. ²⁶ [אחד] למטאני; פ אדם. ²⁷ [שדברי כולם אמת] מטאני; ל שכל אחד מהם אומרי אמת. ²⁸ [הם] מטאני; ל היה. ²⁹ [והנה שמו] פלמאני; ט חסר. ³⁰ [סרטן] מופיע בכ"ו ט מודגש ובראש של פסקה חדשה. ³¹ [בית] פלמאני; ט מזל. ³² [הוא] פלמאטי; נ חסר. ³³ [הגבוה] פלמאטי; נ גבוה. ³⁴ [קץ להם] למאני; פ להם קץ; ט אין להם. ³⁵ [אריה] פלמטני; א חסר. ³⁶ [שמה] למאפטי; נ > לבנה במזל הזה. ³⁷ [כחה] למטאני; פ הכה. ³⁸ [האור] פלמאני; ט והוא. ³⁹ [הוא] למא; פני חסר. ⁴⁰ [היה] פלמא; ט יהיה; י היא; נ אין. ⁴¹ [אחרי] פלמאני; ט אחר. ⁴² [כוכב חמה] פלמאני; ט כותב. ⁴³ [ברוב] פלמאני; ט חסר. ⁴⁴ [כוכב חמה] פלמאני; ט כותב. ⁴⁵ [ויהיה] פלמאני; ט > והנה. ⁴⁶ [והוא כוכב] פלמטני; א והנה הככב. ⁴⁷ [הקטן] פלמטאני; י חסר. ⁴⁸ [כן] פלמטני; א חסר. ⁴⁹ [היה] למא; פטני יהיה. ⁵⁰ [הרביעי] פלמטא; נ הרביעי.

the cusp of the tenth (mundane) house, and in like manner Libra is at the back.^[17] (14) Sexual intercourse. Those (signs) that have the shape of a ram, bull, and lion are lustful, and it is on account of these shapes that they concluded that they are like that.^[18] (15) Sterile. All the signs that have a human shape are sterile, because human beings produce few children.^[19] (16) Intermediate (signs), which have the shape of animals that live in water, produce many (offspring). (17) The sign of the sea (is) Cancer, because it is the house of the Moon, and the Moon by its nature indicates water; therefore, whenever Saturn is in this sign at the beginning of the year, harm will befall seafarers. (18) And Pisces is in charge of all the rivers because Jupiter, which is the lord of the house, has moisture, and the watery signs and Pisces are a portent (of that). (19) Scorpio is a portent of wells, because it is a watery sign, but Mars is dry and wells dry up before rivers.^[20] (20) The sign of Aries. Since it is the first sign, they made it signify the head; no harm will befall the head of any native whose lord is in the sign of Aries, even though it is together with a malefic planet. (21) All the signs were assigned to the limbs and organs of the human body down to Pisces, which represents the feet.^[21]

5 (1) The houses. There is a great dispute among scholars about whether Venus and Mercury are above or below the Sun; this uncertainty arose because nobody can see them when they are in conjunction with the Sun, and also because they both have the same eccentric circle.^[1] (2) But in my opinion all of them are right, for sometimes they [i.e. Venus and Mercury] are below and sometimes they are above (the Sun),^[2] and this requires a long explanation.^[3] (3) They made Cancer the house of the Moon because it is the highest sign in all the ecumene; and they found out by experience innumerable times that it rains when the Moon enters this sign during the rainy season. (4) Leo was made the house of the Sun because when it [i.e., the Sun] enters there [Leo] its power is perceptible, and the air is hot and dry then.^[4] (5) Next after the Sun is Mercury, because for the most part it [Mercury] is above it [the Sun]; and because Mercury moves away from the Sun less than one sign, its house is adjacent to the house of the Sun.^[5] (6) Libra is the house of Venus, because it is in an aspect of half love to the house of the Sun and it [i.e. Venus] is the small benefic planet; consequently the house of Jupiter is in trine (with the house of the Sun), namely, (an aspect of) love, because it [i.e. Jupiter] is the large benefic (planet). (7) The house of Mars is in quartile with the house (of the Sun), which is

מריבה, כאשר אפרש. (8) והנה היה בית שבתאי עם בית השמש אין ביניהם מבט כלל. (9) ועל זה הדרך הבתים האחרים עם בית הלבנה והבתים למשרתים מפאת השמש, הוא¹ מזרחי, והטעם שרוב כחו במזרח, והפך זה הלבנה. (10) על כן אמרו הקדמונים כי אם היה כוכב במולד שיש לו ערך עם השמש ועם הלבנה, וערך² בתיו אליהם, אז יהיה לו כח גדול.

6 (I) ודרך אחרת: בעבור היות גדי ודלי מזלות שיתחזק הקור בהכנס³ השמש שם⁴, וידוע ששבתאי קר כאשר אפרש, שמו אלה הבתים שניהם לשבתאי, והבתים שהם נוכח אלה שני⁵ המאורות⁶. (2) כי הנה⁷ הוא עם שבתאי בגלגל הרביעי, שהוא מבט מריבה⁸ על דעת תלמי⁹, והלבנה בשביעי¹⁰, שהוא מבט נכת, והמאורות יורו על האור והחיים, ושבתאי על החושך והמות. (3) ויהיו בתי צדק לפנים ואחור לבתי שבתאי, כי אם תחיל¹¹ לספור מהעליון יהיה צדק שני לשבתאי¹², ואם תספור¹³ מצדק זה המספר¹⁴ יהיה שבתאי שני לו¹⁵, על כן בית זה לזה שני¹⁶, גם שנים עשר¹⁷, שהוא בית האויבים כבית¹⁸ השביעי, כי שביעי יהיה זה לזה. (4) ובתי¹⁹ מאדים שלישיים²⁰ לבתי שבתאי, ובתי שבתאי²¹ כן²² לבתי מאדים, כי זה שלישי לזה²³, ועם צדק שני, בית זה אל בית זה, גם שביעי²⁴, שהוא כדמות שנים העשר. (5) והנה²⁵ בית נוגה חמישי לבית שבתאי, וככה הוא בגלגלים, גם בית שבתאי חמישי לבית נוגה. (6) וכוכב חמה²⁶ עם שבתאי בגלגל הששי, וכן תאומים עם גדי גם דלי עם בתולה, ואם²⁷ הם²⁸ למעלה מהשמש גם הדבר יבוא קרוב, כאשר הזכרתי. (7) וחכמי המזלות אמרו כי כח הבתים ידעוהו אחרי שנסו זה במולדות רבים, ואמרו שיש בצורת כוכבים רבים שהם בתולדות מאדים, וככה כל מזל ומזל²⁹.

¹ הוא] פלמטא; נ שהוא; י כי הוא. ² וערך] פלמטא; י כערך. ³ בהכנס] למאפטי; נ שיכנס. ⁴ שם] פלמא; טנ חסר. ⁵ שני] לט; פמנאי > נוכח. ⁶ המאורות] למטאני; פ מאורות. ⁷ הנה] פלטנ; אי חסר. ⁸ מריבה] פלמטא; י אהבה. ⁹ שהוא מבט ... תלמי] למאפטי; נ חסר. ¹⁰ והלבנה בשביעי] למאי; פט והלבנה ברביעי; נ חסר. ¹¹ תחיל] למטאני; פ חסר. ¹² לשבתאי] לפטאני; מ לשמש. ¹³ מהעליון יהיה ... תספור] למאפטי; נ חסר. ¹⁴ זה המספר] טני; מא ממספר; פ מספר; ל חסר. ¹⁵ יהיה שבתאי שני לו] למאפטי; טנ זה שבתאי יהיה שני לו. ¹⁶ על כן בית זה לזה שני] לטמאני; פ ע"כ בית של זה שני לזה; י חסר. ¹⁷ שנים עשר] למאפטי; נ > בית. ¹⁸ כבית] לטאני; פי בבית. ¹⁹ ובתי] לטמאני; י ובית. ²⁰ שלישיים] למטא; פנ שלישי; י שלישי. ²¹ בתי שבתאי] למאפטי; נ חסר. ²² כן] מטנאיפ; ל גם כן. ²³ לזה] למאפטי; נ חסר. ²⁴ שביעי] פלמטא; י שביעי; זה שביעי. ²⁵ והנה] פלמטני; א והוא. ²⁶ וכוכב חמה] פלמאני; ט וכותב. ²⁷ ואם] למאפטי; נ ואשר. ²⁸ הם] לפטאני; מ היה. ²⁹ במולדות רבים ... ומזל] פמטא; נ חסר; ל < סוף ענין הבתים הוא כך אם תחיל לספור מבתי המאורות לפנים ולאחור תמצא בתי החמשה כוכבים לאחור ואלה לפנים ושני המספרים יכלו בבתי שבתאי שאם תחיל לפנים מאריה שהוא בית השמש תמצא בתיהם לאחור והוא שהבתולה בית כוכב חמה ומאונים בית נגה ועקרב בית מאדים וקשת בית צדק וגדי בית שבתאי ומשם ועד סרטן שהוא בית הלבנה תמצאם לפנים דלי בית שבתאי דגים בית צדק טלה בית מאדים שור בית נגה תאומים בית כוכב חמה ואם תחיל מסרטן ותשוב לאחור עד גדי תמצא בתיהם גם כן לאחור.

an aspect of antagonism, as I shall explain.^[6] (8) As for the house of Saturn and the house of the Sun, there is no aspect at all between them. (9) And in this manner the other houses ⟨are arranged⟩ with respect to the house of the Moon as well as the houses of the planets with respect to the Sun, which is eastern, meaning that most of its power is in the east; and the opposite applies to the Moon.^[7] (10) For this reason the Ancients said that if a nativity contains a planet that has a ratio to the Sun as well as to the Moon, and its houses have a ratio to them [i.e. to the houses of the Sun and the Moon], then it has a great power.

6 (1) Another approach: because Capricorn and Aquarius are signs where the cold intensifies when the Sun enters them, and ⟨because⟩ it is known that Saturn is cold, as I shall explain,^[1] they assigned these two houses to Saturn, as well as the houses opposite the two luminaries. (2) For it [i.e. the Sun] is in the fourth orb counting from Saturn, which is an aspect of antagonism, according to Ptolemy,^[2] and the Moon is in the seventh ⟨orb⟩, which is an aspect of opposition, and the luminaries indicate light and life, and Saturn darkness and death.^[3] (3) The houses of Jupiter are ahead of the houses Saturn or behind them, because if you begin to count from the uppermost ⟨orb⟩ then Jupiter is the second ⟨counting from⟩ Saturn, and if you count from Jupiter the same number then Saturn is the second from it. For this reason, the house of the former is the second from the latter, and it is also the twelfth [counting in the other direction], which is the house of enemies,^[4] like the seventh ⟨mundane⟩ house, since each is the seventh with respect to the other. (4) The houses of Mars are the third counting from the houses of Saturn, and the houses of Saturn are the same with respect to the houses of Mars, because the former is the third to the latter, and with respect to Jupiter it is the second, one house with respect to the other house, and it is also the seventh ⟨mundane house⟩ which has the likeness of the twelfth ⟨mundane house⟩.^{[5][6]} (5) So the house of Venus is the fifth counting from the house of Saturn, and similarly with respect to the orbs, and the house of Saturn is also the fifth counting from the house of Venus. (6) Mercury is in the sixth orb counting from Saturn, and likewise Gemini with respect to Capricorn as well as Aquarius with respect to Virgo;^[7] if they [i.e. Mercury and Venus] are above the Sun the result will be almost the same, as I have mentioned.^[8] (7) The astrologers said that they discovered the power of the houses after verifying them by experience in many nativities, and they said that there are many constellations that have the nature of Mars, and similarly with each sign.

7 (I) בתי הכבוד. אמר תלמי כי כל מזל טלה הוא כבוד השמש, והטעם שיראה שם כחו ככח מלך¹, כי אז יתחדש העולם². (2) והפך זה בהכנס³ השמש במזל מאזנים⁴, כי אז יחלו העלים לבלות ויחל האדם לחלות ותשומם הנפש, ובעבור היות תולדת שבתאי⁵ הפך תולדת השמש היה כבוד שבתאי במאזנים ושפלותו בטלה. (3) ולעולם כח הלבנה יוסיף מתחלת ליל הראותו, ואם התחברה עם השמש בטלה⁶ אז תחל להראות בהיותה במזל שור⁷, וכל⁸ המזל בית כבודה. (4) וחכמי הודו אמרו כי במעלת תשע עשרה יש כוכב ממוסך, כאלו הוא מתולדת צדק ונגה, ואמרו כי כבוד השמש במעלה הזאת בלבד, וכבוד הלבנה במעלה השלישית ממזל שור, והטעם שיהיה⁹ רחוק מהשמש כדי מעלות קשת | המראה, ומעלת¹⁰ קלון השמש בתשע עשרה מעלות ממאזנים¹¹. (5) על כן, יקראו מתשע עשרה מעלות ממאזנים¹², שהוא מקום קלון השמש¹³, עד שלוש מעלות מעקרב, ששם¹⁴ קלון הלבנה, דרך החושך, ואומרים שהמשרתים אין להם כח במקום הזה. (6) וכבוד צדק בסרטן, כי הוא מזל צפוני, והטעם שהוא גבוה, וצדק יורה¹⁵ על רוחות דרום, ואף כי בהיותו בסוף דרום שהוא גדי¹⁶, אז תחזק הרוח הדרומית, ואנשי הודו מודים כי כבוד צדק בט"ו מעלות מסרטן, ומאדים בכ"ח¹⁷. (7) ויאמר חנוך כי כבוד שבתאי בכ"א¹⁸ ממאזנים, שיהיה רחוק מנכח השמש שתי¹⁹ מעלות, שלא יזיקהו²⁰; וכבוד מאדים בכ"ח מגדי, כי שם²¹ כוכב²² עליון בתולדתו, ועוד להיותו רחוק מנכח כבוד צדק י"ג מעלות; וכבוד נגה במזל דגים, כי בהיותו שם אז תתגבר הרוח המערבית, ובית קלונו בתולה והפך זה כוכב חמה, כי הוא יורה על הרוח²³ המזרחית. (8) ויאמר חנוך²⁴ כי כבוד נגה בעשרים ושבע מעלות מדגים, וכבוד כוכב חמה בט"ו מעלות מבתולה, כדי שיתרחק²⁵ כבוד זה מנוכח כבוד זה²⁶. (9) גם חכמי הודו אמרו כי כבוד ראש התלי בתאומים והזנב²⁷ בקשת. (10) ואלו דברי תוהו, כי הראש והזנב לא יורו על הטוב ועל הרע, כי הוא מחברת שני גלגלים. (11) רק אם היתה הלבנה עמהם, כי²⁸ בהיותה עם הראש היא קרובה אל הישוב, על כן יראה אז כח הלבנה, ובהיותה עם

¹ כחו ככח מלך | פלמאי; י כחו כמו המלך; נ כח וככה מלך. ² העולם | למטאני; פ העולם. ³ בהכנס | פלמטאני; י בהכנסת. ⁴ במזל מאזנים | פלמאני; ט במאזנים. ⁵ תולדת שבתאי | פלמטאני; י שבתאי תולדתו. ⁶ ולעולם כח ... בטלה | פלמטני; א חסר. ⁷ בהיותה במזל שור | לאי; פמטנ בהיות מזל שור. ⁸ וכל | מטנאיפ; ל > ולפי דעתו. ⁹ שיהיה | פלמאני; ט שהיה. ¹⁰ ומעלת | מטא; פי ומעלות; נ ומעלה. ¹¹ ומעלת קלון ... ממאזנים | מטנאיפ; ל חסר. ¹² על כן יקראו ... ממאזנים | פלמא; טני חסר. ¹³ שהוא מקום קלון השמש | למאפטי; נ חסר. ¹⁴ ששם | למאפטי; נ שהוא מקום. ¹⁵ יורה | פלמטאני; י מורה. ¹⁶ גדי | למ; פטנאי דגים. ¹⁷ בכ"ח | פלמטאני; י < מגדי. ¹⁸ בכ"א | למאפטי; נ בכ"ח. ¹⁹ שתי | למאפטי; נ ט'. ²⁰ שלא יזיקהו | מטנאיפ; ל חסר. ²¹ כי שם | מטנאיפ; ל ששם. ²² כוכב | פלמטאני; נ כח. ²³ הרוח | למטא; ני רוח; פ כח. ²⁴ חנוך | פלמאני; ט חסר. ²⁵ שיתרחק | למטאני; פ שירחק; נ חסר. ²⁶ כדי שיתרחק ... זה | למאפטי; נ חסר. ²⁷ והזנב | למאפטי; נ וכבוד. ²⁸ כי | למ; פמטאיפ חסר.

7 (1) Houses of exaltation.^[1] Ptolemy said that the whole sign of Aries is the exaltation of the Sun, meaning that there its power resembles the power of a king, because the world is renewed then.^[2] (2) The opposite occurs when the Sun enters the sign of Libra, for then the leaves begin to wither and men begin to sicken and the soul is depressed; because Saturn's nature is the opposite of the Sun's nature, Saturn's exaltation is in Libra and its dejection in Aries.^[3] (3) The power of the Moon always increases from the beginning of the night of its first visibility, and if it is in conjunction with the Sun in Aries then it [i.e. the Moon] begins to be visible when it is in the sign of Taurus, and the whole sign is its house of exaltation.^[4] (4) The Indian scientists said that there is a mixed star, of the nature of Jupiter and Venus, as it were, in the 19th degree (of Aries). They said that the exaltation of the Sun is in this degree only,^[5] and the exaltation of the Moon is in the third degree of Taurus, meaning that its distance from the Sun is equal to the degrees of the arc of vision^[6] and the Sun's dejection is at Libra 19°.^[7] (5) Therefore, they call (the interval) from Libra 19°, which is the place of the Sun's dejection, to Scorpio 3°, which is the place of the Moon's dejection, the path of darkness,^[8] and they say that the planets have no power in this place. (6) The exaltation of Jupiter is in Cancer, because it is a northern sign, meaning that it is high; and Jupiter indicates southern winds, particularly when it is in the far south, namely, Capricorn, then the southern wind grows stronger. The Indians admit that the exaltation of Jupiter is at Cancer 15°^[9] and of Mars at 28°. (7) Enoch said that the exaltation of Saturn is at Libra 21°, in order that it be 2° distant from opposition to the (exaltation of the) Sun, lest it be damaged;^[10] and the exaltation of Mars is at Capricorn 28°, because there is an upper star there with its own nature,^[11] and also in order that it be 13° distant from opposition to the exaltation of Jupiter. The exaltation of Venus is in Pisces, because when it is there the west wind becomes stronger, and its house of dejection is Virgo; the opposite applies to Mercury, because it indicates the east wind. (8) Enoch said that the exaltation of Venus is at Pisces 27° and the exaltation of Mercury at Virgo 15°, in order that the exaltation of one be distant from opposition to the exaltation of the other.^[12] (9) The Indian scientists also said the exaltation of the Head of the Dragon is in Gemini, and of the Tail in Sagittarius. (10) This is nonsense, because the Head and the Tail do not give any indication about good fortune or misfortune, since it is the intersection of two circles.^[13] (11) But if the Moon is in them (because when it is in the Head it is close to the ecumene), the Moon's power is perceptible then;

(1) השלישיות. אמרו כי טלה וחבריו מזלות האש שלשה⁴. (2) ובעל⁵ השלישיות תחל⁶ השמש ביום כי אריה ביתו וכחו ביום, וצדק יחל בלילה כי קשת ביתו ויוכל להראות בלילה, ולא כן השמש⁷. (3) והוציאו מזאת השלישיות מאדים, א''ע''פ שהוא בעל מזל טלה, בעבור היות⁸ אלה מזלות⁹ החום¹⁰ וככה מאדים, והנה יזיק ולא יועיל. (4) והושם תחתיו שבתאי בעבור היותו קר ותהיה תולדתו ממוסכת, וככה אמרו כי שבתאי טוב ביום בעבור כי היום חם, ומאדים בלילה טוב כי הלילה קר¹¹. (5) ושמו כח בעל¹² שלישות העפר לנגה, שיחל ביום כי שור ביתו, ושמו הלבנה עמו כי שור בעל כבוד הלבנה. (6) ותחל בלילה, שכח¹³ הלבנה בלילה¹⁴ יותר מכחה¹⁵ ביום, על כן שמו נגה ביום. (7) והסירו שבתאי, שהוא בעל מזל גדי, גם¹⁶ כוכב חמה, בעל¹⁷ מזל בתולה, בעבור שלא יורו על רוח דרומית¹⁸, ושמו מאדים מקומם¹⁹ שיליד רוח דרומית, שמזלות העפר הם²⁰ דרומיים. (8) ושמו כח שלישות הרוח לשבתאי כי דלי ביתו והוא בעליו, והחלו ביום ממנו בעבור היותו זכר והוא מכוכבי היום. | (9) וכוכב חמה היה²¹ בעל השלישיות השניה כי תאומים ביתו והוא מכוכבי הלילה. (10) ועל כן החלו ביום משבתאי ובלילה²² מכוכב חמה²³, והסירו נגה, שהוא בעל מזל מאזנים, מכח²⁴ השלישיות בעבור היות תולדתו קרה, ושמו מקומו צדק, שתולדתו כתולדת האור²⁵. (11) ושמו כח בעל השלישיות הראשונה למזלות המים לנגה²⁶ בעבור שיש לו כבוד נגה²⁷ בדגים. והשניה אל מאדים שביתו

י' יחסר כחה ... משרת] לט; מאפ יחסר כח וככה משפט כל משרת; י יחסר כח משפט כל משרת; נ ו יחסר משפט כח כל משרת. ² בלוחות] פלמאני; ט בספר הלוחות. ³ הזה] פלמטאני; י חסר. ⁴ שלשה] למאפט; נ חסר. ⁵ ובעל] למאפט; נ ובעלי. ⁶ תחל] למאפט; נ תחלת. ⁷ השמש] פטמאני; ל < וכל כוכב שהוא למעלה קו הארץ כח יותר גדול מההווה תחת הארץ. תוספת ו נמצאת בגרסה הראשונה של ספר הטעמים. ראה טעמים א' §2.7:2. ⁸ היות] למטאני; ט חסר. ⁹ היות] למטאני; פ חסר. ¹⁰ ההוחם] פלמטאני; י הוחם. ¹¹ קרה] פלמטאני; י קר. ¹² בעל] פלמטני; א חסר. ¹³ שכת] פלמאני; ט כ כח. ¹⁴ בלילה] לא; פטמני חסר. ¹⁵ מכחה] פלמאני; ט כחה. ¹⁶ ג] לאטני; ט גום; מ כי. ¹⁷ בעל] פלמטאני; פ > שהוא. ¹⁸ דרומית] למטאני; פ דרומי. ¹⁹ מקומם] פלמטני; א מקומה. ²⁰ הם] פלמטאני; י חסר. ²¹ היתה] למטאני; פ חסר. ²² ובלילה] פני; למטא וביים. ²³ הזה] פטני; לא חסר. ²⁴ מכח] למטאני; פ מבעל. ²⁵ האויר] פטמאני; ל < ואלה המזלות הם ישרים, על כן שמו מקומו צדק שהוא ישר בתולדתו. תוספת ו נמצאת בגרסה הראשונה של ספר הטעמים. ראה טעמים א' §2.17:7. ²⁶ לנה] פלמטאני; ט לכובר. ²⁷ ננה] פלמטאני; י לונה.

but when it is in the Tail its latitude is southern and its power decreases. (12) This is also the ⟨astrological⟩ judgment of any planet when it is in the Head of the Dragon or its Tail, except for the Sun, which has no latitude at all [with respect to the ecliptic]. (13) Hence, if one of the planets is in the Head of the Dragon or the Tail, as recorded in the tables, it will neither help nor harm. (14) Many say that the Head adds a quarter to the years of life of the ruling planet, and the Tail subtracts them, in accord with this ⟨astrological⟩ judgment.^[14]

8 (1) The triplicity.^[1] They said that Aries and its companions, the fiery signs, are three. (2) The lord of the triplicity, the Sun, is the first by day because Leo is its house and its power is diurnal; Jupiter is the first by night because Sagittarius is its house and it is visible at night, which is not the case for the Sun. (3) Mars was excluded from this triplicity, even though it is the lord of the sign of Aries, because these are the signs of heat and Mars is like that [i.e. it is hot], and therefore it might cause harm and not be beneficial. (4) Saturn was assigned [as their partner] in its [Mars'] place, because it is cold and its nature is mixed; they also said that Saturn is benefic by day because the day is hot and that Mars is benefic by night because the night is cold.^[2] (5) They assigned the power of the lord of the earthy triplicity to Venus, which is the first by day because Taurus is its house, and they associated the Moon with it because Taurus is the lord of the exaltation of the Moon. (6) It [i.e. the Moon] is the first by night, because the Moon's power is greater by night than by day, and consequently they assigned Venus to day. (7) They excluded Saturn, which is the lord of the sign of Capricorn, and also Mercury, the lord of the sign of Virgo, because they do not indicate a south wind, and assigned Mars [as partner] in their place because it generates a south wind, because the earthy signs are southern.^[3] (8) They assigned the power of the airy triplicity to Saturn, because Aquarius is its house and it [Saturn] is its [Aquarius] lord, and they made it first in the day because it is masculine and because it is one of the diurnal stars. (9) Mercury was made lord of the second triplicity,^[4] because Gemini is its house and it is one of the nocturnal stars. (10) For this reason they began from Saturn by day and from Mercury by night; they excluded Venus, which is the lord of the sign of Libra, from the power of the triplicity because its nature is cold, and in its place they assigned Jupiter, whose nature is like the nature of the air.^[5] (11) They assigned the power of lord of the first triplicity of the watery signs to Venus because the exaltation of Venus is in Pisces, and ⟨the power

עקרב¹. (12) ובית הלבנה סרטן על כן היתה שותף² עמהם.

9 (I) הגבולים. יש לחכמי פרס גם לחכמי הודו גבולים אחרים. (2) גם תלמי אמר³ שמצא נוסחא⁴ קדמונית לגבולים אחרים⁵; גם הם⁶ קרובים⁷ לגבולים⁸ הכתובים, והם גבולות⁹ חכמי מצרים¹⁰, ובעלי¹¹ המשפטים נסום. (3) וכשאתה סופר מספר מעלות גבולות¹² כל משרת, אז תמצא מספר שנותיו הגדולות. (4) הפנים. חחלו מבעל הבית, שהוא מאדים, ואחריו השמש, כאשר הוא תחתיו בגלגל. (5) וככה נסום ועלה בידם. (6) התולדת¹³. בעבור היות¹⁴ המזלות שהם מתולדת אחת שלשה שמו כח המזל¹⁵ בעשר¹⁶ מעלות, שהוא השלישית הראשונה, ועל זה הדרך¹⁷ הנשארות. (7) כח שנים עשר. אמרו כי בכל מזל כח השנים עשר מזלות, וככה נסום¹⁸, ויש לו כח במשפטי העולם. (8) על כן נתנו לכל מזל שתי מעלות וחצי, כי חלקן מעלות המזל שהם שלשים על שנים עשר מזלות¹⁹. (9) כח תשיעי²⁰. בעבור כי המזל התשיעי מכל מזל הוא המזל האחרון שהוא כתולדתו²¹, שמו כחות²² תשעה מזלות במזל אחד, ויחלו²³ מהמזל²⁴ המתהפך בעבור כי²⁵ הארבע²⁶ תקופות הנם ראשים²⁷, ויש אומרים בעבור היות סך כל החשבון תשעה²⁸.

3§

I (I) הבתים. לא מצאתי לאחד הקדמונים שדבר על טעמי הבתים. (2) והנה, לפי דעתי, שמו המעלה הצומחת שורש, כדמות הנולד בצאתו ממקום החשך. (3) וככה המעלה הצומחת²⁹, והיא עולה עד היותה בחצי השמים ובסוף תשקע³⁰, וזה הדבר יתברר בשמש בזרחה בבוקר. (4) על כן, תורה המעלה הצומחת על החיים, ואמרו כי הוא דומה³¹ למחשבת³² בדרך דמיון. (5) והנה המעלה השוקעת דומה למעלה

¹עקרב] פלמאני; ט > בית. ²היתה שותף] למ; פ היתה שותפת; י יהיה שותף; א היה שותף. ³אמר] פלמטא; י חסר. ⁴נוסחא] לי; נ נוסחה; מטא נסחא; פ נסחאה. ⁵אחרים] פלמטני; א חסר. ⁶הם] מטנאיפ; ל כן. ⁷קרובים] למאפטי; נ חסר. ⁸לגבולים] פלמטאני; י לגבולי הגבולים. ⁹גבולות] למטאני; פ גבולי. ¹⁰מצרים] פלמטאני; י המזלות של מצרים. ¹¹ובעלי] פלמטני; א ובעל. ¹²גבולות] פלמטאני; י הגבולים של. ¹³התולדת] פטאני; מ התולדות. ¹⁴היות] פמאני; ט חסר. ¹⁵כח המזל] מטאני; פ הכח מזל. ¹⁶בעשר] פטי; אמ בעבור; נ כי. ¹⁷הדרך] מטאני; פ הדרכים. ¹⁸וככה נסום] פלמאני; ט < ט ועלה בידם. ¹⁹מזלות] פמטאני; י מעלות; ל < נתנו החלק הראשון לבעל המזל העולה והחלק השני לבעל המזל הבא אחריו וכן כלם ולזה כח גדול בתקופת העולם. הקטע הזה מופיע בגרסה הראשונה של ספר הטעמים. ראה טעמים א' §2.II:1-3. ²⁰תשיעי] למאפטי; נ הט. ²¹כתולדתו] פמאני; ט בתולדתו. ²²כחות] פלמטני; א כח. ²³יחלו] מאני; ט ויחלו; פ ויחל; י וחלק. ²⁴מהמזל] מאני; פ ממזל; ט במזל. ²⁵כי] פמאני; ט חסר. ²⁶הארבע] ט; נ הד; פמאי הארבעה. ²⁷הנם ראשים] פ; י הם הראשים; טמ הנה הראשים; נ הנה ראשים. ²⁸החשבון תשעה] פמאטי; נ החשבונות. ²⁹שורש כדמות ... הצומחת] פלמטאני; י חסר. ³⁰ובסוף תשקע] למאפטי; נ חסר. ³¹הוא דומה] לטאמ; פ דומה הוא; י דומה היא; נ היא דומה. ³²למחשבת] פלמאטי; נ במחשבת.

of) the second (triplicity) to Mars, whose house is Scorpio. (12) Cancer is the house of the Moon, and consequently it [the Moon] was made partner with them [Venus and Mars].^[6]

9 (1) The terms.^[1] The scientists of Persia and India have [i.e., describe] other terms. (2) Ptolemy also said that he found an ancient text with other terms; they are close to the terms in the books, which are the terms of the Egyptian scientists, and the experts in (astrological) judgments verified them by experience.^[2] (3) When you count the number of degrees in the terms of each planet, you will find the number of its great years.^[3] (4) The decans. They began from the lord of the house [Aries], which is Mars, and after it the Sun, inasmuch as its [the Sun's] orb is just below its [Mars'] orb.^[4] (5) They tested them [i.e., the lords of the decans] by experience in this manner and proved that this is so. (6) The nature. Because three signs have the same nature, they assigned the power of the sign to the (first) ten degrees, which is the first triplicity, and (assigned) the rest (of the decans) by the same method.^[5] (7) The power of the dodecatemoria.^[6] They said that, in each sign, (each of) the twelve signs has power, and they tested them in this manner, and it has power in the (astrological) judgments of the world.^[7] (8) For this reason they assigned two and a half degrees to each sign, since they divided the thirty degrees of the sign by twelve.^[8] (9) The power of the ninth-part. Since the ninth sign from any sign is the last sign (whose nature) is as its own nature, they put the powers of nine signs in one sign; they began from the tropical sign because the (beginnings of the) four seasons are "heads",^[9] but others say that this is because there are a total of nine digits.^[10]

§3

I (1) The (mundane) houses. I have not found any of the Ancients who explained the houses.^[1] (2) In my opinion, they made the degree of the ascendant a root, like the native when he emerges from the place of darkness. (3) Similarly, the degree of the ascendant rises until it reaches midheaven and in the end sets; this is made plain by the Sun when it rises in the morning (and reaches midheaven and in the end sets). (4) Hence, the degree of the ascendant indicates life, and they said that it [the ascendant] resembles thinking imaginatively.^[2] (5) The degree of the descendant resembles the degree of the ascendant, since

הצומחת, כי במספר המעלות שיעלו המזלות¹ בפאת מזרח ככה במספרו ישקע המזל האחר במערב, וגבהות מעלות השמש בשוה בשני הבתים, וזה הדבר ברור. (6) וידענו כי לעולם² תנועת חצי השמים בכל מקום, בדרך הגלגל העליון המניע הכל, שוה, וכמוהו מעלות יתד הארץ. (7) וכאלו אלו הולידו³ המעלה⁴ הצומחת גם השוקעת, על כן היו לאות על האבות שהולידו הבן. (8) ואמרו כי העשירי יורה על האם⁵ בעבור שהוא הנראה, כי הוא⁶ למעלה מן הארץ, ותלמי אמר⁷ הפך הדבר. (9) ויהיה הבית השביעי לאות על הנקבה, כי היא עזר כנגדו והיו לבשר אחד⁸, ובעבור היות מעלות | הבית השביעי שוות היה⁹ לאות על השותפים. (10) ובעבור¹⁰ היות כל בית שביעי¹⁰ נוכח הראשון, והוא להפך¹¹, כי זה עולה וזה שוקע, היה גם כן בית הנשים, שהם¹² הפך הזכרים, גם בית המריבות והקטטות, בעבור¹³ שהוא מבט¹⁴ נוכח. (11) ואלה הארבעה בתים¹⁵ הם היתדות, כי לעולם יתחלק הגלגל על ארבעה¹⁶, ובעבור שיש לכל¹⁷ תחלה ומעמד וסוף חלקו¹⁸ כל יתד על שלשה ועל¹⁹ שנים עשר בתים. (12) ואמרו²⁰ כי הארבעה שהם אחרי היתדות יש להם כח אמצעי, בעבור שבמהרה²¹ ישובו גם הם²² להווייתם, והאחרים²³ נופלים, אין להם כח.

2 (I) ובעבור היות הבית החמישי לעולם על מבט אהבה עם²⁴ הבית הראשון ובתולדתו²⁵, היה סימן על הבנים, שאין אהבה גמורה לאדם כאהבתם, ואין ככה תשיעי בעבור היותו נופל. (2) ובעבור שהמאכל ישוב לתולדת האדם, שמו זה המזל²⁶ בית המאכל והמשתה והתענוג. (3) ובעבור היות הבית הי"א²⁷ על מבט חצי אהבה, שמוהו בית האוהבים, ובעבור היותו למעלה, היה בית השבח והריוח והשם הטוב²⁸. (4) ולא כן השני, כי לא יביט אל המעלה²⁹ הצומחת, כאשר אפרש במבטים³⁰, ובעבור היותו עם כח³¹ הבית הראשון, יורה³² על הממון, שהוא מסבות החיים. (5) ובעבור היות הבית השביעי הפך הראשון³³, על כן אמרו כי תחלת

¹ כי במספר ... המזלות] פלמאנ; ט במעלות בספר כי כאשר יעלו המזלות; י כי היא במספר המעלות.
² לעולם] פלמטאנ; י חסר. ³ אלו הולידו] פלמאנ; ט חסר. ⁴ המעלה] למטאנ; פ מעלה. ⁵ האם] א; מטי האש; פנ האיש; ל הראש. ⁶ הוא] מטאנ; פ חסר. ⁷ אמר] פלאנ; מט אומר. ⁸ אחד] פלמאנ; נ חסר. ⁹ היה] למאי; פט היו; נ תהיה. ¹⁰ שביעי] פלמטאנ; י שביעית. ¹¹ להפך] פלמטאנ; י נהפך. ¹² שהם] פלמטי; אנ שהוא. ¹³ בעבור] פלמטאנ; י חסר. ¹⁴ מבט] פלמטאנ; י מכח. ¹⁵ בתים] פלמטנ; א חסר. ¹⁶ ארבעה] למטאנ; פ הארבעה; י הד'. ¹⁷ לכל] פלמטאנ; י < אחד. ¹⁸ חלקו] למאפטי; נ שמו חלקי. ¹⁹ ועלן] למאפטי; נ ועל. ²⁰ ואמרו] פלמטאנ; י ובעבור. ²¹ שבמהרה] למטאנ; פ שמהרה. ²² גם הם] פלמטנ; א ג'כ. ²³ והאחרים] פלמטאנ; י ואחרים. ²⁴ עם] פלמאנ; ט חסר. ²⁵ ובתולדתו] פלמאנ; ט ותולדתו; י ובתולדתם. ²⁶ המזל] פלמטאנ; י חסר. ²⁷ הי"א] ג; פלמטא העשירי. השווה טעמים א' §.6:10. ²⁸ הטוב] אני; פלמט טוב. ²⁹ אל המעלה] למטאנ; פ במעלה. ³⁰ במבטים] למטאנ; פ בספר המבטים. ³¹ כח] למאפטי; נ הכח. ³² יורה] פלמטאנ; י < השני. ³³ היות הבית השביעי הפך הראשון] למטאנ; פ היותו הפך הבית השביעי מהראשון.

the number of degrees that the signs ascend at the eastern edge (of the horizon) is equal to the number of degrees that the opposing sign descends in the west, and the apogee of the degrees of the Sun is the same in both houses, and this matter is clear. (6) We also know that the motion of midheaven, by means of the uppermost orb that propels all, is always uniform in every place, and so are the degrees of the cardo of lower midheaven. (7) It is as though they produce the degree of the ascendant as well as of the descendant, and for this reason they signify fathers, who produce sons. (8) They said that the tenth (house) indicates the mother because it is visible, since it is above the Earth, but Ptolemy said the opposite.^[3] (9) The seventh house signifies the female, because she is a helpmate to him and they are one flesh (Gen. 2:18, 20 and 2:24); it indicates partners because the degrees of the seventh house are equal. (10) Because the entire seventh house is in opposition to the first (house), and just the opposite, in that one ascends when the other descends, it was also seen as the house of women, who are the opposite of men, and also as the house of quarrels and disputes, because it is in an aspect of opposition.^[4] (11) These four houses are the cardines, for the circle is always divided into four, and because everything has a beginning, a stable stage, and an end, each cardo was divided into three, yielding twelve houses.^[5] (12) They said that the four (houses) that are after the cardines have intermediate power, because they will soon return to their basic existence [i.e. to the cardines], and the other (four) are falling (from the cardines),^[6] (because) they do not have power.^[7]

2 (1) Since the fifth house is always in an aspect of love to the first house and is of the same nature, it was seen as an indication of the sons, since no man has a fuller love than (he has) for them; but this is not true for the ninth (house), because it is falling (from the cardines). (2) And because food is converted into the nature [i.e., natural constitution] of man, they made this *mazzal*^[1] the house of food, feast, and pleasure.^[2] (3) Because the eleventh house is in an aspect of half love (to the first house) they made it the house of lovers, and because it is above it was considered to be the house of praise, profit, and renown.^[3] (4) But this is not the case for the second (house), because it does not aspect the degree of the ascendant, as I shall explain in (the discussion of) the aspects;^[4] because it has the power of the first house it indicates wealth, which is among the causes of life.^[5] (5) Because the seventh house is the opposite of the first, they said that the cusp of the seventh house^[6]

היתד¹ השביעי יפסיק החיים²; גם יורה בעל הבית השביעי על המות³, ובעבור שיש לו קשור⁴ עם⁵ הבית הראשון⁶, לא יורה על המוות לגמרי. (6) רק הבית השמיני, הוא הדבק⁷ עם⁸ שהוא בכחו ואין לו קשר עם הבית הראשון, על כן יורה על המוות, ובעבור שהוא דומה לשני שורה על הממון, יורה על ירושה מפאת מתיים⁹.

3 (1) ובהיות השמש בחצי השמים ויסור אל¹⁰ צד מערב, אז¹¹ יסור מצד אל צד; על כן שמו זה הבית התשיעי בית הדרכים הארוכים, בעבור שהוא למעלה מן הארץ. (2) והשלישי¹² לדרכים הקרובים בעבור היות כחו פחות¹³, ובעבור היותו על מבט חצי אהבה שמוהו בית האחים¹⁴, ובעבור¹⁵ היות החכמה כדמות חפוש והלך לנשמה ולתור בדעת¹⁶ היה התשיעי בית החכמות הגדולות. (3) והיה השלישי¹⁷ בית התורות, גם בחלום, כאילו¹⁸ הנשמה הולכת אל מקומות. (4) ובעבור היות הבית העשירי¹⁹ למעלה²⁰ על כל הגלגל, והשמש והכוכבים כולם יוכיחו בהיותם במקום הזה, אמרו²¹ כי הוא בית המלוכה, והכבוד גם אומנות האדם, שהוא כמו מלכות לו. (5) ובעבור היות הבית השנים עשר נופל ואינו דבק עם הראשון, היה בית האויבים²² והחרפה, ובעבור היותו קרוב מהצומחת, היה בית מרכבת האדם. (6) ובעבור כי הבית הששי אינו דבק עם הבית הראשון והוא בית רע, כי הוא נופל ולמטה מהארץ, יורה על החלאים²³, כי הם²⁴ כדמות אויבים נסתרים. (7) גם יורה על העבדים ועל השפחות, בעבור שהוא²⁵ הפך השנים עשר, גם זה הבית | קרוב מהבית השביעי שהוא בית³⁰ הנשים.

4§

I (1) הכוכב. דמו²⁶ הכוכב העולה בגלגל המוצק לרוכב²⁷ על סוס שיש לו שבח על הרגלים בעבור רחקו מהארץ, ובעלותו בפאת²⁸ גלגלו הקטן²⁹ אז הוא ישר בהליכתו ויוסיף כל יום אומץ. (2) וטעמי האחרים הם הנכתבים. (3) ובעבור שלא יראה כח כוכב כאשר השמש על הארץ, על כן שמו שאין כח להזה עם השמש³⁰.

¹ היתד] פלמטא; י הבית. ² יפסיק החיים] פלמטא; י על המוות. ³ גם יורה ... המות] פלמטא; י חסר. ⁴ קשור] פלמטא; י קשר. ⁵ עם] למאפטי; נ על. ⁶ הראשון] למאפטי; נ חסר. ⁷ הדבק] למאפטי; נ מדבק. ⁸ עם] למנפטי; ט חסר. ⁹ מתים] פלמאני; ט המתים. ¹⁰ אל] פלמטא; י על. ¹¹ אז] פלמא; ט אם. ¹² והשלישי] פלמטא; י והבית השלישי. ¹³ ובהיות השמש בחצי השמים ... פחות] למאפטי; נ הקטע הזה נמצא מחוץ למקומו. ¹⁴ האחים] פלמטא; י באחים. ¹⁵ ובעבור] פלמאני; ט ובהיות. ¹⁶ ולתור בדעת] פלמטא; י ולתור ודעת. ¹⁷ והיה השלישי] למא; פ והיה הבית השלישי; ט והנה הבית השלישי; נ והי; י והיה הבית הט'. ¹⁸ בחלום כאילו] לפטנמא; י בחלומות בעבור כאילו. ¹⁹ הבית העשירי] למטאני; פ העשירי. ²⁰ למעלה] פלמטני; א למען. ²¹ אמרו] פלמטא; י באמרו. ²² האויבים] למטני; א > הראשון; פ השמש. ²³ החלאים] נ; פלמטא החלקים. ²⁴ הם] פמטי; א הוא. ²⁵ שהוא] פלמאני; ט היות. ²⁶ דמו] פמטא; י דומה; נ הוא כמו. ²⁷ לרוכב] מטני; פא לכוךב. ²⁸ בפאת] פמאני; ט מפאת. ²⁹ גלגלו הקטן] פמטא; נ גלגלו הקטן; י גלגל הקטן. ³⁰ שאין כח להזה עם השמש] מא; י שאין כח להנה עם השמש; ט שאין לה כח; פנ שאין להנה עם השמש.

interrupts life; the lord of the seventh house also indicates death, but because it has a link with the first house it does not absolutely indicate death. (6) ⟨Death is indicated⟩ only by the eighth house, the one that is attached to it [i.e. to the seventh house] and has the ⟨same⟩ power but has no link to the first house; therefore it [i.e. the eighth house] indicates death. And because it is similar to the second house, which indicates wealth, it indicates an inheritance from the deceased.^[7]

3 (1) When the Sun is at midheaven and starts descending to the west, it moves from one side to the other; so they made this ninth house the house of the long journeys, since it is above the Earth. (2) The third ⟨house was assigned to⟩ short journeys because its power is less; because it is in an aspect of half love, it was made the house of brothers; and because science resembles searching and traveling by the soul and pursuing knowledge, the ninth house was made the house of the major sciences. (3) The third ⟨house⟩ is the house of religions and of dreams, as if the soul were roaming to ⟨distant⟩ places.^[1] (4) Because the tenth house is at the top of the circle, which is demonstrated by the Sun and all the stars when they are in this place, they said that it is the house of kingship, of honor, and of human crafts, which [i.e. honor] is like his [i.e. man's] kingdom. (5) Because the twelfth house falls ⟨from the cardines⟩ and is not attached to the first, it was made the house of enemies and of shame, and because it is close to the ascendant it was made the house of the riding animals for man.^[2] (6) Because the sixth house is not attached to the first house and is a malefic house, for it falls ⟨from the cardines⟩ and is below the Earth, it indicates diseases, which resemble hidden enemies.^[3] (7) It also indicates male and female slaves, because it is the opposite of the twelfth ⟨house⟩, and also ⟨because⟩ this house is close to the seventh house, which is the house of women.

§4

1 (1) Planets. They compared a planet when it rises in its eccentric circle to a horseman^[1] whose horse has excellent legs because it is getting farther from the Earth, and when it ascends in its epicycle its motion is direct and gets brighter^[2] each day. (2) The reasons for the other ⟨topics⟩ are the ones that are written ⟨in *Reshit Hokhmah*⟩.^[3] (3) Because the power of the planet is invisible when the Sun is above the Earth they stated that it [i.e. the planet] has no power with the Sun.

2 (I) האורים. שמו אור¹ השמש חמש מעלות לפניו ולאחריו, כי לא יראה כוכב שהוא קרוב אליו מימיו² ומשמאלו עד שירחק ממנו חמש עשרה מעלות³. (2) ואור הלבנה יהיה שתיים עשרה מעלות בעבור היות אורו⁴ פחות, ואור⁵ שבתאי וצדק תשע מעלות בעבור היות אורם פחות מאור הלבנה והם קרובים במדת גופם. (3) ואור מאדים שמנה⁶ בעבור היות גופו פחות גם כן אורו, ואור נה ואור כוכב חמה שבע⁷ בעבור היותם שפלים, גם הם⁸ קטנים מאד בגופם. (4) א' ע' פ' שיראה⁹ נה במראה¹⁰ העין גדול מאד הוא קטן מאד, ונראה¹¹ כן בעבור היותו קרוב אל הארץ¹².

3 (I) המחברת. אלכסון השמש קרוב מאחד ושלושים חלקים, והנה מהנקודה האמצעית קרוב מששה עשר¹³ חלקים. (2) על כן¹⁴ אמרו בהיות הכוכב ככה¹⁵ יחשב כאלו הוא עם הנקודה, יותר מזה ימין ומאל¹⁶ איננו תחת גוף השמש; על כן אמרו שהוא נשרף, בעבור שלא יראה. (3) וכאשר הוא עם¹⁷ גוף השמש כאלו יש להם¹⁸ כח אחד, על כן אמרו כי כוכב חמה עם השמש שני כוכב¹⁹ חמה יש בגלגל, ועל זה הדרך כל המשרתים. (4) וטעם ט' ו' מעלות הזכרתי²⁰; וטעם מעלות לשבתאי²¹ גם לצדק, ולא כן למאדים, בעבור שני דברים: האחד בעבור גודל אורם, והשני בעבור המתנתם בהליכתם, כי²² מהרה²³ תעובם השמש. (5) ויהיה מאדים מעשר מעלות בעבור שאורו חסר מאורם והוא מהיר בהליכתו, ויהיה בין השמש ובין נוגה עשר²⁴ מעלות ורחבו שמאלי, כי אז יהיה קרוב שיראה. (6) הלבנה, כשהיא מערבית מהשמש, אז יחל אורה להוסיף, על כן יש לה²⁵ כח. (7) וטעם העליונים בהיותם מזרחיים כי²⁶ השמש תעובם, והפך זה השפלים כי מהלכם יותר ממהלך השמש, והנה הם כאשר²⁷ מערביים יעובו השמש מהרה. (8) וכח העליונים²⁸ עד שלשים²⁹ כי מהלכם במרוצה, ובמעמד הראשון נשאר לו מעט כח. (9) וטעם חצי הכח, או שלישית הכח, על דרך סברא³⁰; גם הנסיון יורה³¹ כן. (10) וטעם אם היה³² לכוכב³³ מרחב מעט עם השמש בעבור שאין לשמש מרחב, ולא כן לכל המשרתים³⁴. (II) וטעם חצי המחברת בעבור כי המחברת השלימה³⁵ היא באורך וברוחב, והנה³⁶

¹ אור] פלמטאנ; י לאור. ² מימיו] ל; פמטנאפ חסר. ³ לפניו ולאחריו ... מעלות] פלמטאנ; י חסר. ⁴ אורו] למטאני; פ אלה. ⁵ ואור] לטאני; מ האור; פ ואם. ⁶ שמנה] לפני; ט ו'; מא חסר. ⁷ שבע] למאפטי; נ חסר. ⁸ גם הם] פלמטי; א ג' כ'; נ שהינם גם כן. ⁹ שיראה] פלמאנ; ט < על. ¹⁰ במראה] פלמטאנ; נ במראות; י במראית. ¹¹ ונראה] פלמטאנ; י וכנראה. ¹² אל הארץ] למטאנ; פי מהארץ. ¹³ מששה עשר] פמי; ט מ' ז'; א מששה. ¹⁴ על כן] פמטאנ; י עד כאן. ¹⁵ הכוכב ככה] פמאני; ט כוכב חמה שם. ¹⁶ יותר מזה ימין ומאל] פמא; טנ ויותר מן הימין לשמאל. ¹⁷ עם] פמאטי; נ על. ¹⁸ להם] פמאטי; נ לה. ¹⁹ כוכב] פמטני; א ככבים. ²⁰ הזכרתי] פמטאנ; י הזכרתיים. ²¹ לשבתאי] פמאטי; נ שבתאי. ²² כי] פטאני; מ חסר. ²³ מהרה] מטאני; פ חסר. ²⁴ עשר] פמטאנ; י שש. ²⁵ לה] פמאטי; פ לו. ²⁶ כי] פמאטי; נ חסר. ²⁷ כאשר] פמטני; א < הם. ²⁸ וכח העליונים] פמטאנ; פ וככה עליונים. ²⁹ שלשים] פמאני; ט חסר. ³⁰ סברא] מטאני; פ הסברא. ³¹ יורה] פמאטי; נ חסר. ³² היה] פמאני; ט חסר. ³³ לכוכב] מטאני; פ הכוכב. ³⁴ המשרתים] טני; פמא משרתים. ³⁵ השלימה] פמאטי; נ שלימה. ³⁶ והנה] מטאני; פ והוא.

2 (1) Light. They assigned the light of the Sun 15° forward or backward because any planet that is near it, whether to the left or the right, cannot be seen until it is 15° away from it. (2) The light of the Moon is 12° , because its light is less; the light of Saturn and Jupiter is 9° , because their light is less than the Moon's light and their bodies are of similar size. (3) The light of Mars is 8° , because of its smaller body and (lesser) light, and the light of Venus and Mercury is 7° because they are lowermost and their bodies are also very small. (4) Even though Venus may look very big to the naked eye it is very small; it looks like that because it is close to the Earth.^[1]

3 (1) Conjunctions. The diameter of the Sun is almost 31 minutes, so that from the center it is almost 16 minutes. (2) For this reason they said that when a planet is like that it should be considered as if were at the point (of the center), but (when a planet is) more than that [i.e., more than 16 minutes] to the right or to the left, it is not under the body of the Sun; for this reason they said that it is burned, because it is invisible. (3) When it is with the body of the Sun it is as if they have one power; for this reason they said that if Mercury is together with the Sun there are two Mercuries in the orb,^[1] and so too for all the planets. (4) I have already explained why 15° .^[2] There are two explanation for the degrees of Saturn and also of Jupiter (but not of Mars):^[3] the first is the size of their bodies and the second is the slowness of their motion, for the Sun moves away from them quickly. (5) Mars (emerges from the domain of burning) at 10° because its light is less than theirs [Saturn and Jupiter] and its motion is faster, and (Venus emerges from the domain of burning when) there are 10 degrees between the Sun and Venus and its [Venus'] latitude is northern, because then it is almost visible. (6) When the Moon is west of the Sun its light begins waxing and therefore it has power. (7) The explanation for the upper (planets) when they are eastern is that the Sun is moving away from them, and the contrary occurs with the lower (planets), because their motion is faster than the Sun's motion, so when they are western they move away from the Sun quickly. (8) The power of the upper (planets) extends to 30 (degrees) because they move quickly, and when they are in the first station they are left with little power. (9) The explanation for half of the power or a third of the power (is based on) a logical assumption; but experience shows this as well. (10) The reason why planets should have a small latitude with respect to the Sun is that the Sun has no latitude, but this does not apply to all the planets. (11) The explanation for the

יחסר החצי¹ בעבור הרוחב, ואם שניהם בפאה אחת והרוחב² שוה אין ספק שהיא מחברת שלימה.

4 (I) והשמאלי ינצח³ את ההווה בקו גלגל המזלות⁴, וככה את⁵ הדרומי, וההווה⁶ ינצח הדרומי⁷, ובעל⁸ המרחב⁹ הדרומי¹⁰ המעט¹¹ ינצח בעל¹² המרחב הדרומי הרב, בעבור שהכוכב ההווה בפאת שמאל יש לו כח רב, כי הישוב הוא בפאת שמאל, ובהיות השמש במזלות השמאליים¹³ או יש לו כח גדול לחמם האויר. (2) דרך הנצוח. ההווה במקום גבהותו הוא קרוב מגלגל המזלות והנה הוא כדמות נשמה, ובהיותו שפל הוא קרוב אל האדמה¹⁴ והנו¹⁵ כמו גוף, והמעשה כלי לנשמה כי הגוף הוא כלי, והנה זה¹⁶ בשני הנצוחים. (3) ויהיה לנצוח גלגל המוצק¹⁷ כח רב בעבור שיעמוד שם הכוכב הרבה, כי בגלגל הקטן במהרה ישתנה מגבהות לשפלות.

5 (I) הנוכח. אם עשית¹⁸ קו הגלגל, הנה¹⁹ אחר ק"פ מעלות יהיה סוף הקו אם הגלגל נחלק על ש"ס²⁰. (2) ואם תשים הסימן לפנים²¹ מהגלגל או חוץ ממנו לא יהיה ביניהם ק"פ²². (3) רק²³ אם היו שני הכוכבים²⁴ בפאות משונות, רחב זה כרחב²⁵ זה, הנה²⁶ נקודת גלגלם²⁷ לא תהיה נקודת²⁸ אפודת הגלגל. (4) ולעולם יהיה²⁹ ביניהם ק"פ מעלות³⁰ אם תחלק הגלגל על ש"ס.

6 (I) המבטים. אם נעשה עגול שיהיה הקו הסובב אותו ש"ס יהיה האלכסון בדרך קרובה³¹ ק"כ, ונרצה לחלק³² הגלגל על חצי הנה³³ יתחלק עם³⁴ האלכסון. (2) ואם רצינו לחלק³⁵ על שלשה, והטעם לעשות צורה שלישית³⁶ בתוך העגול ויהיה³⁷ כל צלע שוה, נקח מהקו³⁸ שלישיתו, שהוא³⁹ מאה ועשרים, או יהיה מהאלכסון על תשעים, וזה הוא מבט שלישית. (3) ואם⁴⁰ נעשה יתר⁴¹ בחצי חצי⁴² האלכסון, שהוא שלשים מעלות, והקו הסובב יהיה קשת⁴³ ששים מעלות, או יהיה מבט ששית. (4) והיתר⁴⁴, שהוא כמו⁴⁵ צלע, שוה עם הקו; על כן, תמצא ביתרים⁴⁶ ובקשות יתר⁴⁷

¹החצי¹ פמטאני; י חצי. ²והרוחב² מטאני; פ וברוחב. ³ינצח³ פמטאני; י ימח. ⁴המזלות⁴ מטאני; פ חסר. ⁵את⁵ פמטאני; י אם. ⁶וההווה⁶ פמטי; נ והנה; א חסר. ⁷ינצח הדרומי⁷ פמטי; א חסר. ⁸ובעל⁸ מפני; ט ובעבור; א חסר. ⁹המרחב⁹ פמטאני; א חסר. ¹⁰הדרומי¹⁰ מטני; פא חסר. ¹¹המעט¹¹ פמאטי; נ חסר. ¹²בעל¹² פטאני; מי בכל. ¹³השמאליים¹³ פמאני; ט הצפוניים. ¹⁴והנה הוא כדמות ... האדמה¹⁴ למטאני; פ חסר. ¹⁵והנו¹⁵ למא; פטי והנה הוא. ¹⁶זה¹⁶ פלמטאני; י הוא. ¹⁷המוצק¹⁷ פלמאני; ט המזלות. ¹⁸עשית¹⁸ מטאני; פ עשית. ¹⁹הנה¹⁹ פמטני; א הוה. ²⁰סוף הקו ... ש"ס²⁰ פמאני; ט סוף הגלגל כי הגלגל נחלק על ש"ד; י סוף הקו אם הקו נחלק על ש"ס. ²¹ואם תשים הסימן לפנים²¹ פמטאני; י ואם תשים הגלגל לפנים²² ק"פ²² פמאטי; נ קע. ²³רק²³ פמטאני; י חסר. ²⁴הכוכבים²⁴ פמטי; א כוכבים. ²⁵כרחב²⁵ פמאני; ט ברחב. ²⁶הנה²⁶ אני; מ והנה; פ הכח. ²⁷גלגלם²⁷ מטני; פ הגלגלים; א גלגל. ²⁸נקודת²⁸ פמאטי; נ חסר. ²⁹יהיה²⁹ פמאני; ט חסר. ³⁰מעלות³⁰ פמאני; ט חסר. ³¹קרובה³¹ פמני; ט קרוב; אי חסר. ³²לחלק³² פמאטי; נ לחלוק. ³³הנה³³ פמאני; נט יהיה. ³⁴עם³⁴ פמטאני; נ על. ³⁵לחלק³⁵ פטאני; מנ לחלקנו. ³⁶שלישית³⁶ פמטאני; נ שלישית. ³⁷ויהיה³⁷ פמאני; ט ותהיה. ³⁸מהקו³⁸ פטאני; י < שלישית בתוך העגול ויהיה כל צלע שווה נקח מהקו. ³⁹שהוא³⁹ פמאטי; נ חסר. ⁴⁰ואם⁴⁰ פמאני; ט ואו. ⁴¹יתר⁴¹ פמאני; טי יותר; נ חסר. ⁴²בחצי חצי⁴² פמאני; נט בחצי. ⁴³יהיה קשת⁴³ פמאטי; נ בקשת. ⁴⁴והיתר⁴⁴ פמאני; ט והיתר; י והיתר. ⁴⁵כמו⁴⁵ פמאני; ט חסר. ⁴⁶ביתרים⁴⁶ פמטאני; י ביתדים. ⁴⁷יתר⁴⁷ פמאני; ט יתר; י יתר.

half conjunction is that a full conjunction is in longitude and latitude, so half ⟨of the conjunction⟩ is missing on account of the latitude, but if both are in the same side [with respect to the ecliptic] and they have the same latitude there is no doubt that the conjunction is full.^[4]

4 (1) A northern ⟨planet⟩ is victorious over one that is in the line of the zodiac, and likewise over one that is southern ⟨to it⟩; one ⟨that is in the line of zodiac⟩ is victorious over a southern ⟨planet⟩; and one in a lower ⟨southern⟩ latitude is victorious over one that has a higher southern latitude, because a planet that is in the north has greater power, inasmuch as the ecumene is in the north [with respect to the equator], and when the Sun is in the northern signs it has a great power to warm the air. (2) The path of victory. ⟨A planet⟩ at apogee is close to the zodiac, so it resembles the soul; when it is low it is close to the Earth and is like a body. Action is a tool for the soul because the body is a tool, and this applies to the two paths of victory. (3) Being victorious in the eccentric circle has great power, because the planet stays there a long time, inasmuch as in the epicycle it passes quickly from apogee to perigee.^[1]

5 (1) Opposition. If you draw a circumference, the extreme of the circumference will come after 180°, if the circle is divided into 360 ⟨degrees⟩. (2) And if you put the sign inside or outside the circle there will not be 180 ⟨degrees⟩ between them [two stars/planets]. (3) But if the two planets are on opposite sides [with respect to the ecliptic], and the latitude of the one is [of the same magnitude] as the latitude of the other, then a point of their circles will not coincide with a point of the ecliptic.^[1] (4) And there will always be 180° between them when you divide the circle into 360 ⟨degrees⟩.^[2]

6 (1) Aspects.^[1] If we draw a circle whose circumference has 360 ⟨degrees⟩ ⟨and measure the length of⟩ the diameter ⟨it will cover⟩ approximately 120 ⟨degrees⟩^[2]; ⟨if⟩ we want to halve the ⟨circumference of the⟩ circle, it is bisected by the diameter.^[3] (2) If we want to divide it [the circumference] into three parts, namely, to inscribe an equilateral triangle in the circle, we take a third of the circumference, which is 120 ⟨degrees⟩, then this will take 90 ⟨degrees⟩ from the diameter,^[4] and this is the aspect of trine. (3) If we draw a chord at a quarter of the diameter, which is 30 degrees ⟨of the diameter⟩, and the ⟨corresponding segment of the⟩ circumference is an arc of 60 degrees, this produces an aspect of sextile.^[5] (4) The chord, which is like a side [of the triangle], is equal

קשת ל' גם הוא ל'. (5) ומבט רביעית הוא בחצי² הגלגל. (6) והנה אין בעגול יתרים³ וקשתות⁴ כאלה.

7 (I) ועוד, כי כל חשבון לעולם יהיה החשבון שהוא חמישי⁵ לראשון שתשים כדמותו, על כן מספר החמשה שומר עצמו⁶ כדמות האחד⁷. (2) ואם חשבת לחלקו יהיה חלקו⁸ החמישי⁹ כחלק הראשון לזוג ולנפרד. (3) השלישי¹⁰ גם כן¹¹ יהיה¹² כמוהו, מזוג או נפרד, רק בחלקו לא יהיה שוה. (4) על כן¹³ החמישי אהבה גמורה והשלישי חצי אהבה. (5) והמספר הרביעי¹⁴ לעולם משונה מהראשון, על כן הוא מבט איבה. (6) וככה¹⁵, המזלות ממבט¹⁶ שלישית על תולדת אחת. (7) ואם טען טוען: הנה מבט ששית¹⁷ איבה כי זה¹⁸ יבש וזה לח, ומה הפרש יש¹⁹ בינו ובין מבט²⁰ רביעית²¹? (8) התשובה: כי מבט רביעית הוא הפך²² בתולדת הפועלת, שהוא העיקר.

8 (I) ויאמר יעקב אלכנדי²³: בעבור²⁴ היות המזלות שנים עשר, ויתחלק על שלשה או על ארבעה²⁵ ועל ששה, ככה היו המבטים. (2) ודברי תלמי²⁶ אמת²⁷: אם היה כוכב אחד בראש אריה²⁸ ואחד בראש קשת, במקום שיהיה²⁹ רחבו קרוב מחמשים מעלות, אז יהיה³⁰ ביניהם³¹ במעלת³² לוח הארץ | קרוב ממאה ושנים, וככה³³ מבט³⁴ רביעית ישוב³⁵ בשלישית³⁶ והששית ברביעית³⁷, ובמזלות³⁸ הקצרים³⁹ כמו דגים וטלה יעלו שניהם בקרוב משבע ועשרים מעלות, והנה אין זה³⁹ נחשב מבט, ומבט רביעית יהיה בששית והשלישית⁴⁰ ברביעית. (3) ומאמר חכמי ישמעאל במבט רביעית הוא אמת⁴¹, כי לעולם יתחלק הגלגל מאיזה מקום שתרצה על שני אלכסונים, והנה יהיו ארבעה יתדים⁴² שווים.

9 (I) הקבול ונתינת הכח⁴³. דרך סברא, ואין צריך לתת טעם, כי אם היה הכוכב חזק במקום שנקרא ביתו, או בית כבודו, אז⁴⁴ יחזק כמו אם⁴⁵ כוכב⁴⁶ יביט אליו באחד המבטים, והקל יתן⁴⁷ הכח לכבד בעבור רוץ הקל ויתפרד מהעליון⁴⁸.

¹ ל' פמטני; א חסר. ² בחצי פמאטי; נ חסר. ³ יתרים פמטאני; י יתדים. ⁴ וקשתות תיקנתי עפ"י הקשר הדברים; למטאניפ קשרים. ⁵ חמישי פמטא; י ה'; נ חמשים. ⁶ עצמו פמטאני; י בעצמו. ⁷ כדמות האחד פמטאני; י בדמות. ⁸ חלקו פמאטי; נ חילוק; ט החלוק. ⁹ החמישי פמאטי; נ היה. ¹⁰ אהבה גמורה והג' חצי אהבה. ¹¹ השלישי פמאני; י הג'; ט שלישי. ¹² כן פמטא; נ חסר. ¹³ יהיה פמטאני; פ חסר. ¹⁴ כן פמאני; ט < אמר. ¹⁵ והמספר הרביעי פמאטי; נ והד'. ¹⁶ וככה פמאני; ט וכן. ¹⁷ ממבט פמטאני; א ממול. ¹⁸ ששית פמטאני; י ששי. ¹⁹ זה פמטאני; א < רביעית. ²⁰ פמטאני; א חסר. ²¹ ממבט פמאטי; נ חסר. ²² רביעית פמטאני; י ד'. ²³ הוא הפך פמטאני; י ההיא שהפך. ²⁴ ויאמר יעקב אלכנדי פמאני; י ויאמר יעקב אלכנדי; ט אמר אלכנדי. ²⁵ בעבור פמאני; ט כי בעבור. ²⁶ ארבעה פמאטי; ט שמונה. ²⁷ תלמי פמאני; ט בטלמיס. ²⁸ אמת פטני; א < כי; י אחת. ²⁹ אריה פמטאני; פ עליון. ³⁰ שיהיה פמטאני; פ < אם; א שהיה. ³¹ אז יהיה פמאני; ט והיה. ³² ביניהם פמטאני; פ חסר. ³³ במעלת פמאני; ט כמהלך. ³⁴ וככה פמטאני; י וכן. ³⁵ ישוב פמאני; ט והיה. ³⁶ בשלישית פמאני; פ בשלישית. ³⁷ ברביעית פמאני; ט ברביעית. ³⁸ ובמזלות פמאני; ט ומזלות. ³⁹ הקצרים פמטאני; א הקצבים. ⁴⁰ זה פמאטי; נ חסר. ⁴¹ והשלישית אמת; פ < יהיה. ⁴² הוא אמת פמטאני; פ כי אמר. ⁴³ יתדים; נ פמטא יתרים. ⁴⁴ ונתינת הכח לאני; מפי ונתינת כח; ט תת הכח. ⁴⁵ אז פמאני; לט או; פ חסר. ⁴⁶ אם למטאני; י ואם; פ חסר. ⁴⁷ חזק במקום ... כוכב למטאני; פ חסר. ⁴⁸ יתן מטאניפ; א חסר. ⁴⁹ מהעליון פלמטני; א < והמחלקת בין החכמים היה בעבור רוץ הקל ויתפרד מהעליון.

to the line ⟨of the arc⟩; for this reason, you will find in the ⟨table of⟩ chords and arcs that a chord of 30 corresponds to an arc of 30.^[6] (5) The aspect of quartile is in the middle of the circle.^[7] (6) So, in the circle there are no chords and arcs like these.

7 (1) In addition, regarding any number, always the number that is the fifth to any other number you conceive is in its likeness; hence the number five preserves itself, as does ⟨the number⟩ one.^[1] (2) If you divide it, the division of the fifth is like the division of the first, ⟨namely,⟩ into even and odd.^[2] (3) The third ⟨number⟩ is also like it [i.e., like the fifth], ⟨made up⟩ of even and odd,^[3] but it is not the same in its division.^[4] (4) Therefore, the fifth ⟨number⟩ is absolute love and the third is half love. (5) The fourth number is always incompatible with the first, so it is an aspect of antagonism. (6) Likewise, the signs that are in trine have one nature.^[5] (7) And if someone argues: sextile is the aspect of antagonism because one is dry and the other is moist, so how does it differ from quartile? (8) The answer is that quartile is the opposite with respect to the nature of the active agent, which is the essence.^[6]

8 (1) Ya'qub al-Kindī said: Because there are twelve signs, and because ⟨twelve⟩ is divisible by three, four, and six, the aspects work out this way.^[1] (2) Ptolemy's statements are true: if one planet is in the head of Leo and another in the head of Sagittarius, in a place whose latitude is close to 50°, they will be approximately 180° apart on the latitude plate ⟨of the astrolabe⟩, and in this manner the aspect of quartile is converted into trine and sextile into quartile. In the case of the short signs such as Pisces and Aries, they will rise approximately 27°, which is not considered to be an aspect, and the aspect of quartile will be sextile and trine will be quartile.^[2] (3) The statement made by the Arab scientists is true, because at any place you choose the circle is always divided by two ⟨perpendicular⟩ diameters, producing four equal cardines.

9 (1) “Receiving” and “giving power”. ⟨This is known⟩ through logical assumption, so there is no need to explain it; if a planet is strong in the place that is called its house, or its house of exaltation, then its power is increased if it is aspected by ⟨another⟩ planet, and the lighter [i.e., quicker] ⟨planet⟩ gives its power to the heavier [i.e., slower] ⟨planet⟩, because the lighter ⟨planet⟩ runs away and is separated from

(2) והמחלוקת בין חכמים היתה בעבור בלבול הדינין,¹ ושילקח² ממאות רבות.³
 (3) ודרך סברא להיות⁴ האמת במספר האורים, וכח המחובר יותר מהמבט אין
 בו ספק. (4) והשבת האור גם הוא ידוע, וככה מניעת האור,⁵ ודרך השומם כאדם
 שהוא יושב לבדו. (5) כח המעלות.⁶ הסבה ידועה, כי בשני מקומות יתחברו השני
 הגלגלים,⁷ והדרך האחרת כי⁸ עשרים⁹ מקשת תעלה בעלות¹⁰ עשר מסרטן, וזה תוכל
 לדעתו בלוח הארץ.

10 (I) כאב. הבית הראשון של שבתאי הוא גדי, ושל צדק קשת¹¹, ושל מאדים
 טלה, ושל נוגה שור, ושל כוכב חמה תאומים. (2) והנה שמו תחלת בית¹² הכוכב
 הראשון כמו מזל¹³ טלה, להיות כאב הראש לבעל¹⁴ הבית. (3) על כן, יש¹⁵ לשבתאי
 בטלה החזה בעבור היותו רביעי¹⁶ לשבתאי, שהוא ביתו גדי. (4) והוא לבית¹⁷ צדק
 חמישי, על כן כאב צדק בו¹⁸ הוא הלב, ומאדים הראש¹⁹ כי²⁰ הוא²¹ ביתו הראשון.
 (5) והנה הוא טלה לבית שמש תשיעי, כקשת²² לטלה²³, והנה יש לשמש הירכים
 ולנגה²⁴ הרגלים כי הוא שנים עשר לביתו הראשון²⁵, ולכוכב חמה שוקים כי הוא
 עשתי עשר לביתו הראשון²⁶. (6) ועל זה הדרך²⁷ מזל שור, כי לנגה הראש והצואר
 למאדים כי הוא שני מביתו הראשון²⁸. (7) והנה בתאומים יהיה הצואר לנגה בעבור
 שהוא שני לבית הראשון, ולשמש באריה הראש כי הוא בעל הבית, ועל זה הדרך
 כל המזלות.

11 (I) עין²⁹ הבתים. הטעם על המראה³⁰. (2) והנה הראשון לבן³¹ כדמות זרוח
 השמש, והבית השביעי³² דומה לראשון, ויהיה³³ העשירי אדום בעבור כחו, וכדמותו
 לעולם הוא הרביעי³⁴. (3) והעשתי עשרה והחמישי מעורבים בעבור היותם בין שני
 היתדות, והם מביטים³⁵ אל המעלה הצומחת; על כן, יש להם דמות טוב. (4) והשמיני

¹ והמחלוקת בין חכמים ... הדינין] למטני; אפ נח. ² ושילקחון] מינל; פ שילקחו; אט ושילקו.
³ ממאות רבות] מטנאפי; ל חסר. ⁴ להיות] למאפטי; נ להיותם. ⁵ גם הוא ידוע וככה מניעת האור;
 פלמאני; ט ומניעתו ידוע. ⁶ כח המעלות] פלמטאני; י וכח מעלות. ⁷ הגלגלים] לפי; מנ הגלגל; ט
 גלגלים; א גלגל. ⁸ כן] פלמטאני; י היא. ⁹ עשרים] פלמאני; ט העשרים. ¹⁰ תעלה בעלות] פלמטאני;
 י תעל המעלות. ¹¹ קשת] פלמאני; ט חסר. ¹² בית] למאפטי; נ חסר. ¹³ מזל] פלמטאני; י חסר.
¹⁴ לבעל] ט; למנ ולבעל; פא ובעל. ¹⁵ יש] למטאני; פ חסר. ¹⁶ לשבתאי בטלה ... רביעי] למא;
 פטני חסר. ¹⁷ לבית] פלמטאני; א בית. ¹⁸ בן] פלמאני; ט חסר. ¹⁹ הראש] פלמטאני; י < הוא. ²⁰ כן]
 פלמאני; ט חסר. ²¹ הוא] למאפטי; נ חסר. ²² כקשת] למטאני; פי בקשת. ²³ לטלה] פלמטאני; י טלה.
²⁴ ולנגה] למטאני; פ אל נגה. ²⁵ הראשון] פלמטאני; י חסר. ²⁶ ולכוכב חמה ... הראשון] למא; פטני
 חסר. ²⁷ הדרך] מטאני; פ המאמר. ²⁸ ועל זה הדרך ... הראשון] מטנאפי; ל חסר. ²⁹ עין] פלמאני; ט
 ערך. ³⁰ הטעם על המראה] לפטאני; מ הוא בעל הבית ועל. ³¹ לבן] פלמאני; ט חסר. ³² השביעי]
 פלמאני; ט התשיעי. ³³ ויהיה] פלמטאני; י חסר. ³⁴ הרביעי] למטאני; פ הרביעי. ³⁵ מביטים] פלמאני;
 ט < לעולם.

the superior ⟨planet⟩. (2) The disagreement among the scholars was due to the confusion about the ⟨astrological⟩ judgments.^[1] (3) It is logical that the truth depends on the number of lights,^[2] and there is no doubt that the power of the ⟨planet in⟩ “conjunction” is greater than ⟨the power of the planet in⟩ “aspect”. (4) “Reflecting the light” is also known, as well as “occlusion of light”, and the condition of “desolation” is like a man sitting alone.^[3] (5) The power of the degrees. The reason is known, because the two circles intersect in two places; the other method is that the 20th ⟨degree⟩ of Sagittarius rises when the 10th ⟨degree⟩ of Cancer rises, as you may know from the latitude plate ⟨of the astrolabe⟩.^[4]

10 (1) Pain. The first house of Saturn is Capricorn; of Jupiter, Sagittarius; of Mars, Aries; of Venus, Taurus; and of Mercury, Gemini. (2) They made the beginning of the first house of the planet equivalent to Aries, so pain in the head ⟨was assigned⟩ to the lord of the house. (3) For this reason, Saturn in Aries has the chest, because it [i.e. Aries] is the fourth ⟨counting from⟩ Saturn’s ⟨first⟩ house, Capricorn. (4) And it [i.e. Aries] is the fifth ⟨counting from⟩ the ⟨first⟩ house of Jupiter [i.e. Sagittarius], hence the pain of Jupiter in it [i.e. in Aries] is the heart, and ⟨the pain⟩ of Mars ⟨in Aries⟩ is the head, because it is its first house. (5) Now Aries is the ninth ⟨counting from⟩ the house of the Sun [i.e. Leo], just as Sagittarius is to Aries, so the Sun ⟨in Aries⟩ has the thighs. Venus ⟨in Aries⟩ has the feet because it [i.e. Aries] is the twelfth ⟨counting from⟩ its first house [i.e. Taurus]; Mercury ⟨in Aries⟩ has the shanks, because it [i.e. Aries] is the eleventh ⟨counting from⟩ its first house [i.e. Gemini]. (6) The same method is applied to Taurus: Venus has the head ⟨in Taurus⟩ and Mars the neck, because it [i.e. Taurus] is second ⟨counting from⟩ its [i.e. Mars’] first house [i.e. Aries]. (7) Similarly, in Gemini the neck belongs to Venus because it [i.e. Gemini] is the second ⟨counting from⟩ its first house [i.e. Taurus], and the Sun in Leo has the head because it is the lord of the house. The same method applies to all the signs.^[1]

11 (1) The color of the ⟨mundane⟩ houses. The explanation is based on the appearance. (2) The first ⟨mundane house⟩ is white like the sunrise, and the seventh house is similar to the first; the tenth is red, because of its power, and the fourth always resembles it. (3) The eleventh and the fifth are mixed, because they are between the two cardines, and they aspect the degree of the ascendant; therefore, they have a good

והשני פחותים¹ מהם בעבור שלא יסתכלו אל המעלה הצומחת². (5) והשני והשנים עשר שחורים בעבור שהם בתים נופלים ורעים, ולא יביטו אל המעלה הצומחת³.

12 I (I) השמחות. שמחת⁴ כוכב חמה בהיותו בבית הראשון⁵ בעבור שהוא יורה על הנשמה; ועל החכמה⁶ גם כן כוכב חמה, כי הלבנה תורה על הגוף והוא על הנשמה⁷ בעבור היותו עליון על הלבנה וקרוב אלינו. (2) ושמחת הלבנה בבית השלישי בעבור שיוורה בתולדתו על הדרכים הקרובים והשיחות והחכמות⁸ | הקרובות. (3) ושמחת^{32א} נגה בחמישי כי תולדת נגה השמחה והתענוג, ויהיה⁹ שמחת מאדים בבית הששי כי הוא בית התחלואים והפצעים, וככה תולדת מאדים. (4) ויהיה בית שמחת השמש בבית התשיעי כי היא תורה¹⁰ על האומנות והתורות והחכמה, וככה הבית התשיעי. (5) ויהיה שמחת צדק בבית עשתי עשר כי הוא יורה על הריוח והחסד והעושר והמזל הטוב, וככה הבית העשתי עשר¹¹. (6) ויהיה שמחת שבתאי בשנים עשר¹² כי הוא יורה על הקלון ועל המריבות ובית הסוהר, וככה הבית השנים עשר.

5 §

I I (I) השמש תורה על החיים כי הוא המאור הגדול, והוא אור¹³ כל הגוויות והמתכות והצמחים וכל הבעלי חיים¹⁴. (2) ויאמר חכם¹⁵ יון כי נשמת האדם מכח השמש, על כן תורה על החכמה ועל הכבוד שהוא כדמות מלך, והטוב בעבור שיוורה על המזל הטוב¹⁶ במבטים, והחן¹⁷ ככה¹⁸. (3) ויש לו חצי הגלגל הגדול כי הוא המאור הגדול. (4) והוא זכר כי¹⁹ תולדתו חמה, והטעם שיוליד חום, וככה תולדת היום²⁰. (5) ויש לו הלב, כי הוא עיקר הגוף, וחלק במוח כי הוא נקשר עם הלב בעבור הרשת²¹ שהוא על המוח²², והוא מגידי הלב. (6) והוא לאות על האב, כי השמש כדמות האב לכל

¹ [פחותים] פמאני; ט פחות. ² על כן יש להם ... הצומחת] מטנאפי; ל חסר. ³ והשני והשנים ... הצומחת] פלמאני; ט חסר. ⁴ [שמחת] למטאני; פ שמחה. ⁵ [הראשון] מטאני; לפ ראשון. ⁶ [החכמה] למטאני; פ החומה; י חסר. ⁷ ועל החכמה ... הנשמה] פלמאני; י חסר. ⁸ [החכמות] למטאני; פ והומות. ⁹ [ויהיה] פלמאני; נ והיו; ט חסר. ¹⁰ [היא תורה] פלמאני; י הוא יורה. ¹¹ כי הוא יורה ... עשר] למאפטי; נ חסר. ¹² [בשנים עשר] למאפטי; נ בבית י"ב. ¹³ [והוא אור] פמטני; א חסר. ¹⁴ [הבעלי חיים] פמאני; נ ב"ח; ט חי. ¹⁵ [ויאמר חכם] מטאני; פנ ויאמרו חכמי. ¹⁶ [שיוורה על המזל הטוב] פמאני; ט על הטוב. ¹⁷ [במבטים והחן] פמאני; נ והחן במבטיה. ¹⁸ [ככה] פמטאני; י בכח. ¹⁹ [והוא זכר כי] פמאני; ט זכר. ²⁰ [וככה תולדת היום] פמאני; ט חסר. ²¹ [הרשת] פמטאני; י הראש. ²² על המוח] פמאני; ט במוח.

image. (4) The eighth and the second ⟨houses⟩ are inferior to them because they do not aspect the degree of the ascendant. (5) The sixth and the twelfth ⟨houses⟩ are black because they are houses that are falling ⟨from the cardines⟩ and malefic and do not aspect the degree of the ascendant.^[1]

12 (1) Joys. Mercury rejoices when it is in the first ⟨mundane⟩ house because it indicates the soul; Mercury also ⟨indicates⟩ wisdom, for the Moon indicates the body and it [i.e. Mercury] indicates the soul, because it [i.e. Mercury] is above the Moon and close to us. (2) The joy of the Moon is in the third house, because by its nature it indicates short journeys and idle chatter and the near sciences. (3) The joy of Venus is in the fifth ⟨house⟩, because the nature of Venus is joy and pleasure. The joy of Mars is in the sixth ⟨house⟩, because it is the house of diseases and wounds, and that is the nature of Mars. (4) The house of joy of the Sun is the ninth house, because it indicates crafts and religions and wisdom, and that is the ⟨nature of the⟩ ninth house. (5) The joy of Jupiter is in the eleventh house, because it indicates profit and kindness and wealth and good fortune, and that is ⟨the nature of⟩ the twelfth house. (6) The joy of Saturn is in the twelfth ⟨house⟩, because it indicates shame and disputes and prison, and that is the ⟨nature of the⟩ twelfth house.^[1]

§5

1 (1) The Sun indicates life because it is the great luminary, and it is light to all bodies and metals and plants and all animals. (2) A Greek scholar said that the human soul derives from the power of the Sun,^[1] so it [the Sun] indicates wisdom and honor, which is like the image of a king, and good fortune because it indicates fortunate aspects, and beauty ⟨because it⟩ is like that [i.e. it indicates fortunate aspects]. (3) It has the “greater half” of the circle because it is the great luminary.^[2] (4) It is masculine because its nature is hot, meaning that it generates heat, and this is also the nature of the day. (5) The heart belongs to it, because it is the essence of the body, and part of the brain, because it is connected to the heart by means of the net that is on the brain, and it is one of the blood vessels of the heart. (6) It gives an indication about the father, because the Sun is like a father for all plants and animals; and

הצמחים והחיים, על כן הלבנה כאם, כי אורה מהשמש. (7) והעין הימנית ביום¹ לשמש, כי הגוף נחלק לשני המאורות שהם מושלים, והחלק הימני, שהוא החזק, לשמש, והעין בעבור האור שיש בו² דומה לשמש, ויהיה גם כן לזכרים בעבור שהם חמים³, ולא כן הלבנה בעבור היותה קרה. (8) ובעבור היות הממשלה בלילה ללבנה, היה לה העין הימני לזכרים⁴ בעבור שהיא אורה על הארץ, והיה השמש לאות על השמאלי⁵ בעבור היותו למטה. (9) והשנים הקטנות י"ט כי במספר הזה יתחברו⁶ שני המאורות במהלכם האמצעי, וזהו מחזור המולדות. (10) והגדולות מאה ועשרים כי אלה⁷ שנות חיי כל אדם כפי התולדת⁸, והאמצעיות רביעית הגדולות מחוברת⁹ עם חצי הקטנות. (11) וטעם העצומות על דעת חכמי הודו, כי במספר הזה יתחברו המאורות במהלכם האמצעי, ומהלך האמצעי לשמש בלוחות הודו¹⁰ אינו ככתוב¹¹ בלוחות שחברתי לך, ושניהם נכונים. (12) ונסו¹² חכמי המזלות כי ביום הראשון יש כח לשמש; והנה היתה השעה הראשונה המעוותת לשמש, והשנית¹³ לגנה, שהוא שפל ממנה¹⁴ והוא משתתף עם השמש כי הכח לבעל היום, ואחר שהדבר כך עלה להיות תחלת ליל חמישי לשמש, והמתחיל לשמש הוא הפקיד¹⁵ על היום או על הלילה. (13) ושנות אלפרדאר¹⁶ הזכירו¹⁷ חכמי פרס ולא נתנו טעם, ואחרים אמרו¹⁸ עשירית שנות השמש הגדולות, ודעת תלמי י"ט בעבור¹⁹ מחברת²⁰ המאורות. (14) ותולדתו חם ויבש כי הוא מוליד חום ויובש²¹, רק היא | ממוסכת כי תולדת³² החיים חום על²² ליחה, ועינו לבן בעבור גודל מאורו, כי האור לבן. (15) ודברי תלמי, שמעשיו כל²³ מעשה, דבר נכון, כי המאורות הם המושלים, וכפי קבול כל מדינה²⁴ כחם; בעבור מרחב הארץ, ככה תהיינה צורות²⁵ בני האדם²⁶. (16) ויש אומרים שהוא קצר קומה²⁷, כי כן האריה, ושנוי העין בעבור היותו המאור הגדול, ואחר שהוא מושל יראה כחו בעין האחת, והלבנה תורה על האחרת, ופניו²⁸ עגולים ופיו רחב, כי כן האריה.

¹ ביום] פמטאני; י כיום. ² בן] פמטני; א חסר. ³ חמים] פמטאני; י דומים. ⁴ הימני לזכרים] פמטאני; י חסר. ⁵ בעבור שהיא ... השמאלי] פמאני; טי חסר. ⁶ יתחברו] פמטאני; י נתחברו. ⁷ אלה] מאי; פ חסר. ⁸ התולדת] פמטאני; י תולדת. ⁹ מחוברת] מא; ט עם מחברת; פי מחברת. ¹⁰ בלוחות הודו] מאני; פ ובלוחות הודו; י בלוחות; ט בלוחות כ"ז. ¹¹ ככתוב] מטאני; פ כתו'. ¹² ונסו] פמטאני; י ונסום. ¹³ והשנית] מא; פטנ והשני; י והשנים. ¹⁴ ממנה] פמטאני; י ממנו. ¹⁵ הפקיד] טאני; מפי פקיד ¹⁶ אלפרדאר] מטאני; נפ האלפרדאר. ¹⁷ הזכירו] פמאטי; נ הסכימו. ¹⁸ אמרו] פמאטי; ט אומרים. ¹⁹ בעבור] פמאטי; ט כי כן. ²⁰ מחברת] פמאני; טי מחברות. ²¹ כי הוא ... ויובש] פמאטי; נ חסר. ²² על] פמאטי; נ עם. ²³ כל] מטאני; פ כלם. ²⁴ כל מדינה] פמאני; ט המדינה; י כל המדינה. ²⁵ צורות] פמטאני; י צורת. ²⁶ האדם] מאני; פטי אדם ²⁷ קצר קומה] מטאני; פ קצר. ²⁸ ופניו] פמאטי; ט ופיניו.

consequently the Moon is like a mother, because its light comes from the Sun. (7) The right eye belongs by day to the Sun, because the body is divided between the two luminaries that are rulers, and the right side ⟨of the body⟩, which is the stronger one, belongs to the Sun, and the eye because the light within it is like the Sun, and it belongs to the males because they are hot; but this is not the case with the Moon, which is cold. (8) Because rulership over the night belongs to the Moon, ⟨by night⟩ it has the right eye of males, because its light is above the Earth, and the Sun ⟨by night⟩ signifies the left ⟨eye⟩, because it is underneath ⟨the Earth⟩. (9) Its least years are 19, because in this number ⟨of years⟩ the two luminaries conjoin in their mean motion, and this is the cycle of the mean conjunctions of Sun and Moon. (10) Its great ⟨years⟩ are 120, because this is the natural human lifespan. Its middle ⟨years⟩ are a quarter of the great ⟨years⟩ plus half of the least ⟨years⟩. (11) The explanation for the greatest ⟨years⟩, according to the Indian scientists, is that in this number ⟨of years⟩ the luminaries will conjoin in their mean motion, and the mean motion of the Sun in the tables of India is not the same as what is written in the tables that I have compiled for you;^[3] but both are correct. (12) The astrologers have found by experience that the Sun has power on the first day ⟨of the week⟩; so the first seasonal hour belongs to the Sun, and the second to Venus, which is below it and participates with the Sun, because the power belongs to the lord of the day; accordingly the beginning of the night of the fifth day is assigned to the Sun, and ⟨the planet that⟩ begins to serve is the lord of the day or of the night.^[4] (13) The Persian scientists mentioned the years of the *fardâr* but did not provide any explanation;^[5] others said ⟨that a *fardâr* lasts⟩ one tenth of the great years of the Sun. Ptolemy's opinion ⟨is that it lasts⟩ 19 ⟨years⟩,^[6] because of the conjunction of the luminaries. (14) Its nature is hot and dry, inasmuch as it generates heat and dryness, but it is mixed, because the essential natural quality of life is heat with moisture. Its color is white because of the intensity of its luminosity, inasmuch as light is white. (15) Ptolemy's statement, namely, that all actions are its action,^[7] is correct, because the luminaries are the rulers (Gen. 1:16), and their power is in accordance with the capacity of any country to receive ⟨astrological influence⟩; the forms of the inhabitants correspond to its latitude. (16) Some say that he [i.e., one born under the sign of the Sun] is short of stature, because the lion is;^[8] the change in the eye is because it is the great luminary; because it is a ruler its power is visible in one eye, and the Moon indicates the other ⟨eye⟩; his face is round and his mouth is wide, because the lion's ⟨face and mouth⟩ are ⟨wide and round⟩.

2 (I) הלבנה תורה על החיים כמו השמש, כי אורה ממנו, ואין לה חכמה בעבור היות לה גוף עב ושחור, ואין השמש ככה. (2) וטעם השיחות בעבור שאינה חכמה, רק מה ששמע בעבור שאור הלבנה מהשמש. (3) והלבנה מושלת¹ בלילה כי תאיר העולם, והיא נקבה² בעבור היותה קרה. (4) וידענו כי לא יתכן להיות³ כל אור רק שיוליד⁴ חום, רק⁵ בעבור שאין לה כח רב, מפני שגופה קטן, לא תוכל לחמם כדי חיי תולדת האדם, והחום המעט יחל לפתח⁶ כל מקושר באויר, על כן יוסיף⁷ ליחה, כי השמש ברוב חומה תייבש. (5) ושני תולדת כפי הרביעיות ידוע, כי אחר העמדה שבעה⁸ ימים היא תוליד חום וליחה, יתחזק החום וייבש. (6) ובהיותה במקום גבהות המוצק היא קרה ולחה בעבור התרחקה מהארץ, וחומה מעט ולא יוכל חומה לייבש רק יתיר הקישור⁹, וכאשר תהיה קרובה אל¹⁰ הארץ תחמם ותיבש ותשתתף במוח, כי אורה אור השמש. (7) ושמו הריאה¹¹ לחלק הלבנה, כי היא מרחפת על¹² הלב, שהוא בחלק השמש, והוא¹³ יכניס הרוח ויוציא. (8) והלבנה היא האמצעית בין העולם השפל והעליון. (9) ושלה העין השמאלית בעבור שהשמאל פחות מהימין, ויש לו¹⁴ כח¹⁵ בכל¹⁶ הגוף בעבור שהוא דומה לאור האדם באורו שיגדל עד זמן קצוץ ואחר יחסר. (10) ויש לו חלק בפה, כי¹⁷ הוא פתח הגוף, ובזמן בעבור שהוא כמו מקרה שיתחדש. (11) וחלקו במזלות הוא הקטן כי הוא המאור הקטן. (12) ולילו¹⁸ ויומו כדרך השמש. (13) ושנותיו הקטנות¹⁹ כ"ה; כך נסו ואין להם טעם. (14) והאמצעיות רביעית הגדולות וחצי הקטנות, ויש אומרים שהאמצעיות חצי הגדולות עם חצי הקטנות והם²⁰ מ"ט וחצי. (15) והגדולות ק"ח, בחסרון²¹ י"ב מעלות משנות השמש הגדולות, בעבור שלא יראה כחו רק אחר שיצא מתחת אור²² השמש י"ב מעלות. (16) ושנות אלפרדאר תשע שנים, בחסרון חלק אחד משנות השמש, ויש שאומרים חצי ששית²³ שנותיו הגדולות. (17) וישמש עד ארבעה שנים

¹ מושלת] פמטא; י חסר. ² והיא נקבה] פמאני; ט חסר. ³ להיות] פמטא; י חסר. ⁴ שיוליד] ט; פמאני שתוליד. ⁵ רק] מאנ; פ רב; י חסר. ⁶ לפתח] פמאני; טי לפתוח. ⁷ יוסיף] פמטא; י יוליד. ⁸ שבעה] מטאני; פ שבעת. ⁹ הקישור] מטאני; פי הקשור. ¹⁰ קרובה אל] מטאני; פ על. ¹¹ הריאה] ט; פמאני הראיה. ¹² על] מטאני; פ על. ¹³ בחלק השמש והוא] פמאני; ט חסר. ¹⁴ לו] פמטא; מי לה. ¹⁵ כח] פמטא; א חסר. ¹⁶ בכל] פמטא; י חסר. ¹⁷ כן] מטאני; פ כן. ¹⁸ ולילו] פמטא; י לילו. ¹⁹ הקטנות] פמטא; י חסר. ²⁰ והם] פמאני; נ > ויש אומרים שהאמצעיות. ²¹ ק"ח בחסרון] פמאני; נ כ"ח בחשבון. ²² מתחת אור] פמטא; י מאור. ²³ ששית] פמאני; נ חסר.

2 (1) The Moon indicates life, as the Sun does, because its [the Moon's] light comes from it [the Sun]. It has no wisdom because it has a dark and black body, unlike the Sun. (2) The reason why (someone under the charge of the Moon engages in) idle chatter is that it [i.e. the Moon] is not wise; (he tells) only what he had heard because the light of the Moon comes from the Sun. (3) The Moon rules by night, because it illuminates the world, and it is feminine because it is cold. (4) We know that no light is possible unless it generates heat; but because it [i.e. the Moon] does not have great power, inasmuch as its body is small, it cannot warm enough to sustain life in accord with human nature, and the little heat (it generates) begins to "loosen the ties"^[1] (Job 38:31) in the air and thus to increase moisture, whereas the Sun's great heat dries (things) up.^[2] (5) The change in nature in relation to the quadrants is known, because seven days after its first visibility^[3] it generates heat and moisture, and (then) the heat increases and dries [things] up. (6) When it is at the apogee of the eccentric circle it is cold and moist, because it is far from the Earth, and its heat is small and its heat cannot dry [things] up, but only "loosen the ties"; and when it is close to the Earth it warms and dries up and participates in (affecting) the brain, because its light is the Sun's light. (7) They assigned the lung to the Moon's portion, because it [i.e. the lung] floats above the heart, which is in the Sun's portion, and it inhales and exhales the air. (8) The Moon is intermediate between the inferior and the superior world.^[4] (9) The left eye belongs to it, because the left is inferior to the right.^[5] It has power in the entire body, because in its light it resembles the light of a man, which grows until a certain time and then wanes. (10) It [i.e. the Moon] has a share of the mouth, which is the gate of the body, and of the beard, because it is like a contingency that is renewed. (11) It has the smaller portion of the signs, because it is the small luminary.^[6] (12) Its night and its day (in the week) are as in the case of the Sun. (13) Its least years are 25; this was found by experience and there is no explanation for it. (14) Its middle (years) are a quarter of the great (years) plus half of the least (years); but some say that the middle (years) are half of the great (years) plus half of the least (years), namely, 49½. (15) Its great (years) are 108, namely, 12 degrees less than the Sun's great years, because its power is not perceptible until after it moves 12 degrees away from the rays of the Sun.^[7] (16) (Its) *fardâr* is nine years (long), one less than the years of the (fardâr of the) Sun;^[8] some say (because it is) one twelfth of its [the Moon's] great years. (17) It [the Moon] serves for four years because the Moon is close to us; the reason is that it takes

בעבור שהלבנה קרובה אלינו¹, וטעם הארבעה שנים עד שיעבור הנוולד הארבעה התולדות, אז נבקש כמה יחיה². (18) ואין לו דמות, כאשר פירשתי בשמש, כי הוא המאור הקטן. (19) ועל דעת הקדמונים פניו יפות בעבור יופי הלבנה, ואין השמש כן³ כי לא תוכל | העין להסתכל בו, ואין גופו יפה בעבור היותו שחור, והוא⁴ בריא⁵ 33א בעבור שיליד קור ולחה⁶. (20) ושני⁷ ארוכות כי הוא יורה על העצמות, והשנים יוולדו מקור ולחה⁸. (21) וענינו שחורות⁹ בעבור שיש כדמות קדרות¹⁰ באמצע הלבנה בהיותה מלאה אורה, על כן אמרו כי מראהו מעט יש בו שחורות¹¹, וקצר קומה בעבור צורת סרטן, שהיא קצרה, ומרבה דברים כבר הזכרתיו. (22) וטעמו מלוח בדרך הנסיון¹², ואוהב הנשים כי תולדתו כמוהם.

3 (I) שבתאי. חלקו נקבי הראש על השבעה משרתים, ונתנו האוון¹³ הימנית, בעבור שהאוונים עליונות, לשבתאי העליון, ובעבור היותו עליון גם על צדק נתנו לחלקו הימנית¹⁴, והסתחול כי שבתאי יוליד המרה שחורה שהיא קרה¹⁵. (2) ואמרו עליו שהוא מוליד קור בעבור היותו רחוק מהארץ, והנה החום שלו אינו כתולדת החיים¹⁶, ולא כן צדק כי הוא יותר קרוב וגופו גדול¹⁷ מגוף שבתאי, על כן אורו גדול. (3) ויש אומרים כי צדק חם ולח כי¹⁸ כן יוליד האור¹⁹ ויש לו אור גדול; והנה מאדים אדום כי הוא חם, ויש²⁰ מעט שחרות בשבתאי²¹, וחום²² נגה מעט בעבור היות²³ גופה קטן²⁴. (4) ואמרו על שבתאי כי בהיותו בגבהות הגלגל המוצק הוא יבש, כי בהיותו קרוב אל הארץ יחמם יותר ויליד ליחה, א'ע'פ' שלא יחמם מה²⁵ שיש צורך לאדם לו²⁶. (5) ושני תולדתו מפאת גלגל²⁷ הקטן, כדרך הלבנה. (6) ויורה על תחלואים ארוכים²⁸ מהקור, וטעם ארוכים שאין לך משרת שילך מעט כמוהו, והקדחת²⁹ הרביעית שהיא ממרה³⁰ השחורה³¹ שהיא קרה, והשטות³² שיש ממנו שיבוא בעבור הקור והלחה³³, והצרעת גם כן, ונפיחות³⁴ הפנים בעבור הלחה³⁵, וחשך העין כי הוא הפך המאורות ודמותו חשוכה, ושמות הנפש בעבור³⁶ המרה השחורה. (7) ויורה על האב בעבור היותו³⁷ רחוק ממנו, ויורה על כל דבר קדמון וישן, וטעם הקבר

¹אלינו] מ; פטאני אליו. ²יחיה] מאני; פ נחיה; ט יהיה. ³כן] מטאני; פ חסר. ⁴בעבור היותו שחור והוא] פטאני; ט חסר. ⁵בריא] פאני; מ שמן; ט חסר. ⁶ולחה] מאנ; ט ליחה; פ לחות. ⁷שני] פמאטי; נ ושיני. ⁸ולחה] מאנ; י ליחה; פ לחות. ⁹כי הוא יורה ... שחורות] פמאני; ט חסר. ¹⁰קדרות] פמטא; י קרנות. ¹¹מעט יש בו שחרות] פמטאני; י יש בו מעט שחרות. ¹²בדרך הנסיון] פמאטי; נ חסר. ¹³האוון] פמטני; א לאוון. ¹⁴נתנו לחלקו הימנית] פמטאני; י נטל חלקו הימנית. ¹⁵קרה] מטאני; פ < יבשה. ¹⁶החיים] פמטני; א חסר. ¹⁷גדול] פמטאני; י > יותר. ¹⁸כי] פמאטי; נ על. ¹⁹האור] פמא; טני האיר. ²⁰יש] פמטאני; י ויבש. ²¹בשבתאי] פטאני; מי כשבתאי. ²²וחום] פמטני; א והוא. ²³היות] פמטאני; י < נוגה. ²⁴קטן] פמטאני; י קטן. ²⁵מה] פמטאני; י בה. ²⁶לו] פמאני; ט בו. ²⁷גלגל] פמאני; ט הגלגל; י גלגלו. ²⁸תחלואים ארוכים] מטאני; פ התחלואים ארוכים; י החלאים. ²⁹הקדחת] פמאני; ט חסר. ³⁰ממרה] פמאני; ט חסר. ³¹השחורה] מא; פני שחורה. ³²השטות] פמטאני; י והשמות. ³³והלחה] מאטני; פ והלחות. ³⁴נפיחות] פמטאני; י נפיחות. ³⁵הלחה] מאטני; פ הלחות. ³⁶בעבור] פמטאני; י ויליד. ³⁷היותו] מטאני; פ היותר.

four years until the native passes through the four natures,^[9] and only then can we try to find how many ⟨years⟩ he will live.^[10] (18) It has no image, as I have explained regarding the Sun,^[11] because it is the small luminary. (19) According to the Ancients he [i.e., one born under the sign of the Moon] has a handsome face because of the Moon's beauty; but the same does not apply to the Sun, because the eye cannot look at it. His body is not attractive because it [the Moon] is black, and he is healthy because it generates cold and moistness. (20) His teeth are long, because it indicates the bones, and the teeth are created by cold and moistness. (21) His eyes are dark because there is a dark patch in the middle of the full Moon; so they said that his appearance is somewhat dark. ⟨He is⟩ short of stature on account of the image of Cancer, which is short,^[12] and talkative, as I have already explained.^[13] (22) Its flavor is salty taste,^[14] ⟨as is known⟩ from experience, and he is a lover of women because its nature is like theirs.^{[15][16]}

3 (1) Saturn. They divided the orifices of the head among the seven planets. To Saturn, the uppermost, they assigned the right ear, inasmuch as the ears are uppermost, and because it is higher than Jupiter they assigned the right ⟨ear⟩ to it.^[1] ⟨They assigned it⟩ the spleen, because Saturn produces the black bile, which is cold. (2) They said that it produces cold because it is far from the Earth; hence its heat is not in accord with the nature of life, but Jupiter is not like that because it is closer ⟨to the Earth⟩ and its body is larger than Saturn's body, so its light is stronger. (3) Some say that Jupiter is hot and moist because it indeed generates light and it has a great light. Now Mars is red because it is hot, and there is a bit of blackness in Saturn, and Venus' heat is slight because its body is small.^[2] (4) They said of Saturn that when it is at the apogee of the eccentric circle it is dry, because when it is close to the Earth it warms more and generates moisture,^[3] even though it does not warm as much as man needs. (5) The change in its nature is because of the epicycle, as in the case of the Moon. (6) It indicates chronic diseases, on account of the cold; chronic, because no planet is as sluggish as it is. ⟨It also indicates⟩ quartan fever, which comes from the black bile, which is cold, and madness, which sometimes comes because of cold and moisture, and also leprosy, and facial edema, on account of the moisture, and blindness, because it is the opposite of the luminaries and its image is dark, and emotional depression, because of the black bile.^[4] (7) It indicates the father because it is far from it [the Earth],^[5] and it indicates anything that is ancient and old. The reason

בעבור כי הוא יורה על הקרקעות, בעבור שיש לו הטחול והוא יעצור¹ כח הגוף, והקבר מקום² שלא יזוז אדם ממנו, וככה תולדתו כי הוא כבד בתנועתו, ומלאך המוות³ כי הוא הפך החיים. (8) וטעם להיות בעלי האומנות מאדים ונגה וכוכב חמה כי כל אומנות צריכה למהירות, והנה תולדת מאדים לתקון, ותולדת נגה לבינה, וככה⁴ כוכב חמה. (9) וטעם רב⁵ חובל⁶ או מלח בעבור שהוא מוליד ליחה רבה, והנה⁷ היא המים והימים⁸, ומעבדי עורות כי עבודתם⁹ במים, וככה הקלפים, וקוברי מתים כי הוא יורה על העפר, על כן שלו העצמות. (10) ויורה על חכמת האמת בעבור היותו עליון, ועומד על דרך¹⁰ אחת בעבור שאיננו רץ בהליכתו, ויורה על כובנות¹¹ בעבור היות תולדתו משונה. (11) ובית הסוהר מקום שיעמוד שם האדם, כטעם הקבר, ולא יצא במהרה, וזה טעם הכבל ומכות¹² בעצים¹³ ובאבנים¹⁴, בעבור שהם קרים, והוא עצל כי איננו מהיר. (12) ולילו ויומו כדרך השמש. (13) ושנותיו הקטנות שלשים, כי אז ישוב קרוב ממקומו | הראשון, והאמצעיות חצי הגדולות¹⁵ עם חצי הקטנות¹⁶, והגדולות כמספר מעלות גבוליו בכל המזלות, ושנות¹⁶ חלקו אין להם טעם, רק הנסיון¹⁷. (14) על דעת תלמי יורה על הזקנה בעבור שהוא סוף המשרתים; והנה¹⁸ הלבנה תתן כח לנולד, ואחר כך כוכב חמה, וזה דרך אמת¹⁹. (15) וטעמו חמוץ בעבור שהחמוץ קר²⁰. (16) ארון קומה²¹ בעבור היותו עליון על כל המשרתים, וזלדקן²² כי הוא הפך הלבנה שתורה על הזקן. (17) ופניו שחורות בעבור המרה השחורה, ודקות²³ בעבור היובש, גם²⁴ כן עיניו קטנות ושחורות, ויביט אל הארץ מפני כובד²⁵ הליכתו, וידבר מעט ולא יכעס בעבור²⁶ אריכות מהלכו²⁷, וכאשר יכעס ישחית נפשו בעבור שהוא²⁸ מזיק²⁹. (18) ובעבור היותו עליון ינצח הכל. (19) ויורה על החמורים שתולדתם קרה, והשמש על הסוסים כי הם חמים, והלבנה על השוורים כי הם קרים ויש להם ממשלת הכבוד במזל שור. (20) והשמש יורה על הזהב בעבור שתולדתו חמה ממוסכת, ואין בכל המתכות כמוהו כמו שאין

¹יעצור] מיט; פ יאסור; א חסר. ²מקום] פמטאנ; י חסר. ³כי הוא כבד בתנועתו ומלאך המוות] מטאני; פ חסר. ⁴וככה] פמטני; א > והנה. ⁵רב] פמאני; ט מרב. ⁶חובל] פמאנ; טי החובל. ⁷והנה] פמאטי; נ והיא. ⁸והימים] טני; פמא וימים ⁹עבודתם] פי; מא עבודם; ט העבוד; העסק. ¹⁰דרך] פמאטי; נ < האמת. ¹¹כובנות] פמטאנ; י סכנות. ¹²ומכות] מטאני; פ ומדות. ¹³בעצים] פמטאנ; י העינים. ¹⁴ובאבנים] פמטאנ; י והאבנים. ¹⁵חצי הגדולות עם חצי הקטנות] מאפטנ; י חצי הקטנות. ¹⁶ושנות] פמא; ט ושנותיו; נ ושנת. ¹⁷הנסיון] פמאני; ט בנסיון. ¹⁸והנה] מטאני; פ והוא. ¹⁹אמת] פמאטי; נ חסר. ²⁰בעבור שהחמוץ קר] פמאטי; נ חסר. ²¹קומה] מטאני; פ הקומה. ²²זלדקן] מאני; פט ודל זקן. ²³דקות] מטאני; פ וריקות. ²⁴גם] פמטאנ; י כי. ²⁵כובד] פמטני; א חסר. ²⁶בעבור] מאפי; נ < המרה השחורה; ט חסר. ²⁷ידבר מעט ... מהלכו] פמא; ט חסר. ²⁸שהוא] פמאנ; י היותו. ²⁹מזיק] פמאני; ט חסר.

(it indicates) the grave is that it indicates the ground, since it has the spleen (assigned to it), which checks the power of the body; and the grave is a place from which a man does not move. Similarly with its nature, because its motion is sluggish. (It indicates) the angel of death because it [Saturn] is the opposite of life.^[6] (8) The reason why Mars, Venus, and Mercury are lords of the crafts^[7] is that all crafts need rapidity, and Mars' nature tends to correction, and Venus' nature to understanding, and similarly with Mercury. (9) The reason (it indicates) a ship's captain or sailor is because it generates abundant moisture, which is the water and the seas; and (it indicates) carriers because they work with water, and similarly tanners; and gravediggers, because it indicates the dust, and this is why the bones belong to it. (10) It indicates the science of truth because it is uppermost,^[8] and it is stable in one way because it does not run in its course [i.e. it moves slowly], and it indicates deceitfulness because its nature is ill-assorted. (11) Also prison, a place where a man stays, just like the grave, and (which) he does not leave quickly; this is the reason for the fetters (Ps. 105:18) and blows on trees and stones (Ex. 7:19),^[9] because they are cold. It is idle because it is not quick. (12) Its day and its night (are) as in the case of the Sun.^[10] (13) Its least years are 30, because then it returns close to its original location; the middle (years) are half of the great (years) and half of the least (years), and the great (years) are like the number of the degrees of its terms in all the signs, and there is no (known) reason for the years of its part [i.e., the *fardâr*], only experience.^[11] (14) In Ptolemy's opinion it indicates old age because it is the last of the planets; similarly, the Moon gives power to the native, followed by Mercury, and this method is true.^[12] (15) It has a sour taste, because sourness is cold. (16) He [the native] is tall, because it [Saturn] is uppermost over all the planets, and has a sparse beard because it is the opposite of the Moon, which indicates the beard. (17) His face is black because of the black bile, and thin because of the dryness, and his eyes, too, are small and black, and he looks at the ground because of the heaviness of its motion,^[13] and he is taciturn and does not get angry because of the length of its course, and when he gets angry he commits suicide because it is malefic. (18) Because it is uppermost he prevails over all. (19) It indicates donkeys because their nature is cold, just as the Sun (indicates) horses because they are hot and the Moon (indicates) bulls^[14] because they are cold and they have their dignity in Taurus.^[15] (20) The Sun indicates gold because its nature is mixed heat, and just as no metal is like gold so no planet is bigger than the Sun. The Moon (indicates) silver because it

במשרתים גדול מהשמש, והלבנה על הכסף כי הוא פחות מהזהב¹ והוא קר, וכאשר יש² יתרון למאורות על המשרתים, כי הם המאורות הגדולים, ככה לכסף ולזהב על כל המתכות, ושבתאי על העופרת בעבור הכובד³ ושהוא בעפר. (21) והוא זכר בעבור יבשות⁴, ומכוכבי היום בעבור שאור היום וחומו יישר תולדתו.

4 (I) צדק. כבר הזכרתי תולדתו עם שבתאי; והוא כוכב טוב שתולדתו בחיים להוסיף כל טוב, ונדיב כי כן תולדת כל אדם, שהוא חם ולח. (2) ויורה על הבנים כי החום והליחה⁵ עיקר פריה ורביה, והעושר⁶ בעבור היותו כוכב טוב. (3) ולפי דעתי ששמו שבתאי בבית הראשון על הגוף כי של⁷ הטחול, שממנו⁸ יבוא כח לעצירת הגוף⁹, ושלו העצמות שהם מוסדי הגוף¹⁰. (4) והנה צדק¹¹ כדמות הבית השני, על כן יורה על העושר¹², ויורה מאדים על האחים¹³ בעבור שהוא כמו הבית השלישי, והשמש על האב שהוא¹⁴ כמו¹⁵ הבית הרביעי, ונוגה על התענוגים כי הוא¹⁶ כמו הבית החמישי, וכוכב חמה על העבדים כי הוא כמו¹⁷ הבית הששי, והלבנה על הנשים כי הוא כמו הבית השביעי, וישוב הבית השמיני¹⁸ לשבתאי, והוא יורה על המוות כמו הבית השמיני, כאשר הורה על התחלה¹⁹ כן יורה על סוף האדם. (5) ויאמר תלמי כי אם היה²⁰ שבתאי חזק במולד האדם כן יהיה חזק גופו, ושיוכל לסבול העמל והטורח. (6) והנה צדק יורה על החכמות והאומנות כמו הבית התשיעי, ומאדים על השררה כמו הבית העשירי, ושמש על החן כמו הבית העשתי עשר, ונגה על מריבות וקלון כי²¹ הם סוף כל התענוגים, ויורה צדק על החכמה ועבודת השם בעבור היות ממסכו ישר. (7) וכבר הזכרתי דבר האוון השמאלית, ושלו הכבד כי הוא מקור הדם²², שהוא חם ולח, על כן | יש לו הנפש הצומחת. (8) וסוכן²³ המלך בעבור היותו נאמן רוח²⁴, ועם²⁵ מאדים על בעל מטבע, כי הוא יורה על ממון²⁶ ומאדים על מכות²⁷, ועם נגה על השירים, וצדק על עבודת השם. (9) ובהיות כוכב חמה נותן הכח²⁸ אליו, אז תהיה כל חכמת המשפטים ותורות²⁹ לשפוט³⁰ צדק, ואם עם השמש³¹ בעל המזלות, כי מלך³² הכוכבים הוא השמש וכפי מרחק³³

¹ מהזהב] פמאני; ט חסר. ² יש] פמטא; י חסר. ³ הכובד] פשטק; תיקנתי עפ"י הקשר הדברים; פלמטנאי הכוכב. ⁴ יבשות] פמטני; י היותו יבש. ⁵ והליחה] פמאני; ט והלחות. ⁶ והעושר] פמטא; י ועושר. ⁷ שלן] פמטי; א י ש לו. ⁸ שממנו] פמאני; ט כי ממנו. ⁹ הגוף] טאני; פ הכח הגוף. ¹⁰ ושלו העצמות ... הגוף] פמטא; י חסר. ¹¹ צדק] פמאטי; נ חסר. ¹² העושר] פמאטי; נ האחים. ¹³ האחים] תיקנתי עפ"י טעמים ב' 5:5; ראה גם טעמים א' 4:1:5, §4.1:5, p. 26, VI:26, 1996, VI:26, p. 261. ¹⁴ שהוא] פמטא; י חסר. ¹⁵ כמו] פמאטי; נ חסר. ¹⁶ כי הוא] פמטא; פ שהוא. ¹⁷ כמון] מפני; ט כדמות; א חסר. ¹⁸ השמיני] פמטא; י השני. ¹⁹ התחלה] פמטא; י ההתחלה. ²⁰ היה] פמאטי; ט חסר. ²¹ כי] פמאטי; פ חסר. ²² הדם] פמטא; פ < שהוא מקור הדם. ²³ רוח] פמטני; א חסר. ²⁴ ועם] פמטא; פ וגם. ²⁵ ממון] פמטא; מ הממון. ²⁶ מכות] פמטא; פ מאורות. ²⁷ הכח] פמטא; ט כח. ²⁸ כל חכמת המשפטים ותורות] פמטא; ט חכמת כל המשפטים ותורות; י כלל חכמת משפטים ותורות. ²⁹ לשפוט] פמטא; מ לשפט. ³⁰ השמש] פמטא; י חסר. ³¹ כי מלך] פמטא; א חסר. ³² וכפי מרחק] פמטא; פ חסר.

is inferior to gold and it is cold. Just as the luminaries are superior to the ⟨other⟩ planets because they are the great luminaries (Gen. 1:16), so gold and silver ⟨are superior⟩ to the other metals. Saturn ⟨indicates⟩ lead because of the heaviness and ⟨because⟩ it [Saturn] is in the dust.^[16] (21) It is masculine because of its dryness, and ⟨it is one⟩ of the diurnal stars because the light and heat of the day temper its nature.

4 (1) Jupiter. I have already mentioned its nature together with Saturn's.^[1] It is a benefic star whose nature in life is to increase any good fortune; it is generous because that is the nature of every man, namely, hot and moist. (2) It indicates sons, because heat and moisture are the essence of procreation; and wealth, because it is a benefic star. (3) In my opinion, they assigned Saturn to the first ⟨mundane⟩ house, ⟨which is in charge⟩ of the body, because the spleen, whence comes the power to retain the body, and the bones, which are the foundation of the body, belong to it. (4) Now Jupiter is like the second ⟨mundane⟩ house; hence it indicates wealth. Mars indicates brothers, because it is like the third house. The Sun ⟨indicates⟩ the father, because it is like the fourth house. Venus ⟨indicates⟩ pleasures, because it is like the fifth house. Mercury ⟨indicates⟩ slaves, because it is like the sixth house. The Moon ⟨indicates⟩ women, because it is like the seventh house. And the eighth house, again, is assigned to Saturn, which indicates death, like the eighth house; as it indicates the beginning so it indicates the end of a man. (5) Ptolemy said that if Saturn is strong in a man's nativity his body, too, will be strong^[2] and he will be able to endure hard work and effort. (6) Now Jupiter indicates the sciences and arts, like the ninth house; Mars ⟨indicates⟩ authority, like the tenth house; the Sun ⟨indicates⟩ beauty, like the eleventh house; Venus ⟨indicates⟩ quarrels and shame, because they are the end of all pleasures; and Jupiter indicates wisdom and divine worship, because its complexion is temperate.^[3] (7) I have already referred to the left ear^[4]; the liver belongs to it, because it is the source of blood, which is hot and moist; hence it has the vegetative soul. (8) ⟨It indicates⟩ the king's steward because he has a loyal spirit, and ⟨mixed⟩ with Mars ⟨it indicates⟩ the minter because it [Jupiter] indicates wealth and Mars ⟨indicates⟩ blows, and ⟨mixed⟩ with Venus ⟨it indicates⟩ poems; and Jupiter ⟨indicates⟩ divine worship. (9) When Mercury gives it the power, ⟨it indicates⟩ all the science of laws and ordinances to pronounce a just judgment,^[5] and if it is ⟨mixed⟩ with the Sun ⟨it indicates⟩ the expert in the zodiacal signs, because the Sun is the king of the planets, and the ⟨astrological⟩ judgments change

המשרת ממנו ישתנו המשפטים. (10) ועם שבתאי יורה על חכם גדול בעבור היותם שניהם עליונים, והוא כוכב אמת כי כן¹ התולדת הישרה. (11) ויומו ולילו כמו השמש. (12) ושנותיו הקטנות י"ב כי ישוב קרוב ממקומו² הראשון בסוף אלה השנים, והאמצעיות מ"ה וחצי כי הם חצי הגדולות עם חצי הקטנות, והגדולות הם ע"ט כמספר גבוליו במזלות, והעצומות תכ"ד³ כי בשנים האלה ישוב אל מקומו ולא יהיה בין מקומו הראשון והשני כי אם חלקים מעטים⁴, וככה שנות שבתאי העצומות, ושנות אלפרדאר כמספר שנותיו הקטנות⁵. (13) ויורה על הזקנה בעבור היותו עליון, ושבתאי על השיבה וסוף החיים, והוא זכר כי כן תולדתו. (14) ושני רביעיות הגלגל⁶ בעבור היותו מהבית העשירי בחצי גלגל⁷ העולה, והוא למעלה מהארץ, והוא זכר גם הוא דרומי⁸, והרביעית⁹ האחרת, שהיא תחת הארץ, נקבה בעבור היותה כנגד הרביעית השנית, וככה עשו מהרביעיות שהם¹⁰ כנגד הגלגל הקטן, כי השב לאחור הפך הישר. (15) וטעם צדק מתוק כי כן כל חם ולח¹¹. (16) וצורתו יפה כי כן תולדת¹² הממוסך ביושר. (17) והוא אמצעי¹³ ועיניו גדולות בעבור החום והלחה, וילך בקומה זקופה בעבור החום¹⁴, ואינו כעסן בעבור יושר תולדתו. (18) אהוב לשמים כי הוא איש אמת ורוח הבריות נוחה הימנו. (19) ושליו הבדיל כי הוא חם ולח, והפילים כי גם הם יקרים.

5 (I) מאדים. חם ויבש, וככה¹⁵ דמותו; חם, ואל תשמע אל דברי המחבר ספר הארבעה ראשים שאמר שהוא חם בעבור שהוא למעלה מהשמש. (2) ויורה על האחים, כאשר הזכרתי עם צדק, ויורה על המריבות והמלחמות בעבור¹⁶ החום הרב עם היובש, וככה התחלואים החדים¹⁷ והתגבר הדם והמרה האדומה. (3) ושליו הנחיר הימני בעבור היותו עליון על נוה, כי הימין נכבד מהשמאל. (4) והוא כוכב הכעס בעבור החום¹⁸ הרב, והגבורה והכח בעבור תולדתו, וזכר בלילה בעבור¹⁹ כי אז יהיה ישר. (5) ושליו חכמת הרפואות והפצעים והחבורות, ויש לו שותפות באומנות, וכבר הזכרתי²⁰ עם שבתאי, והוא יורה על הליסטים שישחיתו החיים, והשקרנים²¹

¹ כי כן מא; פטי גם כן. ² קרוב ממקומו] פמטאנ; י אל מקומו. ³ תכ"ד] פמטי; א כ"ד ⁴ מעטים] פמטאנ; י מועטים. ⁵ הקטנות] פמטני; א חסר. ⁶ בעבור היותו ... הגלגל] פמטני; א חסר. ⁷ גלגל] מטאנ; פי הגלגל. ⁸ דרומי] פמטני; א חסר. ⁹ והרביעית] פמאטי; נ והרביע. ¹⁰ נקבה בעבור ... שהם] פמאטי; נ חסר. ¹¹ ולח] מטאנ; פ חסר. ¹² תולדת] פמאנ; ט צורת. ¹³ והוא אמצעי] פמאנ; ט והאמצעי. ¹⁴ והלחה וילך ... החום] פמטאנ; י חסר. ¹⁵ וככה] פמאנ; ט חסר. ¹⁶ בעבור] מא; פמטני חסר. ¹⁷ החדים] פמטאנ; י החמים. ¹⁸ החום] פמאטי; נ > היותו. ¹⁹ תולדתו וזכר בלילה בעבור] פמאנ; ט חסר. ²⁰ הזכרתי] פמטאנ; י הזכרתי. ²¹ והשקרנים] פמטאנ; י והשקרנית; נ חסר.

in accordance with the planet's distance from it.^[6] (10) <Mixed> with Saturn it indicates a great scholar, because both are upper <planets>. It is a star of truth because such is the temperate nature.^[7] (11) Its day and night are as in the case of the Sun.^[8] (12) Its least years are 12, because it returns close to its original location at the end of these years, and its middle <years> are $45\frac{1}{2}$, which is half the great and half the least <years>. Its great <years> are 79, like the number of its terms in the signs. Its greatest <years> are 424, because in these years it returns to its place, and the difference between the first and the second place is only a few minutes; and similarly with the greatest years of Saturn. The years of the *fardâr* are like its least years.^[9] (13) It indicates old age because it is an upper <planet>. Saturn <indicates> extreme old age and the end of life. It is masculine because that is its nature. (14) The change in the quadrants of the circle is because from the tenth house it is in the ascending half-circle, which is above the Earth, and it is masculine and southern; the other quadrant, which is below the Earth, is feminine, because it is opposite the second quadrant. They did the same with respect to the quadrants that correspond to the epicycle, because the one that is retrograde is opposite the one that is direct. (15) The flavor of Jupiter is sweet because that is <the nature of> everything hot and moist. (16) His form is attractive, because that is the nature of what is temperately mixed. (17) He is of middle stature and his eyes are large, because of the heat and the moisture, and he walks erect because of the heat, and he is not irascible because of its tempered nature. (18) He is loved by the Heavens, because he is a man of truth and people like him. (19) Tin belongs to it, because it is hot and moist, and elephants, because they are heavy.

5 (1) Mars. Hot and dry, and so is its image; hot. Do not heed the statements of the author of the *Tetrabiblos*, who said that it is hot because it is above the Sun.^[1] (2) It indicates brothers, as I have mentioned <above in the section on> Jupiter.^[2] It indicates quarrels and wars because of the great heat <mixed> with dryness, and so too acute illnesses and a surfeit of blood and red bile. (3) The right nostril belongs to it, because it is superior to Venus, inasmuch as the right is more influential than the left. (4) It is the planet of anger because of its great heat, and of courage and might on account of its nature. It is masculine in the night because then it is temperate. (5) The science of medicine and surgery belong to it,^[3] and it is a partner in the arts, as I have already mentioned <in the section on> Saturn.^[4] It indicates thieves who destroy life, and liars,

בעבור¹ כי אין תולדתו ישרה, ואם היה בבית קלונו יורה על אומנות קציצה² והוצאת הדם³ בדרך⁴ חסרון, כי הוא שופך דמים. (6) אמר תלמי המלך⁵ כי השמש בחשבון י"ח, והלבנה י"ב, וכוכב חמה ונגה בחשבון י"ו, | ומאדים בחשבון כ"א ושליש⁶,³⁴ וצדק בחשבון כ"ד, ושבטאי בחשבון ל"ב, ואמר כי זה החשבון נלקח מערך גלגלי המשרתים אל הארץ. (7) על כן זיקו שבטאי ומאדים, כי אין להם ערך טוב⁷ אל המאורות, ויסור נזק שבטאי בעבור שיש ביניהם ערך טוב, וככה נגה וכוכב חמה עם מאדים. (8) וטעם מאדים מר וחריף בעבור חומו ויבשותו. (9) ויש נקודות בפניו בעבור שנוי תולדתו, ובעל הנקודות לעולם חם, והוא ארוך בעבור היותו עליון. (10) ושלו הברול, שהוא משחית, והפרדים כי הם⁸ חזקים. (11) ויומו ולילו כמו השמש. (12) ושנותיו הקטנות ט"ו כי בסוף השנים האלה ישוב להיות קרוב ממקומו הראשון, והאמצעיות מ"ו וחצי כי הם חצי הגדולות עם חצי הקטנות, כי כן מספר גבוליו במזלות, וחכמי פרס אמרו כי שנות חלקו ז', כי כן נסו.

6 (I) נוגה. כוכב טוב בעבור שהוא ממוסך מעט, על כן יורה על המשגל, ולא כן היה צדק בעבור היותו כוכב עליון, והוא מתעסק בדברי העולם הבא ונגה בדברי העולם הזה¹⁰, והוא יורה על המשגל בעבור שהוא נקבה, והנחיר השמאלי כי זה הנקב נשאר לו, והכלי שיש בו כח רב¹¹ למשגל. (2) ושנוי תולדתו כשאר הכוכבים. (3) ושלו¹² הנקיות¹³ והטהרה בעבור היותו כוכב טוב ויפה. (4) ויורה¹⁴ על דשן ושמן כי עיקר השמן¹⁵ קור ולחה בממסך טוב, ואצבעותיו קצרות בעבור תולדת הקור, ופניו עגולים בעבור השומן, והנחושת בחלקו כי כן נסו בעלי הצורות. (5) ושלו¹⁶ הגמלים¹⁷ שאינם מוזיקים. (6) ויומו ולילו כמו השמש. (7) ושנותיו הקטנות שמונה שישוב קרוב למקומו¹⁸, והאמצעיות חצי הגדולות עם חצי הקטנות, והגדולות כמספר גבוליו במזלות, ושנות אלפרדאר כמו הקטנות.

¹ בעבור] פמטאני; י חסר. ² קציצה] פמאטי; נ קצוצה. ³ הדם] פמטאני; י דם. ⁴ בדרך] פמטאני; י דרך. ⁵ המלך] פמאני; ט חסר. ⁶ כ"א ושליש] תיקנתי עפ"י הקשר הדברים. ראה טעמים א' §4.1:2 וטעמים ב' §5:5-7 והערות על אתר. מטי ו'; פאנ חסר. ⁷ טוב] פמאטי; נ < וככה נגה וכוכב חמה. ⁸ כי הם] פמטאני; אי שהם. ⁹ מ"מ] מאי; פט מ"ו. ¹⁰ הבא ונגה ... הזה] פמנ; א הזה; טי חסר. ¹¹ בו כח רב] פמא; ט לו כח רב; י לו כחרב. ¹² ושלו] מאי; טנ ויש לו; פ ושלא. ¹³ הנקיות] מטא; פ הנקיות. ¹⁴ ויורה] פמטאני; י ונוגה. ¹⁵ השמן] פמאני; ט הדשן. ¹⁶ ושלו] פמטאני; י ושלא. ¹⁷ הגמלים] פמטאני; א חסר. ¹⁸ קרוב למקומו] פמאני; ט אל קרוב מקומו.

because its nature is not temperate. When it is in its house of dejection it indicates the art of butchering and bloodletting by way of extraction, because it sheds blood. (6) Ptolemy, the King,^[5] said that the number of the Sun is 18, and of the Moon 12, and the number of Mercury and of Venus is 16, and the number of Mars is $21\frac{1}{3}$, and the number of Jupiter is 24, and the number of Saturn is 32. He said that this number was obtained from the ratio of the planets' orbs to the Earth's orb.^[6] (7) For this reason Saturn and Mars are malefic, because they do not have a good ratio to the luminaries,^[7] but the maleficence of Saturn is removed because they [Saturn and Mars] have a good ratio;^[8] and the same applies to Venus and Mercury with Mars.^[9] (8) The flavor of Mars is bitter and pungent, because of its heat and dryness. (9) He has freckles on his face because of the change in its nature and one who has freckles is always hot. He is tall because it is an upper planet. (10) Iron, which is destructive, belongs to it, as well as mules, because they are strong. (11) Its day and night as in the case of the Sun. (12) Its least years are 15 because at their end it returns nearly to its original place, and its middle years are $40\frac{1}{2}$, which is half of the great years plus half of the least years, for such are its terms in the signs. The Persian scientists said that the years of its part [i.e., the *fardâr*] are seven, as they found by experience.^[10]

6 (1) Venus. A benefic planet because it is slightly mixed. For this reason it indicates sexual intercourse; but Jupiter does not, because it is an upper planet, and it is engaged in the affairs of the afterworld. Venus (is engaged) in the affairs of this world. It indicates sexual intercourse because it is feminine; (it indicates) the left nostril, because this is the orifice that remains for it, and the instrument that has a strong power for sexual intercourse.^[1] (2) The change in its nature is the same as for the other planets. (3) Cleanness and purity belong to it, because it is a benefic and a handsome planet. (4) It indicates the fertile and fat, because the essence of fat is cold and moisture in a good complexion; his fingers are short, on account of the nature of cold; his face is round, because of the fat. Copper is in its portion, as was found through experience by the experts in the images.^[2] (5) Docile camels belong to it. (6) Its day and night (in the week) are as for the Sun. (7) Its least years are eight, when it returns close to its (original) place, and its middle years are half the great years and half the least years, and its great years are as the number of its terms in the signs, and the years of its *fardâr* are the same as its least years.^[3]

7 (I) כוכב חמה¹. כוכב² השכל והחכמה והדעת³ כי הוא ממוסך בתולדתו. (2) על כן משתנה⁴ מהרה לכל תולדת בעבור היותו⁵ ישר, ויהיה טוב או רע. (3) ושליו⁶ הלשון כי שליו⁷ הנשמה העליונה, כאשר הזכרתי על דעת הקדמונים, ולפי דעתי שהיא לשמש. (4) רק יש ללבנה כח הגוף, ולכוכב חמה, שהוא למעלה ממנה, כח הלשון⁸ שיחל הנער לדבר; על כן היה המשגל לנוגה כי כן משפט האדם, ואחר כן לבקש גדולה כאשר ישוב לקבל כח השמש⁹, ואחר כן למאדים שירוף לבקש מה שימצא ויקבץ¹⁰ ממון באיזה דרך שיהיה, ואחר¹¹ כן לצדק ויחל להניח דברי העולם, והסוף לשבתאי כי אז יהיה כבד בכל דבריו. (5) על כן, אמרו הקדמונים שיש לו בחלקו הראש והלשון והכוליא¹² השמאלית בעבור כי ערך אחד יש לו עם נגה, ובעבור היות¹³ נגה עליון¹⁴ ממנו ואין בו ספק, לקח כוכב חמה השמאלית שהיא¹⁵ פחותה. (6) וכבר הזכרתי למה יתהפך, ויורה על התחלואים שהם¹⁶ בעבור החכמה אם היה | במסך רע עם המזיקים. (7) והוא קצר קומה כי הוא מהכוכבים השפלים,^{35א} והוא דק בעבור שלא ברא השם¹⁷ כוכב קטן ממנו, על כן פניו דקות, ולחייו ארוכות כי יורה יובש ברוב¹⁸, ופיו יפה בעבור שיש לו הלשון¹⁹, ודקיק בעבור היותו כוכב קטן, ואצבעות ידיו ארוכות כי כן הסופרים. (8) ושליו המקנה הדק בעבור היותו קטן²⁰, ועלה בחלקו הכסף החי כאשר נסו חכמי הצורות. (9) ולילו ויומו כמו לשמש. (10) ושנותיו הקטנות²¹ כ'²² כי אז ישוב להיות קרוב למקומו, והאמצעות חצי²³ הקטנות עם חצי²⁴ הגדולות, והגדולות²⁵ כפי מספר גבוליו במזלות.

8 (I) ראש התלי. בעבור היותו בפאת שמאל כאשר תהיה הלבנה שם, אז יהיה לו כח גדול, מפני שהישוב כולו בפאת שמאל, על כן אמרו שהראש יוסיף על כל²⁶ טוב שהלבנה מקבלת²⁷ מהכוכבים הטובים. (2) ויאמרו הקדמונים שהשם ברא שנים מזיקים, והם שבתאי ומאדים והאחד גדול מחברו²⁸, וככה שנים²⁹ מטיבים³⁰, והם צדק

¹ כוכב חמה] פמאני; ט כותב. ² כוכב] פמאני; נ חסר. ³ והדעת] פמאני; נ והדעה. ⁴ משתנה] פטנ; מא ישתנה; י > יורה. ⁵ היותו] מטאני; פ היות. ⁶ ושליו] מטאני; פ ושלוא. ⁷ שליו] פמטאני; י יש לו. ⁸ כח הלשון] פמאני; ט הלשון. ⁹ ואחר כן ... השמש] פמטאני; י חסר. ¹⁰ ויקבץ] פמאני; ט ויבקש. ¹¹ ואחר] פמטנ; אי ואחרי. ¹² והכוליא] פמאני; נ והכליא. ¹³ היות] מפני; ט כי. ¹⁴ עליון] מטאני; פ העליון; נ > ככב. ¹⁵ שהיא] פמטאני; י כי היא. ¹⁶ שהם] פמטאני; י שהוא. ¹⁷ השם] פמאני; ט הקב"ה. ¹⁸ ברוב] מאני; ט בגופו. ¹⁹ הלשון] פמטאני; י השלטון. ²⁰ ואצבעות ידיו ... קטן] פמטאני; י חסר. ²¹ ושנותיו הקטנות] פמאני; נ חסר. ²² כ'] פמטאני; י י"ב; נ חסר. ²³ חצי] פמאני; ט הם. ²⁴ חצי] פמטנ; א חסר. ²⁵ והגדולות] פמטי; א חסר. ²⁶ כל] פטאני; מ חסר. ²⁷ מקבלת] הוספתי עפ"י הקשר הדברים; מטנא"פ חסר. ²⁸ מחברו] פמאני; ט מן האחרץ ²⁹ וככה שנים] פמאני; נ חסר. ³⁰ מטיבים] פמטאני; י; פמטאני חסר.

7 (1) Mercury. This is the planet of wit and wisdom and understanding, because it is mixed in its nature. (2) For this reason it quickly changes to any nature because it is temperate, and can be either benefic or malefic. (3) The tongue belongs to it, because the superior soul belongs to it,^[1] as I have mentioned referring to the opinion of the Ancients;^[2] but in my opinion it [i.e. the superior soul] belongs to the Sun. (4) Indeed, the Moon has the power of the body, and Mercury, which is above it, has the power of the tongue, to enable the child to begin to speak;^[3] hence sexual intercourse belongs to Venus, inasmuch as that is the rule with respect to man, and then to seek greatness, when he receives again the power of the Sun, and then ⟨the power passes⟩ to Mars, which causes him to run and seek whatever he may find and to collect wealth in any possible way, and then ⟨the power passes⟩ to Jupiter, when he begins to set aside the affairs of this world, and the end ⟨belongs⟩ to Saturn, when he is heavy in all his actions.^[4] (5) Hence the Ancients said that the head and the tongue and the left kidney are in its portion, because its ratio to Venus is 1:1;^[5] and because Venus is certainly above it, Mercury took the left ⟨kidney⟩, which is inferior. (6) I have already mentioned why it is mutable.^[6] It indicates diseases that derive from wisdom if it is in a bad complexion with the malefic ⟨planets⟩. (7) He is short of stature, because it is one of the inferior stars, and he is thin because it is the smallest star that God created. His face is thin and his cheeks are long, because it indicates dryness in most ⟨people⟩. His mouth is attractive because the tongue belongs to it, and he is slender because it is a small star. His fingers are long, as writers' are. (8) Small cattle belongs to it, because it is small, and quicksilver is in its portion, as has been verified by experience by the scholars of the images.^[7] (9) Its night and its day ⟨in the week⟩ are as for the Sun. (10) Its least years are 20, when it returns close to its ⟨original⟩ place, its middle ⟨years⟩ are half its least ⟨years⟩ plus half its great ⟨years⟩, and its great ⟨years⟩ are equal to the number of its terms in the signs.^[8]

8 (1) The Head of the Dragon. Because it is in the north, when the Moon is ⟨also⟩ there^[1] it [the Dragon's Head] has great power, inasmuch as the entire ecumene is in the north [with respect to the equator]. Consequently they said that the Head increases any good fortune that the Moon receives from the benefic stars. (2) The Ancients said that God created two malefic ⟨planets⟩, Saturn and Mars (the former is bigger than the latter), as well as two benefic ⟨planets⟩, Jupiter and Venus (the former is bigger than the latter), two luminaries, and

ונגה, והאחד גדול מחברו, ושני מאורות¹, וכוכב² ממוסך, פעם טוב ופעם רע, והוא כוכב חמה³. (3) וחכמי פרס אמרו כי שנות הראש בחלק אלפרדאר הם⁴ שלוש⁵, ככה נסו.

9 (I) הזנב⁶. בהיות הלבנה בצד⁷ ימין יחסר כחה⁸, על כן יורה אז על⁹ חסרון טוב, וחסרון כבוד¹⁰ הוא החרפה והקלון. (2) והקדמונים נסו כי שנות חלקו ב¹¹. (3) ויאמרו כי¹² אם היה כוכב טוב עם הראש יוסיף טוב ואם רע יחסר, ויאמרו כי הזנב יחסר מטוב הכוכב הטוב¹³ ויחסר מרעת הרע. (4) על כן יאמרו כי הראש טוב עם הטובים ורע עם הרעים, והזנב רע עם הטובים וטוב עם הרעים¹⁴. (5) והם יאמרו על ראש תנין גלגל הלבנה חונבו, והנכון¹⁵ בעיני כי דבריהם אמת, רק כל משרת עם ראש תנין¹⁶ חונבו¹⁷.

6§

I (I) מעלות המולד. אמר החכם הנקרא¹⁸ משאללה כי¹⁹ לעולם יולד הזכר בשעה²⁰ מפורדת במספר²¹ והנקבה בזוגות, וזה אמת ברוב²² הנולדים והנולדות²³ רק לא בכלם. (2) ואמר כי כפי המרחק מיום המחברת או הנוכח שהיה בתחלת²⁴ קודם הלידה²⁵ יהיה מספר חלקי²⁶ שעה, ולפעמים²⁷ יהיה כן ופעמים לא. (3) ותלמי אמר כי²⁸ כמספר מעלות הממונה על²⁹ מקום המחברת או הנוכח ככה יהיה מספר אחד היתדות. (4) והנה אנכי נסיתי פעמים רבות, שלקחתי מעלות גבהות השמש בשעת³⁰ הלידה עם החלקים, ורובי השנים תקנתי מקום הכוכבים³¹ בלוחות הודו ולוחות תלמי ולוחות פרס והלוחות שהן³² אמת למראית העין, ולא מצאתי אחד היתדות ממספר אחד הכוכבים. (5) כלל: רק³³ מה שהזכיר חנוך הוא אמת ומנוסה, והוא דרך התולדת³⁴.

¹מאורות] פמטאני; י המאורות. ²וכוכב] פמטאני; י וכוכב חמה. ³והוא כוכב חמה] פמאני; ט והוא כותב; י חסר. ⁴בחלק אלפרדאר הם] מטאני; פ תחלה אלה. ⁵שלוש] תיקנתי עפ"י הקשר הדברים; ראה הערה לתרגום האנגלי; פמטאני שנים. ⁶הזנב] מאני; ט זנב התלי; פ והזנב. ⁷בצד] פמטאני; י שם. ⁸כחה] פמטאני; מ ככה. ⁹על] מא; פטנ חסר. ¹⁰כבוד] מטאני; פ חסר. ¹¹ב' פמאני; ט כ"ב. ¹²כי] פמטאני; י חסר. ¹³מטוב הכוכב הטוב] מ; א מטוב הכוכב; פני מטוב הטוב; ט מטוב הראש. ¹⁴והזנב רע ... הרעים] פמאני; נ חסר. ¹⁵והנכון] פמאני; נ ויתכן. ¹⁶תנין] פמאני; נ התנין. ¹⁷וחונבו] מא; פטי חונב; והזנב שלו. ¹⁸החכם הנקרא] פלמאני; ט חסר. ¹⁹כי] למ; פטנאני חסר. ²⁰בשעה] למטאני; פ בשעת. ²¹במספר] פלמאני; ט חסר. ²²ברובי] למא; פטני ברוב. ²³והנולדות] למטני; א והנולדים; פ חסר. ²⁴שהיה בתחלתו] פטני; ל שהיה בתחילת; מ שהיה בתחלה; א שהיה בתחלה. ²⁵הלידה] למטאני; פ הלילה. ²⁶חלקי] פלמני; א חלוק; ט חלוף. ²⁷ולפעמים] פלמאני; ט ופעמים. ²⁸כי] פלמטני; א חסר. ²⁹על] למטאני; פ אל. ³⁰בשעת] לפטאני; מ בשעה. ³¹מקום הכוכבים] פלמטני; א חסר. ³²שהן] פלמי; טאן שהם. ³³רק] פלמטני; אי חסר. ³⁴התולדת] לאטפני; מי התולדות.

a mixed planet, sometimes benefic and sometimes malefic, namely, Mercury. (3) The Persian scientists said that the *fardâr* years of the Head are three,^[2] as they verified by experience.^[3]

9 (1) The Tail. When the Moon is in the south side it loses power; hence it [the Dragon's Tail] indicates then a lack of good fortune and a lack of honor, which is disgrace and shame. (2) The Ancients found by experience that its *fardâr* years are two.^[1] (3) They said that if a benefic planet is in the Head it increases good fortune; if a malefic, it diminishes ⟨good fortune⟩, and they said that the Tail diminishes the good fortune of a benefic planet and diminishes the misfortune of a malefic ⟨planet⟩. (4) Hence they said that the Head is a benefic with the benefics and a malefic with the malefics, and the Tail is a malefic with the benefics and a benefic with the malefics. (5) They said ⟨all that⟩ about the Head of the Dragon of the Moon's orb and its Tail. In my opinion their statements are true, but every planet has its own Head of the Dragon and its Tail.^[2]

§6

1 (1) Degrees of the nativity.^[1] The scholar named Mâshâ'allâh said that males are always born in an hour whose number is odd, whereas females ⟨are born⟩ in even ⟨hours⟩,^[2] and this is true for most natives, male and female, but not for all of them. (2) He said that the number of minutes in the hour ⟨of birth⟩ depends on the distance from the day of the ⟨last⟩ conjunction or opposition ⟨of the luminaries⟩ that began before the birth; sometimes it happens like that and sometimes it does not. (3) Ptolemy said that the number ⟨of degrees⟩ of one of the cardines is equal to the number of degrees of the planet that rules the place of the conjunction or the opposition ⟨of the luminaries⟩.^[3] (4) Now I have tested ⟨this⟩ many times, taking the degrees and minutes of the Sun's apogee at the time of birth, and for most years I corrected the places of the planets in the Indian ⟨scientists'⟩ tables and Ptolemy's tables and the Persian ⟨scientists'⟩ tables and the tables that seem to be correct, but I did not find any of the cardines ⟨to be equal to⟩ the number ⟨of degrees⟩ of any of the planets.^[4] (5) As a general rule, only what Enoch said is true and corroborated by experience, and is compatible with nature.^[5]

2 (I) המושלים. היו ממקומות¹ החיים חמשה, בעבור כי שני המאורות יורו על החיים, ומקום המחברת או הנוכח יורה על כל דבר שיתחדש בעולם, ככתוב בספר | העולם, גם² המעלה הצומחת בעבור שהיא לנולד³, גם גורל הטוב בעבור³⁵ שהוא מזל הלבנה⁴, והטעם כי לעולם כערך השמש אל המעלה הצומחת⁵ ככה ערך הלבנה אל הגורל הטוב, ועוד אדבר עליו⁶. (2) ויאמר תלמי⁷ כי ההוה למעלה מהארץ יורה על החיים מפני שיש לו כח רב. (3) ובעבור היות השמש ביתד העשירי, או בבית⁸ עשתי⁹ עשר, ברביעי¹⁰ זכר, לא חששו אם היה המזל נקבה, ובעבור היות הבית התשיעי והשביעי מהרביעית שהיא נקבה הוצרכו¹¹ לבקש אם המזל הוא נקבה¹², שאם היה נקבה¹³ הנה אין¹⁴ כח לשמש. (4) והבית השמיני גם עשתי עשר¹⁵ לא יביט אל המעלה הצומחת, על כן לא יתכן לקחת החיים אם היה השמש באחד מהם. (5) והקדמונים אמרו כי המאור כדמות האם, והשליט על מקומו הוא האב¹⁶, על כן יקראו מקום המאור הילאג¹⁷, ופירושו אשה, והשליט כדכדאה¹⁸, ופירושו בעל. (6) ובעבור היות הלבנה נקבה, ואם היתה¹⁹ בבית העשירי או עשתי עשר, והוא²⁰ זכר והרביעית²¹ לזכרות, הנה לא יהיה כח ללבנה, רק בבית השביעי²² הרביעית היא נקבה, על כן לא יחשו מן המזל אם זכר אם נקבה, והבית התשיעי הוא בית אבל²³ הלבנה, כי הוא השביעי מבית שמחתה. (7) ולבית הראשון גם הרביעית²⁴ היא נקבה, ובבית השלישי, ואם הוא בית נופל, בעבור ששם שמחת הלבנה, נקח החיים ממנה. (8) וברביעי²⁵ ובחמישי אם היה המזל זכר, נעזובה²⁶, בעבור היות הרביעית בחלק זכרות והלבנה נקבה²⁷, והנה אין כח לה כי לעולם הזכר יש לו כח במזל זכר²⁸ וברביעית²⁹ זכר. (9) ונעזוב השני³⁰ והשישי³¹, כי אינם קשורים עם המעלת צומחת, ואחר כן נקח המחברת אם היתה למעלה מהארץ ביתד העשירי או השביעי או עשתי עשר, כי יש לו כח רב. (10) ולא כן התשיעי כי הוא בית נופל, אף כי השמיני ושנים עשר, ובעבור היות הלבנה ברגע הנוכח

¹ ממקומות פמאטי; לנ מקומות. ² גם] למא; פטני כי. ³ שהיא לנולד] למאפטי; נ הנולד. ⁴ הלבנה] פלמנ; י ללבנה; ט הנקבה. ⁵ הצומחת] למאפטי; נ חסר. ⁶ עליו] למטאני; פ אליו. ⁷ תלמי] למאפטי; נ חסר. ⁸ בבית] פטי; למא בית; נ חסר. ⁹ עשתי] למאפטי; נ בעשתי. ¹⁰ ברביעי] פלמאטי; י ברביעית. ¹¹ הוצרכו] פמאני; ל הוצרכו; ט הוצרכתי. ¹² נקבה] פלמטא; י < ובעבור היות הבית; נ חסר. ¹³ נקבה] לפטאני; מ הנקבה. ¹⁴ הנה אין] למטאני; פ אין. ¹⁵ עשתי עשר] למאפטי; נ היב. ¹⁶ האב] למאפטי; נ > כדמות. ¹⁷ הילאג] למאני; י הלאג; ט הלאג; פ חסר. ¹⁸ כדכדאה] למטאני; פ בדבר הזה. ¹⁹ היתה] לטאני; מ היה. ²⁰ והוא] פלמטאני; י הוא. ²¹ והרביעית] תיקנתי עפ"י הקשר הדברים; פלמטאני והרביעיות. ²² השביעי] למאפטי; נ חסר. ²³ אבל] לפטאני; מ האבל. ²⁴ הרביעית] למטאני; פ הרביעי; נ הד. ²⁵ וברביעי] פלמאני; ט חסר. ²⁶ נעזובה] למאפטי; נ חסר. ²⁷ נקבה] פלמטני; א חסר. ²⁸ זכר] לנ; מאפטי חסר. ²⁹ וברביעית] פלמאני; ט חסר. ³⁰ ונעזוב השני] למאפטי; נ חסר. ³¹ והשישי] למאפטי; נ < והי"ב.

2 (1) The rulers. The places of life are five: [1–2] the two luminaries indicate life; [3] the place of the conjunction or the opposition (of the luminaries) indicates anything that is renewed in the world, as is written in the *Book of the World*;^[1] [4] the degree of the ascendant because it belongs to the native; and [5] the lot of Fortune because it is the *mazzal* of the Moon, because the ratio of the Sun to the degree of the ascendant is always equal to the ratio of the Moon to the lot of Fortune; I shall say more on this subject.^[2] (2) Ptolemy said that the one [i.e., the place of life] that is above the Earth indicates life, because it has great power.^[3] (3) Because the Sun is in a masculine quadrant when it is in the tenth house^[4] or in the eleventh (mundane) house, they paid no attention to whether the sign was feminine; but inasmuch as the ninth and seventh houses are in a feminine quadrant, (in that case) they had to clarify whether the sign is feminine, because if it is feminine then the Sun has no power. (4) The eighth and the eleventh houses do not look at the degree of the ascendant, so it is not possible to locate the (place of) life (there) if the Sun is in one of them. (5) The Ancients said that the luminary is like the mother, and the lord of its place is the father, and therefore called the place of the luminary *hy'ej*, meaning woman, and the lord *kadkad'ah*, meaning husband.^[5] (6) Because the Moon is feminine, when it is in the tenth or eleventh house, which is masculine and whose quadrant is assigned to masculinity, the Moon has no power. But in the seventh house, (which is) in a feminine quadrant, they paid no attention to whether the sign is masculine or feminine. The ninth house is the house of mourning of the Moon, because it is the seventh after its house of joy. (7) We should take the (place of) life from the first house, which also belongs to a feminine quadrant, and from the third house, even though this house is falling (from the cardines), because the joy of the Moon is there. (8) We ignore (the Moon) in the fourth and fifth (houses) if the sign happens to be masculine, because the quadrant is masculine and the Moon is feminine; so (the Moon) has no power (there) because the masculine always has power in a masculine sign and in a masculine quadrant. (9) We ignore the second and sixth (houses), because they are disconnected from the degree of the ascendant, and next we should take the conjunction if it had occurred above the Earth in the tenth house^[6] or in the seventh or eleventh (houses), because it [the tenth house] has great power. (10) But not in the ninth (house), which is a house falling (from the cardines), nor in the eighth and the twelfth; and because the Moon is stronger at the moment of opposition than at the

יותר חזקה מעת היותה ברגע המחברת, בעבור היותה מלאה¹ אורה כנגדנו, על כן יקרא הגורל הטוב. (II) ואם לא נוכל² לקחת³ החיים מאחד מהארבעה המושלים הנזכרים ננהג⁴ לעולם⁵ המעלה הצומחת, כי היא העיקר, ובהגיעה אל מקום רע ימות הנולד, כאשר אפרש⁶ בספר המולדות⁷, בעזרת האל^{8, 9}.

3 (I) התקופה. בעבור היות מהלך¹⁰ השמש שנה תמימה, והטעם עד שובה¹¹ אל המעלה¹² שהיתה שם ברגע המולד; והנה התוספת¹³ על שלש מאות וששים וחמשה הימים חמש¹⁴ שעות ארבעים ותשעה¹⁵ חלקים. (2) והנה ביום אחד יסוב כל הגלגל המקיף שהוא שלש מאות וששים וישראלים הקפתו¹⁶, והנה בסוף שנת החמה¹⁷ באותן חמש שעות וארבעים ותשעה חלקים, סבב האופן המפריש כל¹⁸ שעה חמש עשרה מעלות, וכל¹⁹ ארבעה חלקים מעלה אחת, וכל²⁰ חלק חמשה עשר חלקים. (3) והנה ערכנו חמש שעות על ט' ו' ועלו ע"ה, ולקחנו | רביעית מארבעים ותשעה והנה²¹ שתיים עשרה מעלות²² ונשאר²³ חלק אחד בשעות, והוא חמשה עשר²⁴ חלקים מחלקי המעלה. (4) והוספנו זה על שבעים וחמשה ועלה המספר פ"ז ט"ו, והוא הכתוב בלוחות. ועוד יחסר להשלמת שש שעות אחד עשר חלקים, ושש שעות הן צ' צ"ד²⁵ מעלות כי הם רביעית יום²⁶, וכאשר נקח רביעית²⁷ אחד עשר יהיו שתי מעלות ארבעים וחמשה חלקים. (5) נחסרם מתשעים או יעלה המספר הנזכר.

4 (I) וטעם בית²⁸ הסוף, שהגיע שם סוף השנה. (2) והנה יעלה לכל חודש שתי²⁹ מעלות וחצי, והמקום שהיה שם כוכב טוב או רע³⁰ או יביט אליו, או יתחדש על הנולד דבר³¹ כפי תולדת³² הכוכב. (3) גם ישתנה³³ לבית הסוף הנלקח כפי³⁴ הבתים³⁵, ותהיה השנה מתחלת החלוק עד סוף החלוק³⁶.

5 (I) ואם רצית לדעת טוב או רע שיקרה לנולד, אחר שתעשה המבטים כפי מרחב הארץ³⁷ כאשר פירשתי לך, דע כמה שעות היא³⁸ רחוקה תחלת הבית שתראה

¹ מלאה] מטנאפי; ל חסר. ² נוכל] למה; טניפ יוכל. ³ לקחת] פלמטא; י לקנות. ⁴ ננהג] פלמא; טי ננהג. ⁵ לעולם] למטאני; פ העולם. ⁶ אפרש] פמאטי; נ פירשתי; ל חסר. ⁷ המולדות] מאנ; פטי המאורות; ל חסר. ⁸ בעזרת האל] פמא; ט בע"ה; לי חסר. ⁹ כאשר אפרש ... האל] מטנאפי; ל חסר. ¹⁰ מהלך] פלמא; טנ מעלה. ¹¹ והטעם עד שובה] פלמאני; ט חסר. ¹² המעלה] נ; למטאני מספר השנים; פ מספר שנים. ¹³ התוספת] פמאני; לט בתוספת. ¹⁴ חמש] למאפטי; נ חומם. ¹⁵ ארבעים ותשעה] פלמאני; ט ממ"ט. ¹⁶ הקפתו] פלמאני; ט תופשתו. ¹⁷ שנת החמה] פלמאני; ט שנה. ¹⁸ כל] מטנאפי; ל > ועלה. ¹⁹ וכל] למטאני; פ על. ²⁰ וכל] למטאני; פ על. ²¹ מעלות] פלמטאני; י חסר. ²² ונשאר] פלמטאני; י נשאר. ²³ חמשה עשר] מטאני; פ מ"ט. ²⁴ הן צ' צ"ד] פלמטאני; א שצ'. ²⁵ יום] פמטאני; לי היום. ²⁶ רביעית] פלמאני; ט חסר. ²⁷ בית] לפטאני; מ ב'. ²⁸ שתי] פמטא; י בכ'. ²⁹ טוב או רע] לטאני; מ שוב ארבע. ³⁰ דבר] פלמאני; ט חסר. ³¹ תולדת] פלמטאני; י תולדתו. ³² ישתנה] נ; למטאני ישנה; (פ מטושטש). ³³ כפי] לפטא; י לפי; נ חסר. ³⁴ הבתים] פלמא; נ מהבתים; ט השנים. ³⁵ עד סוף החלוק] למטאני; פ חסר. ³⁶ הארץ] פלמטאני; א חסר. ³⁷ היא] פלמטא; א היה; י חסר.

moment of conjunction, inasmuch as it is full <and> its light is facing us, it was called the lot of Fortune. (11) But if we can not take the <place of> life from any of the four aforementioned rulers we should always direct the degree of the ascendant, because it is the essence; when it arrives in a malefic place the native will die,^[7] as I shall explain in the *Book of Nativities*,^[8] with God's help.

3 (1) The revolution.^[1] <This is> because the course of the Sun is a complete year, meaning until it [the revolution] returns to the degree it was at the moment of nativity; and the excess beyond 365 days is 5 hours and 49 minutes.^[2] (2) Now in one day it [the sun] circles the entire circumferential orb, which is 360 <degrees>, and completes its circuit. Thus at the end of the solar year, during those 5 hours and 49 minutes, the horizon advances 15 degrees every hour [$360^{\circ}/24\text{hr.} = 15^{\circ}$ per hour], and <it advances> one degree every 4 minutes <of an hour> [$60\text{ min.}/15^{\circ} = 4\text{ min. per degree}$], and in one minute <of an hour> 15 <arc> minutes [$60^{\circ}/4 = 15'$]. (3) Now we multiply <the> 5 hours by 15 <degrees> and obtain 75 <degrees>; we divide <the> 49 <minutes> by 4 <degrees per minute> and obtain 12 degrees, plus a remainder of one minute of time, <during> which <the horizon advances> 15 arc minutes. (4) If we add this result to 75 <degrees> we obtain $87^{\circ}15'$, which is the value that is written in the tables. We are short 11 minutes of six hours, and 6 hours are <equivalent to an advance of> 90 degrees, because they are one quarter of a day. When we divide 11 <minutes of an hour> by four we obtain $2^{\circ}45'$. (5) If we subtract them from 90 <degrees> we <also> obtain the aforementioned number [i.e. $87^{\circ}15'$].

4 (1) The “terminal house” is the place that <the revolution> reaches at the end of the year. (2) Now each month is assigned two degrees and a half, and in the place where there is some benefic or malefic planet or one that looks at it, a new event will happen to the native in accordance with the nature of the planet. (3) <This terminal house is> different from the terminal house calculated in accordance with the <mundane> houses, and the year <is calculated> from the beginning of the division until the end of the division.^[1]

5 (1) If you want to know the good fortune or misfortune that will befall the native, after you arrange the aspects in accordance with the latitude of the country, as I have explained you,^[1] find out how many hours the cusp of the <mundane> house you want <to arrange> is distant from

מהיתד שעבר, כי לעולם יהיה רחוק שעות שלימות, והטעם שלא יהיה שם חלקי שעה. (2) ודע המקום ששם¹ הכוכב או המבט: ואם היה מתחלת הבית² העשירי עד המעלה הצומחת, קח שעות³ הכוכב⁴ או שעות מקום המבט בין⁵ מעלות תחלת הבית העשירי⁶ עד המעלה הצומחת⁷ בלוח גלגל היושר⁸, וההוה שמור השעות וחלקיהם, וחסר לעולם השעות⁹ שיהיה רחוק מתחלת היושר תחלת הבית שתוצה, ואשר ישאר קח לכל שעה חודש ולכל חלק שעה¹⁰, קרוב משלשה ימים. (3) ואם היה הכוכב או המבט מהמעלה¹¹ הצומחת אל הבית הרביעי, קח שעות נכח מקום הכוכב או המבט וחסר מעלות המעלה הצומחת בלוח הארץ ממעלות הכוכב או המבט, וחלק המספר שעות¹² הנכח וחסר השעות כמשפט¹³. (4) ואם היה הכוכב בין הבית הרביעי והשביעי, קח שעות נוכח הכוכב או מקום המבט ועשה בגלגל היושר כמשפט¹⁴. (5) ואם היה הכוכב בין הבית השביעי ובין הבית העשירי, קח שעות מקום הכוכב או מקום המבט¹⁵, וחשוב כאלו הכוכב הוא בנוכח¹⁶ מעלתו, וככה¹⁷ מקום המבט¹⁸, וחסר מעלות המעלה הצומחת מהמעלות שהם בלוח הארץ¹⁹ כנגד המעלה שתחשוב שהכוכב שם או מקום המבט²⁰, וחלק על השעות הנזכרות ועשה כמשפט.

6 (I) ואלה החלקים הנקראים אלפרדאר לא אדע²¹ להם טעם, רק²² ככה נסו חכמי פרס, ובספר²³ המולדות אדבר²⁴ עליהם²⁵.

7 (I) השעות. אין ספק כי לפקיד יותר כח²⁶ מאשר יש לשותף. (2) וכאשר יתנו²⁷ מזל לכל שנה²⁸, כן²⁹ נתנו לבעל השעה המעוותת מעלות שנוולד בה הילוד, השנה³⁰ הראשונה לשעה הראשונה³¹, והשנית לשעה השנית, והשנה השלישית³² לשעה³³ השלישית, עד שוב השנה³⁴ השמינית לבעל השעה. (3) לכן³⁵, יש לך להסתכל לעולם בכל שנה אל בעל השעה הראשונה, שאם היה במקום טוב או יהיה³⁶ טוב לנולד, והפך הדבר אם היה להפך³⁷.

¹ששם] פלמטאני; י שיהיה שם. ²הבית] למטני; פא חסר. ³שעות] פלמני; ט שעת; א חסר. ⁴הכוכב או המבט ... הכוכב] פלמטני; א חסר. ⁵בין] תיקנתי עפ"י הקשר הדברים; למטאני ובין; פ חסר ⁶הבית העשירי] למטאני; פ חסר. ⁷עד המעלה הצומחת] ט; למטאני חסר. ⁸היושר] למאפטי; נ המישר. ⁹השעות] למטאני; ט < וחלקיהם; פ חסר. ¹⁰חלק שעה] למטאני; ט שעה; פ חסר. ¹¹מהמעלה] ל; מטאני; פ חסר. ¹²וחלק המספר שעות] למטאני; ט וחלק על מספר השעות; פ חסר. ¹³כמשפט] למטאני; י כמספר; פ חסר. ¹⁴או מקום המבט ... כמשפט] למאפטי; נ חסר. ¹⁵ובין מעלות תחלת הבית העשירי ... המבט] למטאני; פ חסר. ¹⁶בנוכח] פלמאני; ט לנוכח. ¹⁷וככה] למטאני; ט וקח. ¹⁸המבט] פלמאני; ט המביט. ¹⁹הארץ] פלמאני; ט חסר. ²⁰המבט] פלמאני; ט המביט. ²¹לא אדע] פמאני; לט חסר. ²²רק] מטאני; פ < כי. ²³ובספר] מטאני; פ ובפירוש. ²⁴אדבר] פמטא; ני דברתי. ²⁵ואלה החלקים ... עליהם] מטאני; ל חסר. ²⁶יותר כח] למטאני; פ < יש לו. ²⁷יתנו] למטאני; פ < יש לו. ²⁸שנה] פלמטני; א שנה. ²⁹כן] למאפטי; נ חסר. ³⁰השנה] למאפטי; נ השעה. ³¹לשעה הראשונה] פטני; למא חסר. ³²השנה השלישית] למא; פטני והשלישית; י והשעה השלישית. ³³לשעה] פלמטני; א לשנה. ³⁴השנה] למאפטי; נ השעה. ³⁵לכן] למטאני; פ על כן. ³⁶יהיה] מטאני; ל יורה. ³⁷יהיה להפך] טאני; מי יהיה להפך; לפ יהיה בהפך.

the previous *cardo*, because it is always distant an integral ⟨number of⟩ hours, which means that there will not be any minutes. (2) Find out the place where the planet or the aspect is: if it is between the cusp of the tenth house and the degree of the ascendant, look up in the *sphaera recta* table the hours of the planet or the hours of the place of the aspect between the degrees of the cusp of the tenth house and the degree of the ascendant. Keep the hours and the minutes of the result, and always subtract the hours that the house you want ⟨to calculate⟩ is distant from the beginning of *sphaera recta*, and from the result take each hour as a month and each minute as an hour, approximately three days. (3) If the planet or the aspect is between the degree of the ascendant and the fourth house, take the hours directly opposite the place of the planet or the aspect and subtract the degrees of the ascendant on the latitude plate ⟨of the astrolabe⟩ from the degrees of the planet or the aspect; then divide the number into the hours opposite ⟨the place of the planet or the aspect⟩ and subtract the hours according to the rule. (4) If the planet is between the fourth house and the seventh, take the hours opposite the planet or the place of the aspect, and proceed in *sphaera recta* according to the rule. (5) If the planet is between the seventh house and the tenth house take the hours of the place of the planet or the place of the aspect, as if the planet is opposite its degree and similarly with the place of the aspect, and subtract the degrees of the degree of the ascendant from the degrees in the latitude plate ⟨of the astrolabe⟩ opposite the degree that you have calculated and corresponding to the place where the planet is or to the place of the aspect, and divide ⟨this number⟩ into the aforementioned hours and proceed according to the rule.

6 (1) As for the parts that are called the *fardâr*, I cannot explain them, but the Persian scientists derived them from observation.^[1] I will refer to them in the *Book of Nativities*.^[2]

7 (1) Hours. There is no doubt that the lord has more power than the partner.^[1] (2) Just as they assigned a sign to each year,^[2] they also assigned to the lord of the seasonal hour the degrees at which the native was born, the first year to the first hour, the second to the second hour, the third year to the third hour, until the eighth year is assigned again to the lord of the ⟨first⟩ hour. (3) Hence, in every year you should always observe the lord of the first hour, for if it is in a fortunate place the native will enjoy good fortune, and vice versa.^[3]

8 (I) הגבולים. הם¹ גבולות חכמי מצרים. (2) והנה יתחלקו חיי האדם כפי הגבולים, והנה פעמים² שיצא האדם מטוב אל טוב, או מטוב אל רע, או מרע אל טוב, או מרעה אל רעה, כפי תולדת בעלי הגבולים. (3) ואני נסיתי כי בעלי המבטים יותר שלמים מבעלי הגבולים.³

9 (I) השלישות. אמר תלמי כי כח בעל⁴ השלישות יותר מכח בעל⁵ הבתים בעבור שיש כדמות ראיות על⁶ השלישות ולא ככה על הבתים. (2) ואמר כי הלבנה תורה⁷ על שנות הנמול בעבור היותה קרובה אלינו; ואמר: הנה נראה כי מארבע שנים עד י"ד יבקש הנער האומנות והחכמה, ומשם עד כ"ב דברי הנשים; על כן, יורה נה עליהם⁸; ומשם עד מ"א⁹ דברי שררה, ומשם עד קרוב שבעה שבועות¹⁰ שנים יחשוב מה שיהיה בסוף¹¹, ויבקש לכנוס ולקנות¹² עושר שימצא באחרית ימיו, ומשם, שהוא¹³ קרוב אל חמשים שנה, שאמר הכתוב¹⁴: לא יעבור עוד, יבקש עבודת¹⁵ השם כי הוא¹⁶ בכח צדק, וכפי כחו במולד ככה | תהיה עבודתו¹⁷, וככה כולם, ושבתאי על הסוף¹⁸ כי הוא האחרון. (3) ודע כי כוכבי גלגל המזלות, א"ע"פ שיש מהם גדולים מאד, אין להם כח להורות טוב או רע כי אם מעט בעבור היותם רחוקים. (4) ועוד, כי המשרתים יקרה להם תנועות משונות ולא כן לעליונים; על כן המשרתים לבד יורו¹⁸ על כל דברי העולם הזה שלנו, הוא השפל¹⁹.

7 §

I (I) הגורלות. תלמי המלך²⁰ יהתל מן הקדמונים על דברי הגורלות²¹, ואינו מודה רק בגורל²² הלבנה לבדו, שילקח²³ ביום ובלילה²⁴ מהמרחק שיש בין השמש ובין הלבנה, ויוסיף המספר על המעלה הצומחת. (2) וטעם זה הדבר, להוציא ללבנה מעלה כאלו היא צומחת, כי המעלה הצומחת לשמש ובתולדתו; על כן תכרית²⁵

¹ [הם] פמטני; א הנה. ² והנה פעמים [למטאני; פ חסר. ³ הגבולים] למאפטי; נ השלישות. ⁴ [בעלי] למא; פמטני בעל. ⁵ [בעלי] למטאני; נפ בעל. ⁶ [על] למטאני; פ אל. ⁷ [תורה] למטאני; פ חסר. ⁸ ומשם עד ... עליהם] פלמאני; ט חסר. ⁹ עד מ"א] לט; מפי עד מ"ה; נ חסר. ¹⁰ [שבעה שבועות] למטאני; פ מ"ט. ¹¹ [בסוף] פלמטאני; י בסופו. ¹² [ולקנות] למאפטי; נ ולאסוף. ¹³ [שהוא] פלמאני; ט > עד. ¹⁴ [שאמר הכתוב] פלמטני; י שאמר. ¹⁵ [עבודת] פלמטני; א חסר. ¹⁶ כי הוא] למטאני; פ שהוא. ¹⁷ [עבודתו] פלמטני; א חסר. ¹⁸ [יורו] למאפטי; נ חסר. ¹⁹ הוזה שלנו הוא השפל] למא; פמטני חסר. ²⁰ המלך] פלמאני; ט חסר. ²¹ מן הקדמונים על דברי הגורלות] פלמאני; ט מן הגורלות על הקדמונים. ²² בגורל] פלמטני; א בגלגל. ²³ שילקח] למאפטי; נ שיקח. ²⁴ [ובלילה] פלמטאני; י גם בלילה. ²⁵ [תכרית] למאפטי; י תכרות.

8 (1) Terms. These are the terms of the Egyptian scientists. (2) Now a man's life is divided in accordance with the terms, and consequently sometimes a man goes from good fortune to good fortune, or from good fortune to misfortune, or from misfortune to good fortune, or from misfortune to misfortune, in accordance with the nature of the lords of the terms.^[1] (3) I have found out by empirical experience that the lords of the aspects are more complete than the lords of the terms.^[2]

9 (1) Triplicities. Ptolemy said that the lords of the triplicities are more powerful than the lords of the houses, because there are proofs of sort about the triplicity but not about the houses.^[1] (2) He said that the Moon indicates the years of infancy because it is close to us; and he said: Now it seems that from four years until the fourteen a child seeks a craft and wisdom; from then until 22 ⟨he seeks⟩ women, so Venus gives an indication about them; and from then until 41 ⟨he seeks⟩ power; and from then until about seven times seven years he ponders about what will happen at the end and tries to accumulate and acquire wealth for the end of his life; and from then, when he is about fifty years old, as it is written in Scripture, “he shall serve no more” (Numbers 8:25), but will seek to worship God, because he is under the power of Jupiter, and his worship will be in accordance with its [Jupiter's] power in the nativity, and similarly with respect to all ⟨the planets⟩, and Saturn rules his end because it is the last.^[2] (3) Know that even though some of the stars of the orb of the zodiacal signs are very large, they have only slight power to indicate either good fortune or misfortune, because they are distant. (4) What is more, the planets have erratic motions, but the upper ⟨stars⟩ do not; hence the planets alone indicate the affairs of our world, the lower one.^[3]

§7

1 (1) Lots. King Ptolemy mocks the Ancients regarding lots, and acknowledges only the lot of the Moon, which is taken by night and by day from the distance between the Sun and the Moon, and the number ⟨of the distance⟩ is added to the degree of the ascendant. (2) This is done so as to cast a degree for the Moon as if it were the degree of the ascendant, inasmuch as the degree of the ascendant belongs to the Sun and has its nature; therefore it [i.e. the ascendant] will nullify the Moon when it approaches this place, also when the Moon is at this place,

הלבנה בהגיעה שמה גם הלבנה עליה¹, בעבור היות הלבנה קרה, הפך תולדת המעלה הצומחת; על כן, אמרו כי אין ראוי להיות הלבנה במזל העולה². (3) ודע כי כל אלה הגורלות שאמרו הקדמונים הם נכונים. (4) אם³ היה הגורל באחד הבתים הטובים, ולא יביט אליו השליט על מקומו, לא יורה על טוב ועל רע כלל⁴. (5) ושמו הגורל⁵ הטוב⁶ ללבנה כי היא תורה על גוף האדם ועל העצמות⁷ שיש בו, וגורל⁸ השמש לנשמה⁹ כי הוא יורה עליה; על כן, יורה זה הגורל על המחשבות ועל דבר נסתר מבני אדם. (6) וגורל שבתאי יורה על כח הגוף, ונלקח כן בעבור שבתאי יורה על מוסדי¹⁰ הגוף. (7) והגורל הטוב גם כן יורה על אודות הגוף. (8) וגורל צדק נלקח ככה בעבור שהשמש יורה על הנשמה העליונה, וצדק על הנפש הצומחת. (9) וגורל מאדים¹¹ נלקח ממזל הטוב, שהוא חלק הלבנה, אל¹² מאדים, שיוורה על הכעס, והחלק הטוב יורה על הגוף. (10) וגורל נגה¹³ נלקח בין חלקי¹⁴ שני המאורות, כי הוא כוכב טוב ויורה על דברים טובים. (11) וגורל כוכב חמה¹⁵ נלקח מגורל השמש אל גורל הלבנה כי יש לו כח בנשמה, כאשר הזכרתי.

2 (I) גורלות הבתים. גורל החיים מצדק, בעל הנפש הצומחת¹⁶, עד¹⁷ שבתאי, שיוורה על הגוף, כי הנפש הצומחת היא הנפש הראשונה שיקבל הגוף. (2) גורל הדעת השני כוכבים העליונים¹⁸, ויוסיפו על מקום כוכב שהוא בעל הלשון. (3) גורל הגוף בין שני המאורות, כי האחד יורה על הנשמה והשני על הגוף, וזה הגורל יורה אם¹⁹ יהיה הגוף יפה וכל האברים²⁰ שלמים. (4) וטעם גורל הבית השני ידוע, כי הוא יורה²¹ על הממון. (5) וגורל הלקט, הטעם²² שימצא אדם²³ מציאות בדרכים. (6) והקדמונים אמרו כי השמש יורה על הנשמה, ויש אדם שנפשו מכוונת לסחורה, ולעולם יהיה לו ריווח כאילו נפשו | הפיקה רצון מהשם. (7) ובעבור היות נוגה שני לשמש, הוא כדמות הבית השני אל המעלה הצומחת, על כן זה הגורל. (8) וגורל האחים²⁴ מהעליונים בעבור שהם יורו על כל דבר קדמון, ויתכן היות לנולד אחים גדולים ממנו. (9) ואחרים אמרו²⁵ כי שבתאי יורה על הקדמונים וצדק על כל דבר שיתחדש,

¹ עליה [למאפטי; נ > תכרית. ² העולה] פלמטאנ; י הטלה. ³ אם] למטאנ; פ > אבל. ⁴ יורה על טוב ועל רע כלל] למאפטי; ט אבל אם יביט אליו לא יורה על טוב ועל רע כלל; י יורה על טוב. ⁵ הגורל] לטי; מאפטי גורל. ⁶ הטוב] למאפטי; נ טוב. ⁷ העצמות] מטנאיפ; ל הנשמות. ⁸ וגורל] פמטני; ל גורל; א וגלגל. ⁹ לנשמה] מאטני; פ על הנשמה. ¹⁰ מוסדי] למטאנ; פ מוסד. ¹¹ מאדים] למאפי; נ הטוב; ט חסר. ¹² אל] למאנ; פ ו; ט חסר. ¹³ נלקח ככה בעבור שהשמש ... נגה] לפאנ; ט חסר. ¹⁴ בין חלקי] למאטני; פ מן. ¹⁵ כוכב חמה] פלמאנ; ט כותב. ¹⁶ הצומחת] פלמאנ; ט חסר. ¹⁷ עד] חוספתי עפ"י הקשר הדברים; למטנאפ חסר. ¹⁸ כוכבים העליונים] למאנ; פ הכוכבים העליונים; ט כוכבים עליונים. ¹⁹ אם] מטנאיפ; ל כי. ²⁰ וכל האברים] פלמאנ; ט והאברים כולם. ²¹ יורה] למאטני; פ חסר. ²² הטעם] למא; פטנ חסר. ²³ אדם] למ; פא האדם; טנ חסר. ²⁴ האחים] לפאנ; מט החיים. ²⁵ אמרו] למנ; ט אומרים; א חסר.

because the Moon is cold, which is the opposite of the nature of the degree of the ascendant; therefore they said that it is not appropriate for the Moon to be in the sign of the ascendant.^[1] (3) Know that all the lots set forth by the Ancients are right. (4) If the lot is in one of the planetary houses,^[2] and the lord of its place does not aspect it, it will not indicate good fortune or misfortune at all. (5) They assigned the lot of Fortune^[3] to the Moon because it gives an indication about the body of man and the bones in it; the lot of the Sun (was assigned) to the soul because it gives an indication about it, therefore, this lot indicates thoughts and things hidden from man. (6) The lot of Saturn indicates the power of the body, and it is taken in this manner because Saturn indicates the foundations of the body. (7) The lot of Fortune also gives an indication about the body. (8) The lot of Jupiter is taken in this manner because the Sun indicates the superior soul, and Jupiter (indicates) the vegetative soul. (9) The lot of Mars is taken from the lot of Fortune, which is in the portion of the Moon, to Mars, which indicates anger, and the lot of Fortune indicates the body. (10) The lot of Venus is taken between the lots of both luminaries, because it is a benefic planet and indicates good things. (11) The lot of Mercury is taken from the lot of the Sun to the lot of the Moon because it has a power over the soul,^[4] as I have mentioned.^[5]

2 (1) The lots of the (mundane) houses. The lot of life (is taken) from Jupiter, the lord of the vegetative soul, to Saturn, which indicates the body, because the vegetative soul is the first soul received by the body.^[1] (2) The lot of knowledge (is from) the two upper planets, to which they added the place of the planet that is the lord of the tongue [i.e., Mercury].^[2] (3) The lot of the body is between the two luminaries, inasmuch as one indicates the soul and the other the body, and this lot indicates whether the body will be handsome and all the members intact.^[3] (4) The reason for the lot of the second house is known, because it [the second house] indicates wealth.^[4] (5) The lot of gathering^[5] means that a man will find lost objects on the roads. (6) The Ancients said that the Sun indicates the soul, and there are people whose soul is oriented to commerce, and they always make a profit as if their soul obtains favor of God (Prov. 8:35, 12:2, 18:22). (7) Since Venus is second to the Sun, it is like the second house to the degree of the ascendant; this is the explanation for this lot.^[6] (8) The lot of brothers (is taken) from the upper (planets), because they indicate anything pre-existing, and the native may have older brothers. (9) Others said that

והנכון לומר כי כן מצאו בדרך הנסיון¹. (10) גורל האב. כבר הזכרתי שהשמש ושבטאי יורו² על האב, והחלו ביום מהשמש בעבור שיש לו כח רב, ומשבטאי³ בלילה בעבור שיתכן להיותו למעלה מן הארץ, והנה יש לו כח⁴ מכח השמש. (11) ואמרו כי אם היה שבטאי תחת אור השמש, והנה אין כח לו, יקח מקומו צדק בעבור היותו עליון⁵, ואחרים אמרו⁶ כי בהתחבר השמש עם שבתי אין כח לשניהם; על כן נקח בעבור השמש מאדים ובעבור שבתי צדק. (12) ואם טען טוען למה לקחו העליון מהשמש, התשובה בעבור היות העליונים מורים על כל דבר קדמון, ולא מצאנו⁷ עליון משבתי, על כן הוצרכנו⁸ לקחת במקומו צדק. (13) גורל הקרקע. בעבור שהלבנה נוף⁹ ושבטאי יורה על כל דבר קדמון והעפר¹⁰, על כן זה הגורל¹¹. (14) גורל הבנים. בעבור שצדק יורה על פריה ורביה ושבטאי יורה על כל דבר עומד, ובכן יעמד זכר האדם, על כן זה הגורל¹³. (15) גורל¹⁴ הבנים הזכרים¹⁵. ממאדים אל צדק בעבור היות צדק מורה על הבנים, ובית מאדים חמישי לביתו הראשון¹⁶, שיוורה על הבנים, על כן זה הגורל. (16) גורל התחלואים. לעולם שבטאי ומאדים יורו¹⁷ על התחלואים¹⁸, על כן זה הגורל¹⁹. (17) והחלו משבטאי כי הוא מכוכבי היום, ומאדים בלילה כי הוא מכוכבי הלילה. (18) ודברי חנוך: להוסיף המרחק על מקום כוכב חמה²⁰, בעבור היותו כוכב מתהפך. (19) גורל העבדים. כוכב חמה יורה על העבדים, גם כן הלבנה, בעבור היותם שפלים. (20) גורל²¹ הנשים. שבטאי יורה על הטינוף כי יש לו המרה השחורה, וככה המשכב כי טמא הוא, ונהגה על הנשים. (21) גורל הזנות. השמש יורה על השררה ועל כל דבר שיעשה בכח, על כן זה²² הגורל; נוהגה יורה על הנשים. (22) גורל הזכרים²³. במולד הנקבה השמש כמו הבעל ונהגה כמו²⁴ האשה, ואמר²⁵ חנוך ממאדים אל השמש בעבור היות שניהם כמו בעלים בעלי שררה²⁶. (23) הבית השמיני. הלבנה תורה על כל דבר שיקרה לגוף, והבית השמיני על המות, ושבטאי ממונה להרע ולהמית, כי ככה תולדתו. (24) גורל הדרך. ככה²⁷ בעבור | שהבית התשיעי יורה על הדרכים. (25) גורל²⁸ על²⁹ דרך המים. שבטאי יורה על הים והמים, וחצי סרטן, כי שם כח הבית,

¹ בדרך הנסיון] למ; פט בדרך נסיון; נ על דרך הנסיון; א חסר. ² יורו] מטנאפי; ל יורה. ³ ומשבטאי] פלמאנ; ט חסר. ⁴ [כח] למאפטי; נ < רב. ⁵ ואמרו כי אם היה ... עליון] פלמאנ; ט חסר. ⁶ אמרו] פלמא; ט אמרים. ⁷ מצאנו] פלמאנ; ט ימצאו. ⁸ הוצרכנו] פלמאנ; ט הוצרכו. ⁹ נוף] פלמאנ; ט חסר. ¹⁰ קדמון והעפר] פלמאנ; ט עומד ובכן יעמוד זכר האדם. ¹¹ על כן זה הגורל] פלמאנ; ט < כגורל הבנים הזכרים. ¹² גורל] מטנאפי; ל וגורל. ¹³ גורל הבנים ... הגורל] פלמאנ; ט חסר. ¹⁴ גורל] מטנאפי; ל וגורל. ¹⁵ הזכרים] מטנאפי; ל הזכרים. ¹⁶ לביתו הראשון] מטנאפי; ל לו. ¹⁷ יורו] פמא; ט יום. ¹⁸ על התחלואים] ל; מטנאפי חסר. ¹⁹ גורל התחלואים לעולם שבטאי ומאדים יורו על כן זה הגורל] למאפטי; נ חסר. ²⁰ כוכב חמה] פלמא; ט כותב. ²¹ גורל] למאפטי; נ > הבית הז'. ²² [זה] פלמא; ט חסר. ²³ הזכרים] פלמאנ; ט הנשים. ²⁴ כמו] למאפטי; נ במולד. ²⁵ ואמר] מטנאפי; ל ויאמר. ²⁶ היות שניהם כמו בעלים בעלי שררה] למא; ט היות כל בעלים בעלי שררה; פ היות בעלים בעל שררה; נ היות כמו בעלים בעלי שררה. ²⁷ ככה] למטא; פ חסר. ²⁸ על] למאפטי; נ חסר.

Saturn indicates pre-existing <things> and Jupiter anything that emerges later, and this is correct, as was found through experience.^[7] (10) The lot of the father. I have already mentioned that the Sun and Saturn indicate the father;^[8] and the Sun was made first by day because it has a great power, and Saturn <was made first> by night because it may be above the Earth, so that it [Saturn] has <more> power than the power of the Sun. (11) Some said that if Saturn is under the rays of the Sun,^[9] so that it [Saturn] has no power, Jupiter takes its place because it [Jupiter] is an upper <planet>; others said that when the Sun conjoins Saturn both lose their power, so we should take Mars instead of the Sun and Jupiter instead of Saturn. (12) If someone asks why they took one that is above the Sun, the answer is that the upper <planets> indicate everything that is pre-existing, and because we have found no <planet> higher than Saturn, we were bound to take Jupiter in its place.^[10] (13) The lot of the estate. The Moon <indicates the> body and Saturn indicates everything pre-existing and dust; this is the explanation for this lot.^[11] (14) Lot of children. Jupiter indicates procreation and Saturn indicates anything that persists, and <sons> perpetuate a man's memory; this is the explanation for this lot.^[12] (15) The lot of the male children. <It is taken> from Mars to Jupiter because Jupiter indicates sons, and <because> the house of Mars [i.e., Aries] is the fifth to its [Jupiter's] first house [i.e., Sagittarius], which indicates sons;^[13] this is the explanation for this lot.^[14] (16) The lot of diseases. Saturn and Mars always indicate diseases; this is the explanation for this lot. (17) They began from Saturn because it is a diurnal star, and from Mars by night because it is a nocturnal star.^[15] (18) Enoch says to add the distance to the place of Mercury because it is a mutable planet.^[16] (19) The lot of slaves. Mercury indicates slaves, as does the Moon, because they are inferior <planets>.^[17] (20) The lot of women. Saturn indicates filth because the black bile belongs to it, and similarly with sexual intercourse because it is impure, and Venus <indicates> women. (21) The lot of prostitution. The Sun indicates dominance and anything done by force; this is the explanation for this lot; Venus indicates women. (22) The lot of males. In the nativity of a woman the Sun is like the husband and Venus like the wife; Enoch said from Mars to the Sun because the two assert dominance.^[18] (23) The eighth house. The Moon indicates anything that happens to the body, and the eighth house indicates death, and Saturn is the lord that harms and kills, for that is its nature.^[19] (24) The lot of the journey. <This is> so because the ninth house indicates journeys. (25) The lot of the journey by water. Saturn indicates the sea

גם הוא יורה על הים. (26) גורל האם. נוגה והלבנה יורה¹ על הנשים, והלבנה כמו האם². (27) גורל הכבוד. י"ט מעלות ממזל טלה³, שם כבוד השמש על דעת חכמי הודו, ובשלוש מעלות ממזל שור כבוד הלבנה. (28) גורל החן. בעבור כי השמש יורה על⁴ הכבוד וצדק כוכב טוב, והנה כן החן. (29) גורל הסחורה. צדק וכוכב חמה יורו על זה, כי צדק יורה על הממון וכוכב חמה על האומנות, והסחורה היא אומנות. (30) גורל האוהבים. אהבתם דומה לאהבת הנפש עם הגוף. (31) גורל האויבים. שבתאי ומאדים יורו על המריבה ולשבתאי כח ביום, על כן יחלו ממנו. ודברי חנוך ידועים כי הבית השנים עשר יורה על המריבות ושני הגורלות האחרונים.

8§

1 (I) דע כי סרטן ואריה הם תחלת מחלוקת⁵ הבתים, וזה אחר זה, ובחצי כל בית⁶ ישתנה⁷ להיות מרחק זה מתחלת בית זה, כמו האחר⁸ אל סופו⁹. (2) וכאשר יש בית¹⁰ כוכב חמה במזל השני לשמש, ככה במזל השני לאחור¹¹ ממזל סרטן, כי שניהם הם¹² בתי כוכב חמה. (3) וכערך מאזנים אל אריה ככה ערך שור אל סרטן, וכערך עקרב אל אריה ככה ערך טלה אל סרטן¹³, וכערך קשת אל אריה ככה ערך דגים אל סרטן, וכערך גדי אל אריה ככה ערך דלי אל סרטן¹⁴. (4) והנה חלקו מאורות הגלגל לשני חלקים, החלק הגדול לגדול¹⁵ והחלק הקטן לקטן.

2 (I) תקופת¹⁶ החדשים. כאשר תחלק שלש מאות וששים וחמשה ימים ורביעית יום¹⁷, שהוא קרוב ממספר שנה, אל מזלות¹⁸, כי המזל הראשון ישמש בתחלה ובסוף,

¹יורה] פלמטי; א יורו; נ תורה. ²האם] מטנאיפ; ל האש. ³ממזל טלה] פלמאנ; ט מעלה. ⁴על] פלמאנ; ט חסר. ⁵מחלוקת] לפנ; מא מחלקת; ט המחלקת. ⁶בית] מטנאיפ; ל הבית. ⁷ישתנה] פלמטי; א ישתנה. ⁸האחר] למ; טנ האחד. ⁹סופו] מטנאיפ; ל סוכם. ¹⁰בית] מטנאיפ; ל בין. ¹¹לאחור] פלמאנ; ט לאחורי. ¹²הם] פלמאנ; ט > גם. ¹³וכערך עקרב אל אריה ככה ערך טלה אל סרטן] למאפטי; נ חסר. ¹⁴וכערך גדי אל אריה ככה ערך דלי אל סרטן] פלמאנ; ט חסר. ¹⁵לגדול] למאפטי; נ חסר. ¹⁶תקופת] פלמאנ; ט תקופות. ¹⁷ורביעית יום] למאפטי; נ חסר. ¹⁸מזלות] למאפטי; נ > י"ב.

and the water, and the middle of Cancer, where the power of the house is, also indicates the sea.^[20] (26) The lot of the mother. Venus and the Moon indicate women, and the Moon is like the mother.^[21] (27) The lot of dignity. The exaltation of the Sun is at 19 degrees of Aries, in the opinion of the Indian scientists; the exaltation of the Moon is at 3 degrees of Taurus.^[22] (28) The lot of beauty. Inasmuch as the Sun indicates honor and Jupiter is a benefic planet, and beauty is like that. (29) The lot of commerce. Jupiter and Mercury indicate this because Jupiter indicates wealth and Mercury ⟨indicates⟩ crafts, and trade is a craft.^[23] (30) The lot of the lovers. Their love is like the soul's love for the body.^[24] (31) The lot of enemies. Jupiter and Mars indicate quarrels, and Saturn has power by day, hence they began from it [i.e. from Saturn]. Enoch's statements, that the twelfth house indicates quarrels and the last two lots, are well known.^[25]

§8

1 (1) Know that Cancer and Leo are the beginning of the division of the ⟨planetary⟩ houses, and one is next to the other, and at the middle of any house, the distance from this one ⟨from the middle of one of the two houses of a planet⟩ to the beginning of the ⟨other⟩ house is equal to the distance from the other [i.e. from the middle of the second house] to its end [i.e. to the end of the first house]. (2) Also, just as ⟨one⟩ house of Mercury is in the second sign after the ⟨the house of the⟩ Sun, so ⟨there is another house⟩ in the second sign after Cancer, and both are houses of Mercury. (3) The number of ⟨signs separating⟩ Libra from Leo is as the number of ⟨signs separating⟩ Taurus from Cancer, and the number of ⟨signs separating⟩ Scorpio from Leo is as the number of ⟨signs separating⟩ Aries from Cancer, and the number of ⟨signs separating⟩ Sagittarius from Leo is as the number of ⟨signs separating⟩ Pisces from Cancer, and the number of ⟨signs separating⟩ Capricorn from Leo is as the number of ⟨signs separating⟩ Aquarius from Cancer. (4) Consequently, the luminaries divide the circle into two domains, the larger domain to the great ⟨luminary⟩ and the smaller domain to the small ⟨luminary⟩.^[1]

2 (1) The revolution of the months. When you divide 365 and a quarter days, which is approximately the length of the year, by the signs, with the first sign serving at ⟨both⟩ the beginning and the end, each month

יעלה לכל חודש עשרים ושמונה ימים ושתי שעות. (2) וטעם מה שהזכרתי, משוב השמש לכל¹ חודש במספר המעלות² בכל מזל; הוא האמת על דרך סברא³, וככה ניסו אותו הקדמונים והאחרונים אחריהם. (3) ומה שהזכרתי מהשעות הישרות, ככה טעמיהן: (4) דע כי כאשר תחסר⁴ ימי השנה שבעה שבעה, כי הם ימי השבוע והם⁵ חוזרים חלילה, ישאר⁶ יום אחד; על כן אמרתי⁷ להוסיף יום אחד⁸ לכל⁹ שנה. (5) וטעם הישרות כי המעוותות אינם עומדות על דרך אחד; על כן צריך שתדע לעולם, אם הנולד הוא¹⁰ ביום, כמה שעות ישרות עברו מתחלת היום. (6) וזה תוכל לדעת שתשיב המעוותות לישרות¹¹, ואחר כן תוסיף חמש¹² שעות ישרות לכל שנה, גם ארבעים ותשעה חלקים מחלקי שעה. (7) ואחר¹³ שתדע¹⁴ המספר שיגיע, אז תוכל להשיב הישרות | למעוותות¹⁵, כי גם¹⁶ צורך יש להם לדעת מי הוא בעל השעות¹⁷ תקופת¹⁸ השנה. (8) ולעולם תהיה התקופה של תחלת השנה כמספר הימים של חודש הערלים שהיה בתחלה, רק אם היתה השנה¹⁹ מעוברת להם תהיה התקופה בחסרון²⁰ יום²¹, אם הנולד היה בשנה פשוטה. (9) ואם היה בשנה²² מעוברת תהיה תקופת השנה ככל שנה פשוטה בתוספת יום, ובכל שנה מעוברת תהיה כמספר הראשון. (10) ועל זה הדרך תקופת החדשים בכל חדש²³, כי²⁴ לא ישתנה רק אחרי מאה ושלשים ואחת שנה. (11) וכאשר תערוך זה המספר על שתי מעלות ושלש רביעיות מעלה שיחסרו משש שעות²⁵, אז יעלה שלש מאות וששים מעלות שיעלו²⁶ ביום אחד.

3 (I) ודע כי חכמי הודו אמרו שיוסיף חמישית שעה על שש שעות²⁷ שלמות לכל²⁸ שנה תמימה. (2) וזה אמת²⁹ רק כנגד הצורות ואין צורך לשמש שלהם³⁰, רק למי שיתעסק בחכמת הצורות, והיא אסורה בתורת השם כי היא כדמות עבודה זרה. (3) והשמש שהיא³¹ בלוחות שכתבתי תהיה אמת ולא יהיה בה³² שום דופי, רק אם עברו אלף שנים יהיה בה טעות מעט חלקים.

¹ לכל] מטנאיפ; ל בכל. ² המעלות] מטנאיפ; ל מעלות. ³ סברא] למאפטי; נ סברה. ⁴ תחסר] למאנ; נ יחסר; פ תחבר. ⁵ והם] פלמאנ; ט חסר. ⁶ שאר] למאפנ; ט ישארו. ⁷ אמרתי] למאפטי; נ חסר. ⁸ אחד] למאפטי; נ חסר. ⁹ לכל] פלמטני; א בכל. ¹⁰ הוא] למאפטי; נ חסר. ¹¹ לישרות] פמאנ; ט הישרות. ¹² חמש] למאפטי; נ חסר. ¹³ ואחר] למאנ; פט ואחר כן. ¹⁴ שתדע] פלמטני; א תדע. ¹⁵ למעוותות] פלמאנ; ט מעוותות. ¹⁶ כי גם] למאנ; פט גם כי. ¹⁷ השעות תקופת] פלמאנ; ט שעות התקופות ¹⁸ השנה] פלמטני; א חסר. ¹⁹ בחסרון] למטנ; פ לחסרון. ²⁰ יום] למאפטי; נ חסר. ²¹ היה בשנה] פלמנ; ט חסר. ²² להם תהיה התקופה ... מעוברת] פלמטני; א חסר. ²³ חדש] פלמאנ; ט חדשים. ²⁴ כי] פלמאנ; ט חסר. ²⁵ משש שעות] פלמאנ; ט משלש מעלות. ²⁶ שיעלו] פאנ; מ שיחברו; ט שיעלה; ל חסר. ²⁷ שעות] מטנאיפ; ל מעלות. ²⁸ לכל] לטנ; פ חסר. ²⁹ אמת] למאפטי; פ האמת. ³⁰ שלהם] פלמטנ; א אליהם. ³¹ שהיא] למאפטי; נ חסר. ³² בה] למאפטי; נ במ.

turns out to have 28 days and 2 hours.^[1] (2) The explanation for what I have just mentioned is that the Sun moves each month the ⟨same⟩ number of the degrees in each sign; this is true by way of logical assumption, and it was tested empirically by the Ancients and after them by the moderns. (3) As for what I have said about the equal hours, the explanation is as follows: (4) Know that when you keep subtracting seven from the number of days in the year, representing the regular cycle of the week, one day is left over; hence I said that one day should be added each year.^[2] (5) The explanation of the equal ⟨hours⟩ is that the seasonal ⟨hours⟩ are not constant [i.e., they vary in length]; hence you always have to know, for a daytime nativity, how many equal hours have elapsed since the beginning of the day. (6) You can find this out if you convert the seasonal into equal ⟨hours⟩, and then add 5 equal hours for every year, plus another 49 minutes.^[3] (7) When you know the result, you can convert the equal ⟨hours⟩ into seasonal ⟨hours⟩, because they too are necessary for determining the lord of the hours ⟨in⟩ the revolution of the year [i.e., when the same day of the year comes round again].^[4] (8) The revolution of the beginning of the year [i.e. the day each year that corresponds to the natal day] always falls out on the day of the month of the Christians [i.e. the day of the Julian calendar] on which it [the birthday] was originally; but if the previous year was a ⟨Julian⟩ leap year, the revolution of the year [i.e., the natal day] falls out one day less on the calendar [i.e., a day earlier], if the nativity was in a regular year. (9) But if the nativity was ⟨on leap-day⟩ in a leap year, the native day falls out one day more [i.e., a day later] in a regular year, but in a leap year on the original date.^[5] (10) The same method ⟨applies⟩ to the revolution of the months in any month, because it changes only after 131 years. (11) When you multiply this number [i.e., 131] by the two and three-quarters degrees that ⟨the year is short of 365 days and⟩ six hours, the result is 360 degrees, which ascend in one day.^[6]

3 (1) Know that the Indian scientists said that one should add one-fifth of an hour to six whole hours for each full year.^[1] (2) This is true only with respect to the images ⟨of the constellations⟩; there is no need for their ⟨opinion with regard to the motion of the⟩ Sun, except for those who deal in the science of the images ⟨of the stars⟩, which is forbidden by the law of God, because it resembles idolatry.^[2] (3) The ⟨motion of the⟩ Sun as recorded in the tables I have written^[3] is true and flawless; after the lapse of a thousand years there will be an error of only a few minutes.

4 (I) השבועים¹. כבר הזכרתי כי בעל שעות המולד יש לו כח גדול, על כן יקיפו אותו שנה שנה². (2) וטעם שנים העשר כי כן המזלות. (3) וטעם שלשה³ שבועים בעבור כי חשבון שבועות⁴ כל⁵ השנה⁶ הם חמישים ושנים, הוצא⁷ מהם תשעה וארבעים שהם שבעה על שבעה ישאר⁸ שלשה, ונשאר⁹ יום¹⁰ ורביעית יום. (4) וטעם לקחת לתקופת¹¹ המזלות ארבעה שבועים לכל¹² שנה כי חשבון השבועים הם חמישים ושנים, הוצא¹³ מהם ארבעים ושמונה שתוציאם שנים עשר שנים עשר¹⁴, ונשאר¹⁵ ארבע שבועות גם היום ורביעית היום¹⁶, שהוא נוסף¹⁷ בכל שנה על שבועות השנה.

5 (I) תקופת¹⁸ הימים. טעם לתת לכל מעלה שנים עשר יום ועוד שתי שעות ושלישית שעה שכן יתחלקו כל ימות השנה על שלשים מעלות ישרות, שהם בית הסוף. (2) וטעם יעקב אל כנדי לתת לכל יום מעלה אחת פחות חלק¹⁹, בעבור שזה הוא מהלך השמש האמצעי²⁰ ביום אחד. (3) ותלמי אומר²¹ שתתן מן המעלה הצומחת בתקופת השנה לכל מעלה ורביעית מעלה קרוב מיום אחד, וזה הטעם בעבור הרביעית²², שהוא נוסף. (4) ויש אומרים שאלה המעלות יתנם במעלת לוח הארץ, ואחרים אמרו לעשות בשנים הדרכים. (5) וטעם לתת²³ בשתי שעות²⁴ מעלה אחת כי ביום ולילה²⁵ יתן שנים עשרה המעלה. (6) ובעבור היות החמישה מקומות החיים רחוקים, על כן ראוי לנהגם תמיד במעלות כפי מקומם, כאשר הזכרתי בספר מעשה הלוחות, גם לדעת מקום²⁶ בית הסוף לכל אחד.

6 (I) ודע כי ההוה מהחמשה | חזק במולד, כל מה²⁷ שיורה עליו יהיה אמת, בין³⁸ טוב ובין רע, ואם²⁸ היה במקום נופל, או לא יביט אל המעלה הצומחת, לא יבוא²⁹ לידי מעשה כל מה שיורה רק מעט ממנו, בדברים ומחשבות וחלומות. (2) ואין בכל החמישה שהוא העיקר לנהוג במעלות, מעלה אחר מעלה ומזל אחר מזל בתקופות³⁰ השנים, רק השרש³¹ שילקח³² ממנו החיים. (3) ויש לך להסתכל כל

¹ [השבועים] למאטנ; פ השבועיים. ² שנה] מטנאיפ; ל תמימה. ³ שלשה] פלמא; טנ שלשת. ⁴ [שבועות] פלמאנ; ט שביעית. ⁵ כל] למאפטי; נ > של. ⁶ השנה] פלמאנ; ט שנה. ⁷ הוצא] למטאנ; פ הוציא. ⁸ ישאר] למאטנ; פ < בידך. ⁹ ונשאר] למאטנ; פ ועוד נשאר. ¹⁰ [יום] מטנאיפ; ל > עוד. ¹¹ [לתקופת] פלמאנ; ט תקופת. ¹² לכל] פלמאנ; ט בכל. ¹³ הוצא] למאטנ; פ הוציא. ¹⁴ שתוציאם שנים עשר שנים עשר] לטאנ; פ שהם שנים עשר על שנים עשר; מ שנים עשר שנים עבור. ¹⁵ ונשאר] למאנ; פ ישאר בידך; ט ונשאר. ¹⁶ ורביעית היום] מאנ; ל ורביע היום; פ ורביעית יום; ט הרביעית היום. ¹⁷ נוסף] מאטנ; לפ יוסף. ¹⁸ תקופת] פלמטנ; א תקופות. ¹⁹ חלק] למאפטי; נ < אחד. ²⁰ השמש האמצעי] לפטאנ; א השנים האמצעיים. ²¹ אומר] למאפטי; נ אמר. ²² הרביעית] מטנאיפ; א רביעיות. ²³ לתת] למאטנ; פ חסר. ²⁴ שעות] פלמאנ; ט מעלות. ²⁵ ולילה] פמנ; לטא ובלילה. ²⁶ מקום] למאפ; ט חסר. ²⁷ כל מה] למטנ; פ חסר. ²⁸ ואם] למאפטי; נ וגם. ²⁹ יבוא] מטנאיפ; ל יצא. ³⁰ בתקופות] למאפ; ט בתקופת. ³¹ השרש] ל; פאנ השר; מט השם. ³² שילקח] מטנאיפ; ל ילקח.

4 (1) The weeks. I have already mentioned that the lord of the hour of the nativity has great power,^[1] hence its revolution is calculated each year. (2) The reason for “12” is that ⟨this is the number of⟩ the signs. (3) The reason for “3 weeks” is that the number of weeks in a complete year is 52; subtract 49, which is seven times seven, and the remainder is three ⟨weeks⟩; and there is still a remainder of one and a quarter days. (4) The reason for “subtracting 4 weeks for the revolution of the signs for every year” is that the number of weeks ⟨in one year⟩ is 52; subtract 48 by casting out twelves^[2] and the remainder is four weeks plus a day and a quarter, which is the excess each year to the ⟨full⟩ weeks of the year.^[3]

5 (1) Revolution of the days. The reason for assigning “12 days plus two and a third hours to each degree” is that in this manner all the days of the year are divided into 30 equal degrees, which is the terminal house.^[1] (2) Ya‘qub al-Kindi’s reason for assigning “one degree less one ⟨arc⟩ minute to each day” is that this is the mean motion of the Sun in one day. (3) Ptolemy says that from the degree of the ascendant at the revolution of the year you should assign approximately one day to each degree and a quarter,^[2] and the reason for the quarter ⟨of a degree⟩ is that it [i.e., one day] is added. (4) Some say that these degrees should be given in degrees of the latitude plate ⟨of the astrolabe⟩, and others said that this should be done by both methods.^[3] (5) The reason for assigning “one degree to ⟨every⟩ two hours” is that day and night together are equal to 12 degrees. (6) Because the five places of life are distant ⟨one from the other⟩,^[4] it is appropriate always to direct them in degrees^[5] in accordance to their place, as I have mentioned in the *Book on the use of the tables*,^[6] and also to know the place of the terminal house for each one ⟨of the five places of life⟩.^[7]

6 (1) Know that everything indicated by the one of the five ⟨places of life⟩ that is predominant in the nativity comes true, whether for good fortune or for misfortune, but if it is in a ⟨house⟩ falling ⟨from the cardines⟩, or if it is not aspecting the degree of the ascendant, only some of what it indicates will be fulfilled, in deeds, thoughts, and dreams.^[1] (2) It is essential to direct only the root among the five ⟨places of life⟩, namely, the one from which the ⟨length of⟩ life is taken, one degree after another and one sign after another in the revolutions of the years.^[2] (3) You should calculate all the aspects in both straight and

המבטים¹ במעלות ישרות גם המעוותות, כמו שכתוב בספר מעשה הלוחות, במולד ובתקופות כל השנה².

7 (I) סוף הספר³. הנה אגלה לך סוד. (2) דע⁴ כי תחלת שנת⁵ הודו מנקודה בגלגל המזלות, על כן אמרו הקדמונים שיש⁶ מעלות חשוכות ושיש מעלות נוגהות⁷ ויש בורות⁸. (3) והטעם, שיש כוכבים בממסך⁹ שבתאי גם מאדים; והנה בהיות השמש או אחד מן המשרתים כנגדם, או יהיה כאדם שנפל לבור¹⁰. (4) ואתה¹¹, אם רצית¹² לדעת מקום אלה המעלות, כי תשתנינה¹³ בכל שנה, חסר ממקום המאורות גם המשרתים היום שמנה מעלות וחמישה חלקים. (5) ושנת תלמי, גם חכמי ישמעאל ויון¹⁴, היא מנקודת מחברת השני הכוכבים העליונים או הגלגלים הגבוהים¹⁵, כמו שתראה לומר. (6) והבתים ובתי הכבוד והגבולים הם בלוחות אלה החכמים רק¹⁶ לדעת הצורות; אם המזל הוא בצורת¹⁷ בן אדם צריך לחסר מהלוחות לשבעה המשרתים שמנה מעלות. (7) ושמא¹⁸ יטעון טוען: הלא הסכימה דעת הכל כי כוכבי גלגל¹⁹ המזלות למעלה מגלגלי²⁰ כל המשרתים, ואיך יהיה הכוכב העליון ממסכו כשבתאי או מאדים²¹ או כשניהם²²; כי הנה אמרו כי כוכבי כימה הם בממסך מאדים עם הלבנה, על כן²³ כל מולד שתהיה הלבנה במקום כימה יורה על חולי העיניים; וככה, אם היתה הלבנה עם הכוכב שהוא בסרטן הנקרא עב הענן יורה על חשיכות העיניים. (8) התשובה: דע כי אין למשרתים תולדת חום ולא קור ולא לחה²⁴ ולא יובש, רק יולידו אלה הארבעה תולדות בעולם השפל²⁵, וככה העליונים יולידו בעולם תולדת כאלו היא ממוסכת עם מעשה מאדים בהיותו עם הלבנה²⁶. (9) וככה דרך הכוכבים הגדולים, כמו הכוכב שהוא בלב הרומח²⁷, שתולדת מעשיו²⁸ כמעשה נגה עם כוכב חמה²⁹, ולב האריה שהוא כתולדת צדק עם מאדים. (10) ולפי דעתי³⁰ שאין לכוכבי³¹ גלגל³² המזלות כח רב בעבור שהם רחוקים, אף כי הכוכבים שהם רחוקים מקו גלגל המזלות³³, כמו הנשר³⁴ הגדול; גם³⁵ יש לו מעט כח בכל מקום שרחבו רב והוא על ראשו, ולב האריה יש לו כח בעבור שהוא עם³⁶ קו גלגל המזלות. (II) גם הקדמונים מחכמי הודו אמרו שאין כח לאחד מהם, רק אם³⁷ יהיה

¹המבטים] טו; פלמא המביטים. ²במולד ובתקופות כל השנה] למאפטי; ו חסר. ³הספר] מטנאפי; לה העיניים. ⁴דע] פלמטני; א חסר. ⁵שנת] פלמאט; ט שנות. ⁶שיש] תיקנת עפ"י הקשר הדברים; למטנאפ שש. ⁷נוגהות] לפא; מט נוגהות; ו נוגהות. ⁸ויש בורות] למאט; ט ויש בורות; פ חסר. ⁹בממסך] למאפני; ט כממסך. ¹⁰לבור] לפנ; מטא בבור. ¹¹אתה] למאטני; פ חסר. ¹²רצית] למאטני; פ תרצה. ¹³תשתנינה] למאטני; פ תשתנו. ¹⁴יון] פלמטי; א חסר. ¹⁵הגבוהים] פלמטני; א חסר. ¹⁶רק] למאט; פט בין. ¹⁷בצורת] פלמטי; א בצורות. ¹⁸ושמא] למאטני; פ והנה. ¹⁹גלגל] למאטני; פ חסר. ²⁰מגלגלי] למאפ; ט מגלגל. ²¹או מאדים] מטנאפי; ל ומאדים. ²²או כשניהם] למא; פ או בשניהם; ט שניהם. ²³על כן] למאפני; ט חסר. ²⁴לחה] למאטני; פ לחות. ²⁵בעולם השפל] למאפטי; ו חסר. ²⁶וככה העליונים ... הלבנה] למאטני; פ חסר. ²⁷הרומח] מאפני; לט חסר. ²⁸מעשיו] למאפני; ט מעשה. ²⁹כוכב חמה] למאפני; ט כותב. ³⁰דעתי] למאפ; ט חסר. ³¹לכוכבי] פלמ; ט לכוכב; א לכוכבים. ³²גלגל] למאטני; פ חסר. ³³כח רב ... המזלות] ל; מטנאפי חסר. ³⁴הנשר] לפאטני; מ הגבור. ³⁵גם] למאפ; ט חסר. ³⁶עם] למאפני; ט חסר. ³⁷אם] פלמטיני; א חסר.

crooked degrees, as is written in the *Book on the use of the tables*,^[3] for the nativity and for the revolutions of each year.^[4]

7 (1) End of the book. I shall now reveal a secret to you.^[1] (2) Know that the beginning of the year of India is with respect to a point in the zodiac;^[2] hence the Ancients said that there are dark degrees, bright degrees, and pits.^[3] (3) The reason ⟨for the pits⟩ is that there are stars with the complexion of Saturn and Mars; so when the Sun or one of the planets faces them, it is like a person who falls into a pit.^[4] (4) If you want to know the location of these degrees, since they change ⟨their position⟩ every year, today you must subtract 8 degrees and 5 minutes from the place of the luminaries as well as of the planets.^[5] (5) The year of Ptolemy, as well as of the Arab and Greek scientists, ⟨begins with⟩ the conjunction of the two upper stars or ⟨the intersection⟩ of the two uppermost circles, as you prefer.^[6] (6) The houses and the houses of exaltation and the terms are in the tables of these scholars [i.e., the Indian scientists] only with respect to the images;^[7] if the sign has the shape of a human being it is necessary to subtract 8 degrees from the tables of the seven planets.^[8] (7) Perhaps someone will argue: inasmuch as all agree that the stars of the orb of the zodiacal signs are above the orbs of all the planets, how can there be an upper star with the complexion of Saturn or Mars, or of both; for they said that the stars of *Khima* have the complexion of Mars together with the Moon, so that any nativity in which the Moon is in the place of *Khima* indicates an eye disease;^[9] Likewise, if the Moon is with the star that is in Cancer, the one that is called *Thick cloud*,^[10] it indicates blindness. (8) Answer: know that the planets ⟨themselves⟩ do not have a nature that is hot or cold or moist or dry, but they generate these four natures [i.e., qualities] in the lower world; similarly, the upper ⟨stars⟩ generate a nature in the world that appears to be of the nature of Mars when it is together with the Moon.^[11] (9) And similarly for the way ⟨of action⟩ of the large stars, like the star that is in the *Heart of the spear*,^[12] whose nature works as Venus with Mercury, and *Cor leonis*,^[13] which has the nature of Jupiter with Mars. (10) In my opinion, the stars of the orb of the zodiacal constellations do not have much power because they are distant; and that holds good especially in the case of the stars that are distant from the line of the zodiac, like the *Great eagle*,^[14] besides, it [i.e. a star] has little power where it is in a high latitude and when it stands on its head, but *Cor leonis* has power because it is in the line of the zodiac. (11) The Ancients among the Indian scientists also said that none of

בתחלת אחד היתדות או השמש ביום והלבנה בלילה. (12) ושלם ספר הטעמים,
תהלה לשוכן מרומים¹.

¹תהלה לשוכן מרומים] פ; מ חסר; א ונראה שהם טעמים למשפטי המזלות.

them has any power, except when they are at the beginning of one of the cardines, or ⟨in the place of⟩ the Sun by day or ⟨of⟩ the Moon by night.^[15] (12) This book has been completed, praised be the One that dwells in the Heavens.

PART FOUR

NOTES TO THE SECOND VERSION
OF THE BOOK OF REASONS

§ 1.1

^[1]**1: I wish, Hebrew הוֹאֵלִי.** For this translation, see Ibn Ezra's commentary on Genesis 18:27.

^[2]**2: Learn the secret of the Glorious and Awe-Inspiring Name** (Deut. 28:58): One of Ibn Ezra's avowed aims in his biblical commentaries, exegetical digressions, and theological monographs, is to reveal the secret meanings behind the names of God. He does this by applying knowledge related to Hebrew grammar, astrology, astronomy, mathematics, cosmology, and logic; his main tool, however, involves combinations of the numeric values of the Tetragrammaton. See, *inter alia*, the introduction to his second commentary on the Pentateuch, long commentary on Exodus 3:2, 3:13, 6:3, 14:19, 33:21. Ibn Ezra also devoted a complete monograph to this objective: *Sefer ha-Shem* (Book of the Name); see haShem, 1985, p. 419. For an example, see Sela, 2003a, pp. 313–323.

^[3]**2: The holy, who are the angels.** In Ibn Ezra's nomenclature the "holy angels" (Hebrew מַלְאָכִים קְדוּשִׁים) are the supernal and incorporeal "intellects" or "separate intelligences". This concept is part and parcel of a theory combining Aristotelian and neo-Platonic teachings that was elaborated by the Arabic medieval commentators of Aristotle: out of the First Being emanate entities consisting of pure thought corresponding to the number of spheres; each of these intelligences acts as the object of the mind of a sphere and is the cause of its movement; the last intelligence in the sequence of emanations, an emanation of all intelligences called the "active intellect", has in its care the sublunary world: it is held to emanate forms unto sublunary matter and the human intellect; the highest level of cognition an individual can attain is that of "conjunction" with the "active intellect". See Davidson, 1992. Ibn Ezra describes the world of the "holy angels", which is distinct from the sub- and superlunary domains, in his long commentary on Exodus 3:13: "וְהָעוֹלָם הָעֲלִיּוֹן הוּא עוֹלָם הַמַּלְאָכִים הַקְּדוּשִׁים, שְׂאִינֵם גּוּפוֹת, וְלֹא בּוֹשְׁמוֹת הָאָדָם; וּמַעֲלֹתָם נִשְׁבּוּ מִדְּעוֹת הַנִּקְלֹת כְּנֶגְדָם. וְכֹל זֶה הָעוֹלָם כְּבוֹד, כָּלּוּ עוֹמֵד, וְאֵין תְּנוּעָה בְּשׁוּנֵי בַעֲרָךְ; רַק מַעֲמָדוֹ אֵינּוּ בַּעֲצָמוֹ, וְהָעוֹלָם הַתַּיִתּוֹנִי הוּא עוֹלָם הַבָּשָׂר, וְשָׂאִינֵם גּוּפוֹת, וְכָל זֶה הָעוֹלָם כְּבוֹד, כָּלּוּ עוֹמֵד, וְאֵין תְּנוּעָה בְּשׁוּנֵי בַּעֲרָךְ; רַק מַעֲמָדוֹ אֵינּוּ בַּעֲצָמוֹ, וְהָעוֹלָם הַתַּיִתּוֹנִי הוּא עוֹלָם הַבָּשָׂר, וְשָׂאִינֵם גּוּפוֹת, וְכָל זֶה הָעוֹלָם כְּבוֹד, כָּלּוּ עוֹמֵד, וְאֵין תְּנוּעָה בְּשׁוּנֵי בַּעֲרָךְ; רַק מַעֲמָדוֹ אֵינּוּ בַּעֲצָמוֹ." ("The uppermost world is the world of the holy angels who are incorporeal and, unlike the souls of men, do not inhabit bodies. Their importance is far and above the understanding of their insignificant counterparts [i.e. human beings].

^[2]**1: Behold ... each of them in its orb:** Rather than introducing a mere description of the heavens, this passage is followed by a comprehensive, concise, and remarkable three-stage demonstration or deduction of a nine-orb universe: (a) first, the existence of seven orbs for seven planets is predicated on the integration of the various cycles of the planets into a geometrical rule (Tb §1.2:2) as well as on the occultations of the planets (Tb §1.2:3); (b) second, the existence of the eighth orb of the fixed stars is deduced from the occultation of the zodiacal fixed stars by the planets (Tb §1.2:3); (c) third, the existence of the ninth and uppermost orb, *qua* the orb that possesses the daily motion as its inherent motion and confers the daily motion to all the other orbs (Tb §1.2:5), is regarded as logically compelling, because of the slow steady motion of the orb of the fixed stars (Tb §1.2:4) and because the daily motions of the orbs of the fixed stars and of the seven planets are in an opposite direction to their inherent motions (Tb §1.2:4–5). For a detailed analysis of this passage, see Sela, 2003a, pp. 214–237.

^[3]**2: Completes its motion ... the larger.** Corresponds to Ta §1.3:7.

^[4]**3: Whenever one ... hides the upper:** Corresponds closely to Ta §1.3:6. Ibn Ezra also offers an almost identical argument in his second commentary on Genesis 1:14, to uproot the possibility that the planets and stars are embedded in a single orb. Second Commentary on Genesis, 1976, p. 151: *והנה לא נוכל לכחש, כי שבעה מעונות הם לשבעה המשרתים ... והנה אזכיר הדבר הברור לכל. כי אם היו שבעתם במעון אחד לא היה אחד מהם מסתיר חברו בהתחברו עמו באורך וברוחב והיתה מרוצתם שוה.* (“No one can refute that there are seven orbs for seven planets. ... Now I shall mention the clearest (proof) of all: if (we assume that) all the seven planets were in a single orb, then it would be impossible for one planet to be hidden behind another planet when one planet is in conjunction with another planet in longitude or in latitude, since in this case all the planets would have be the same course”). For an analysis of this commentary and for the role of this argument in Ibn Ezra’s conception of the creation of the superlunary world, see Sela, 2003b.

^[5]**3: The planets hide the stars of the zodiacal constellations:** This second type of occultation is advanced here to demonstrate that the fixed stars occupy a separate eighth orb, above the seven planetary orbs.

[6]4: **Host of heaven, Hebrew צבא השמים**. Ibn Ezra construed this biblical expression (Gen. 2:1; Deut. 4:19 *et passim*) as encompassing all of the fixed stars of the eighth orb. He employed it extensively in his biblical commentaries (commentary on Psalms 8:4; 19:2; 82:1; 89:8; 103:21; 136:4; 146:6; 148:2; long commentary on Exodus 3:15; 20:13; 33:21; second commentary on Genesis 1:14; 1:16; 2:1; commentary on Deuteronomy 4:19; commentary on Ecclesiastes 1:13; 1:19; commentary on Hosea 2:1; commentary on Daniel 7:14), in an astrological treatise (Me'orot, München 202, f. 102b), as well as in one of his theological monographs (Sefer haShem, 1985, p. 428).

[7]4: **Astrologers, Hebrew חכמי המזלות, lit. scholars of the zodiacal signs**. See Ta §1.3:10 and note. See Glossary, s.v. “astrologers”.

[8]4: **48 constellations, Hebrew הצורות על שמונה וארבעים, lit. 48 images**. For the relationship between images, zodiacal signs, and constellations, see Ta §1.2:1–3 and notes. See also Glossary s.v. “constellation”, “image”. This is a reference to Ptolemy’s star catalogue in the *Almagest*. See *Almagest*, 1984, VII, pp. 341–399. Besides *Ṭe’amim II* and Rh, I, vi:11, from which this reference to the forty-eight constellations is quoted, Ibn Ezra employed this motif extensively in his biblical commentaries as well as in his scientific work. See, *inter alia*, long commentary on Exodus 33:21; commentary on Ecclesiastes 1:13; commentary on Deuteronomy 4:19; Ibn al-Muthannâ’s Commentary, 1967, p. 301; Mishpeṭei haMazzalot, bnf 1058, f. 14a.

[9]4: **One degree in 70 years**: This is the value proposed by al-Šûfi, as Ibn Ezra reveals in *Liber de Rationibus Tabularum*, 1947, p. 78. The same value is endorsed by Ibn Ezra in *Ṭe’amim I* and in other parts of his work. See Ta §2.12:10 and notes.

[10]5: **A sort of uppermost orb above all (the other orbs)**. An inconsistent approach towards the position of the *uppermost* orb is noticeable in *Ṭe’amim I* and *Ṭe’amim II* in particular, and throughout Ibn Ezra’s oeuvre in general. Whereas in Ta §1.3:1, Rh, I, vi:10, the third version of *Keli haNeḥoshet* (NeḤoshet C, pinsker 26, f. 63a), and elsewhere Ibn Ezra makes the *uppermost* orb identical with the orb of the fixed stars, in Tb §1.2:5, Rh, IX, lxxv:3, the long commentary on Exodus 20:13, the commentary on Amos 5:8, and elsewhere he places this orb above the orb of the zodiacal signs and the fixed stars.

This inconsistency mirrors the problematic cosmological status of the ninth and uppermost orb: because it is starless, it lacks the basic *raison d'être* that justifies the existence of the other orbs; because the daily motion, the quickest motion of all the orbs, is ascribed to it, it contradicts the rule postulated by Ibn Ezra above in Tb §1.2:3: “the orb that completes its motion in a few days is beneath the orb that completes its motion in more days than the former.” For Ibn Ezra’s position in this issue, see Sela, 2003a, pp. 224–233.

^[11]**6: It intersects the orb of the zodiacal signs.** Here Ibn Ezra has in mind the intersection, in an armillary sphere, of two great circles: the great circle of the equator, which represents the daily motion of the ninth uppermost orb, and the great circle of the ecliptic, which represents the motions of the planets’ orbs and of the eighth orb. For a similar image, see Ta §2.12:3; §8.1:6, Tb §2.7:10; §8.7:5; see also *Almagest*, 1984, I:8, pp. 46–47.

^[12]**7: Sphaera recta, namely, the uppermost (orb), Hebrew גלגל הישר, הוא העליון.** The term *sphaera recta*, lit. “right sphere,” refers to the phenomena that occur when the celestial equator is perpendicular to the local horizon. The celestial sphere is then said to be *right*, in the sense of upright or perpendicular, because the paths of the stars are perpendicular to the horizon. See Evans, 1998, p. 32; *Almagest*, 1984 (“introduction”), p. 18. To denote *sphaera recta*—particularly when referring to the use of rising times at *sphaera recta* in the calculation of the aspects, mundane houses and directions—Ibn Ezra employs the term גלגל הישר, lit. circle of uprightness, in *Ṭe’amim I* (§10.1:3; §10.3:2; §10.5:12 *et passim*), *Ṭe’amim II* (§6.5:2; 6.5:4), *Reshit Hōhkmah I* (Rh, X, lxxv:15, 18) and elsewhere in his scientific treatises (*Moladot*, bnf 1056, f. 52b; *Neḥoshet B*, Mant. 10, f. 41b; *Neḥoshet C*, Pinsker 26, f. 63a). A notable exception is *Mishpeṭei ha-Mazzalot* (*Mishpeṭei haMazzalot*, bnf 1058, ff. 13b, 24b, 25a, 25b, 26c), where use is made of the *sui generis* Hebrew expression גלגל המישור “the plane circle”. This Hebrew rendering highlights an additional meaning of the term, namely, that the plane of *sphaera recta* coincides with the plane of the celestial equator, which is the plane of the daily motion. The latter meaning is what is meant in the current passage, where Ibn Ezra speaks of the inclination of the Sun’s path with respect to the celestial equator. It is significant that in this particular context Ibn Ezra was not content with *sphaera recta* alone and added a reference to the *uppermost orb*. This is because

the *sphaera recta*, when associated with the daily motion, may be taken as coinciding with the eighth orb or with the ninth orb, depending on the underlying cosmological model. Since in *Tē'amim II* Ibn Ezra clearly endorses a nine-orb cosmos, here he identifies the *sphaera recta* with the uppermost orb. In the third version of *Keli ha-Nehoshet*, too, Ibn Ezra regards the *sphaera recta* as being the same as the uppermost orb (Nehoshet C, Pinsker 26, f. 63a: "גלגל היושר שהוא העליון" ["the sphaera recta is the uppermost {orb}"]); but it is crystal clear that there *sphaera recta* is the eighth orb, since in this text he identifies the eighth orb with the uppermost orb (Nehoshet C, Pinsker 26, f. 63a: "הגלגל העליון ששם המזלות חלקוהו חכמי המזלות על מ"ח צורות" ["The uppermost orb, where the zodiacal constellations are, was divided by the astronomers into 48 {parts}"]).

§ 1.3

[¹] **1: <Astrological> judgments, Hebrew משפטים.** Ibn Ezra's Hebrew neologism, widely used in medieval Hebrew literature, denotes the rules by which the astrologer can determine astrological influences. Like the Latin *iudicia* (employed by Ibn Ezra in his Latin writings), *mishpatim* is derived from the Arabic *ahkām al nujūm* (lit. judgments of the stars). But Ibn Ezra identified a source in Psalms 19:10. See Commentary on Psalms, 19:10, 1525: "משפטי – ידוע כי משפטי חכמת המזלות כפי מערכת המשרתים בערכם אל השמש, ויש משפטים בערכים מכחישים אלה לאלה ובעבור זה יטעו בעלי הדין, על כן אמר על משפטי השם צדקו יחדו." ("Judgments of [the Lord]—It is known that the judgments of astrology are according to the configuration of the planets in relation to the Sun; because some <astrological> judgments are mutually contradictory, the experts in <astrological> judgments make mistakes; therefore it is written that the judgments of the Lord are true and righteous altogether [Ps. 19:10]"). For the usage of this term, see Glossary, s.v. "judgments", Appendix 5: Authorities and Sources s.v. "experts in judgments". See also Sela, 2003 (i), pp. 116–123.

[²] **1–2: We know ... analogies and experiences:** Here astrology is compared unfavorably with astronomy: whereas the latter is supported by conclusive proofs grounded on logic, mathematics, and geometry, the former does not rely on logical (and therefore irrefutable) proofs about judgments but only on analogy and experience. Astrology's

inferiority to astronomy was a commonplace even among astrologers. Thus astrology is depicted as a “less self-sufficient method” in the first chapter of Ptolemy’s *Tetrabiblos*, the bedside book of astrologers, where astronomy is described as an “unvarying science” (*Tetrabiblos*, 1980, I:1, pp. 2–5). Similar statements can be found in medieval Arabic and Hebrew astrological sources. See Sela, 2001a, esp. pp. 94–100. In the Aristotelian tradition, too, knowledge acquired by *experience*, with no basis in theory, is demoted to the inferior degree of an *art*, the knowledge of practical rules resting on general principles, and occupies a lower level than *science*, the pure knowledge of universal causes devoid of any ulterior practical end. See Aristotle, *Metaphysics*, I (A), 980^{a25}–981^{b1}.

^[3]**2: Just as ... opposed to nature:** This puzzling statement probably refers to the “specific properties” or “occult qualities” (Arabic, *khâṣṣa*; Hebrew, *segullah*) of certain substances believed to have medicinal effects that cannot be deduced from their natural or physical composition according to Aristotle’s theory of matter. For the “specific properties” of stones, see Ibn Ezra’s long and short commentaries on Exodus 28:9 and short commentary on Exodus 11:7. Another possibility is that this statement alludes to the idea, conveyed by Ibn Ezra in his biblical commentaries, that methods of healing that penetrate the human body to treat the internal organs are the exclusive province of God, who works through miracles. See long commentary on Exodus 21:19 and 15:26; commentary on Psalms 6:10; 16:9; *Yesod Mora’*, 1985, VII, p. 330. For Ibn Ezra’s conception of medicine, see Sela, 2003a, pp. 179–180; For an analysis of this comparison between astronomy, astrology and medicine, and its relation to the introduction of *Reshit Hokhmah I*, see Sela, 2003a, pp. 199–208.

^[4]**3: Astrology, Heb. חכמת המזלות, lit. science of the zodiacal signs.** See Ta §1.3:10 and note.

^[5]**3: They divided the zodiac ... many fractions.** Corresponds to Ta §1.1:1–6. See notes there.

§ 2.1

^[1]1: **Fifth and distinct element, Hebrew תולדת המישיה בפני עצמה**.

To denote the Aristotelian *aether* or fifth element, here Ibn Ezra employs the coinage *toledet* “nature”. On this neologism, see Ta § 1.2:5 and note. The passage corresponds to Ta § 1.5:7. See notes there.

^[2]3: **Like the flesh of the ox and the goat, even though all flesh is hot.** Corresponds closely to Ta § 1.5:12 and to Liber de Rationibus Tabularum, 1947, p. 97: “Qua ratione magistri philosophice carnem bovinam frigidam dicunt, cum tamen omnis caro calida et humida sit.” See note at Ta § 1.5:12 and “Introduction,” p. 000.

^[3]1–4: **The philosophers proved ... the rule about the moist and dry.** Corresponds closely to Ta § 1.5:7–12 (see notes there) and to Liber de Rationibus Tabularum, 1947, p. 97. See also Ta § 2.7:3 and note. Although here, as in Ta § 1.5:7–12, Ibn Ezra ostensibly subscribes to the Aristotelian view of the physical makeup of the bodies of the supra- and the sublunary domains, he subsequently deviates from it by viewing cold not as the contrary or privation of heat, but as a lesser degree of heat, as in the case of the flesh of bulls or the human complexion. In Ta § 1.5:12, Ibn Ezra attributes the theory that the flesh of bulls is cold to the “physicians”; in Liber de Rationibus Tabularum, 1947, p. 97, to the “magistri philosophice.” But the originator of the theory that gives heat primacy over cold seems to be Ya’qub al-Kindī: in Ta § 1.4:2–3 he is represented as stating that “heat and cold are agents”; but, whereas heat is the “stronger agent,” cold is the “weaker agent”; in Tb § 2.1:7 that heat, which is the active agent, “is more influential than cold.”

^[4]5: **Ascendant, Hebrew המול העולה, lit. ascending sign.** See Glossary s.v. “ascendant”.

^[5]5: **Doronius said ... same way everything <else>.** This example shows how the fiery signs (Aries, Leo, Sagittarius) engender an excess of red bile in the native; because such an excess generates heat, it illustrates how these signs are astrologically instrumental in the generation of heat in the human body. For a similar example, see Ibn Ezra’s long commentary on Exodus 23:25: “ידענו כפי חכמת התולדת, כי כל אדם שגברה על תולדתו המרה האדומה, יהיה בעל אף; כי כן תולדת האש, כי המרה האדומה

דומה לו ... גם נחשב אדם אין חום בגופו, ובא אחר וחרפו וקללו עד שכעס - והנה "דומה לו ... גם נחשב אדם אין חום בגופו, ובא אחר וחרפו וקללו עד שכעס" ("We know from the natural sciences that any person whose natural constitution is dominated by red bile will be choleric, for this is the nature of fire, and red bile is like it [i.e., like fire]. ... Likewise, let us consider a person whose body does not possess heat; if another person comes along and reviles and curses him to the point that he becomes angry, he produces heat in his body, which was not there before he became angry").

^[6]**6: Four (beginnings of the) seasons, Hebrew ארבע תקופות.** Ibn Ezra employs the biblical term **תקופה** (Ex. 34:22; 2Chron. 24:23; Ps. 19:7) to denote various intervals of cyclical time, such as the day ('Iggeret haShabbat, 1894/5, p. 73), week (commentary on Psalms 19:7 and commentary on Job 1:5), month (Mishpeṭei haMazzalot, bnf 1058, f. 19a), and year (short commentary on Genesis 40:12). A frequent usage is the expression **ארבע תקופות**, namely, *four tequfot*, for dividing some period into four parts, such as the four parts of the day ('Iggeret haShabbat, 1894/5, pp. 64, 72), the four phases of the lunar month (Mishpeṭei haMazzalot, bnf 1058, f. 19a), and, particularly, for dividing the solar year into four seasons (short commentary on Genesis 8:22; long commentary on Exodus 12:2; 'Iggeret haShabbat, 1894/5, pp. 64, 66; 'Ibbur, 1874. 6b, 91). Although the expression usually denotes the interval, in some cases it also indicates the beginning of the interval. A telling example is found in Mishpeṭei haMazzalot, bnf 1058, f. 19a: "המתהפכים: טלה וסרטן, מאזנים וגדי; פירוש: כי באלה המזלות מתהפך העת," "המתהפכים: טלה וסרטן, מאזנים וגדי; פירוש: כי באלה המזלות מתהפך העת," "כי הם ארבע תקופות השנה" ("The tropical (signs): Aries, Cancer, Libra, Capricorn; Explanation: At these signs the weather switches, because they are (the beginning of) the four seasons"). This is the precise meaning of the term in our passage, which speaks of the natural properties of Aries, Cancer, Libra, and Capricorn, which mark the beginning of the four seasons, rather than of the four seasons themselves.

^[7]**8: Water, which corresponds to cold, which is the second agent.** Corresponds to Ta §1.4:2–3, where Cancer's nature, namely, water, is said to be like the nature of the "weaker agent," namely cold, in contrast to heat, which is called "the stronger agent."

^[8]**6–9: Ya'qub ... fourth (season) to earth.** Corresponds closely to Ta §1.4:2–3. A similar account, without mentioning al-Kindī, is presented in Abū Ma'shar's Kitāb al-Madḥal, 1996, II:5, v, pp. 76–79.

For the triplicities, see also Mishpetei haMazzalot, bnf 1058, f. 19a; Art of Astrology, 1934, par. 379, p. 230; al-Qabîṣî, 2004, I:16, p. 25–27.

[9] **10: According to the aspects.** Here Ibn Ezra refers to al-Kindî's position on the aspects, as presented in Tb §4.8:1 and Ta §3.1:2.

[10] **10: Signs that are aspecting in complete love have one nature (in common).** A pair of signs that are in an aspect of trine or “complete love,” like Aries and Leo, belong to the same triplicity and are consequently associated with the same element. Hence both of them are either hot or cold, moist or dry.

[11] **10: They have the same active nature but not the (same) passive (nature).** Heat and cold are considered to be active virtues, whereas dryness and moisture are passive virtues. See Art of Astrology, 1934, par. 347, p. 211: “When therefore you know the active virtues of a sign whether heat or cold, and the passive virtues, whether dryness or moisture, it will not be concealed from you what particular element of the world and what particular humor of the body each sign resembles. Each sign that is hot and dry is related to fire and yellow bile, each that is cold and dry, to earth and black bile, each that is hot and moist to air and blood and each that is cold and moist to water and phlegm”. A pair of signs in an aspect of sextile or “half love,” like Aries and Gemini, are both hot, although the former is dry and the latter is moist; or both are cold, like Taurus and Cancer, although the former is dry and the latter is moist.

[12] **10: The opposite holds for the quartile aspect.** A pair of signs in an aspect of quartile, like Aries and Cancer, share neither active nor passive virtues: the former is hot and dry, whereas the latter is cold and moist.

[13] **11: In my opinion ... like that.** Corresponds closely to Ta §1.4:4–5.

[14] **12: Because of the division of the aspect, as (in the case of) its companions.** The aspect referred to here is trine, which is considered to be one of complete love. In Tb §2.1:10 Ibn Ezra states that “the signs that are in an aspect of complete love have one

nature”; in Tb §4.7:6, that “the signs that are in an aspect of trine have one nature.” In the current passage this aspect links Virgo to its “companions,” namely, Capricorn and Taurus; the three are members of the earthy triplicity whose nature is cold and dry, like the element earth.

^[15]**14: Aquarius’ image is that of a man holding an urn.** As far back as the Babylonians, the image associated with the constellation of Aquarius was that of a man pouring water from an urn; thus in Greek astrology it was called Hydroxous “water-pourer”.

^[16]**11–14: In my opinion ... meaning: fish.** Corresponds closely to Ta §1.4:4–7 (see note there), where Ibn Ezra offers his own opinion about the nature of the triplicities; namely, that it is a consequence of the nature of the images of the corresponding zodiacal signs. For signs with images of humans and of animals, see Tb §2.3:9 and note. For the nature of the signs, see Kitāb al-Madḥal, 1996, II:4, v, pp. 74–76; *Art of Astrology*, 1934, par. 347, pp. 210–211.

§ 2.2

^[1]**1: The head ... is renewed.** Corresponds to Ta §2.1:2–6. See notes there. A similar idea is conveyed in Moladot, bnf 1056, f. 13b: וְהָנָה “בהכנס השמש בתחילת טלה היא תקופת האמת או יתחדש העולם” (“When the Sun enters the beginning of Aries the true (beginning of the) year occurs and the world is renewed”).

^[2]**5: Equator, Hebrew קו הצדק, lit. line of justice.** See Ta §1.2:3 and note, and Glossary s.v. “equator”.

^[3]**1–6: Eastern signs ... Scorpio is more southern than Pisces.** This passage offers a comprehensive three-stage explanation of the signs’ cardinal points and of their positions relative to the cardinal points:

(a) Following an explanation of why Aries is the beginning of the zodiac, this sign is placed in the ascendant of a horoscopic chart, Capricorn in midheaven, Libra in the descendant, and Cancer in lower midheaven. Hence, Aries is in the east, Capricorn in the south, Libra in the west and Cancer is in the north (Tb §2.2:1); notice that this is

not the horoscope of the creation of the world, where Cancer is in the ascendant and Aries is in midheaven with the Sun. See Ta §2.4:4; Tb §2.4:9.

(b) The remaining signs are assigned to a main cardinal point, according to the principle that this cardinal point is part of their common nature (*toledet*) as members of the four triplicities. The fiery signs are assigned to the east, the earthy to the south, the airy to the west, and the watery to the north (Tb §2.2:2).

(c) Finally, each of the three signs in each triplicity is assigned a position (middle, north, south; or middle, left, right) relative to the main cardinal point, as follows: the sign that is closest to one of the equinoctial signs (Aries and Libra) is at the “middle” of the cardinal point, while the other two signs are placed “south” or “north” of the cardinal point of the triplicity according to various criteria (Tb §2.2:3–6).

Abû Ma’shar and Al-Bîrûnî, too, offer comprehensive accounts of this subject. Although the division of the signs into triplicities underpins their statements, they essentially provide bare lists, lacking the explanatory details of *Ṭe’amim II*; in some cases they differ from *Ṭe’amim II* or from each other regarding the relative positions of the signs of the triplicities. See Kitâb al-Madḥal, 1996, VI:24, v, p. 257; Art of Astrology, 1934, par. 357, p. 215. Notice, for example, that whereas Abû Ma’shar makes Aries, Capricorn, Libra, and Capricorn the “middle” of the cardinal point, Al-Bîrûnî and Ibn Ezra in *Ṭe’amim II* do not. *Ṭe’amim I*, for its part, comments on *Reshit Hokhmah I*, where each sign is assigned two attributes in each of the separate sections devoted to each sign: first, a position relative to a cardinal point, second, a “wind.” For example, Aries “has the heart of the east and the eastern wind” (Rh, II, ix:4), Leo “has the left of the east and the eastern wind” (Rh xix:28–29), and Sagittarius “has the right of the east and the eastern wind” (Rh, II, xxviii:19). Consequently, in the section devoted to Aries, *Ṭe’amim I* provides a brief explanation related to Aries and the fiery signs (see Ta §2.2:8–9 and note); in the section on Taurus, Ptolemy’s and al-Kindî’s opinions are presented (see Ta §2.13:8–9 and note). It turns out that *Reshit Hokhmah I* and consequently *Ṭe’amim I* follow Abû Ma’shar, not only with respect to the relative positions of the signs but also regarding the terminology, which is different from that employed in *Ṭe’amim II*. Notice that Abû Ma’shar (Kitâb al-Madḥal, 1996, VI:24, v, p. 257) not only makes Aries, Capricorn, Libra, and Capricorn the “heart” of the cardinal points, but he also assigns “winds” to these signs.

The same approach is followed by Ibn Ezra in *Reshit Hokhmah I*, but not in *Te'amim II*. For example, in *Reshit Hokhmah I* Sagittarius is assigned the *ruah qadim* or east wind (Rh, II, xxviii:19) and Libra is placed in the “heart” of the west (Rh, II, xxiv:15). By contrast, Libra is in the “middle” of the west in Tb §2.2:5. The incipit of the current section in *Te'amim II*—“eastern signs”—as well as the comprehensiveness with which the subject is developed, indicates that *Reshit Hokhmah II* did not include separate references, as does *Reshit Hokhmah I*, but rather collective references to the eastern, southern, western and northern signs. This approach is also adopted in *Mishpetei ha-Mazzalot*, bnf 1058, f. 14b.

^[4]**7: The reason ... applies to all.** The tastes of the signs are listed separately and without any explanation in *Reshit Hokhmah I*, in the sections devoted to each sign. For Aries, see Rh, II, ix:5; for Taurus see Rh, II, xi:24; for Gemini, see Rh, II, xiv:14; etc. In many cases the same Hebrew word employed in *Te'amim II* to denote the tastes (מטעמים) is also employed in *Reshit Hokhmah I*. The tastes of the signs are not mentioned at all in *Mishpetei ha-Mazzalot*.

§2.3

^[1]**1–4: Tropical (signs) ... to the next nature.** This passage refers to a well known tripartite classification of the twelve zodiacal signs—tropical (Aries, Cancer, Libra, Capricorn), fixed (Taurus, Leo, Scorpio, Aquarius), and bicorporal (Gemini, Virgo, Sagittarius, Pisces)—in accordance with the prevailing weather when the Sun travels through them in its annual path. See Tetrabiblos, 1980, I:11, pp. 64–69; Kitāb al-Madhal, 1996, II:6, v, p. 79; Art of Astrology, 1934, par. 380, p. 231; al-Qabīṣī, 2004, I:7, p. 27; see also Abbreviation, 1994, pp. 15–25, where separate designations are given to separate signs. Ibn Ezra explains them in similar terms in all his introductions to astrology. However, the dissimilar terminology employed in *Te'amim II*, in *Te'amim I* and *Reshit Hokhmah I*, and in *Mishpetei ha-Mazzalot* to designate the fixed and bicorporal signs indicates that these three groups of texts embody three separate terminological trends in Ibn Ezra's astrological work. Thus, the fixed signs are called עומדים “standing” in *Te'amim II*; עומדים על דרך אחד “standing in one way” in *Reshit Hokhmah I* and *Te'amim I*; and נאמנים “faithful” in *Mishpetei ha-Mazzalot*. Cf. Tb §2.3:3; Ta §2.13:1;

Rh, II, xi:16–17; Mishpetei haMazzalot, bnf 1058, f. 14b. The bicorporal signs are called שני גופים “two bodies” in *Ṭe’amim II*, יש לו שני גופים “it has two bodies” in *Reshit Hokhmah I* and *Ṭe’amim I*, and בעלי שתי גופות “owners of two bodies” in *Mishpetei ha-Mazzalot*. Cf. Tb §2.3:4; Ta §2.14:1; Rh, II, xiv:7–8; Mishpetei haMazzalot, bnf 1058, f. 14b. In *Liber de Rationibus Tabularum*, 1947, p. 85, these three groups are called “signa mobilia, fixa and bicorpora.” Also, whereas *Ṭe’amim II* and *Mishpetei ha-Mazzalot* offer a comprehensive explanation of this tripartite division in a single locus, *Ṭe’amim I*, following *Reshit Hokhmah I*, gives separate accounts related to separate signs. Cf. Tb §2.3:1–4; Mishpetei haMazzalot, bnf 1058, f. 14b; Ta §2.2:1, §2.13:1, §2.14:1; Rh, II, viii:27–28, xi:16–17, xiv:7–8 *et passim*.

[2] **5: Long signs ... just the opposite.** Reference is here made to two sets of six signs each—from Capricorn to Gemini, and from Cancer to Sagittarius—which divide the zodiac according to their rising times. These two are commonplace in introductions to astrology: see *Art of Astrology*, 1934, par. 378, p. 229; *Kitāb al-Madḥal*, 1996, VI:4, v, p. 243; *Abbreviation*, 1994, p. 27. The term “rising times” refers to how many degrees of the equator cross the horizon of a given locality simultaneously with the consecutive zodiacal signs. On rising times or ascensions, see Evans, 1998, pp. 109–125; *Sanctification of the New Moon*, 1967, pp. 142–143. Interestingly enough, in *Ṭe’amim II* Ibn Ezra employs a double set of terms to designate them generically: “long” and “short” in Tb §2.3:5, “crooked” and “straight” in Tb §2.3:21. Virtually the same occurs in the separate descriptions of the signs in *Reshit Hokhmah I*: Capricorn is characterized as “crooked in its rising times and its rising times are short” (Rh, II, xxx:24–25); and Leo is described as “straight in its rising times and its rising times are long” (Rh, II, xix:24–25). *Ṭe’amim I*, which follows *Reshit Hokhmah I*, refers to Aries as “decreasing” in its rising times and “crooked” (Ta §2.2:1–2), and to Cancer as “straight,” and then offers a global characterization of the crooked and straight signs (Ta §2.15:1–2). The same double set of terms appears in *Mishpetei ha-Mazzalot*. See Mishpetei haMazzalot, bnf 1058, ff. 14b, 18a, 25. There are two reasons for this seeming redundancy of terms. First, as explained in *Ṭe’amim II*, whereas one pair (long/short) refers to whether the corresponding signs rise in more or less than 30 equinoctial degrees (Tb §2.3:5), the other pair (crooked/straight) refers to whether the corresponding signs rise in more or less than two equinoctial hours (Tb §2.3:21). Notice, however, that there is a confusion with respect to

the crooked/straight signs: whereas *Ṭe'amim II* states that these signs rise in more or less than two equinoctial hours (Tb §2.3:21), *Ṭe'amim I* asserts that they rise in more or less than 30 equinoctial degrees (Ta §1.15:2). Second, as conveyed in *Ṭe'amim II*, the *Book of the Tables* is also involved in this usage, a statement which is borne out by a passage in *Liber de Rationibus Tabularum*, 1947, pp. 84–85: “He tabule quas composuimus utiles sunt ... ad cognoscendum ... *recta signa et obliqua et longa et curta*” (italics added).

[³5]: **As is written in the *Book of the Tables*.** See below Tb §5.1:11 and note.

[⁴6]: **I shall say more about that (in due course):** See below, Tb §8.1:1–4.

[⁵6–8]: **The larger domain ... their terms.** The division of the zodiac into a “larger domain” or a “greater half” of the circle ascribed to the Sun, and a “smaller domain” or a “smaller half” of the circle ascribed to the Moon, is later expanded in Tb §5.1:3, §5.2:11, §8.1:1–4, and corresponds closely to Ta §2.5:1–4. This division of the zodiac is not mentioned in *Reshit Hokhmah I* but appears with a very similar wording in *Mishpetei ha-Mazzalot* and *Liber de rationibus tabularum*. See *Mishpetei haMazzalot*, München 202, f. 151b: “מראש אריה עד סוף גדי, חצי חלק הגלגל הגדול לשמש, ומראש דלי עד סוף סרטן, החצי הקטן ללבנה” (“From the head of Leo to the end of Capricorn, the Sun has the “greater half” of the circle, and from the head of Aquarius to the end of Cancer, the Moon has the “smaller half”.”); *Liber de Rationibus Tabularum*, 1947, p. 98: “Magistri iuditorum partiti sunt circulum in duo, maiorem partem attribuentes soli, que est a capite leonis ad finem capricorni, minorem vero partem lune que est a fine capricorni usque ad caput leonis.” The reference to the “greater” and “smaller” halves of the circle, as well as the claim that the Sun and the Moon have power in their halves as the planets have in their terms, which is mentioned in Ta §2.5:4, correspond closely to al-Qabîṣī, 2004, I:10, pp. 21–22: “The half of the circle from the beginning of Leo to the end of Capricorn is also called the greater half, and this is the half of the Sun, because the same kind of lordship that planets have in their terms, belong to the Sun in the whole of this half; the half from the beginning of Aquarius to the end of Cancer is called the smaller half, and this is the half of the Moon, because in the whole of this half also

the Moon has the same kind of lordship as the Sun has in the greater half." See also Tetrabiblos, 1980, I:17, p. 79; Art of Astrology, 1934, par. 440.

[6] **10: Scholars of the images, Hebrew חכמי הצורות**. They are also mentioned in Tb §5.7:8 and §5.6:4, where they are designated "experts in the images" (בעלי הצורות). In Tb §8.3:2 they are those who are "dealing in the science of the images, which is forbidden by the law of God, because it resembles idolatry." Their involvement in the making of idols or talismans is implied in Tb §5.6:8 and §5.7:8, where they are said to have established the association between the planets and the metals under their charge by empirical means. Both the "scholars of the images" and the "experts in the images" appear in Ibn Ezra's biblical exegesis, where they are associated with idolatry and are said to bring down supreme powers. See long commentary on Exodus 20:3 and 20:5; Schwartz, 2005, pp. 14–18. In other parts of Ibn Ezra's work, the same circle are cited as involved in clearly astronomical affairs, such as the controversy about trepidation and the motion of the fixed stars. In such a context, they are alluded in 'Olam A, bnf 1056, ff. 85b as חכמי הצורות "scholars of the images", in *Liber de rationibus tabularum* as "doctores ymaginum" or "magistri ymaginum," and in 'Ibbur, 1874, p. 10a as חכמי המולות בעלי המשפטים והצורות "astrologers who are experts on judgments and images". What Ibn Ezra says about the activities of the "scholars of the images" is reminiscent of what is said about the "experts in talismans" in Pseudo-Ptolemy, *Centiloquium*. Ibn Ezra introduced this treatise into medieval Jewish educated circles employing Hebrew names such as *Sefer ha-'Ilan* (Book of the Tree) or *Sefer ha-Peri* (Book of the Fruit) in *Sefer ha-Moladot* (Moladot, bnf 1056, f. 49a) and *Reshit Hokhmah* (Rh, X, lxxvi:24). *Sefer ha-Peri* was translated into Hebrew by Kalonymus ben Kalonymus at the beginning of the 13th century. See *Centiloquium*, *verbum* 9 in *Sefer ha-Peri*, bnf 1055, f. 54b: אמר "בטלמיס: הצורות אשר בעולם ההרכבה נשמעות אל הצורות הגלגליות ולזה יחוקקו אותם בעלי הטליסמאות במזל הכוכבים בהם למה שירצו עשייתו." ("Ptolemy said: the forms which are in the composite world obey the forms of the orb; consequently the experts in talismans engrave (the form of) the zodiacal sign whose influence they wish to attract."). The link between their involvement in astronomy and idolatry is found in Abū Ma'shar's *Kūtāb al-Qīrānāt* and in Al-Bitrūjī's *On the Principles of Astronomy*, where they take part in the controversy about trepidation under the designation "masters of talismans." See 'Olam A, bnf 1056, ff. 85b–86a;

Liber de Rationibus Tabularum, 1947, p. 77; 'Ibbur, 1874, p. 10a; On the Great Conjunctions, 2000, I, pp. 155, 580; On the Principles of Astronomy, 1971, I, pp. 23, 29.

^[7]**9–10: Signs <with> shapes ... of an animal.** This is a reference to the signs with a human shape (Gemini, Virgo, Libra and half of Sagittarius and Aquarius), and to those with the shape of an animal, such as the four-footed signs (Aries, Taurus, Leo, the hinder half of Sagittarius and front half of Capricorn). They are mentioned in *Reshit Hokhmah I*, *Mishpetei ha-Mazzalot*, and introductions to astrology. See Rh, II, ix:2, xi:21, xiv:12–13, xxii:8; *Mishpetei haMazzalot*, bnf 1058, f. 14b; *Art of Astrology*, 1934, par. 352, pp. 212–213; al-Qabîsî, 2004, I:24, p. 33. For other references to these signs, see Tb §2.1:11–14, §2.3:24, 23, §8.7:6; Ta §1.4:7, §2.2:4, 7, §2.3:1.

^[8]**11: Masculine <and> hot ... hotter than the female.** This is a reference to Aries, Gemini, Leo, Libra, Sagittarius and Aquarius, which are considered hot and masculine signs. For masculine signs, see Rh, II, viii:27, xiv:7 *et passim*, and Ta §2.2:1; see also *Mishpetei haMazzalot*, bnf 1058, f. 14b; *Tetrabiblos* 1980, I:12, pp. 69–71; *Art of Astrology*, 1934, par. 348, p. 211; al-Qabîsî, 2004, I:16, p. 25.

^[9]**12: Beauty ... Aries and the others.** The handsome signs are mentioned in *Mishpetei ha-Mazzalot*. See *Mishpetei haMazzalot*, bnf 1058, f. 14b. See also above, Tb §2.3:9 and note

^[10]**13–14: Voice ... brevity of speech.** This refers to three categories of signs that are characterized with respect to their voices: (a) voiced signs (Gemini, Virgo, Libra, and half of Sagittarius and Aquarius), which here are deemed to be identical with the human-image signs; (b) half-voiced signs (Aries, Taurus, Leo), which here are considered to be identical with animal-image signs (corresponds to Ta §2.2:7); and (c) dumb signs (Cancer, Scorpio, Pisces), which in Ta §2.16:15 are identical with the watery signs because they are “born in water.” See *Mishpetei haMazzalot*, bnf 1058, f. 14b; *Kitâb al-Madhal*, 1996, VI:18, v, p. 254; *Art of Astrology*, 1934, par. 353, pp. 213–214; al-Qabîsî, 2004, I:24, p. 33; Rh, II, ix:4, xi:22 *et passim*, Ta §2.2:7, §2.16:15.

^[11]**15: Tail of the Lion.** β Leonis (Denebola), “the star at the end of the tail,” No. 27 in the constellation of Leo in Ptolemy’s star catalogue.

See *Almagest*, 1984, VII:5, p. 349. In *Reshit Hokhmah I* and in the three versions of *Keli haNeḥoshet* (Rh, II, xxiv:2–3; Neḥshet A, bnf 1061, f. 159a; Neḥoshet B, Mant. 10, f. 39b; Neḥoshet C, Pinsker 26, f. 67a) Ibn Ezra acknowledges that in his own time this star is in the constellation of Virgo (lat. 9;38, long. 11;50).

[12] **15: Power ... in its tail.** See Mishpetei haMazzalot, bnf 1058, f. 14b, where Leo and Virgo are called strong signs (החזקים).

[13] **17: Deformities ... in my opinion.** The deformed signs (Aries, Taurus, Cancer, Scorpio, Capricorn, Pisces) are enumerated in *Mishpetei ha-Mazzalot*, Ta §2.2:4–5, §2.3:1 and other introductions to astrology. See Mishpetei haMazzalot, bnf 1058, f. 14b; Rh, II, xxv:15–17; al-Qabîṣî, 2004, I:24, p. 33; *Art of Astrology*, 1934, par. 350, p. 212. Here they are defined as those that do not correspond to the signs with human images (see above, Tb §2.3:9 and note).

[14] **18: Metals ... can withstand fire:** This is a reference to the fiery signs, which, according to *Reshit Hokhmah I*, are the only ones of the twelve signs that are in charge of metals. Thus, Aries is in charge of gold, silver, iron, and copper (Rh, II, ix:6–7); Leo, of gold and silver (Rh, II, xix:31); and Sagittarius, of lead (Rh, II, xxviii:21). See also *Art of Astrology*, 1934, par. 367–369, p. 222. As for the metals ascribed to Aries, see Ta §2.2:12.

[15] **19: Trees ... known through experience.** Trees that are under the charge of signs are usually mentioned in introductions to astrology. See *Kitâb al-Madḥal*, 1996, VI:23, v, p. 256; *Art of Astrology*, 1934, par. 367–369, p. 222; al-Qabîṣî, 2004, I:26–32, pp. 35–37. See also Rh, II, xi:26–27.

[16] **21: Crooked ... the straight (signs).** See above, Tb §2.3:5 and note

[17] **22: Kings ... nobles ... commoners ... slaves.** This classification, which divides the twelve signs of the triplicities into four social classes according to the relative natural position of the basic element of each triplicity (fiery = kings, airy = nobles, watery = commoners, earthy = slaves), corresponds closely to a passage in *Mishpetei ha-Mazzalot*, which, however, employs a different terminology for each of

the four types of signs. See *Mishpeṭei haMazzalot*, bnf 1058, f. 14b: “המתנאים המושלים: טלה, אריה, קשת. השפלים: שור, בתולה, גדי. האמצעיים: אries, Leo, Sagittarius. Despised: Taurus, Virgo, Capricorn. Middle: Gemini, Libra, Aquarius. Plebeians: Cancer, Scorpio, Pisces”). Cf. *Kitāb al-Madḥal*, 1996, VI:11, v, p. 250.

§ 2.4

^[1]**1: Physicians.** This is a reference to Taurus and Scorpio, as clarified in *Mishpeṭei haMazzalot*, bnf 1058, f. 14a, where the same designation of “Physicians” (הרופאים) is used to characterize these signs.

^[2]**1: Mars and Venus ... science of medicine.** Mars and Venus, as well as their “partnership in the science of medicine,” are mentioned here because Taurus and Scorpio are their planetary houses. For Mars as the planet in charge of the science of medicine, see below, Tb §5.5:5. In both his astrological and exegetical work Ibn Ezra viewed medicine as a dual art: (a) a “hard” version, which is under the sign of Mars and pierces the human body in order to treat the internal organs surgically; (b) a “soft” version, which is under Venus and touches only the external surface of human body, employs natural materials such as perfumes and ointments, and heals particularly by regulating the use of food. See Sela, 2003a, p. 179. Cf. *Kitāb al-Madḥal*, 1996, VII:9, v, pp. 314–315; *Art of Astrology*, 1934, par. 435, p. 254.

^[3]**1: It is the sixth, as I shall explain:** See below, Tb §2.4:2 and §3.3:6.

^[4]**2: Ptolemy said ... deformities and foolishness.** See *Tetrabiblos*, 1980, III:12, p. 317: “Of Bodily Injuries and Diseases ... it is necessary to look to the two angles of the horizon, that is, the orient and the occident, and especially to the occident itself and the sign preceding it, which is disjunct from the oriental angle.” cf. *Tetrabiblos*, 1980, I:17, p. 81–83.

^[5]**2: Ascendant, Hebrew מול צומח, lit. growing sign.** See Glossary, s.v. “ascendant”.

[6]3: **Winged ... Pisces as well.** See al-Qabîṣī, 2004, I:24, p. 33: “Some have wings, i.e. Virgo, Gemini and Pisces.”

[7]4: **Heavens ... heavens are air.** Gemini is characterized in Rh, II, xiv:16–17 as indicating “כל דבר גבוה כמו השמים והאוויר והרוחות” (“anything that is high, like the heavens and the air and the winds”). Here Ibn Ezra elaborates the idea that the relative height of a sign derives from its position in the zodiac as well as from the natural place to which the element (fire, air, water, earth) that identifies the triplicity of that sign tends to move. Gemini pertains to the airy triplicity and its last degree (Gemini 30°) coincides with the highest place in the zodiac. More often than not, in his biblical commentaries Ibn Ezra makes the heavens equivalent to the superlunary domain, but in a few places the heavens are identified with the air. See commentary on Deuteronomy 32:37; Isaiah 47:13, 49:13; long commentary on Exodus 9:22. See Sela, 2003b, pp. 147–182.

[8]5: **Demons ... Saturn is perceptible in it.** In Rh, II, xxxiii:3 the demons are described as being under the charge of Aquarius; and in Mishpetei haMazzalot, bnf 1058, f. 21b, as under the charge of Saturn. Notice that Aquarius is the planetary house of Saturn.

[9]9: **If we place ... ascendant is Cancer.** This is a succinct description of the *thema mundi*, the horoscope of the creation of the world, and corresponds to Ta §2.4:4; see note there.

[10]10: **For this reason ... 30 years.** Corresponds to Ta §2.4:5; see note there.

[11]10: **House of detriment, Hebrew בית רעה, lit. house of evil** (Arabic *wabâl*, Latin *alienation*). This is a reference to the opposite of the planetary house or the seventh sign from the planetary house of each planet. Corresponds to Ta §2.6:3, where the same term is called בית שנאה “house of hate”.

[12]10: **House of dejection, Hebrew בית קלקון, lit. house of dishonor** (Arabic *hubûṭhâ*, Latin *servitus*). This is a reference to the opposite of the exaltation or the seventh sign from the house of exaltation of each planet. Corresponds to Ta §2.16:5 *et passim*.

^[13]**10: Planetary house, Hebrew בֵּית טוֹב, lit. house of good.** This is an unusual rendering of the planetary house. It stands here in contrast to house of detriment, Hebrew בֵּית רָעָה, lit. house of evil. See below, Tb §7.1:4, and Glossary s.v. “house” (planetary).

^[14]**6–11: Sign of the world ... for all the world.** Corresponds closely to Ta §2.4:4–6; see notes there.

^[15]**12: The circle ... other signs.** See al-Qabīṣī, 2004, I:11, p. 23: “The quadrant from the beginning of Aries to the beginning of Cancer is the hot and moist quadrant, belonging to spring, childhood and blood; the quadrant from the beginning of Cancer to the beginning of Libra is the hot and dry quadrant, belonging to midsummer, youth and choler; the quadrant from the beginning of Libra to the beginning of Capricorn is the cold and dry quadrant, belonging to autumn and melancholy, and signifying the beginning of decay and middle age; the quadrant from the beginning of Capricorn to the beginning of Aries is the cold and moist quadrant, belonging to old age and senility, winter and phlegm.” See also Kitāb al-Madḥal, 1996, II:5, v, p. 77.

^[16]**13: The houses of divine worship begin at the equator, Hebrew ומהצדק בתי עבודת השם, lit. the houses of divine worship stem from justice.** This puns on the word צדק, whose primary signification is “justice” but here means “equator,” and on the expression בתי עבודת השם, literally “houses of divine worship” but here denoting Aries and Libra, two signs that begin at the intersection of the ecliptic and the equator. See Ta §2.2:14: “וְיָבִיטִי הַתְּפִילִּית בַּעֲבוּר כִּי בִתְחִלָּתוֹ קוֹ הַצִּדִּיק” (“The houses of prayer ⟨are in Aries’ portion⟩ because the equator [lit. “line of justice”] is at its beginning”). For the meaning of צדק, see Ta §1.2:3, the note there, and Glossary s.v. “equator”.

^[17]**13: Houses of divine worship ... Aries and Libra ... Libra is at the back.** The reference to Aries corresponds to Ta §1.2:14. See note there; for Libra, see Art of Astrology, 1934, par. 366, p. 221. The horoscope presented at the end of the passage is the same as that presented above in Tb §2.2:1.

^[18]**14: Sexual intercourse ... are like that.** This is a reference to the so-called libidinous signs: Aries, Taurus, Leo, and Capricorn. They are mentioned in *Mishpetei ha-Mazalot* (בעלי המשגל) and other

introductions to astrology. See Mishpetei haMazzalot, bnf 1058, f. 14b; al-Qabîṣî, 2004, I:24, p. 33; Kitâb al-Madḥal, 1996, VI:14, v, p. 253; Abbreviation, 1994, pp. 15–23. For the relationship between the images of the signs and their natural properties see Tb §2.1:11–14 and Ta §1.4:4–7.

[19]**15: Sterile ... produce few children.** For the signs that have a human shape see above, Tb §2.3:9 and note. The definition given here of the sterile signs, i.e., signs that have a human shape—Gemini, Virgo, Libra, and half of Sagittarius and Aquarius—matches none of the lists of sterile signs found in various introductions to astrology. For example, Abû Ma'shar lists Gemini, Leo, and Virgo, and sometimes Aquarius and the beginning of Capricorn: Kitâb al-Madḥal, 1996, VI:16, v, p. 254; Abbreviation, 1994, p. 15–23. See also al-Qabîṣî, 2004, I:24, p. 33; Art of Astrology, 1934, par. 354, p. 214; Tetrabiblos 1980, IV:6, pp. 409–411. In *Reshit Hokhmah I*, the sterile signs are Gemini, Leo, Virgo, and Aquarius: Rh, II, xiv:13, xx:25, xxiii:6, xxxiii:21.

[20]**16–19: Intermediate ... dry up before rivers.** This is a reference to the “signs with many children,” which, according to various introductions to astrology, include Cancer, Scorpio, Pisces, and in some cases also the last half of Capricorn. See Kitâb al-Madḥal, 1996, VI:16, v, p. 254; Abbreviation, 1994, pp. 17–25; Art of Astrology, 1934, par. 354, p. 214; al-Qabîṣî, 2004, I:24, p. 33. See also the references to Scorpio, Capricorn and Aquarius in *Reshit Hokhmah I*. Because Ibn Ezra defines them as having “the shape of animals that live in water” and because they are virtually identical with the watery signs, the designation “intermediate” seems to mean that they are intermediate between the earthy and the airy signs. Indeed, Ibn Ezra goes on to study Cancer, Pisces and Scorpio separately and dwells on their astrological associations with water.

[21]**20–21: The sign of Aries ... the feet.** Corresponds to Ta §2.3:2, where the twelve signs and the limbs of the human body under their charge are given. Similar information, either in ad hoc lists or as part of the separate descriptions of the properties of each sign, is commonplace in introductions to astrology. See Mishpetei haMazzalot, bnf 1058, f. 17a (where this doctrine is attributed to Ptolemy, the King, although it is not found in *Tetrabiblos*); Rh, II, x:11–12 *et passim*; Astronomica, 1977, II, 453, pp. 119; al-Qabîṣî, 2004, I:25–36, p. 35–37; Abbreviation,

1994, pp. 15–25; Kitāb al-Madḥal, 1996, IV:12, v, pp. 251–252; Art of Astrology, 1934, par. 359, p. 216; Carmen Astrologicum, 1976, IV:1, p. 251. Cf. Bouché-Leclercq, 1899, pp. 319–320.

§2.5

^[1]**1: Eccentric circle, Hebrew גלגל המוצק, lit. circle of the center.** For this meaning see Rh, I, viii:6–7, where the eccentric circle is designated גלגל המוצק שאינו במוצק הארץ, lit. “the circle of the center which does not coincide with the center of the Earth”; see also Mishpetei haMazzalot, bnf 1058, f. 19b, where it is designated גלגל המוצק שמוצקו רחוק ממוצק הארץ, lit. “the circle of the center whose center is far from the center of the Earth.” See Glossary s.v. “eccentric circle”.

^[2]**2: But in my opinion ... sometimes they are above <the Sun>.** Corresponds to Ta §1.3:9. See also below Tb §2.5:5, where Ibn Ezra maintains that “for the most part it [Mercury] is above it [the Sun]”. Ibn Ezra endorses here, as a middle-ground solution, a partially heliocentric theory according to which Mercury and Venus circle the Sun. This system was advocated in antiquity by Theon of Smyrna and had a vigorous Latin tradition. It is mentioned by three late (fourth and fifth centuries A.D.) Latin writers—Chalcidius, Macrobius and Martianus Capella—and also by twelfth-century philosophers—William of Conches and Hermann of Carinthia. See Evans, 1998, pp. 349, 413–414; Dreyer, 1953, p. 128. Since it is not found in Arabic sources, it is possible that Ibn Ezra was acquainted with this theory via Latin sources. I am grateful to Prof. Charles Burnett for this information. Notice, however, that an embryonic heliocentric system is presented in Ibn Ezra’s translation of Ibn al-Muthannā’s Commentary, 1967, pp. 172, 284: “The scholars of the constellations, who had no knowledge of the science of the spheres, thought that the planets are bound to the sun by bonds, just as horses and beasts are bound to wagons. When the planets are far from the sun, they are pulled by their bonds toward it”.

^[3]**1–2: A great dispute ... a long explanation.** Corresponds to Ta §1.3:8–11; see note there. Although here Ibn Ezra is ostensibly discussing the relative location of Venus and Mercury with respect

to the Sun, this is in fact the beginning of the discussion about the planetary houses. For an explanation of this peculiar *modus operandi*, see below Tb §2.6:6 and note.

^[4]**3–4: They made Cancer ... hot and dry then.** Corresponds to Ta §2.4:6–7.

^[5]**5: Next after ... the Sun.** Corresponds to Ta §2.5:11.

^[6]**7: As I shall explain.** See below, Tb §4.7:5–8.

^[7]**6–9: Libra is ... the Moon.** Corresponds to Ta §2.5:9–10.

§2.6

^[1]**1: As I shall explain.** See below, Tb §5.3:2.

^[2]**2: According to Ptolemy.** See Tetrabiblos, 1980, I;14, p. 75: “quartile and opposition are disharmonious because they are composed of signs of opposite kinds.”

^[3]**1–2: Because Capricorn ... darkness and death.** Corresponds to Ta §2.5:9.

^[4]**2: House of enemies.** See below, Tb §3.3:5.

^[5]**4: The seventh ⟨mundane house⟩ which has the likeness of the twelfth ⟨mundane house⟩.** See above, Tb §2.6:3.

^[6]**3–4: The houses ... the twelfth ⟨mundane house⟩.** Corresponds to Ta §2.4:10–11.

^[7]**5–6: The house of Venus ... to Virgo.** Corresponds to Ta §2.5:6.

^[8]**6: If they are above the Sun the result will be almost the same, as I have mentioned.** In his discussion of the planetary houses, Ibn Ezra seems to hesitate about the positions of Venus and Mercury with respect to the Sun. Thus, in Tb §2.5:5 he claims that Mercury’s planetary house is next to the Sun’s planetary house

“because for the most part it [Mercury] is above it [the Sun].” But in Tb §2.6:5–6 he writes that “the planetary house of Venus is the fifth to the house of Saturn, and ... Mercury is in the sixth orb with respect to Saturn,” which is tantamount to placing the Sun’s orb above those of Venus and Mercury. In the current passage Ibn Ezra states that his explanation of the relative order of the houses of the planets by means of the relative position of their orbs is valid whether one places Mercury and Venus above or below the Sun. The last words of this passage, “as I have mentioned,” refer to Tb §2.5:1–2, where Ibn Ezra begins the discussion about the planetary houses by touching upon the “great dispute among scholars about whether Venus and Mercury are above or below the Sun” and where he subsequently offers his own position, namely, that “they are all right, for sometimes they [i.e. Venus and Mercury] are below and sometimes they are above.” Ibn Ezra decided to insert the account of this disagreement and his own opinion on the matter at the beginning of the discussion in order to prepare readers and resolve the upcoming difficulty in advance.

§2.7

^[1]**1: Houses of exaltation, Hebrew הכבוד, lit. houses of the honor.** This entire section (Tb §2.7:1–14) corresponds closely to the parallel discussion of the houses of exaltation in Ta §2.6:1–2, §2.16:1–14, as will be shown in the following notes.

^[2]**1: Ptolemy said ... renewed then.** Corresponds to Ta §2.6:1 and refers to Ptolemy’s explanation of the Sun’s exaltation in *Tetrabiblos* I:19. See *Tetrabiblos*, 1980, I:19, p. 89: “Since the sun, when he is in Aries, is making his transition to the northern and higher semicircle, and in Libra is passing into the southern and lower one, they have fittingly assigned Aries to him as his exaltation, since there the length of the day and the heating power of his nature begin to increase.”

^[3]**2: The opposite ... dejection in Aries.** Corresponds to Ta §2.16:6 and refers to *Tetrabiblos* I:19. See *Tetrabiblos*, 1980, I:19, p. 89: “Saturn again, in order to have a position opposite to the sun, as also in the matter of their houses, took, contrariwise, Libra as his exaltation and Aries as his depression. For where heat increases there cold diminishes, and where the former diminishes cold on the contrary increases.”

^[4]**3: The power ... house of exaltation.** Corresponds to Ta §2.16:3; see note there.

^[5]**4: The Indian scientists ... this degree only.** Corresponds closely to Ta §2.6:2.

^[6]**4: Arc of vision, Hebrew קשת המראה:** In the second version of *Keli haNehoshet* Ibn Ezra explains how to measure this arc with an astrolabe and defines it as the angular distance between the sun and the moon plus/minus two-thirds of the northern/southern latitude of the place from which the observation is made. This value is used to determine whether the moon will be visible on the night of the new crescent: if the arc is at least 12° the moon will be seen, otherwise not. See *Nehoshet B*, Mant. 10, f. 44b–45a; *Nehoshet A*, bnf 1061, f. 157b; *Yesod Mora*, 1985, I, p. 316; *Iggeret haShabbat*, 1894/5, p. 71; *Me'orot*, München 202, f. 105b; *Ibbur*, 1874, p. 11a; long commentary on Exodus 12:2. See also *Sanctification of the New Moon*, 1967, pp. 69, 71, 82 *et passim*. For the same term, Maimonides uses the expression קשת הראייה.

^[7]**4: The exaltation of the Moon ... at Libra 19°.** Corresponds to Ta §2.16:4–5, where the account is ascribed to the scientists of India.

^[8]**5: Path of darkness, Hebrew דרך החושך.** Corresponds to the “place of burning” (Hebrew מקום השריפה) in Ta §2.16:5; see note there. A Latin gloss to the relevant passage in al-Qabîṣî, 2004, III:29, p. 105 reads “iste locus dicitur combustus et *tenebrosus*” (italics added). I am grateful to Prof. Charles Burnett for this information.

^[9]**6: The exaltation of Jupiter ... Cancer 15°.** Corresponds to Ta §2.16:10. Notice, however, that the reference to the “southern winds,” found in all the manuscripts consulted, is at variance with *Tetrabiblos* I:19, *Kitâb al-Madḥal*, 1996, V:6, v, p. 189, and Ta §2.16:10, which refer to “northern winds.” See *Tetrabiblos*, 1980, I:19, p. 89: “Then Jupiter, which produces the fecund north winds, reaches farthest north in Cancer and brings his own power to fullness; they therefore made this sign his exaltation and Capricorn his depression.” See also *Art of Astrology*, 1934, par. 389, p. 236, where Jupiter is presented as being associated with the north.

[11] **7: The exaltation of Mars ... its own nature.** Corresponds closely to Ta §2.16:12, where this opinion is attributed to the scientists of India; see note there.

[13] **9–10: The Indian scientists ... intersection of two circles.** Corresponds closely to Ta §2.16:9 (see note there) and to Mishpeṭei haMazzalot, bnf 1058, f. 14b: **הַקְדְּמוֹנִים אָמְרוּ כִּי תְאוּמִים בֵּית כְּבוֹד רֹאשׁ** **”הַתַּלִּי, וְכְבוֹד הַזֶּנֶב בְּמוֹל קֶשֶׁת, וְתַלְמִי מֵהַתֵּל בָּהֶם וְהָדִין עִמּוֹ.”** (“The Ancients said that Gemini is the house of exaltation of the Head of the Dragon, and the exaltation of the Tail is Sagittarius, but Ptolemy laughs at them and he is right”). For the Dragon, see Ta §1.6:7 and note. The “two circles” whose intersection marks the nodes or Head and Tail of the Dragon, are the ecliptic, namely, the path of Sun, and the path of the Moon.

[14] **14: Many say ... this (astrological) judgment.** See Māshâ'llāh's *Kitāb al-Mawālīd*, 1971, p. 149: “Et scias quod Caput Draconis cum fuerit in uno signo cum planeta qui fuerit almutez infra 12 gradus vel plus ante vel retro addit quartam partem ipsorum annorum ... Quod si Cauda Draconis ibi fuerit minuit quartam partem annorum.”

§ 2.8

[1] **I: The triplicity, Hebrew השלישות** (Arabic *al-muthallathât*, Latin *trigonalitas*). The term is never comprehensively defined, neither in *Te'amim I* nor in *Te'amim II*. It denotes four groups of three zodiacal signs linked with the same element of the four basic elements and thus regarded as having an identical nature; their name stems from the fact that they form four equilateral triangles across the zodiac. The first triplicity, formed by Aries, Leo, and Sagittarius, has a fiery nature. The second triplicity, composed of Taurus, Virgo, and Capricorn, is earthy. The third triplicity, Gemini, Libra, and Aquarius, is airy in nature. The fourth triplicity, Cancer, Scorpio, and Pisces, is watery. In both versions

of *Sefer ha-Ṭe'amim*, the triplicities are a main component of other astrological doctrines, such as the nature of the zodiacal signs (Ta §1.4:1–7; Tb §2.1:1–14), the cardinal points of the signs (Ta §2.2:8–9; Tb §2.2:1–6), the decans (Ta §2.8:1; Tb §2.9:4–6), the ninth-parts (Ta §2.10:1–4; Tb §2.9:9), and the special types of Saturn-Jupiter conjunctions (Ta §10.9:3). The present section (Tb §2.8:1–12) deals exclusively and comprehensively with the lords of the four triplicities. In contrast with the accounts in contemporary introductions to astrology, which merely list the lords of the triplicities, *Ṭe'amim I* and *Ṭe'amim II* include the reasons for the inclusion and exclusion of certain planets as the lords of the triplicities. See Tetrabiblos, 1980, I:18, pp. 83–87; Kitâb al-Madḥal, 1996, V:14, v, pp. 200–214; Abbreviation, 1994, p. 25; Art of Astrology, 1934, par. 445, p. 259; al-Qabîṣî, 2004, I:16, p. 25–27; Carmen Astrologicum, 1976, I:1, p. 161–162. The accounts in both versions of *Sefer ha-Ṭe'amim* correspond closely to each other, as shown in the following notes.

[2] **1–4: They said that Aries ... night is cold.** Corresponds closely to Ta §2.7:1–4.

[3] **5–7: They assigned ... are southern.** Corresponds closely to Ta §2.17:2–4.

[4] **9: Lord of the second triplicity, Hebrew בעל השלישית השנייה.** Here “second triplicity” does not denote any of four groups of three zodiacal signs (see above Tb §2.8:1 and note). A planet that is “lord of the second triplicity” is the second in the sequence of lords by day or by night of one of the four triplicities (airy, airy, watery, earthy). Thus, in the airy triplicity, Mercury is “lord of the second triplicity” by day because it is second to Saturn, which is “lord of the first triplicity” by day. For the same use of this expression, see Tb §2.8:11 and Ta §2.17:2, 5, 6, 9.

[5] **8–10: They assigned ... nature of the air.** Corresponds to Ta §2.17:5–7.

[6] **11–12: They assigned ... partner with them [Venus and Mars].** Corresponds to Ta §2.17:8–9.

§2.9

^[1]**1: The terms, Hebrew הגבולים** (Arabic *ḥudūd*, Latin *finēs*). They are widely employed but never comprehensively defined in Ibn Ezra's writings. The "terms" are unequal divisions of the signs; for each of them a planet, except the Sun and the Moon, is associated as "lord of the term" (see Tb §6.8:2,3). Introductions to astrology usually provide lists of the terms in each sign; in some cases they also refer to various methods. The most common are the terms of the Chaldeans or Babylonians, of the Hindus, of the Egyptians, and of Ptolemy. *Te'amim II* also mentions the terms of the scientists of Persia, which perhaps correspond to the terms of Aṣṭaratus or Arsthoathol, mentioned by Al-Bîrûnî and Abû Ma'shar. See Art of Astrology, 1934, par. 453, pp. 265–266; Kitâb al-Madḥal, 1996, V:8, v, pp. 196–200; Abbreviation, 1994, p. 89; al-Qabîṣî, 2004, I:19, pp. 27–29; Tetrabiblos 1980, I:21–22, pp. 91–107. Whereas *Reshit Hokhmah I* gives the terms of the Egyptians or Babylonians and the terms of Ptolemy separately for each sign, *Mishpeṭei ha-Mazzalot* lists the terms of the Egyptians only. See Rh, II, x:23–27 *et passim*; *Mishpeṭei haMazzalot*, bnf 1058, ff. 15a–15b.

^[2]**2: Ptolemy also said ... by experience.** Corresponds closely to Ta §2.9:1; see note there.

^[3]**3: When you count ... great years.** Corresponds closely to Ta §2.9:2; see note there. This rule is later corroborated for the cases of all the relevant planets. See below, Tb §5.3:13; §5.4:12; §5.5:12; §5.6:7; §5.7:10.

^[4]**4: The decans ... below its [Mars'] orb.** Corresponds to Ta §2.8:1 (see notes there) and refers tacitly to the lords of the decans according to the method of the Egyptian scientists.

^[5]**6: The nature ... same method.** Corresponds to Ta §2.8:2 and refers tacitly to the lords of the decans according to the scientists of India. The header of the current fragment—the nature—indicates that, just as the three signs of one triplicity are considered to have "one nature," so too the lords of the three decans of the sign should be assigned to the three lords of the three signs of a single triplicity: the lord of the first decan is the lord of the sign, while the lords of the

second and third decans are the lords of the remaining two signs of the triplicity. See Kitâb al-Madḥal, 1996, V:16, v, pp. 202–203; Art of Astrology, 1934, par. 451, p. 263.

^[6]7: **The power of the dodecatemoria, Hebrew כח שנים עשר, lit. power of twelve** (Arabic *ithna ashriyât*, Latin *duodecatemoria*). This doctrine divides the signs into twelfths by two methods, as reported in Ta §2.11:1,2. See notes there.

^[7]7: **It has power in the (astrological) judgments of the world.** Corresponds to Ta §2.11:3; see note there. The role of the dodecatemoria in general astrology is amply documented in both versions of Ibn Ezra's *Sefer ha-'Olam*. See 'Olam B, bnf 1058, f. 90a: ויש לך להסתכל אל מקום הכוכבים הטובים והרעים בתחלת שנת המחברת, ודע באי זה מזל הוא כח השנים עשר, כמו שפירשתי בספר ראשית חכמה. ומוזה תוכל לדעת כל טוב וכל רע שיקרה לכל מדינה ומדינה. ("Observe the location of the benefic or malefic planets at the beginning of any year of a conjunction (of Saturn and Jupiter) and find out in which sign the power of the dodecatemoria is found, as I explained in *Reshit Hokhmah*, and from this you will be able to know any good or evil that will befall any country"). See also 'Olam A, bnf 1056, f. 83a.

^[8]7–8: **They said ... by twelve.** Corresponds to Ta §2.11:2; see note there.

^[9]9: **The four seasons are "heads", Hebrew הארבע תקופות היום ראשים.** For the four seasons, see above Tb §2.1:6 and note. Ibn Ezra took the expression "four heads" (Hebrew ארבעה ראשים) from Gen. 2:1; in his long commentary on Genesis 3:21 he regarded them as a metaphor for the four basic elements ("וארבעה ראשים הם השרשים"). Thus here Ibn Ezra is echoing the idea already conveyed above at Tb §2.1:6–9 and states pithily that Aries, Cancer, Gemini, and Capricorn—the four first signs of each of the four seasons—are respectively associated with fire, air, water, and earth, i.e. the four basic elements.

^[10]9: **The power of the ninth-part ... nine digits.** Corresponds closely to Ta §2.10:1–5. According to this doctrine, of Indian origin, each sign is divided into nine equal-sized ninth-parts (Hebrew תשיעיות, Arabic *nawbahra*, Latin *novenarii*) and each ninth-part is associated with a sign. The lords of these signs are the lords of the corresponding

ninth-parts. Like contemporary introductions to astrology, Ta §2.10:1–5, Tb §2.9:9, and Mishpetei haMazzalot, bnf 1058, f. 15b, state that this doctrine rests on the triplicities: first, because nine is the number of signs that separate the first and the last sign in any triplicity; second, because in every case the assignment of the lords of the ninth-parts starts from the changeable sign of the triplicity. See Kitâb al-Madḥal, 1996, V:17, v, p. 203–204; Art of Astrology, 1934, par. 455, pp. 266–267; al-Qabîṣî, 2004, IV:16–17, pp. 129–131; Abbreviation, 1994, p. 139. But Ta §2.10:1 and Tb §2.9:9 advance beyond this point when they claim that the signs were divided into nine parts because “nine is the last of the digits” or “there are a total of nine digits.”

§3.1

^[1]**1: The houses ... explained the houses.** Corresponds closely to Ta §3.5:1; see note there.

^[2]**2–4: In my opinion ... thinking imaginatively.** Refers to the first mundane house and corresponds to Ta §3.6:1–2.

^[3]**7–8: They signify fathers ... Ptolemy said the opposite.** Corresponds closely to Ta §3.6:3–4; see note there.

^[4]**9–10: The seventh house ... aspect of opposition.** Corresponds closely to Ta §3.6:7–8.

^[5]**11: These four ... twelve houses.** Corresponds closely to Ta §3.5:4.

^[6]**12: Falling** ⟨from the cardines⟩, Hebrew נופלים. See note in Ta §3.5:11 s.v. “falling”.

^[7]**12: They said that the four ... do not have power.** Corresponds to Ta §3.6:5–12.

§3.2

[¹]2: **Mazzal, Hebrew מול**. This is an unusual usage of this Hebrew word, which as a rule denotes a zodiacal sign or constellation, but here means “mundane house.” For a similar case, see Ta §3.6:1.

[²]1–2: **Since the fifth house ... feast and pleasure**. Corresponds closely to Ta §3.6:9.

[³]3: **Because the eleventh house ... profit, and renown**. Corresponds closely to Ta §3.6:10.

[⁴]4: **As I shall explain in the aspects**. See below, Tb §4.6:1–6, §4.7:1–8, §4.8:1–3.

[⁵]4: **But this ... causes of life**. Corresponds to Ta §3.6:11.

[⁶]5: **Seventh house, Hebrew יתד שביעי, lit. seventh cardo**: Ibn Ezra is in the habit of applying the term *cardo* to the mundane houses whose cusps correspond to the cardines. See below Tb §6.2:3, 9; see also Ta §3.5:7, §3.6:12.

[⁷]5–6: **Because the seventh house ... inheritance from the deceased**. Corresponds to Ta §3.6:12–13.

§3.3

[¹]1–3: **When the Sun ... roaming to (distant) places**. Refers to the third and ninth mundane houses and corresponds to Ta §3.6:15. Corresponds also very closely to Mishpeṭei haMazzalot, bnf 1058, f. 15b–16b: והדרך הקרוב, וגיסיו, וחנניו, והקרובים, בית האחים והשלישי: בית האחים והקרובים, וחכמת התורות והמשפטים ... הבית התשיעי: בית הדרכים והחלום הקטן, וחכמת התורות והמשפטים, והחכמות, והתבונות, והחלומות, והאמונה, ועבודת השם” (“The third house: the house of brothers, relatives, sons-in-law, brothers-in-laws, short journeys, short dreams, and the science of ordinances and laws ... The ninth house: the house of long journeys, sciences, understanding, dreams, belief, and divine worship.”

^[2]5: **Because the twelfth ... animals for man.** Corresponds to Ta §3.6:16.

^[3]6: **Because the sixth ... hidden enemies.** Corresponds to Ta §3.6:17.

§4.1

^[1]1: **They compared ... to a horseman.** Corresponds to Ta §5.2:3 and Rh, VIII, lxvi:9.

^[2]1: **Gets brighter, Hebrew יוסיף אומץ.** For this translation, see Ibn Ezra's gloss on the word אמוצים in Zech. 6:3: והוא גוון; "מגורת 'אמיץ'; ונראה למרחוק יותר מכל הגוונים" ("it is derived from אמיץ and is a strong color, which can be seen from a distance more than any other color").

^[3]2: **The reasons for the other are the ones that are written (in *Reshit Hokhmah*).** This statement shows that *Te'amim II* is commenting on an underlying text: the lost *Reshit Hokhmah II*.

§4.2

^[1]1–4: **Light ... close to the Earth.** This section deals with the "lights" of the planets—Hebrew אורים, Arabic *shu'ā*, Latin *radii*—namely, the backward or forward rays of the planets. Corresponds closely to Ta §4.2:12. Instead of *lights*, which is employed in both *Te'amim I* and *Te'amim II*, *Mishpetei ha-Mazzalot* employs ניצוץ "ray" and offers a list of these rays without any explanation. See *Mishpetei ha-Mazzalot*, bnf 1058, f. 17b *et passim*. Contemporary introductions to astrology usually provide similar lists of the lights without any explanation and employ a divergent terminology to denote the same term. See *Kitāb al-Madhal*, 1996, VII:3, v, p. 281 ("power of the body"); *Abbreviation*, 1994, p. 35 ("power of the body"); Rh, IV, xlv:17 *et passim* ("power of the body"); al-Qabîṣī, 2004, II:5, p. 65 *et passim* ("size of the body"); *Art of Astrology*, 1934, par. 436, p. 255 ("orbs").

§4.3

^[1]**3: If Mercury ... two Mercuries in the orb.** Corresponds closely to Ta §6.2:4, where this statement is attributed to Doronius.

^[2]**4: I have already explained why 15°.** See above, Tb §4.3:1

^[3]**4: The degrees of Saturn and also of Jupiter (but not of Mars).** See Ta §6.2:5: “Saturn and Jupiter emerge from the domain of burning at six degrees because of the size of their bodies, but Mars’ body is not as big as theirs; for this reason they assigned to Mars 10 degrees.”

^[4]**1–11: Conjunctions ... is full.** Corresponds closely to Ta §6.2:1–5, which comments on Rh, VI, liv:28–lv:23. See Mishpetei haMazzalot, bnf 1058, f. 19b and Kitâb al-Madḥal, 1996, VII:2, v, pp. 276–278.

§4.4

^[1]**1–3: A northern ⟨planet⟩ ... apogee to perigee.** Corresponds to Ta §7.1:4–10. See Mishpetei haMazzalot, bnf 1058, ff. 19b–20a; Art of Astrology, 1934, par. 495, pp. 307–308. Notice that whereas *Te’amim I* and *Te’amim II* render the concept of being victorious as מְנַצֵּחַ *Mishpetei ha-Mazzalot* also employs the Hebrew word מְנַצֵּחַ.

§4.5

^[1]**3: Ecliptic, Hebrew אֶפְרֹדֶת הַלִּיל, lit. vest of the circle.** See note at Ta §1.2:1 and Glossary, s.v. “ecliptic”.

^[2]**1–4: Opposition ... into 360 ⟨degrees⟩.** Corresponds closely to Ta §7.2:1–4; see note there.

§4.6

^[1]**1: Aspects.** See Ta §3.1:1 and note

^[2]**1: If we draw a circle ... approximately 120 (degrees).** Ibn Ezra is here paraphrasing Ptolemy's *Almagest* I, 10 (*Almagest*, 1984, I:10, p. 48). He acknowledges this, and explains the convenience of this approximation in *Liber de Rationibus Tabularum*, 1947, p. 126: "Dixit Ptholomeus: Si posuerimus diametrum circuli 120 graduum, erit circumferencia fere 377 graduum, qui numerus ad numerum diametric nullam proportionem habet notam. Ad cuius rei alleviacionem posuit numerum circumferentie 360 graduum. Que res magistris astronomie minime nocet, ut post docebimus, licet practicis geometrie non nichil efficiat, quibus nos post remedium conferemus." Similar ideas are conveyed in Ibn Ezra's translation of Ibn al-Muthannâ's *Commentary*, 1967, pp. 176, 281: "One who wishes to construct the sine and the declination according to the opinion of Ptolemy should consider the diameter of the circle equal to 120".

^[3]**1: Halve the circle ... by the diameter.** Corresponds closely to Ta §3.1:3 and *Mishpeṭei haMazzalot*, bnf 1058, f. 20a.

^[4]**2: If we want to divide it ... 90 (degrees) from the diameter.** Here Ibn Ezra gives very succinct instructions for dividing the circumference into three parts by inscribing an equilateral triangle in the corresponding circle. One side of the equilateral triangle is obtained by drawing a chord that is perpendicular to the diameter and crosses it at two-thirds of its length, namely at 90 degrees. The intersections of this chord with the circumference give one side of the equilateral triangle. The other two sides of the equilateral triangle are given by drawing two chords connecting each of the two extremes of the previous chord with the farthest extreme of the diameter. Corresponds closely to Ta §3.1:5 and *Mishpeṭei haMazzalot*, bnf 1058, f. 20a.

^[5]**3: If we draw a chord ... an aspect of sextile.** In addition to the triangle described at Tb §4.6:2, instructions are given here to draw another equilateral triangle which is inscribed in the circle and whose base is obtained by drawing a chord that is perpendicular to the diameter and crosses it at a third of its length, namely at 30 degrees of its length. These two triangles divide the circumference into six equal parts, thereby producing an aspect of sextile. Corresponds closely to Ta §3.1:6 and *Mishpeṭei haMazzalot*, bnf 1058, f. 20a.

^[6]**4: The chord ... corresponds to an arc of 30:** Here Ibn Ezra refers the reader to a table of arcs and their corresponding chords. Indeed, in a table of arcs and chords in an anonymous treatise on arithmetic and geometry called *Sefer ha-Middot*, which has recently been ascribed to Abraham Ibn Ezra and considered to be a preliminary version of *Sefer ha-Mispar*, we find these precise values: **”ויתר קשת שלשים, גם הוא שלשים בלא חלקים”** (“The chord of an arc of 30 is also 30, with no subdivisions”). See *Sefer ha-Middot*, 5.25 (Middot, 2006, pp. 156, 199). Notice that Lévy and Burnett, in their translation of *Sefer ha-Middot*, render the Hebrew **יתר** as sine (Middot, 2006, p. 156). In my opinion, however, at least in the current passage, it is clear that the Hebrew expression **”ויתר קשת ל’”** means “a chord of 30” because it refers to one of the sides (Hebrew: **צלע**) of the hexagon that represents the aspect of sextile. Similar, although not identical, values are given in the table of arcs and chords found in Ptolemy’s *Almagest* I, 11 (*Almagest*, 1984, I:11, p. 57).

^[7]**5: The aspect of quartile is in the middle of the circle.** Ibn Ezra says, very briefly as is his wont, that if a chord that is perpendicular to the diameter is drawn at the “middle,” namely, at the center of the circle, then the two extremes of the diameter and the two points of intersection of the chord with the circumference are the corners of an inscribed square that divides the circumference into four equal parts; this produces the aspect of quartile. Corresponds closely to Ta §3.1:4 and Mishpeṭei haMazzalot, bnf 1058, f. 20a.

§4.7

^[1]**1: Always the number ... as does the ⟨the number⟩ one.** Corresponds closely to Ta §3.2:4. See note there.

^[2]**2: If you divide it ... into even and odd.** Here Ibn Ezra conveys the idea that pairs of integers separated by the constant 4 are either both odd (1 and 5, 3 and 7, 5 and 9) or both even (2 and 6, 4 and 8, 6 and 10).

^[3]**3: The third ⟨number⟩ ... ⟨made up⟩ of even and odd.** Just like pairs of integers separated by the constant 4, pairs of integers separated by the constant 2 are also either both odd (1 and 3, 3 and 5, 5 and 7) or both even (2 and 4, 4 and 6, 6 and 8).

^[4]**3: But it is not the same in its division.** Here Ibn Ezra briefly conveys the idea that despite the aforementioned property that pairs of numbers separated by the constant 4 or by the constant 2 are both even or they are both odd, their splitting up is not the same: they are either separated by the constant “four” or by the constant “two”.

^[5]**1–6: Regarding any number ... one nature.** Corresponds closely to Ta §3.2:1–9, where Ibn Ezra attributes this explanation of the aspects to himself; see note there. A similar explanation of the aspects is offered in *Sefer ha-’Eḥad* (Book of the Unit), a theoretical mathematical monograph written by Ibn Ezra prior to 1148 (EḤad, 1985, p. 400): “המזל הרביעי הפך הראשון, כי החם והקר הם הפועלים והשנים האחרים, לח ויבש פְּעוּלִים. והנה כל רביעי במזלות הפך הראשון בפעל, ומזלות האש לבדה הפך בפעל ובפעול. על כן אמרו חכמי המזלות כי מבט רביעית הגלגל שנאה, ומבט ששית חצי אהבה, כי השלישי מהמזלות על הראשון בתולדת, אחד בפעל והפך בפעול, על כן אמרו כי הוא חצי אהבה. ומבט שלישית אהבה גמורה, כי מבט שלישית הגלגל שהוא החמישי בתולדת הראשון, על כן מבט אהבה גמורה בפעל ובפעול. וככה א’ עם ה’, כי שניהם שומרים עצמם; וככה ב’ עם ו’; כי שניהם זוג “The fourth sign is the opposite of the first, because heat and cold are active ⟨virtues⟩ and the other two ⟨virtues⟩, moistness and dryness, are passive. So any sign that is fourth is opposite the first ⟨sign⟩ with respect to the active ⟨virtues⟩, but the fiery signs only are opposite ⟨the first⟩ with respect to the active and passive ⟨virtues⟩. Therefore the astrologers said that the aspect that extends over a quarter of the circle is of hate, and sextile is half love. Because the third sign is related in nature to the first, with common active ⟨virtues⟩ but contrary passive ⟨virtues⟩, they said that it is of half love. Trine is of complete love, because trine, which extends over a third of the circle, includes the fifth sign, which has the same nature as the first; therefore the aspect of complete love is with respect to the active and passive ⟨virtues⟩. This applies to one and five, because both preserve themselves; and likewise two and six, because both are even numbers and are divisible into odd numbers; and likewise three and seven because both are odd numbers and divisible by odd numbers”).

^[6]**7–8: If someone argues ... the essence.** Here Ibn Ezra echoes ideas already conveyed at Tb §2.1:10 and explores the nature of the signs involved in the aspects of sextile and quartile. He localizes a source of confusion: a pair of signs in sextile have half a nature in

common, so that although both are either hot or cold, one of them is dry while the other is moist (see Tb §2.1:10 and note); so too in the case of a pair of signs in an aspect of antagonism, namely, opposition, which have opposite natures, one of them is dry while the other is moist. Ibn Ezra clears up the confusion up by echoing the explanation he gave at Tb §2.1:10: in contrast to a pair of signs in sextile, which share active virtues (heat and cold) but do not share passive virtues (dryness and moisture), a pair of signs in quartile do not share active virtues.

§4.8

[¹]1: **Ya‘qub al-Kindî ... work out this way.** Corresponds to Ta §3.1:2. For Ya‘qub al-Kindî’s position on the aspects, see also above, Tb §2.1:10.

[²]2: **Ptolemy’s statements ... be quartile.** Cf. Tetrabiblos, 1980, III:10, pp. 287–307.

§4.9

[¹]2. **Confusion about the <astrological> judgments.** Here the manuscripts add: “and they were taken from many hundreds”. This passage resists any reasonable elucidation and is in all likelihood a scribal error.

[²]3: **Number of lights.** See above, Tb §4.2:1–4 and note.

[³]1–4: **“Receiving” and “giving power” ... a man sitting alone.** Of the eight planetary conditions referred to in this passage, only “desolation” and “reflecting the light” are mentioned in Ta §7.3:1. All are studied in the seventh chapter of *Reshit Hokhmah I*, although in a completely different order; “receiving”: Rh, VII, lxi:4–18; “giving power”: Rh, VII, lix:12–14; “conjunction”: Rh, VII, lvii:6–23; “aspect”: Rh, VII, lviii:10–14, “reflecting the light”: Rh, VII, lix:6–11; “occlusion of light”: Rh, VII, lix:27–lx:1–5; “desolation”: Rh, VII, lviii:31–32. See also Kitâb al-Madhal, 1996, VII:5, v, pp. 292–304; al-Qabîsî, 2004, III:1–31, pp. 91–107; Abbreviation, 1994, pp. 41–51; Art of Astrology, 1934, par. 505–507, p. 310–313.

^[4]**5: The power ... latitude plate** *⟨of the astrolabe⟩*. This is probably a reference to the bright and dark degrees and to the pits. See below, Tb §8.7:1–6 and Ta §2.12:1–15, and notes there. Ibn Ezra refers here to a “reason” that is “known” to him, but is unknown to us because the underlying text of *Te’amim II*, *Reshit Hokhmah II*, is lost. Judging on the basis of the reference to the “two circles that intersect in two places,” which is in all likelihood a reference to the equinoxes, we may surmise that the “reason” was related to the fact that the doctrine of the bright and dark degrees and of the pits, was based on the Hindu theory that the fixed stars are motionless, whereas according to another theory the position of the zodiacal degrees changes with respect to the equinoxes. The “other method,” whose relationship to the “reason” is very difficult to ascertain, refers to a characteristic of the rising times of pairs of signs such as Aries and Pisces, Taurus and Aquarius, Gemini and Capricorn, Cancer and Sagittarius, etc. In all these cases a special case of symmetry occurs: the rising time of the first ... the 10th ... the 20th ... and the last degree of the first sign of the pair is equal to the rising time of the last ... the 20th ... the 10th ... and the first degree of the second sign of the pair, as can be known by using an astrolabe. See, for example, Neḥoshet A, bnf 1061, f. 154b: *השער השמונה עשר: בידיעת כמה מעלות יעלה כל מול בארץ שלך* (“Chapter 18: how many degrees each sign rises at (the latitude of) your country”).

§4.10

^[1]**1–7: Pain. The first house ... applies to all the signs.** By contrast with introductions to astrology, such as Rh, II, x:11–16 *et passim* and al-Qabîṣī, 2004, I:37–48, pp. 37–41, which include no more than lists of the pains of the planets in the signs, in Ta §2.3:3–7 and Tb §4.10:1–7 Ibn Ezra undertakes to elucidate the mechanism behind the distribution of the pains of the planets among the signs. Moreover, in Mishpetei haMazzalot, bnf 1058, ff. 17a–17b, in addition to couching the same mechanism in similar terms, Ibn Ezra attributes its elucidation to himself: *... והקדמונים הזכירו מכאוב כל כוכב במזל רק אתן לך דרך כוללת לדעת זה ... כבר גיליתי לך סוד, העלימוהו הקדמונים ולא הזכירוהו בספריהם* (“The Ancients mentioned the pains of each planet in each sign. ... I offer you a comprehensive method to understand them. ... I have now disclosed to you a secret; the Ancients concealed it and did not reveal it in their books”). Notice,

however, that there is a terminological divide: whereas the two versions of *Sefer ha-Te'amim* render “pain” as כאב, *Mishpetei ha-Mazzalot* uses מכאוב.

Two astrological tenets underlie Ibn Ezra’s clarification of this doctrine: (a) each zodiacal sign, beginning with Aries, is assigned to a part of the human body, from head to toe (see Tb §2.4:20–21; Ta §2.3:2 and note); (b) one of the two houses of each planet, except for the luminaries, is considered to be the “first” house. The importance of these two principles is reflected by the fact that they introduce the discussion of the pains in Ta §2.3:2, Tb §4.10:1 and in *Mishpetei ha-Mazzalot*, bnf 1058, f. 17a.

The procedure to find the pain of a planet in some zodiacal sign consists basically of two steps: (a) The zodiacal sign in which the pains of the planets are being sought is considered as equivalent to Aries; in other words, this sign is assigned to the head, the following sign is assigned to the neck, and so on; (b) the pain of some planet in this sign is then established by counting, counterclockwise, the number of signs that separate the “first” house of this planet from this zodiacal sign; if the “first” house of the planet coincides with this sign, the “first” house is considered as equivalent to Aries and the pain of this planet in this sign is the head, namely, the part of the body assigned to Aries. If, for example, the “first” house is separated by five signs from the relevant zodiacal sign, the “first” house is considered as equivalent to the fifth sign after Aries, namely, Leo, and the pain of this planet in this sign is the heart, which is the part of the body normally assigned to Leo. In *She’elot B*, bnf 1058, f. 4b, and in *Moladot*, bnf 1056, f. 55b, drawing on *Mâshâ’llâh*, reference is made to this doctrine in the framework of medical prognostications, to localize a disease.

§4.11

[¹]1–4: **The color of the <mundane> houses ... degree of the ascendant.** Corresponds to al-Qabîṣī, 2004, I:69, p. 55; cf. *Kitâb al-Madḥal*, 1996, VI:28, v, p. 265 and *Art of Astrology*, 1934, par. 468, p. 277, where a different method for the allocation of colors to the mundane houses is given.

§4.12

^[1]**1–6: Joys. Mercury rejoices ... ⟨nature of the⟩ twelfth house.** Corresponds to Ta §4.9:1; see note there. See below, Tb §5.4:3–6, where a different method for the allocation of the planets to the mundane houses is offered.

§5.1

^[1]**2: A Greek scholar ... power of the Sun:** Corresponds to Ta §4.5:2; see note there.

^[2]**3: It has the “greater half” ... it is the great luminary.** Corresponds to Ta §2.5:3, Tb §5.2:11, §8.1:4. This is a reference to the solar planetary houses: Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn. By contrast, the lunar planetary houses, Cancer, Gemini, Taurus, Aries, Pisces, Aquarius, are called the “smaller portion” (Tb §5.2:11) or the “smaller domain” (Tb §8.1:4). See especially Tb §2.3:6–8 and note.

^[3]**11: The tables that I have compiled for you.** This reference indicates that the same patron who commissioned *Ṭe’amim II* also commissioned Ibn Ezra to compile a set of astronomical tables. Ibn Ezra presumably composed four versions of the *Book of the Tables* (ספר לוחות), which were accompanied by their canons or a *Book of the Reasons behind Astronomical Tables* (ספר טעמי הלוחות), two in Hebrew and two in Latin. See Sela, 2003a, pp. 22–27; Sela, 1996, Sela, 1997. Taking into consideration the likelihood that *Ṭe’amim II* was composed on 1154 (see below, Tb §8.7:4 and note), the current reference also suggests a connection between *Ṭe’amim II* and two works written by Ibn Ezra in 1154: (a) the second version of *Liber de rationibus tabularum*, written in some unspecified location in France (See *Liber de Rationibus Tabularum*, 1947, p. 78: “anno 1154 ab incarnatione Domini, quo hanc edicionem fecimus”); (b) *Liber Abraham Iude de nativitatibus*, probably an original Latin treatise by Ibn Ezra, where both the year 1154 as well as a past-tense reference to the *Liber de rationibus tabularum* may be found (see *Liber de nativitatibus*, 1484, ff. 3 (a)^r, 3 (c)^v).

^[4]**12: The astrologers have found ... the day or of the night.** Corresponds closely to Ta §4.2:10; see note there.

[5] **13: The Persian scientists mentioned ... did not provide any explanation.** See below, Tb §6.6:1 and note. See also Ta §10.9:2 and note.

[6] **13: Ptolemy's opinion <is that it lasts> 19 <years>:** See Tetrabiblos, 1980, IV:10, p. 445: "The lord of the middle sphere, the sun, takes over the fourth age, which is the middle one in order, young manhood, for the period of nineteen years, wherein he implants in the soul at length the mastery and direction of its actions, desire for substance, glory, and position, and a change from playful, ingenuous error to seriousness, decorum, and ambition."

[7] **15: Ptolemy's statements ... all actions are its action.** See Tetrabiblos, 1980, IV:10, p. 445. See previous note.

[8] **16: Because the lion is.** Leo, the lion, is the planetary house of the Sun.

§5.2

[1] **4: "Loosen the ties", Hebrew כל מקושר לפתח.** These words derive from Job 38:31 (תִּתְּקֶשֶׁר מַעְדָּנוֹת כִּימָה אוּ מִשְׁכוֹת כְּסִיל תִּפְתָּח), a verse which mentions two constellations—*Kesil* and *Khima*—that are usually taken to be the Pleiades and Orion. According to talmudic traditions (Genesis Rabbah 10:7; B Berakhot 58b), which Ibn Ezra echoes in his commentary on Job 38:31, this verse speaks of the influence of these two constellations on the ripening of fruits. Ibn Ezra, by the reference to Job 38:31, seems to want to convey the idea that the Moon too exerts its influence on fruits, in particular, and on agriculture, in general. Notice also that in Rh, II, xxxvii:6–7 Ibn Ezra states that *Khima* is a star with the complexion of Mars and the Moon. For Ibn Ezra's distinctive approach to *Kesil* and *Khima*, see Sela, 2003a, pp. 257–273.

[2] **4: We know that no light ... heat dries <things> up.** Corresponds to Ta §1.5:12; see note there, and above, Tb §2.1:3.

[3] **5: Seven days after its first visibility, Hebrew אחר העמדה שבעה ימים.** For this translation, see Ex. 9:6 and Ibn Ezra's long commentary on this verse.

^[4]**8: The Moon ... superior world.** A similar approach, placing the Moon in an intermediate position between the sublunary domain and the other components of the supralunary domain, can be found in Me'orot, München 202, f. 103a: **וְהַלְבֵנָה לְבִדָּה בְּמַדְרָגָה הַשְּׁפִלָּה כְּנֹגֵד הַתִּיכוֹנָה ... וְאִשֶּׁר תַּחַת הַלְבֵנָה יִשְׁתַּנוּ וְלֹא יַעֲמְדוּ רֹגַע אֶחָד עַל מַתְכוֹנֹת אַחַת בְּעֶצְמָם** ("the Moon alone is in the lower rank vis-à-vis the middle [rank] ... and those beneath the Moon alter and never stay in the same condition for a moment").

^[5]**9: Inferior to the right.** See, above, Tb §5.1:7.

^[6]**11: Smaller portion ... small luminary.** This is a reference to the lunar planetary houses: Cancer, Gemini, Taurus, Aries, Pisces, Aquarius. By contrast, the solar planetary houses are called the "greater half" of the circle (Tb §5.1:3) or the "larger domain" (Tb §8.1:4). Corresponds to Ta §2.5:3, §4.5:6. See especially Tb §2.3:6–8 and note.

^[7]**15: Its great ... rays of the Sun.** Corresponds closely to Ta §4.8:8 (see note there), although without mentioning Abû Ma'shar as the source. For the expression "rays of the Sun," see Tb §7.2:11 and note.

^[8]**16: One less than the years of the *fardâr* of the Sun.** According to Rh, IV, xlvi:6 and al-Qabîṣî, 2004, II:22, p. 73, the *fardâr* of the Sun is 10 years long. Notice that at Tb §5.1:13 Ibn Ezra discusses other values for the Sun's *fardâr*.

^[9]**17: It serves ... four natures.** Corresponds to Ta §4.2:8, §4.8:6 and Rh, IV, 1:26. See Tetrabiblos, 1980, IV:10, 443: "For up to about the fourth year, following the number which belongs to the quadrennium, the moon takes over the age of infancy and produces the suppleness and lack of fixity in its body, its quick growth and the moist nature, as a rule, of its food, the changeability of its condition, and the imperfection and inarticulate state of its soul, suitably to her own active qualities." See Tb §6.9:2 and note.

^[10]**17: Only then ... he will live.** See Art of Astrology, 1934, par. 522, p. 324: "It is impossible to have confidence in its [the infant's] survival until it has attained the age of four years. These are called the years of rearing by the astrologers."

[11] **18: As I have explained regarding the Sun.** See above, Tb §5.1:6.

[12] **21: Short of stature ... is short.** Cancer is the planetary house of the Moon.

[13] **21: As I have already explained.** See above, Tb §5.2:2.

[14] **22: Its flavor is salty taste.** As for the tastes of the planets, which are predicated upon the “nature” of the planets (cold/hot, dry/moist) and known from experience, see also below §5.3:15 where Saturn is said to have a sour taste, §5.4:15 where the taste of Jupiter is said to be sweet, §5.5:8 where the taste of Mars is said to be bitter and pungent, and Ta §4.7:5 where the taste of Mercury is said to be sour “because it is cold and dry more often than not”. The tastes of the planets are commonplace in introductions to astrology: Rh, IV, xlix:20–21 (for Mercury); Mishpetei haMazzalot, bnf 1058, f. 21a (for Saturn and Jupiter); al-Qabiṣī, 2004, II:2–36, pp. 63–83, (Latin Alcabitius, see notes below the text); Kitāb al-Madḥal, 1996, VII:9, v, p. 313 (for Mars); Abbreviation, 1994, p. 63 (for Mars).

[15] **22: Its nature is like theirs.** See Rh, IV, l:27: The Moon ... gives an indication about ... women and any pregnant woman.

[16] **1–22: The Moon indicates life ... its nature is like theirs.** Cf. Ta §4.8:1–8; Rh, IV, l:14–li:8 Mishpetei haMazzalot, bnf 1058, ff. 21a–21b.

§5.3

[1] **1: They divided ... the right <ear> to it.** Corresponds to Ta §4.2:6.

[2] **2–3: They said ... its body is small.** Corresponds to Ta §1.5:13–15. See also Ta §4.2:1.

[3] **4: They said ... generates moisture.** Corresponds to Mishpetei haMazzalot, bnf 1058, f. 21b: וְהוּא קָר וְלֹחַ אִם הִיָּה בִשְׁפִלּוֹת גִּלְגַּל הַמּוֹצֵק.

“וקר ויבש אם היה בגבהותו” (“It is cold and moist when it is at the perigee of the eccentric circle, cold and dry when it is at its apogee”).

^[4]**6: It indicates ... black bile.** Corresponds to Ta §4.2:7. As for “chronic diseases” (תחלואים ארוכים) and “quartan fever” (הקדחת הרביעית), see Mishpetei haMazzalot, bnf 1058, f. 21b: ... ובחלקו “In its portion ... are chronic diseases ... and quartan fever”).

^[5]**7: The father ... from it [the Earth].** Corresponds to Rh, IV, xliii:25. Notice that fathers are usually assigned to the Sun. See Ta §4.1:5; §4.5:5; Rh, IV, xlvii:27; Moladot, bnf 1056, f. 20b.

^[6]**7: Ancient and old ... opposite of life.** Corresponds to Ta §4.2:1. Also corresponds closely to Mishpetei haMazzalot, bnf 1058, f. 21a: “שבתיאי ... ובחלקו הזקנים ... והכלל הוא כמו מלאך המות להמית תחת מפולת” (“Saturn ... the elderly are in its portion ... and this is the rule: it is like the angel of death, killing in an avalanche or by being thrown from a high place or by drowning in water”).

^[7]**8: Mars, Venus, and Mercury are lords of the crafts.** See Moladot, bnf 1056, f. 58a: “תסתכל אל מקום מאדים ונגה וככב חמה וראה” (“Look at the place of Mars, Venus, and Mercury and find out which is the lord in these places, and this planet is called the lord of the crafts”).

^[8]**10: Science of truth because it is uppermost.** Corresponds to Mishpetei haMazzalot, bnf 1058, f. 21a: “ובחלקו מהחכמות דעת עליון” (“[Saturn’s] portion among the sciences is the knowledge of the most High [Num. 24:16] and the principles”). See also Ta §4.2:5 and Rh, IV, xlii:26.

^[9]**11: Fetters and blows on trees and stones, Hebrew מכות ומכות הכבל בעצים ובאבנים.** None of these words—which are included in *Te’amim II* as a quote from an underlying text to be explained—appear in *Reshit Hokhmah I*. They were clearly part of the lost *Reshit Hokhmah II*. Notice, however, that Ibn Ezra employs here biblical terms that are somewhat related to Saturn’s properties: (a) כבל “fetters” derives from Ps. 105:18, a verse that rehashes the story of Joseph, who was in prison

when his father thought he was in the grave; this is connected to Tb §5.3:9, where Saturn is described as indicating “prison, a place where a man stays, just like the grave”; (b) **בַּעֲצִים וּבִאֲבָנִים** “on trees and stones”, probably derive from Ex. 7:19, a verse that tells how “water” in vessels of wood and stone was transformed into blood; this may be connected to Tb §5.3:9, where Saturn is closely related to “water”, which is cold. See long commentary on Ex. 7:19: **וְיִטְעֵם וּבַעֲצִים וּבִאֲבָנִים - הַמֵּיִם שֶׁהָיוּ** “**וְיִטְעֵם וּבַעֲצִים וּבִאֲבָנִים**” (**בְּבָתִּים, בְּכָלֵי עֵץ, אוֹ בְּכִיּוּרִים הַנּוֹעֲשִׂים מֵאֶבֶן.**) (“On trees and stones means the water in the houses, in the vessels made of wood, or in the lavers made of stone.”).

[10] **12: Its day ... the Sun.** See above Tb §5.1:12. Corresponds to Ta §4.2:10.

[11] **13: Its least ... only experience.** Corresponds to Ta §4.2:11. For the years of the *ḥardār*, see below, Tb §6.6:1 and note, and Ta §10.9:2 and note.

[12] **14: In Ptolemy’s opinion ... this method is true.** See Tetrabiblos, 1980, IV:10, pp. 442–447. Corresponds to Ta §4.2:8; see note there.

[13] **16–17: He ... has a sparse beard ... his face is black ... and he looks at the ground because of the heaviness of its motion.** Corresponds closely to al-Qabîṣî, 2004, II:6, p. 65: “Mâshâ’allâh said: of the appearances of people, it indicates a brown-skinned person; when he walks he lowers his eyes; he walks heavily ... having a sparse beard”.

[14] **19: It indicates donkeys ... the Sun horses ... the Moon <indicates> bulls.** As for the riding animals, see also below §5.4:19 where Jupiter indicates elephants, §5.5:10 where Mars indicates mules, §5.6:5 where Venus indicates camels, and §5.7:8 where Mercury indicates small cattle. Similar information is offered in the section devoted to the planets’ properties in *Mishpetei ha-Mazalot* (Mishpetei haMazalot, bnf 1058, ff. 20b–22a) but not in *Reshit Hokhma I*. Corresponds closely to Abû Ma’shar in *The Book of Religions and Dynasties* (On the Great Conjunctions, 2000, IV:10, p. 49): “If the indicator of this is Saturn, it indicates ... mules. If the indicator is Jupiter, elephants. If it is Mars, pack horses. If it is the Sun, horses. If it is Venus, camels. If it is Mercury, donkeys. If it is the Moon, cattle.”

^[15]**19: Bulls ... have their dignity in Taurus.** There is here a play on the double meaning of the Hebrew word שׁוֹר, which means bull but is also the name of the sign of Taurus, and of the Hebrew word כְּבוֹד, which means honor but also exaltation. Notice that Taurus is the exaltation of the Moon.

^[16]**20: Saturn <indicates> lead because of the heaviness and <because> it is in the dust.** Corresponds to Ta §4.2:3 and above, Tb §5.3:7 (“it indicates the ground ... and the grave is a place from which a man does not move. Similarly with its nature, because its motion is sluggish.”) See also Rh, IV, xliii:1; *Mishpetei haMazzalot*, bnf 1058, f. 21a.

§5.4

^[1]**1: I have already mentioned ... with Saturn’s.** See, above, Tb §5.3:2–3.

^[2]**5: Ptolemy said ... will be strong.** See *Tetrabiblos*, 1980, III:11, p. 309; III:13, pp. 339–341.

^[3]**3–6: In my opinion ... its complexion is temperate.** The method for the allocation of planets to mundane houses on which Ibn Ezra comments here is ascribed to Ibn Abi Damina in a parallel and very similar passage in Ta §4.1:5–7; see note there. Notice that a different method for the allocation of planets to mundane houses is offered in the doctrine of the planets’ joys (Tb §4.12:1–6).

^[4]**7: I have... left ear.** See, above, Tb §5.3:1.

^[5]**9: All the science of laws and ordinances to pronounce a just judgment, Hebrew כל חכמת המשפטים ותורות לשפוט צדק:** There is here a pun on the word צדק, which denotes Jupiter but here means just judgment. Corresponds to Ta §4.5:5 (“It indicates ordinances and laws, like Jupiter”). For the expression “science of laws and ordinances,” Hebrew, חכמת המשפטים ותורות, see above, note on Tb §3.3:1–3 and the corresponding quotation from *Mishpetei ha-Mazzalot*.

^[6]**9: The <astrological> judgments change ... distance from it.** Ibn Ezra conveys a similar idea in *Liber de rationibus tabularum* and in

his Commentary on Psalms 19:10. See *Liber de Rationibus Tabularum*, 1947, p. 73: “Item omnia iudicia astronomica secundum proportionem aliarum planetarum ad solem fiunt”; Commentary on Psalms 19:10: **“משפטי’ – ידוע כי משפטי חכמת המזלות כפי מערכת המשרתים בערכם אל השמש”** (“Judgments—It is known that the judgments of the science of the zodiacal signs are pronounced according to the configuration of the planets and the ratio ⟨of their distances⟩ to the Sun”).

^[7]**9–10: When Mercury gives ... the temperate nature.** Corresponds to al-Qabîṣî, 2004, II:9, p. 67.

^[8]**11: Its day and night ... the Sun.** See above, Tb §5.1:12.

^[9]**12: Its least years ... its least years.** Cf. Rh, IV, xlv:27–29 and Ta §4.3:5.

§5.5

^[1]**1: Do not heed ... above the Sun.** Refers to *Tetrabiblos*, 1980, I:4, p. 37: “The nature of Mars is chiefly to dry and to burn, in conformity with his fiery color and by reason of his nearness to the sun, for the sun’s sphere lies just below it.” See Ta §1.5:5 and §2.18:2, where Ptolemy’s *Tetrabiblos* is also taken to task on similar grounds. See notes there.

^[2]**2: Mentioned ⟨above in the section on⟩ Jupiter.** See above, Tb §5.4:4.

^[3]**5: The science of medicine and surgery belong to it.** See above, Tb §2.4:1 and notes.

^[4]**5: Mentioned ⟨in the section on⟩ Saturn.** See above, Tb §5.3:8.

^[5]**6: Ptolemy, the King, Hebrew תלמי המלך.** Ibn Ezra received the (“Arab”) mythical King Ptolemy from his Arabic sources. See Abû Ma’shar’s *Kitâb al-Madḥal*, 1996, IV:I, viii, p. 56: “Post Alexandrus Macedonem Grece reges Egypto cclxxv annis imperrare narrantur, quorum x continuo succedentes omnes uno Ptholomei nomine vocati sunt. Ex quibus unus ex Philadelphia ortus in Egypto regnans

astronomie Librum Almagesti greca ionica lingua scripsit. Eidem nonnulli et Astrologie Tractatus Quatuor Partium asscribunt.” Ibn Ezra in turn created a new (“Jewish”) mythical King Ptolemy—not only the flesh-and-blood astronomer of antiquity but also the “King Ptolemy” who promoted the translation of the Septuagint. For Ptolemy the King in Ibn Ezra’s work, see Sela, 2003a, pp. 296–305. Notice that *Ṭe’amim II* and *Mishpeṭei ha-Mazzalot*, on the one hand, and *Reshit Ḥokhmah I* and *Ṭe’amim I*, on the other, go in opposite directions regarding the Hebrew name of Claudius Ptolemy: whereas in the first pair Ptolemy is designated by the biblical name *Talmi* (2 Sam. 3:3, 1 Chron. 3:2, *et passim*), in the second pair the Arabic *Baṭalmiyūs* is used.

^[6]**6: The number of the Sun ... to the Earth(’s orb).** Corresponds closely to Ta §4.1:2; see note there.

^[7]**7: Saturn and Mars ... the luminaries.** Corresponds closely to Ta §4.1:4; see note there.

^[8]**7: The maleficence of Saturn is removed because they [Saturn and Mars] have a good ratio.** The ratio of Saturn to Mars is $32:21\frac{1}{3}$, or $3:2$, which constitutes the musical concord of a fifth and is indeed a “good” or “noble” ratio (see Ta §4.1:3 and note). That $32:21\frac{1}{3}$ or $3:2$ is a “good” ratio demonstrates that the number that Ibn Ezra originally assigned to Mars was $21\frac{1}{3}$ —as in the *Canobic Inscription* and in the *Epistle on Music* (see above, note on Tb §5.5:6)—and not 6, which appears in some manuscripts of *Ṭe’amim II*, or 20, which is the reading of all manuscripts of *Ṭe’amim I*. For if 20 or 6 is assigned to Mars, the ratio of Saturn to Mars is $32:20$ ($8:5$) or $32:6$ ($16:3$), which do not represent any musical concord and are therefore not “good” or “noble” ratios.

^[9]**7: The same applies to Venus and Mercury with Mars.** The ratio Mars-Venus or Mars-Mercury is $21\frac{1}{3}:16$, namely $4:3$, which represents the musical concord of the fourth and is also a “good” or “noble” ratio (see Ta §4.1:3 and note).

^[10]**1–12: Mars. Hot and dry ... found by experience.** Corresponds loosely to Ta §4.4:1–6 and *Mishpeṭei haMazzalot*, bnf 1058, f. 21b.

§5.6

^[1]**1: The instrument ... for sexual intercourse.** This is in all likelihood a reference to semen, as stated in Rh, IV, xlviii:30; al-Qabîṣī, 2004, II:27, p. 77. According to Mishpeṭei haMazzalot, bnf 1058, f. 21b and Art of Astrology, 1934, par. 426, p. 248 the genitals are in Venus' charge.

^[2]**4: Experts in the images, Hebrew בעלי הצורות.** Corresponds to the “scholars of the images” in Tb §2.3:10; see note there.

^[3]**1–7: Venus. A benefic planet ... as its small <years>.** Cf. Ta §4.6:1–4; Rh, IV, xlviii:8–xlix:7; Mishpeṭei haMazzalot, bnf 1058, ff. 22a–22b.

§5.7

^[1]**3: The tongue ... belongs to it.** A scrutiny of Ibn Ezra's literary work reveals that the “superior soul”—Hebrew הנשמה העליונה—is the highest component of the tripartite soul: the vegetative or appetitive soul; the animal or locomotive soul; and the wise or superior soul. The sources of this pattern can be traced back to Plato and Aristotle (Timaeus 69a, 69d, 79d; De Anima 413a, 413b, 414a, 414b), a fact of which Ibn Ezra seems to have been aware (Ta §4.5:2 and Tb §5.1:2). See, *inter alia*, the long commentary on Exodus 23:25; commentary on Ecclesiastes 7:3; She'elot A, bnf 1056, f. 62b; Mishpeṭei haMazzalot, bnf 1058, f. 17b. In his commentary on Ecclesiastes 7:3 Ibn Ezra refers to the superior soul as the “speaking” soul: וְלֵאדָם לִבְדּוֹ נֶפֶשׁ שְׁלִישִׁית “היא הנקראת נשמה היא המדברת המכרת בין אמת ושקר בעלת החכמה” (“Man alone is endowed with a third soul, which is designated ‘the speaking soul,’ which distinguishes between truth and falsehood and possesses wisdom.” The term “speaking soul” creates a clear link with Mercury, the planet that is in charge of the tongue and of faculty of speech. In Ibn Ezra's view, the “superior soul” is also the main instrument available to human beings to evade, in part, the decrees of the stars. See, *inter alia*, Mivḥarim A, München 202, f. 108b: וְיֵשׁ לְנִשְׁמַת הָאָדָם העליונה כח לבטל קצת הפרטים ולהוסיף או לגרוע על כל מה שיורו הכוכבים, רק אין כח לה לבטל הכלל (“The superior soul of man has the power to avert something of the particular events and to augment or reduce

everything indicated by the stars, but it does not have power to annul universal events”).

^[2]**3: As I have ... the Ancients.** See above, Tb §4.11:1.

^[3]**4: Mercury ... to begin to speak:** Corresponds to Ta §4.2:6; Rh, IV, l:4; Mishpeṭei haMazzalot, bnf 1058, f. 22b. See above, Tb §5.7:3 and note.

^[4]**4: The Moon has the power ... in all his actions.** This refers to the division of life into seven stages, each under the charge of a different planet. Corresponds to Tb §6.9:2, Ta §4.2:8. See notes there; also Ta §4.8:6, Tb §5.2:17, §5.3:14, Tetrabiblos, 1980, IV:10, pp. 442–447.

^[5]**5: Because its ratio to Venus is 1:1.** According to Tb §5.5:7, the numbers of Venus and Mercury are 16 (see Ta §4.1:2 and note), so that their ratio is 16:16, namely 1:1.

^[6]**6: Why it is mutable.** See above, §5.7:2.

^[7]**8: Scholars of the images.** See above Tb §2.3:10, and note.

^[8]**1–10. Mercury. This is the planet of wit and wisdom ... its terms in the signs.** Cf. Ta §4.7:1–6; Rh, IV, xlix:8–l:12; Mishpeṭei haMazzalot, bnf 1058, f. 22b.

§5.8

^[1]**1: When the Moon is <also> there.** See above, Tb §2.7:11.

^[2]**3: The *fardâr* years of the Head are three.** This is the value provided by Ibn Ezra in Moladot, bnf 1056, ff. 59b–60a (quoted below at the note to Tb §6.6:1) as well as by Abû Ma’shar and Al-Bîrûnî: Abbreviation, 1994, p. 87; Art of Astrology, 1934, par. 437, p. 255. See also Kennedy, 1964, p. 29. Notice that all the manuscripts examined read “two” years.

[3] **1–3: The Head of the Dragon ... verified by experience.** See Rh, V, lii:28f.–liii:1f.; al-Qabîṣî, 2004, II:45–46, pp. 87–89; Kitâb al-Madḥal, 1996, VII:6, v, p. 307; Abbreviation, 1994, pp. 55–57.

§5.9

[1] **2: Its *fardâr* years are two.** See Moladot, bnf 1056, ff. 59b–60a (quoted below at the note to Tb §6.6:1); al-Qabîṣî, 2004, II:48, p. 89; Abbreviation, 1994, p. 87; Art of Astrology, 1934, par. 437, p. 255. See also Kennedy, 1964, p. 29. Cf. above, Tb §5.8:3 and note.

[2] **3–5: They said that if a benefic planet ... Head of the Dragon and its Tail.** Corresponds closely to Ta §5.3:1–5; Rh, V, lii:25–29–liii:1–4. A virtually identical statement is given in Abbreviation, 1994, p. 57: “Some of the early writers claimed that the Head is of the nature of increasing, and if the benefics are with it, it increases their good fortune, and if the malefics are with it, it increases their harming. But the Tail is of the nature of decreasing, and if the benefics are with it, it detracts from their good fortune, and if the malefics are with it, it detracts from their harming. Because of this, the majority of them said that the Head was a benefic with the benefics and a malefic with the malefics, and the Tail a benefic with the malefics and a malefic with the benefics.” For another very similar statement, see al-Qabîṣî, 2004, II:48, p. 89. See also Kitâb al-Mawâlîd, 1971, 149, and above, Tb §2.7:12.

§6.1

[1] **1: Degrees of the nativity.** This section studies a procedure designed to find the ascendant in those cases where the precise time of birth is not known—the situation in the vast majority of cases. This procedure is designated *Nimubar* (נימובאר) in Moladot, bnf 1056, f. 47a, and *animodar* or *numûdâr* in other sources. See Moladot, bnf 1056, f. 47a–47b; Art of Astrology, 1934, par. 525–526, p. 328–331; al-Qabîṣî, 2004, IV:3, pp. 109–111; Bouché-Leclercq, 1899, pp. 373–390; Nallino, 1987, p. 496;

[2] **1: Male are always born ... females in even (hours).** See Mivḥarim A, München 202, f. 11b: מי שירצה להתחבר עם אשתו בשעה

“שהיה לו בן זכר, השמר שלא תהיה השעה מהשעות הזוגות ביום או בלילה” (“One who wishes to have sexual intercourse with his wife in a specific hour to father a son should take care that the hour not be even-numbered, either by day or by night”). See also f. 114a. For the correspondence between female/male and even/odd hours, see *Art of Astrology*, 1934, par. 390, p. 238.

^[3]**3: Ptolemy said ... the opposition (of the luminaries).** See *Tetrabiblos*, 1980, III:2, pp. 231–233: “It would be necessary that an account first be given how one might ... discover the degree of the zodiac which should be rising, given the degree of the known hour nearest the event, which is discovered by the method of ascensions. We must, then, take the syzygy most recently preceding the birth, whether it be a new moon or a full moon; and, likewise having ascertained the degree accurately, of both the luminaries if it is a new moon, and if it is a full moon that of the one of them that is above the earth, we must see what stars rule it at the time of the birth.” See also *Art of Astrology*, 1934, par. 525, p. 329; al-Qabîṣī, 2004, IV:3, pp. 109–111. Ibn Ezra explains the same procedure in detail in *Moladot*, bnf 1056, f. 47a, where he writes that, in addition to *Tetrabiblos*, Ptolemy developed this doctrine in the otherwise unknown *Sefer ha-Qosem ha-Qaṭan* (The Little book of the wizard) and in *Sefer ha-'Ilan* (Book of the Tree), that is, the apocryphal *Centiloquium*.

^[4]**4: Now I have tested ... of any of the planets.** A similar statement is found in *Moladot*, bnf 1056, ff. 47a–47b: “כי אני נסיתים פעמים רבות בכלי הנחושת שלם שדקדקתי רגע המולד ולא מצאתי מעלות היתדות כמספר מעלות השליט ... ע”כ התברר לי כי אלו המאזנים הבל המה” (“For I have tested them many times with the complete astrolabe, and I have sought meticulously the moment of the nativity and did not find that the degrees of the cardines are equal to the number of degrees of the lord (of the nativity). ... Hence it was clear to me that this method of correction is false”).

^[5]**5: As a general rule, only what Enoch said is true and corroborated by experience, and is compatible with nature.** For the legendary figure of Enoch, or Hermes, see note at Ta §1.2:3. A similar endorsement of Enoch’s procedure is found in *Moladot*, bnf 1056, f. 47b, where Ibn Ezra also gives details about Enoch’s approach: “והאמת הם מאזני חנוך ... אמר חנוך לעולם במולד אדם מקום הלבנה ברגע

המולד היא המעלה הצומחת ברגע רדת הטיפה ברחם, והמעלה הצומחת ברגע המולד שם היתה הלבנה ברגע הטיפה; ע"כ אם ידענו רגע הטיפה נוכל לדעת רגע המולד ואם ידענו רגע המולד נוכל לדעת מתי היה רגע הטיפה" ("But the most trustworthy is Enoch's method of corrections. ... Enoch said: In a man's nativity, the location of the Moon at the time of birth is always the degree of the ascendant at the moment of the descent of the drop ⟨of semen⟩ into the womb; and the degree of the ascendant at the moment of birth is the place where the Moon was at the moment of the ⟨descent of⟩ the drop ⟨into the womb⟩; therefore, if we know the moment of the ⟨descent of the⟩ drop, we can know the moment of birth, and if we know the moment of birth we can know the moment of the ⟨descent of the⟩ drop"). Enoch's procedure is also recorded in *Mishpetei ha-Mazzalot* (*Mishpetei haMazzalot*, bnf 1058, f. 16b). See also *Art of Astrology*, 1934, par. 526, pp. 329–330; Bouché-Leclercq, 1899, pp. 379–383.

§6.2

[¹] **I: As is written in the *Book of the World*:** Taken at face value, this passage may refer to either the first or the second versions of *Sefer ha-'Olam*. See 'Olam B, bnf 1058, f. 88a: "אומר כלל, כי יש לך להסתכל ... אל המחברת העקרית, שהיא מחברת שני המאורות, אם היתה קודם הכנס השמש במזל טלה, או נכח המאורות" ("I give a general rule: observe ... the main conjunction, which is the conjunction of the two luminaries, whether it occurs before the Sun enters the sign of Aries, or before the opposition of the luminaries"). See also 'Olam A, bnf 1056, f. 81b: "והנה הסתכל במחברת הגדולה אל המזל הצומח ברגע מחברת המאורות או נכחם" ("⟨In the year⟩ of a great conjunction ⟨of Saturn and Jupiter⟩, observe the ascendant at the moment of the conjunction of the luminaries or of their opposition, the one which occurs before the Sun enters Aries"). For an argument for the second version of *Sefer ha-'Olam*, see Sela-Freudenthal, 2006, n. 39, p. 37.

[²] **I: I shall say more on this subject.** See below, Tb §6.2:10, §7.1:1–5.

[³] **2: Ptolemy said ... it has great power.** Corresponds to Tetrabiblos, 1980, III:10, p. 271–273: "Of length of life: ... Among these there are to be preferred, with reference to power of domination, first those

which are in the midheaven, then those in the orient, then those in the sign succedent to the mid-heaven, then those in the occident, then those in the sign rising before mid-heaven; for the whole region below the earth must, as is reasonable, be disregarded when a domination of such importance is concerned.” Cf. Ta §3.4:6.

^[4]**3: Tenth house, Hebrew עשירי יתד, lit. tenth cardo:** See above, Tb §3.2:5 and note.

^[5]**5: *Hyl'ej*, meaning woman ... *kadkad'ah* meaning husband.** For this nomenclature and its meaning, see Moladot, bnf 1056, f. 50a: “והפרסיים יקראו לה מקומות החיים הילאג' והשליט אל כדכדאה ופירוש אלה” “המלות זכר ונקבה” (“The Persians designate the five places of life *hyl'ej* and the ruler the *kadkad'ah*, meaning male and female”). See Art of Astrology, 1934, par. 522, p. 324: “They look whether there is a *haylāj* or not. This they search for in five places: (1) the lord of the time, day or night; (2) the moon by day and the sun by night; (3) the degree of the ascendant; (4) the part of the fortune; (5) the degree of conjunction or opposition of the moon preceding the birth. The *haylāj* is one of these. After it has been determined according to the proper rules, then the most powerful planet as regarding dignities of those in an aspect to it is the *kadkhuda*.” See also al-Qabīṣī, 2004, II:5, p. 115; Kitāb al-Mawālīd, 1971, p. 242.

^[6]**9: Tenth house, Hebrew עשירי יתד, lit. tenth cardo:** See above, Tb §3.2:5 and note.

^[7]**3–11: Because the Sun ... the native will die.** The current passage discusses the criteria for the selection of the *hyl'ej* (Tb §6.2:5), that is, of one of the five places of life—Hebrew: מקומות החיים—mentioned in Tb §6.2:1 and §8.6:1. The *hyl'ej* is subsequently (see Tb §6.2:11) “directed” to a malefic place (Hebrew: מקום רע)—i.e., the degrees of the resulting zodiacal arc converted into a number of years, which represent the prospective length of life of the native. For this procedure, see Mishpeṭei haMazzalot, bnf 1058, ff. 22a–22b; al-Qabīṣī, 2004, II:4–5, p. 111–115; Carmen Astrologicum, 1976, III:2, pp. 242–245; Kitāb al-Mawālīd, 1971, p. 242; Art of Astrology, 1934, par. 522, p. 324; see also below, Tb §8.6:2 and note. *Ṭe'amim II* and *Mishpeṭei ha-Mazzalot* diverge regarding terminology here: in *Ṭe'amim II* the five places of life, or prorogative places, are designated מקומות חיים “places of life”,

or מושלים “rulers”; the preponderant planet in the *hyl’ej* is designated שליט “lord”; and the lot of Fortune is designated גורל הטוב “the benefic lot”; in *Mishpetei ha-Mazzalot* the respective terms are מקומות השררה “places of governance,” פקיד “officer in charge,” and מנת החן “lot of beauty”. See *Mishpetei haMazzalot*, bnf 1058, ff. 22a–22b.

[8] 11: **As I shall explain in the *Book of Nativities*:** This is in all likelihood a reference to the lost second version of *Sefer ha-Moladot*. For a reference to the same subject in the first version of *Sefer ha-Moladot*, see *Moladot*, bnf 1056, ff. 49a–49b: ועתה אדבר על חיי הנולד. לעולם הסתכל. אם הנולד ביום אל מקום השמש שאם היתה בבית ה' או בבית ה"א ... אז נוכל לדעת כמה שנות החיים ממקום השמש ... אם יגיע באותו הזמן אל מקום כרת ימות. “I shall now discuss the ⟨length of⟩ life of the native. If the native was born by day, always observe the place of the Sun, since if it is in the 10th or in the 11th house ... we can know the years of life from the place of the Sun. ... And when ⟨the ruler⟩ reaches a ‘place of cutting’ the native will die that same year”).

§6.3

[1] 1: **Revolution, Hebrew תקופה** (Arabic *adwâr*, Latin *revolutio*). This term, denoting the notion of rotation or period, is a crucial parameter in continuous horoscopy for the calculation of the “revolution of the year”, Hebrew תקופת השנה, namely, the anniversary horoscope drawn up when the Sun arrives at the same point in the zodiac where it was at the time of birth (see Tb §8.2:7–9; §8.5:3; §8.6:2–3).

[2] 1: **5 hours and 49 minutes:** The reckoning of the “revolution” is taken here to be the calculation of the excess over 365 days of the length of the solar year, and the conversion of this value from equinoctial hours and minutes to equinoctial degrees and minutes. The value of the “revolution” offered here—5 hours and 49 minutes—is the one endorsed by Ibn Ezra in *Sefer ha-Moladot*, after a long digression about the length of the solar year. See *Moladot*, bnf 1056, fols. 59a–59b: וְלֹא נִשְׁתַּבֵּשׁ בּוֹ אֶפֶי' חֶלֶק אֶחָד שֶׁתִּהְיֶה בֵּין תְּקוּפָה וְתְקוּפָה פ'וֹ מַעֲלוֹת “ולא נשתבש בו אפי' חלק אחד שתהיה בין תקופה ותקופה פ'ו מעלות” (And we will not make a mistake of even one minute if between one revolution and another there are 87 degrees and 15 minutes”). This is also the value endorsed by al-Šūfī, Ibn Sînâ and Azarchiel, and the one that Ibn Ezra applied in his own astronomical

tables. See *Liber de Rationibus Tabularum*, 1947, pp. 95–96: “Superius ergo docuimus quod secundum rationem harum tabularum annus 365 dies continet et quartam, centesimam sextam partem diei minus, et hoc secundum probationem Azofi et Abencine et Acerchel ... et quia in anno solari ultra 365 dies aliquot hore supersunt, ideo dies vertimus in horas adiungentes producto 5 horas que supersunt, et quia etiam horis predictis aliquot minuta hore supersunt ideo omnes horas illas minuta hore convertimus, producto superaddentes 49 minuta hore que supererant ... Iam docuimus supra quod annus solaris secundum has tabulas est 365 dierum et 5 horarum et 49 minutorum hore et 38 secundarum”.

§6.4

^[1]**1–3: The “terminal house” ... until the end of the division.** al-Qabîṣî, in his *Introduction to Astrology* (al-Qabîṣî, 2004, IV:8, pp. 117–119), defines the “terminal house,” which he designates *intihâ’*, as follows: “As for the years of the nativities, knowledge of this is that you consider the complete solar years which have passed for the native and take a sign for each year, and you begin with the ascendant of the nativity in the order of the signs, and the sign which is next to the sign where the counting is exhausted is the sign of the *intihâ’*. ... Its lord is called the *sâlḥudâ’*, which means the lord of the year.” See also *Art of Astrology*, 1934, par. 522, p. 325; *Carmen Astrologicum*, 1976, IV:1, pp. 245–246. Corresponds to Moladot, bnf 1056, f. 61a.

§6.5

^[1]**1: As I have explained you.** Refers to Tb §4.8:2, where Ibn Ezra explains how the difference of longitude between two planets changes in relation to the latitude of the places where the aspects are calculated. Notice that in *Ṭe’amim II*, in contrast to Ta §10.4:1–8, §10.6:1–6, §10.7:1–7, §10.8:1–10, there are no specific instructions to calculate the aspects.

§6.6

^[1]**I: As for the parts that are called the *fardâr* ... from observation.** See Tb §5.1:13, Ta §10.9:2, and note.

^[2]**I: In the *Book of Nativities*.** This is in all likelihood a reference to the lost second version of *Sefer ha-Moladot*; but for an explanation of the *fardâr* by Ibn Ezra, see *Moladot*, bnf 1056, ff. 59b–60a: “והרביעי” החלק הנקרא אל פרדאר; ויש לך לדעת כי הנולד ביום תחל השמש להיות לאות על הנולד י’ שנים ... ואח”כ יהיה נגה המורה לבדו בשביעית חלקו וכל חלקו ח’ שנים ... ואחר נגה יהיה ככב חמה מורה לבדו בשביעית חלקו שהוא י”ג שנה ... ואחריו תתבודד הלבנה לבדה בשביעית חלקה שהיא ט’ שנים ... ואחריה יהיה שבתי המורה לבדו בשביעית חלקו שהוא י”א שנה ... ואחריו יהיה צדק המורה לבדו בשביעית חלקו ... שהוא י”ב שנה ... ואחריו יהיה המורה לבדו בשביעית חלקו שהוא שנה אחת מאדים ... ואחריו יהיה המורה לבדו ג’ שנים ראש התלי ואחריו זנבו שנתיים ... והנה, כלל השנים ע”ה ואם שנות הנולד ארוכים מזה המספר “The fourth ⟨thing to be taken into consideration each year⟩ is the part that is called the *fardâr*; know that for the native who was born by day the Sun is first and gives an indication for 10 years. ... Next Venus gives an indication alone in its seventh, and its whole part is 8 years. ... And after Venus Mercury gives an indication alone in its seventh, which is 13 years. ... And after it the Moon secludes itself in its seventh, which is 9 years. ... And after it Saturn, which indicates alone in its seventh, which is 11 years. ... And after it Jupiter which indicates alone in its seventh, which is 12 years. ... And after it Mars indicates alone in its seventh, which is one year. ... And after it the Head of the Dragon indicates alone 3 years and after it the Tail 2 years ... So, all these years together are 75, and if the native lives more than this number ⟨of years⟩ the planets return again, and the Sun is first as in the previous cycle”). See also Ta §10.9:2 and note.

§6.7

^[1]**I: The lord has more power than the partner.** The “lord” (Hebrew פקיד) stands here for the planet that is lord of some day of the week; the “partner” (Hebrew שותף) stands for any of the planets that are appointed lords of one of the crooked hours of this day of the week. See above, Tb §5.1:12, and Ta §4.2:10 and note.

^[2]**2: A sign to each year.** This sign is the one that is adjacent to the “terminal house” and its lord is the “lord of the year.” See above, Tb §6.4:1–3 and note.

^[3]**2–3: The lord of the seasonal hour ... and vice versa.** Corresponds to al-Qabîṣī, 2004, IV:19, p. 133: “This is that you look at the lord of the hour in which the native was born, and you give it to the ascendant and to the first year from his birth. By its condition one is informed of the health or illness of the body. ... You give the lord of the second hour from it to the second place [i.e., second mundane house] from the ascendant and to the second year and by its condition in this year one is informed of the condition of ⟨his⟩ property. ... You give the lord of the third hour from it to the third place from the ascendant of the base nativity and to the third year and by its condition in this year one is informed of the condition of ⟨his⟩ brothers and sisters....” See also Moladot, bnf 1056, f. 61a, where this method of allocation is attributed to Enoch: *וְהַתְּשִׁיעִי עַל דַּעַת חֲנוּךְ שִׁשִּׁים בַּעַל שַׁעַת הַמּוֹלָד בַּשָּׁנָה הָרִאשׁוֹנָה בְּבֵית הָאֵל, שֶׁהוּא בֵּית הַחַיִּים, וּבַשָּׁנָה הַשְּׁנִיָּה בֵּית הָעוֹשֶׁר, כִּכָּה עַד סוֹף י”ב שָׁנָה יְחֻזֵּר חֲלִילָה.* (“The ninth ⟨topic to be taken into consideration⟩, in the opinion of Enoch, is that the lord of the hour of the nativity in the first year is to be assigned to the first ⟨mundane⟩ house, which is the house of life, and in the second year to the house of wealth, and similarly again and again until the end of the twelve years”).

§6.8

^[1]**1–2: Terms ... lords of the terms.** This second reference to the terms (for the first, see above, Tb §2.9:1–3) focuses on their application to nativities. Ibn Ezra is writing here about an astrological technique that al-Qabîṣī called *gârbuḥtâr* in his *Introduction to Astrology*. The *gârbuḥtâr* is employed in the framework of the procedure of direction, or prorogation (see below, Tb §8.6:2 and note), when the arc of the zodiac between a place of life and a place of death is divided by the terms of the corresponding zodiacal signs, and the lord of these terms, called *qâsim* or divisor, is considered to be in charge of the corresponding year. See especially al-Qabîṣī, 2004, IV:14, p. 129; Art of Astrology, 1934, par. 523, p. 327. Ibn Ezra also refers briefly to the same procedure in Mishpetei haMazzalot, bnf 1058, f. 25a, Moladot, bnf 1056, f. 51a, as well as in such an unexpected place as his commentary on Daniel

2:2 (Commentary on Daniel, 1525, 2:2, p. 6): “והכשדים הם חכמי המזלות ... שהם יודעים העתידות כפי מלאכתם בדעתם מולדי האדם לנהוג המעלות על ... הגבולין” (“The *Kasdim* are the astrologers. ... They know future events, in accordance with their craft, since they know the nativities of a man to direct the degrees to the terms”).

^[2]3: **The lords of the aspects are more complete than the lords of the terms.** Here Ibn Ezra juxtaposes the relative power of two factors that play a major role in determining the time and quality of events in the native’s life, in the framework of the procedure of direction or prorogation (see below, Tb §8.6:2 and note). The “lords of the aspects” (Hebrew בעלי המבטים) stand here for the planets that “project their rays” onto the degrees of the arc between the place of life and a place of death, namely, when they are aspecting these degrees at a fixed distance marked by some significant aspect (see Moladot, bnf 1056, f. 49a). For the aspects in the framework of prorogations, see below, Tb §8.6:3 and Ta §10.4:1–8; *Carmen Astrologicum*, 1976, III:1, pp. 235–241. The “lords of the terms,” (Hebrew בעלי הגבולים) are the planets in charge of the terms along the arc of prorogation referred to in the previous sentence (Tb §6.8:2).

§6.9

^[1]1: **Ptolemy said ... about the houses.** See Tetrabiblos, 1980, I:20, p. 93. Corresponds to Ta §2.18:1. This statement is predicated on the calculation that underlies the scale of powers for the selection of the *hyl’eg* (see above, Tb §6.2:5). See Moladot, bnf 1056, f. 48b: “והנה נחשב לבעל הבית ה’ כחות ולבעל הכבוד ד’ ולבעל השלישות ג’ ולבעל הגבול ב’” (“So we assign to the lord of the house 5 powers, to the lord of exaltation 4 {powers}, to the lord of the triplicity 3 {powers}, to the lord of the term 2 {powers}, and to the lord of the decan 1 {power}; we proceed in this manner regarding any of those that rule over any of the 5 places {of life}”).

^[2]2: **He said that the Moon ... because it is the last.** This is a comment on Ptolemy’s statement in Tetrabiblos, 1980, IV:10, pp. 442–447: “For up to about the fourth year ... the moon takes over the age of infancy. ... In the following period of ten years, Mercury; ... Venus,

taking in charge the third age, that of youth, for the next eight years; ... the sun ... for the period of nineteen years. ... After the sun, Mars, fifth in order, assumes command of manhood for the space of fifteen years; ... sixth, Jupiter, taking as his lot the elderly age, again for the space of his own period, twelve years. ... Finally to Saturn falls as his lot old age, the latest period, which lasts for the rest of life.” Corresponds closely to Tb §5.7:4 and Ta §4.2:8; see note there. See also Ta §4.8:6, Tb §5.2:17, §5.3:14 and Moladot, bnf 1056, f. 52a.

^[3]**3–4: Know that ... the lower one.** This idea is further expanded below, Tb §8.7:7–11. See also Ta §1.2:1–3.

§7.1

^[1]**1–2: King Ptolemy mocks the Ancients ... sign of the ascendant.** Corresponds to Ta §9.1:1–2. See Tetrabiblos, 1980, III:10, pp. 275–277: “Take as the Lot of Fortune always the amount of the number of degrees, both by night and by day, which is the distance from the sun to the moon, and which extends to an equal distance from the horoscope in the order of the following signs, in order that, whatever relation and aspect the sun bears to the horoscope, the moon also may bear to the Lot of Fortune, and that it may be as it were a lunar horoscope.” Corresponds to Tb §7.1:1. For a similar statement about Ptolemy, see Art of Astrology, 1934, par. 476, p. 282.

^[2]**4: Planetary houses, Hebrew בתי טובים, lit. good houses.** This is an unusual Hebrew rendering of “planetary house.” See above, Tb §2.4:10, and Glossary s.v. “house” (planetary).

^[3]**5: Lot of Fortune, Hebrew גורל הטוב.** Whereas the same Hebrew name—גורל הטוב—is used to designate this lot in Rh, IX, lxvii:9 *et passim* and in other parts of Ibn Ezra’s astrological work (Moladot, bnf 1056, f. 48a, etc.), *Mishpetei ha-Mazzalot* repeatedly employs the special name גורל החן, namely lot of beauty (Mishpetei ha-Mazzalot, bnf 1058, f. 21a, 23a). Notice also that in Tb §7.2:28 the Hebrew expression גורל החן designates one of the lots of the eleventh mundane house. This indicates that *Mishpetei ha-Mazzalot* is not the underlying text of *Te’amim II*.

^[4]**5–11: The lot of the Sun <was assigned> to the soul ... power over the soul.** For the lots of the planets, except the Moon, see Ta §9.1:2–8. Rh, IX, lxvii:18–lxviii:5; Mishpeṭei haMazzalot, bnf 1058, f. 23b; Kitâb al-Madḥal, 1996, VIII:3, v, pp. 329–333; Art of Astrology, 1934, par. 476, p. 283. al-Qabîṣî is silent about these lots.

^[5]**11: As I have mentioned.** See above, Tb §5.7:3 and note.

§7.2

^[1]**1: The lot of life ... received by the body.** This lot, pertaining to the first mundane house, is taken by day from Jupiter to Saturn, and vice versa by night, and is cast out from the ascendant. Corresponds to Ta §9.2:1–2. See Mishpeṭei haMazzalot, bnf 1058, f. 23b; Rh, IX, lxviii:6–7; al-Qabîṣî, 2004, V:4, p. 141; Art of Astrology, 1934, par. 476, p. 283; Kitâb al-Madḥal, 1996, VIII:4, v, p. 335; Abbreviation, 1994, p. 73.

^[2]**2: The lot of knowledge ... lord of the tongue.** There seems to be a scribal error in the reference to this lot. According to other sources, this lot, pertaining to the first mundane house, is taken by day from Mercury to Mars, and vice versa by night, and is cast out from the ascendant. See Rh, IX, lxviii:9–11; Ta §9.2:5; Art of Astrology, 1934, par. 476, p. 283; Kitâb al-Madḥal, 1996, VIII:4, v, p. 337.

^[3]**3: The lot of the body ... members intact.** No lot with this name is mentioned elsewhere in Ibn Ezra's work or in contemporary Arabic introductions to astrology. However, it may be the same as the lot of firmness, which is said to be taken from the lot of Fortune to the lot of the absent. See Rh, IX, lxviii:8–9; al-Qabîṣî, 2004, V:4, p. 141; Art of Astrology, 1934, par. 476, p. 283; Kitâb al-Madḥal, 1996, VIII:4, v, pp. 335–336; Abbreviation, 1994, p. 71.

^[4]**4: The reason ... indicates wealth.** This is a reference to the lot of property, which, according to *Reshit Hokhmah I*, pertains to the second mundane house and is taken by day and night from the lord of the second mundane house to the cusp of the second mundane house, and is cast out from the ascendant. See Rh, IX, lxviii:11–13; Mishpeṭei haMazzalot, bnf 1058, f. 24a; al-Qabîṣî, 2004, IV:5, p. 141;

Art of Astrology, 1934, par. 476, p. 283; Kitâb al-Madḥal, 1996, VIII:4, v, p. 337; Abbreviation, 1994, p. 73. For the second house as indicating wealth, see above, Tb §3.2:4.

^[5]**5: Lot of gathering, Hebrew גורל הלקט**. This lot, pertaining to the second mundane house, is not mentioned in *Mishpeṭei ha-Mazzalot*. It appears in Rh, IX, lxviii:14 with another name—גורל המציאה “lot of finding”—as taken from Mercury to Venus, and vice versa by night, and as being cast out from the ascendant. This clearly indicates that *Ṭe’amim II* is commenting neither on *Mishpeṭei ha-Mazzalot* nor on *Reshit Hokhmah I*. For this lot see Kitâb al-Madḥal, 1996, VIII:4, v, p. 338; Art of Astrology, 1934, par. 476, p. 283.

^[6]**6–7: The Ancients said that the Sun ... this is the explanation for this lot.** This passage is of obscure meaning. It is in all likelihood commenting on some part of the lost *Reshit Hokhmah II* that presumably gave instructions for casting some lot pertaining to the second mundane house: the Sun and Venus played a central role in these instructions.

^[7]**8–9: The lot of brothers ... through experience.** The lot of brothers—pertaining to the third mundane house—is taken by day and night from Saturn to Jupiter, and is cast out from the ascendant. See *Mishpeṭei ha-Mazzalot*, bnf 1058, f. 24a; Rh, IX, lxviii:16–17; al-Qabîṣî, 2004, V:6, p. 143; Art of Astrology, 1934, par. 476, p. 283; Kitâb al-Madḥal, 1996, VIII:4, v, p. 338; Abbreviation, 1994, p. 73.

^[8]**10: I have already mentioned ... indicate the father.** See, above, Tb §5.1:6, §5.3:7.

^[9]**11: Under the rays of the Sun.** A planet is “under the rays”, or “under the light”, of the Sun, if it is in an interval of 15° ahead or behind the Sun. See above Tb §4.2:1, §5.2:15, Ta §4.2:12.

^[10]**10–12: The lot of the father ... take Jupiter in its place.** The lot of the father, or lot of parents—pertaining to the fourth mundane house—is taken by day from the Sun to Saturn, and vice versa by night, and is cast out from the ascendant. The explanations in *Ṭe’amim II* follow closely what is said about this lot elsewhere in Ibn Ezra’s work and in contemporary Arabic introductions to astrology. See *Mishpeṭei ha-Mazzalot*, bnf 1058, f. 24a; Rh, IX, lxviii:20–22; al-Qabîṣî, 2004, V:7,

p. 143; Art of Astrology, 1934, par. 476, p. 284; Kitâb al-Madḥal, 1996, VIII:4, v, p. 340; Abbreviation, 1994, p. 73.

[11]13: Lot of the estate ... this is the explanation for this lot.

Elsewhere in Ibn Ezra's work and in contemporary Arabic introductions to astrology this lot—pertaining to the fourth mundane house—is taken by day and night from Saturn to the Moon, and is cast out from the ascendant. See Mishpeṭei haMazzalot, bnf 1058, f. 24a; Rh, IX, lxxviii:28–29; al-Qabîṣî, 2004, V:7, p. 143; Art of Astrology, 1934, par. 476, p. 284; Kitâb al-Madḥal, 1996, VIII:4, v, p. 342; Abbreviation, 1994, p. 73. That *Te'amim II* follows neither *Reshit Hokhmah I* or *Mishpeṭei ha-Mazzalot* emerges from the divergent Hebrew nomenclature used to name this lot: גורל הקרקע in *Te'amim I*, גורל הקרקעות in *Reshit Hokhmah I*, and מנת הקרקע in *Mishpeṭei ha-Mazzalot*.

[12]14: Lot of children ... this is the explanation for this lot.

This lot—pertaining to the fifth mundane house—is taken by day from Jupiter to Saturn, and vice versa by night, and is cast out from the ascendant. See Mishpeṭei haMazzalot, bnf 1058, f. 24a; Rh, IX, lxxviii:33–lxix:1; al-Qabîṣî, 2004, V:8, p. 145; Art of Astrology, 1934, par. 476, p. 284; Kitâb al-Madḥal, 1996, VIII:4, v, pp. 343–344; Abbreviation, 1994, p. 73.

[13]15: Which indicates sons. This is a reference to the fifth mundane house, which indicates sons. See above, Tb §3.2:1.

[14]15: Lot of the male children ... this is the explanation for this lot.

See Mishpeṭei haMazzalot, bnf 1058, f. 24a; Rh, IX, lxix:3–4; al-Qabîṣî, 2004, V:8, p. 145; Art of Astrology, 1934, par. 476, p. 284; Kitâb al-Madḥal, 1996, VIII:4, v, pp. 344–345; Abbreviation, 1994, p. 74.

[15]16–17: Lot of diseases ... a nocturnal star. This lot pertains to the sixth mundane house and is mentioned elsewhere in Ibn Ezra's work and in contemporary Arabic introductions to astrology. See Mishpeṭei haMazzalot, bnf 1058, f. 24a; Rh, IX, lxix:7–8; al-Qabîṣî, 2004, V:9, p. 145; Art of Astrology, 1934, par. 476, p. 285; Kitâb al-Madḥal, 1996, VIII:4, v, pp. 346; Abbreviation, 1994, p. 75.

^[16]**18: Enoch says ... mutable planet.** Enoch's opinion, on which Ibn Ezra is commenting here, does not appear either in *Reshit Hokhmah I* or *Mishpetei ha-Mazzalot*—an indication that it was quoted from the lost *Reshit Hokhmah II*. Nor is Enoch's opinion mentioned in any of the Arabic sources mentioned in the previous note.

^[17]**19: Lot of slaves ... they are inferior (planets).** This lot pertains to the sixth mundane house and is taken by day and by night from Mercury to the Moon, and is cast out from the ascendant. See *Mishpetei haMazzalot*, bnf 1058, f. 24a; Rh, IX, lxix:7–8; al-Qabîṣî, 2004, V:9, p. 145; *Art of Astrology*, 1934, par. 476, p. 285; *Kitâb al-Madḥal*, 1996, VIII:4, v, pp. 346; *Abbreviation*, 1994, p. 75.

^[18]**20–22: Lot of women ... lot of prostitution ... lot of males ... assert dominance.** Because the seventh mundane house indicates women and eroticism (Tb §3.1:9–11; Ta §3.6:7–8; Rh, III, xliii:4–7), these three lots probably pertain to this house. However, the name of these lots do not occur in any of the introductions to astrology I consulted, with the exception of the lot of women, which appears in *Mishpetei haMazzalot*, bnf 1058, f. 24a. For the lots of the seventh house, see *Mishpetei haMazzalot*, bnf 1058, f. 24a; Rh, IX, lxix:11–28; al-Qabîṣî, 2004, V:10, p. 145; *Art of Astrology*, 1934, par. 476, p. 285; *Kitâb al-Madḥal*, 1996, VIII:4, v, pp. 347–351; *Abbreviation*, 1994, p. 75.

^[19]**23: The eighth house ... for that is its nature.** No name of a lot is given here, although there are references to astrological properties of the Moon, the eighth house, and Saturn. This indicates that here *Ṭe'amim II* is commenting on a text in which instructions were given for casting the lot of death, which is taken by day and by night from the Moon to the cusp of the eighth house, and is cast out from the degree of Saturn. The explanations given in *Ṭe'amim II* and in *Kitâb al-Madḥal*, 1996, VIII:4, v, p. 351 for the roles that the Moon, the eighth house, and Saturn play in the casting of this lot are identical. For this lot, see *Mishpetei haMazzalot*, bnf 1058, f. 24a; Rh, IX, lxix:29–30; al-Qabîṣî, 2004, V:11, p. 147; *Art of Astrology*, 1934, par. 476, p. 286; *Kitâb al-Madḥal*, 1996, VIII:4, v, pp. 351–352; *Abbreviation*, 1994, p. 77.

^[20]**24–25: Lot of the journey ... lot of the journey by water ... indicates the sea.** Here *Ṭe'amim II* is expounding the astrological

properties of the main elements involved in the casting of two lots of the ninth mundane house. The instructions are omitted, making it clear that *Ṭe'amim II* is commenting on a text in which these instructions were given explicitly. From other sources we know that the lot of the journey is taken by day and by night from the lord of the ninth house to the cusp of the ninth house and is cast out from the ascendant; and that the lot of the journey by water is taken by day from Saturn to the 15th degree of Cancer, and vice versa by night, and is cast out from the ascendant. The Hebrew nomenclature makes it clear that the underlying text of *Ṭe'amim II* is neither *Reshit Hokhmah I* nor *Mishpeṭei ha-Mazzalot*: in *Ṭe'amim II* the lot of journeys is designated גורל הדרך, in *Reshit Hokhmah I* גורל ההליכה, and in *Mishpeṭei ha-Mazzalot* מנת ההליכה ביבשה “lot of walking on the dry land”; in *Ṭe'amim II* the lot of journeys by water is designated גורל על דרך המים; in *Reshit Hokhmah I* it is גורל ההליכה במים (it is absent from *Mishpeṭei ha-Mazzalot*). For these two lots, see *Mishpeṭei ha-Mazzalot*, bnf 1058, f. 24a; Rh, IX, lxx:5–9; al-Qabîṣî, 2004, V:12, p. 147; *Art of Astrology*, 1934, par. 476, p. 286; *Kitâb al-Madḥal*, 1996, VIII:4, v, p. 354; *Abbreviation*, 1994, p. 77.

^[21]**26: Lot of the mother ... like the mother.** This lot, pertaining to the tenth mundane house, is taken by day from Venus to the Moon, and vice versa by night, and is cast out from the ascendant. See *Mishpeṭei ha-Mazzalot*, bnf 1058, f. 24a; Rh, IX, lxx:31–32; al-Qabîṣî, 2004, V:13, p. 149; *Art of Astrology*, 1934, par. 476, p. 287; *Kitâb al-Madḥal*, 1996, VIII:4, v, p. 360; *Abbreviation*, 1994, p. 79.

^[22]**27: Lot of dignity ... at 3 degrees of Taurus.** This lot, pertaining to the tenth mundane house, is taken by day from the Sun to the 19th degree of Aries, namely the Sun's exaltation, and by night from the Moon to the 3rd degree of Taurus, namely the Moon's exaltation, and the degrees are cast out from the ascendant. If the Sun by day is in its degree of exaltation or the Moon by night is in its degree of exaltation, then the degree of both of them is cast out from the ascendant. Here *Ṭe'amim II* does not follow *Reshit Hokhmah I*: whereas the Hebrew designation of the lot in the former is גורל הכבוד “lot of dignity”, in the latter it is גורל הגדולה “lot of greatness” (Rh, IX, lxx:28–31). On the other hand, *Ṭe'amim II* and *Mishpeṭei ha-Mazzalot* offer very similar accounts of this lot (*Mishpeṭei ha-Mazzalot*, bnf 1058, f. 24a). Abû Ma'shar designates it the “lot of the nobility” and says that it is cast out when doubts arise about who is the legitimate father of the native.

See Kitâb al-Madḥal, 1996, VIII:4, v, pp. 356–357; Abbreviation, 1994, p. 79; cf. Art of Astrology, 1934, par. 476, p. 286. al-Qabîṣî omits this lot.

^[23]**28–29: Lot of beauty ... lot of commerce ... trade is a craft.**

These two lots—the first somehow related to the Sun and Jupiter and the second to Jupiter and Mercury—presumably pertain to the eleventh mundane house (see above, Tb §5.4:6, Ta §3.6:10). The two appear neither in Ibn Ezra’s astrological work nor in contemporary Arabic introductions to astrology.

^[24]**30: Lot of the lovers ... for the body.** Mishpetei haMazzalot, bnf 1058, f. 24a, records a lot with this name pertaining to the eleventh mundane house: it is taken by day and by night from Jupiter to Venus and is cast out from the ascendant. It does not appear elsewhere in Ibn Ezra’s astrological work or in other contemporary Arabic introductions to astrology.

^[25]**31: Lot of enemies ... are well-known.** Arabic introductions to astrology assign the twelfth mundane house two lots bearing the designation “lord of enemies” or two versions of the same lot. The first, which is attributed to the Ancients, is taken by day and by night from Saturn to Mars and is cast out from the ascendant. The second, which is attributed to Hermes, is taken by day and by night from the lord of the twelfth mundane house to the cusp of this house and is cast out from the ascendant. See al-Qabîṣî, 2004, V:15, p. 149; Art of Astrology, 1934, par. 476, p. 288; Kitâb al-Madḥal, 1996, VIII:4, v, p. 364; Abbreviation, 1994, p. 79. The procedure of *Te’amim II*—the explicit reference to “the last two lots” and the brief comments about the main parameters of these two lots—makes it clear that the precise instructions for how to cast these lots were given in an underlying text. That here *Te’amim II* follows neither *Reshit Hokhmah I* nor *Mishpetei ha-Mazzalot* is evident from the fact that the last two present a different picture regarding this lot: *Reshit Hokhmah I* refers to both versions of the lot of enemies but interchanges the Ancients with Hermes (Rh, IX, lxxi:13–15); *Mishpetei ha-Mazzalot* refers only to the version of the Ancients, but without mentioning their name (Mishpetei haMazzalot, bnf 1058, f. 24a).

§8.1

^[1]**1–4: Know that Cancer ... to the small <luminary>.** This is an expansion of Tb §2.3:6–8; see note there.

§8.2

^[1]**1: Revolution of the months ... 28 days and 2 hours.** This procedure is intended to find the planet that is the lord of the month of a certain year in the native's life. To this end, the year is divided into 13 months of 28 days and 2 hours each (equivalent to dividing $365\frac{1}{4}$ days by 13) and each of these months is assigned to one of the signs, beginning with the ascendant. The lord of the month is the planet that is the lord of the sign corresponding to the month of interest. See Moladot, bnf 1056, f. 60b, where this specific procedure is attributed to Ptolemy: "... בטלמיוס: נתן ל' מעלות מבית הסוף לכ"ח יום וב' שעות." ("Ptolemy said: make the 30 degrees of the terminal house correspond to 28 days and two hours ..."). Cf. Tetrabiblos, 1980, IV:10, p. 453: "We shall do the same thing for the months, setting out, again, the number of months from the month of birth, starting from the places that govern the year, twenty-eight days to a sign; and similarly for the days." See also Art of Astrology, 1934, par. 522, p. 325; Carmen Astrologicum, 1976, IV:1, pp. 248–249. Notice, however, that 28 days and 2 hours is only an approximation, with the quotient of $365\frac{1}{4}$ divided by 13 (28 days and 2.3 hours) rounded off to integral hours.

^[2]**4: Hence I said that one day should be added each year.** This statement appears neither in *Reshit Hokhmah I* nor in *Mishpetei ha-Mazzalot* and is evidently a reference to *Reshit Hokhmah II*.

^[3]**6: Add 5 equal hours for every year, plus another 49 minutes.** See above, Tb §6.3:1.

^[4]**7: The lord of the hours in the revolution of the year.** Corresponds to Tb §6.7:2–3; see note there.

^[5]**8–9: The revolution of the beginning of the year ... a leap year on the original date.** Here Ibn Ezra explains that, for astrological purposes, one celebrates a person's birthday on the day of the

Julian month that he was born on; but if a leap-day has intervened since the last birthday, the astrological birthday (when 365 days have passed) is one day earlier (because 365 days after Feb. 25 in a leap year is Feb. 24); if he was born on Feb. 29, then in a normal year one adds one day and observes his nativity on Mar. 1, but in a leap year on Feb. 29. It is noteworthy that Ibn Ezra gives instructions for making the calculation of the “revolution of the year” fit the Julian calendar. This indicates that *Te’amim II* was intended for Jewish readers deeply immersed in a Christian environment. By contrast, in *Sefer ha-Moladot*, written in 1148 in Béziers (Sela-Freudenthal, 2006, n. 31 p. 35), Ibn Ezra gives instructions for adapting the calculation of the “revolution of the year” to a lunar calendar. Moladot, bnf 1056, f. 59a: “והנה אתן לך חשבון שתוכל לדעת כמה ימים לחדש הלבנה תהיה תקופת שנת ... הנולד.” (“I now give you a procedure so you can know the day in a lunar month on which the revolution of the year of the native falls out ...”).

^[6]**10–11: It changes only after 131 years ... which ascend in one day.** The same value for the length of the solar year—365¼ days minus the 131th part of a day—is endorsed in Ta §2.12:5; (see note there) and in ‘Olam A, bnf 1056, f. 81a, where Ibn Ezra reports that this value was also maintained by al-Ṣūfi and al-Zarqāl. Tb §8.2:11 includes the computation necessary to confirm the correctness of this value ($360^\circ / 2^\circ 45' \approx 131$).

§8.3

^[1]**1: Know that the Indian scientists ... each full year.** Ibn Ezra offers identical information in the following places: ‘Ibbur, 1874, p. 8a; Liber de Rationibus Tabularum, 1947, p. 75; commentary on Leviticus 25:9; ‘Iggeret haShabbat, 1894/5, p. 64; Moladot, bnf 1056, f. 59a. See Sela, 2003a, pp. 274–275; 280–286.

^[2]**2: The science of the images ... resembles idolatry.** See above, Tb §2.3:10 and note.

^[3]**3: Tables I have written.** See above, Tb §5.1:11 and note.

§8.4

[¹] **1: I have already mentioned ... has great power.** See above, Tb §6.7:1–3 and notes.

[²] **4: Subtract 48 by casting out twelves.** 12 weeks for each season, 4 times 12, namely 48 weeks, for the four seasons.

[³] **1–4: The weeks ... (full) weeks of the year.** The current section incorporates obvious quotations from the lost *Reshit Hōkhmah II*: “12” (Tb §8.3:2), “3 weeks” (Tb §8.3:3), “subtracting 4 weeks for the revolution of the signs for every year” (Tb §8.3:4). It goes without saying that these phrases appear neither in *Reshit Hōkhmah I* nor in *Mishpeṭei ha-Mazzalot*. It seems that in *Reshit Hōkhmah II* these values and procedures were used in some calculation whose exact nature is unknown to us but was probably related to finding the lord of the week or the hour of the nativity.

§8.5

[¹] **1: Terminal house.** For a definition of the terminal house, see above Tb §6.4:1–3 and note. See also below, Tb §8.5:6. Notice that Ibn Ezra’s explanation yields only a very approximate result: 30 times 12 days plus $2\frac{1}{3}$ hours is 362 days and 22 hours, significantly shorter than the solar year.

[²] **3: Ptolemy says ... each degree and a quarter.** See Tetrabiblos, 1980, IV:10, p. 453 (note 3).

[³] **4: Done by both methods.** The first of these two methods is in equal degrees of the zodiac; the second, according to the rising times of the country. See Ta §10.3:1–5 and note.

[⁴] **6: The five places of life are distant (one from the other).** See above, Tb §6.2:1–11 and notes.

[⁵] **6: Direct them in degrees, Hebrew לנהגם במעלות.** For this procedure, see below, Tb §8.6:2 and note.

^[6]**6: Book on the use of the tables, Hebrew ספר מעשה הלוחות**. This probably refers to the canons that accompanied the astronomical tables (see Tb §2.3:5, §5.1:11, §8.3:3) and explained their use. Thus, *Book on the Use of the Tables* may be an alternative name for ספר טעמי הלוחות, i.e. Book of Reasons behind astronomical tables. A book with this name is mentioned in the past tense in She'elot B, bnf 1058, f. 8b, creating an interesting link between *Ṭe'amim II* and the second version of *Sefer ha-She'elot*, and in the future tense in Neḥoshet B, Mant. 10, f. 42b. See below, Tb §8.6:3.

^[7]**1–6: Revolution of the days. ... for each one (of the five places of life)**. As in the previous section, this section too explains values that are quoted in *Ṭe'amim II* from the lost *Reshit Hokhmah II*: assigning “12 days plus $2\frac{1}{3}$ hours to each degree” (Tb §8.5:1); “one degree less one minute to each day” (Tb §8.5:2); “one degree to two hours” (Tb §8.5:5). It goes without saying that these values appear neither in *Reshit Hokhmah I* nor in *Mishpetei ha-Mazzalot*. These values and procedures are used to compute the revolution of days. See Tetrabiblos, 1980, IV:10, p. 453; Art of Astrology, 1934, par. 522, p. 326; Carmen Astrologicum, 1976, IV:1, p. 249.

§8.6

^[1]**1: Know that ... thoughts and dreams**. Resumes the discussion about the rulers of the five places of life begun at Tb §6.2:1.

^[2]**2: It is essential to direct ... the revolutions of the years**. This is a reference to the procedure of “direction” or “prorogation”—Greek *aphesis*; Arabic *tasyîr*; Hebrew גיהוּגים; Latin *ductus*—employed to determine the length of life of the native. In this astrological procedure an arc of the zodiac is established between one of the five places of life (called *hyl'eg* in Tb §6.2:5 and *root* in the present passage) and a place of “cutting” or place of death (מקום כרת) (See Moladot, bnf 1056, f. 50a). The length of life is determined by converting the degrees of the arc, usually projected on the equator, into a corresponding number of years, months, and days. Rh, X, lxxvi:21–23 deals briefly with this topic (נהוג במולד האדם, i.e. direction in the nativity of a man); Ta §10.3:1–5 amplifies this to some extent. For this procedure, see also Tetrabiblos, 1980, III:10, pp. 279–307; *Mishpetei haMazzalot*, bnf 1058, f. 25a;

al-Qabîṣî, 2004, IV:11–13, pp. 121–129; Art of Astrology, 1934, par. 522, 523 pp. 324–325, 326–327; Carmen Astrologicum, 1976, III:1, III:2, pp. 235–245; Kitâb al-Mawâlîd, 1971, pp. 148–152. See also Bouché-Leclercq, 1899, pp. 411–419; Tester, 1987, pp. 84–85.

[³]3: **As it is written in the *Book on the use of the tables*.** See above, Tb §8.5:6, and note.

[⁴]3: **You should calculate ... revolutions of each year.** Corresponds to the two methods mentioned in Tb §8.5:4; see note there. See also Ta §10.4:1–7 and notes; Mishpetei haMazzalot, bnf 1058, ff. 25b–26a.

§8.7

[¹]1: **End of the book. I shall now reveal a secret to you.** The pledge made in Ta §1.2:3, namely, to refer “at the end of the book to the secret of the change in the positions of the zodiacal constellations,” is presumably fulfilled not in *Ṭe’amim I* but in the present and final section of *Ṭe’amim II*. Since the manuscripts of *Ṭe’amim I* and *Ṭe’amim II*, widely circulating from the second half of the 13th century onward, offer a fairly uniform picture of the contents of both texts, one is led to conclude that in the very first stage of the transmission of *Ṭe’amim I* and *Ṭe’amim II* a copyist, probably one of Ibn Ezra’s students, found fit to combine the two texts. Notice, however, that the ensuing discussion at Tb §8.7:2–6 corresponds to Ta §2.12:2–15.

[²]2: **Know that the beginning of the year ... a point in the zodiac.** Corresponds to Ta §2.12:6; see note there. See also Ta §2.12:6 and note.

[³]2: **Dark degrees, bright degrees, and pits.** Corresponds to Ta §2.12:1, 14. See notes there.

[⁴]3: **The reason ... falls into a pit.** Corresponds closely to Ta §2.12:14; see note there.

[⁵]4: **If you want ... subtract today 8 degrees and 5 minutes ... of the planets.** This instruction is the clear counterpart of Ta

§2.12:14. The date of composition of *Te'amim II* may be inferred from the difference between the correction values given in these two places. See "Introduction," p. 11.

^{[6]5: The year of Ptolemy ... as you prefer.} Two alternative methods for the determination of the solar year are ascribed to Ptolemy and to the Arab and Greek scholars. The second, namely, the return of the Sun to "the intersection of the two uppermost circles," corresponds to Ta §2.12:3 and refers to the equinoxes as the intersections of the ecliptic (on the 8th orb) and the equator (on the 9th orb). This method was certainly endorsed by Ptolemy (see *Almagest*, 1984, III:1, p. 132), as Ibn Ezra was well aware (see *Ibbur*, 1874, p. 8a; *Liber de Rationibus Tabularum*, 1947, p. 80). Most problematic, however, is the first method, namely, "the conjunction of the two uppermost stars," and its ascription either to Ptolemy or to Arab and Greek scientists. For one thing, it is inconceivable that Ibn Ezra would use the phrase השני הכוכבים העליונים "the two upper stars" to denote two fixed stars, since there are no conjunctions of fixed stars. Hence this statement, although found in all the manuscripts examined, is either a later scribal error or a somewhat distorted reference to the sidereal year, namely the return of the Sun to one of the fixed stars. Notice that in *Almagest*, 1984, III:1, p. 131–132, Ptolemy endorses the tropical year only after he relates that Hipparchus came to the idea that the fixed stars have a very slow motion, just like the planets, because of the difference in the length of the year when measured with respect to the return of the Sun to the same equinox or to the same fixed star, that is, with respect to the two alternative methods presented in our passage. Ibn Ezra, in his idiosyncratic style, refers to the latter passage when, in *Liber de Rationibus Tabularum*, 1947, p. 80, he depicts Ptolemy as endorsing the tropical year and mocking the Ancients, who subscribe to the sidereal year: "Sed Ptholomeus dixit in *Almagesti* quod annus solis est circularis revolutio solis a capite arietis ad idem, antiquos deridens qui dixerunt annum solis esse coniunctionem solis cum fixa reiteratam." Now, although in Ta §2.12:3 and in *Ibbur*, 1874, p. 8a, Ibn Ezra presents the scientists of India as supporting the method of the conjunction of the Sun and a fixed star, in *Liber de Rationibus Tabularum*, 1947, p. 79, he relates that Arab scientists, such as Azarchiel, Thâbit b. Qurra, and Ibn Sînâ, regarded the conjunction of the Sun and a fixed star as one among several alternative methods for the determination of the solar year: "Dicit Azarchel in libro de anno solari quod annus solaris tripliciter consideratur. Primus

modus est annus circuli declinationis; secundus est annus circuli puncti; tercius, annus adunacionis solis cum fixa. Thebit vero in libro de anno solari docuit duos annos tantum esse anni solaris, annum puncti et annum fixe eundem esse affirmans, cui assentit Abencine.”

[7]6: The houses ... only with respect to the images. Here Ibn Ezra reports that not only the dark degrees, bright degrees, and pits, but also the planetary houses, the exaltations, and the terms, as given in Indian astronomical tables, are reckoned with respect to the zodiacal constellations. Since these tables do not take into account the slow motion of the fixed stars, an adjustment is necessary when one uses astronomical tables compiled by Greek or Arab scientists. The passage corresponds to Liber de Rationibus Tabularum, 1947, p. 85: “Sententia secunda, secundum indos distinguentes circulum firmamenti per 12 secundum sensum oculi, est necessaria ad sciendum domus planetarum et honores eorum ... et terminos ... et gradus ... lucidos et tenebrosos ... et gradus putei et ad figuram que est una de 36 sitarum extra zodiacum ... et ad figuram orientis utrum hominis an alterius animalis ...”

[8]6: If the sign ... subtract 8 degrees ... of the seven planets. In contrast with the aforementioned 8 degrees and 5 minutes (Tb §8.7:4), the exact result of computation, the 8 degrees of the current passage are an approximation, sufficient for most astrological purposes. For the signs that have the shape of human being, see above, Tb §2.3:9–10 and note. The passage corresponds to Liber de Rationibus Tabularum, 1947, p. 89: “Et si vis operari in iudiciis Ymaginum secundum tabulas indorum minue a medio cuiusque planete cursu eorum gradum unum, vel si in eisdem iudiciis ymaginum vis operari secundum tabulas meas minue a medio cursu cuiusque planete 8 gradus et erit anni revolutio 92 gradus et 24 minutorum.”

[9]7: The stars of *Khima* have the complexion of Mars ... indicates an eye disease. The biblical constellation of *Khima* (Amos 5:8, Job 38:31), according to a talmudic tradition (B Berakhot 58b), is located “in the tail of Aries and the head of Taurus.” Following this tradition, Ibn Ezra identifies *Khima* in his commentary on Job 38:31 with *‘eyn ha-shor ha-semali* “the left eye of the ox”, Arabic *al-Dabarân*. This is α Tauri (Aldebaran), No. 14 in the constellation of Taurus in Ptolemy’s star catalogue. See Almagest, 1984, VII:5, p. 362. The position of this

star is recorded in the star lists in all three versions of Ibn Ezra's *Book of the Astrolabe* (Neḥoshet A, bnf 1061, f. 157b; Neḥoshet B, Mant. 10, f. 39a; Neḥoshet C, Pinsker 26, f. 67a), as well as in Rh, I, vi: 14–15. In his commentary on Amos 5:8, however, Ibn Ezra asserts that *Khima* was created at one of the equinoxes but subsequently moved to its location in Taurus because of the slow motion of the fixed stars. See Sela, 2003a, pp. 257–273. The reference to *Khima*'s astrological role in eye diseases corresponds to Rh, II, xii: 28–29 and is also mentioned in Art of Astrology, 1934, par. 459, p. 272. The reference to *Khima* as having the complexion of Mars together with the Moon corresponds closely to Rh, II, xxxvii: 6–7 and Tetrabiblos, 1980, I:9, p. 47.

^[10]7: **Thick cloud**, Hebrew עב הענן [Ex. 19:9]: Possibly “the middle of the nebulous mass in the chest, called Praesepe,” No. 1 in the list of stars of the constellation of Cancer, or “the quadrilateral containing the nebula,” Nos. 2–5 in the constellation of Cancer in Ptolemy's catalogue. See Almagest, 1984, VII:5, p. 366.

^[11]8: **Know that the planets ... together with the Moon**. Ibn Ezra repeatedly conveys his concern about ascribing the physical properties of sublunary bodies to the celestial bodies. See above, Tb §2.1:1–5, Ta §1.5:7, Ta §2.18:3–4 and notes.

^[12]9: **Heart of the spear**, Hebrew לב הרומה. Possibly Arcturus (α Boötis) No. 23 in the constellation of Boötes in Ptolemy's catalogue. See Almagest, 1984, VII:5, p. 347.

^[13]9: **Cor leonis**, Hebrew לב האריה, lit **heart of the lion**. α Leonis (Regulus), Arabic *galb al-asad*, Latin *Cor leonis*, No. 8 in the constellation of Leo in Ptolemy's catalogue. See Almagest, 1984, VII:5, p. 367. This star is frequently mentioned in Ibn Ezra's scientific and non-scientific work, as in the star lists in the three versions of Ibn Ezra's *Book of the Astrolabe* (Neḥoshet A, bnf 1061, f. 159b; Neḥoshet B, Mant. 10, f. 39b; Neḥoshet C, Pinsker 26, f. 67a), in Rh, II, xxi:30, Ta §1.2:3, Me'orot, München 202, f. 107b, Liber de Rationibus Tabularum, 1947, p. 82, Commentary on Amos, 1989, 5:8, pp. 213–214.

^[14]10: **Great eagle**, Hebrew הנושר הגדול. Possibly α Aquilae (Altair), No. 3 in the constellation of Aquila in Ptolemy's catalogue. See Almagest, 1984, VII:5, p. 356.

[15] **11: The Ancients ... said that none of them has any power ... by night.** For the limited astrological influence exerted by the fixed stars, see above Tb §6.9:3–4.

PART FIVE

APPENDIXES

APPENDIX I

REFERENCES IN IBN EZRA'S ASTROLOGICAL WORK TO *ṬE'AMIM I* OR *ṬE'AMIM II*

This appendix collects all available references in Ibn Ezra's extant Hebrew astrological treatises to *Ṭe'amim I* or *Ṭe'amim II*. The Hebrew texts and translations of six fragments are presented, followed by a brief analysis of their contents.

Fragment 1: Moladot, BNF 1056, fol. 59b:

דע אי זה הוא מקום החיים שיורה על חיי הנולד, ככתוב בבית הראשון, ונהג אותו
בשני הנהגים כאשר הזכרתי בספר הטעמים.

Know which is the place of life that gives an indication about the life of the native, as is written in the first chapter, **and you should direct it by the two (methods of) directions, as I mentioned in the Book of the Reasons.**

This refers to Ta §10.3:1–6, where the two methods of directions are studied in detail. Notice that this topic is omitted from *Ṭe'amim II*.

Fragment 2: Moladot, BNF 1056, fol. 50a:

והנהגים ראויים להיות כאשר הזכרתי בספר הטעמים.

The directions should be (calculated) as I mentioned in the Book of the Reasons.

This reference, also dealing with the calculation of the directions (הנהגים), is to Ta §10.3:1–6. Notice that both the topic and the very term הנהגים 'directions' are not found in *Ṭe'amim II*.

Fragment 3: Moladot, BNF 1056, fol. 48a:

ויאמר בטלמיוס ודורוניוס, לעולם נבקש אי זה ככב הוא שליט על הנולד וככה נמצאנו: ידענו כי מקומות החיים הם ה', הב' מקום שני המאורות ביום ובלילה, והג' מקום מחברת המאורות או נכחם, ההוה מהם בתחלה קודם לדת הנולד, והד' המעלה הצמחת, והה' הגורל הטוב, כאשר פירשתיו בספר טעמי ראשית החכמה.

Ptolemy and Doronius said that we should always try to ascertain which planet is the lord of the nativity. We should find it in the following way: We know that there are five places of life, namely, the two places of the luminaries by day and by night, and the third is the place of the conjunction or opposition of the luminaries (whichever occurs first prior

to the birth of the native), and the fourth is the ascending degree, and the fifth is the lot of fortune, **as I explained it in the Book of the Reasons behind the Beginning of Wisdom.**

This refers to the discussion of the lot of the fortune in Ta §9.1:1–2. The same topic is covered in Tb §7.1:1–5.

Fragment 4: She'elot A, BNF 1056, fol. 63a:

אמר יעקב על כנדי הסתכל אל מקום השמש ביום ... ואל הנורל הטוב ביום ובלילה,
הוא הנתפש כדרך בטלמיוס, ככתוב בספר הטעמים.

Ya'qub al-Kindî said: observe the place of the Sun by day ... **and the lot of fortune by day and by night, as it is conceived by the method of Ptolemy, as it is written in the Book of the Reasons.**

This reference is also focused on the lot of fortune and is aimed at Ta §9.1:1–2. See also Tb §7.1:1–5.

Fragment 5: She'elot A, BNF 1056, fol. 63b:

וסמוך אל הניהוגים כדרך שהראיתך בספר המולדות, רק אמר כי ללבנה יש כח
בשאלות יותר מהמולדות, ע"כ אתה צריך לנהגה ביום ובלילה אל מקום כרת בשנים
הניהוגים ככתוב בספר הטעמים.

Trust in the directions according to the method I showed you in the Book of Nativities; but he [Māshā'allāh] said that the Moon has more power in interrogations than in nativities, **hence you should direct it [i.e., the Moon] by day and by night to the place of cutting by the two (methods of) directions, as is written in the Book of the Reasons.**

Like fragment 1, this deals with the two methods of directions and clearly refers to Ta §10.3:1–6. The topic is omitted from *Te'amim II*.

Fragment 6: 'Olam B, BNF 1058, fol. 92b:

תחסר ממקום השמש, שתמצאנה בספר הלוחות, תשע מעלות, ואז תמצא מקום השמש
של הודו שהוא כנגד הצורות, כאשר פרשתי בספר הטעמים.

Subtract 9 degrees from the place of the Sun, which you find in the Book of the Tables, **and you obtain the place of the Sun of India, which is (located) with respect to the images (of the constellations), as I explained in the Book of the Reasons.**

This refers to Tb §8.3:1–3, where Ibn Ezra refers to the Sun of the Indian scientists, which is “true only with respect to the images of the constellations.” Ta §2.12:11 refers to the “year of the Sun of India” but does not mention the images of the constellations.

APPENDIX 2

QUOTATIONS FROM *RESHIT HOKHMAH I* IN *ṬE'AMIM I*

This appendix contains two examples to illustrate how quotations from the extant text of *Reshit Hōkhmah I* are embedded in the text of *Ṭe'amim I*. The first relates to the opening paragraph of the first chapter of *Reshit Hōkhmah I*, which corresponds to the opening paragraph of *Ṭe'amim I*. The second refers to the description of the properties of Aries in the second chapter of both *Reshit Hōkhmah I* and *Ṭe'amim I*. The relevant texts are presented in Hebrew and English translation; the common passages are in bold type. An underline marks quotations from *Reshit Hōkhmah I* in the text of *Ṭe'amim I*, with the third person plural used to introduce what are often verbatim quotations.

(I) Rh, I, vi:4–8: The division of the circle into 360, 12 and 30 parts.

השער הראשון. הגלגל נחלק לשלש מאות וששים חלקים שוים יקראו מעלות ועל זה הסכימה דעת כל הקדמונים והאחרונים כי יש למספר ההוא כל השברים שיש מחצי עד עשירית חוץ מהשביעית. גם הוא נחלק לשנים עשר חלקים יקראו מזלות, וכל מזל שלשים מעלות ישרות, וכל מעלה ששים ראשונים, וכל ראשון ששים שניים, וככה עד עשיריים.

First chapter. The circle was divided into 360 equal parts, which are called degrees. All of the ancient and modern (scholars) agreed about this, **because this number has all the fractions** that are from one-half to one tenth, **except one seventh.** It [the circle] is also divided into 12 parts, which are called signs, **and each sign into 30 equal degrees, and each degree into 60 minutes, and each minute into 60 seconds, and similarly down to the tenths.**

Ta § 1.1:1–6:

השער הראשון. חלקן 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 אז תמצא החשבון שיש לו כל השברים, והוא אלפים וחמש מאות ועשרים. ועוד, בחרו זה החשבון בעבור שהוא קרוב מחשבון ימות שנות החמה. וחלקן מעלות הגלגל על שנים עשר בעבור שלא מצאו חשבון פחות ממנו שיש לו שברים כמהו, ועוד כי בכל שנה יש שנים עשר לבנות. והנה עלה בחלק כל מזל שלשים מעלות, וזה המספר יש לו שברים יותר משנים עשר. ובעבור שאין לו רביעית הוצרכו לכפול המספר, וחלקן כל מעלה לששים חלקים ראשונים, וכל ראשון לששים שניים, וככה עד עשיריים.

First chapter. They divided the circle into 360 degrees because they did not find a smaller number **that has all the fractions** (from one-half to one-tenth), **except for one-seventh**. Therefore, if you multiply this number by 7 you obtain the number that has all the fractions (from one-half to one-tenth), namely, 2,520. In addition, this number [i.e., 360] was chosen because it is close to the number of days in the solar year. They divided the degrees of the circle into 12 because they found no smaller number that has as many fractions as it does, and also because there are 12 lunar months in any (solar) year. So **each sign was assigned 30 degrees**, and this number has more fractions than 12. But because it does not have a quarter it was necessary to double it. They divided each degree into 60 minutes and each minute into sixty seconds, and similarly down to the tenths.

(II) Rh, II, viii:27–x:3: Astrological properties of Aries.

טלה. מזל אש, זכר, מתולדת היום, מזרחי, מזמן החום, מתהפך כי הזמן יתהפך בו ... ושעותיו נוספות על הישרות, ומצדעיו חסרים כי הוא יעלה בכל מקום פחות ממה שיעלה על הקו השווה בארץ, והוא מעוות ... והוא מן המזלות הטובים המעודנים, יורה על הרעם והברק. ... ואם היה שמאלי הוא מוליד חום עם ליחה ואם דרומי הוא מקרר, והוא על צורה שיש לה ד' רגלים שיש לה פרסה ואיבריו כרותים כי יצמדו בגלגל מעוותים, ויורה על שני עינים במראה ושתי צורות ויש לו חצי קול, ושלו לב מזרח ורוח מזרחית, וחלקו מארבע שרשים האש, וחזמו ממוסך, ושלו הדם, ומן הטעמים כל דבר מתוק, ומן העיניים האדמימות וכל מין מכורכם, ומן החיות הצאן וכל מה שיש לו פרסה, ומן המתכות הזהב והכסף והברזל והנחושת, ובחלקו הגבול השלישי וארץ בבל ופרס ואדריין ופלשתים, וממקומות הארץ השדות ומקום מרעה הצאן ומקומות האש ונוה הליסטים וכל בית מקורה בקורות ועל דעת בטלמיוס בחלקו בתי התפלות ומקום הדיינים. והקדמונים אמרו כי יש לו מן האותיות האלף והנן ושנותיו חמש עשרה ותדשיו חמש עשר והימים שבעה ושלישים וחצי והשעות ארבע. ויעלה בפנים הראשונים ממנו צורת אשה, היא המאירה, וחנב דג מן הים בדמות אפעה וראש המשולש וצורת שור. ויאמרו אנשי הודו כי שם ראש צורת כלב ... ועל דעת בטלמיוס יעלה בו גב האשה היושבת על הכסא ... והנולד בו יהיה גופו ממוסך ופניו ארוכים ועיניו גדולים והוא מביט אל הארץ הרבה וצוארו עב ואזניו רפות.

Aries. A fiery sign, masculine, of the nature of the day, eastern, of warm weather; tropical because the weather is changeable in it. ... Its hours grow longer than the equal (hours), and its rising times grow less because it ascends in any place less than it ascends at the terrestrial equator, and it is crooked. ... It is one of the delicate benefic signs and indicates thunder and lightning. ... If it is northern it generates heat with moisture; if southern, (it generates) cold. Its image has four legs with hoofs, and its limbs are cut off because they advance crookedly along the orb. It indicates two colors and two shapes and has half a voice. The heart of the east belongs to it, and the east wind. Fire is its portion of the four elements. Its [Aries'] heat is tempered. The blood belongs to it, and of the tastes anything sweet, and of colors the reddish and any color that is saffron yellow; of the animals, sheep and

whatever has hoofs; **of the metals, gold and silver and iron and copper**. In its portion is **the third climate** and the land of Babylonia, Persia, Aderian, and the Philistines, and of places on earth fields, and **pastureland for sheep**, and **the places of fire**, and **the abode of robbers**, and **any roofed house** with beams; according to Ptolemy, **houses of prayer and the place of the judges** are in its portion. The Ancients said that among the **letters** it has *aleph* and *nun*, that **its years are 15, its months 15, the days 37^{1/2}, and the hours 4**. **The image of a woman** ascends in its first decan and shines, and **the tail of a marine fish** in the shape of an adder, and **the head of the triangle and the image of a bull**. **The Indians said** that there is the head of the figure of a dog there. ... According to **Ptolemy** the back of a women sitting on a chair ascends in it. ... **The body of one native in it will be mixed**, his face long and his eyes large, and he will look towards the ground constantly, and his neck is thick **and his ears are flaccid**.

Ta § 2.2:1–20:

וגורו עליו שהוא מזל אש, כאשר הזכרתי, והוא זכר בעבור החום, ומתולדת היום כי היום חם, ומוזחי כי פאת מזרח חמה, ומתהפך בעבור שהחלו הימים להוסיף והלילה לגרוע, ושעותיו נוספות בעבור אורך קשת היום, ומצעדי חסרים, זה ידוע מפאת הגלגל. ונקרא מעוות בעבור חסרון מצעדיו, והוא מן המזלות הטובים בעבור שיראה חזק השמש בו, ויורה על הרעם ועל הברק בעבור התהפך הזמן וסור הקור ובא החם. וזה שאמרו אם היה שמאלי מוליד חום ואם דרומי קור, הם דברי חכמי הודו, ובטלמיוס לועג עליהם. וזה שאמרו כי הוא על צורה שיש לה ארבע רגלים, בעבור שהוא דומה לטלה. ואמרו כי איבריו כרותים בעבור שלא יראו איבריו כהוגן, זו אחר זו. ואמרו שירה על שני עינים במראה ושתי צורות בעבור התהפכו. ואמרו שיש לו חצי קול בעבור שהוא על צורה בהמה ואינו על צורת בן אדם. ואמרו כי שלו לב מזרח בעבור חומו ובעבור השתוות בו היום והלילה, על כן אמרו כי לו לב מזרח. והנה יהיה אריה שמאל מזרח כי השמש היא שם בפאת שמאל, על כן היה קשת גנב מזרח. ואמרו כי חומו ממוסך בעבור הזמן, וככה שהוא שלו הדם. ומן המטעמים המתוק, ומן העיניים האדמדמות וכל מין מכורכם בעבור היות זה העין אמצעי בין הלבון והשחרות. וחלקו מן החיות הצאן בעבור שכוכביו בצורת טלה, ומן המתכות הזהב והברזל והכסף והנחשת בעבור שכל אלה באים באש ותולדתם אש. ואמרו כי בחלקו הגבול השלישי בעבור חומו שהוא ממוסך. ואמרו כי בחלקו מרעה הצאן בעבור צורות הכוכבים שיש בו, ומקומות האש כי ככה תולדתו, ונוה הלסטים בעבור כי הוא בית מאדים, וכל בית מקורה שיתקנו ככה בעבור הלסטים, ובתי התפילות בעבור כי בתחלתו קו הצדק, וככה טעם מקום הדיינים. ולא אדע טעם לאותיות שלו. ושנותיו חמש עשרה כמספר שנות מאדים הקטנות, כאשר אפשר במקומו, וככה טעם חדשיו. וטעם הימים והשעות ראיתיו בספר אבו מעשר וניסיתי. וזה שאמרו שיעלה שם צורת אשה חזב דג וראש המשולש וצורת שור, בעבור שיעלו שם כוכבים דומים לאלו הצורות. וככה טעם כל מה שיאמר בטלמיוס שיעלה שם, רק כל מה שידברו אנשי הודו שיעלו בכל פנים לא ידענו סודם. ומה שאמרו שהנולד בו יהיה גופו ממוסך ואוניו רפות, אלה הדברים עלה בידם מהנסיין.

They concluded that it is **a fiery sign**, as I have explained, and **masculine** because of the heat, and that it is of **the nature of the day** because the day is hot, and **eastern** because the east is hot, and **tropical**

because the days begin to grow longer and the night to grow shorter, and **its hours grow longer** because of the length of the arc of the day, and **its rising times grow less** (as is known) on account of the circle. It is also called **crooked** because of the decrease in its rising times. It is **one of the benefic signs** because the strength of the Sun is perceptible in it. **It indicates thunder and lightning** because of the alteration of the weather and the retreat of the cold and approach of the heat. They said that **if it is northern it generates heat and if southern *<it generates>* cold**. This is what the Indian scientists say, but Ptolemy laughs at them. They said that **it is a four-legged image** because of its likeness to a ram. They also said that **its limbs are cut off** because its limbs are not seen properly, one after the other. They also said that **it indicates two colors and two shapes** because of its instability. They said that **it has half a voice** because it has the form of a beast and not of a man. They said that **the heart of the east belongs to it** because of its heat and because day and night become equal in it; consequently they said that **the heart of the east belongs to it**. So Leo is in the northeast, because there the Sun is at the north [i.e., relative to the equator], and Sagittarius is in the southeast. They also said that **its [Aries'] heat is tempered** because of the weather, and in like manner that **the blood belongs to it. Of the tastes the sweet and of the colors the reddish and any color that is saffron yellow** because this color is intermediate between whiteness and blackness. Its portion **of the animals** is **sheep**, because its stars are in the shape of a ram, and **of the metals gold, iron, silver, and copper**, because all of them can withstand fire and have a fiery nature. They said that **the third climate is in its portion** because of its heat, which is temperate. They said that **pastureland for sheep** is in its portion, because of the shape *<composed by>* its stars; and **the places of fire**, because that is its nature; and **the abode of robbers**, because it is the house of Mars; and **any roofed house** that was designed like that because of the robbers; and **houses of prayer**, because the equator is at its beginning; this is also why **the place of judges** *<belongs to it>*. I do not know the reason for its **letters. Its years are 15**, like the number of the least years of Mars, as I shall explain in its proper place, and so too the reason for **its months**. As for the reason for **the days and hours**, I saw it in Abû Ma'shar's book and I verified it by experience. As for what they said, namely, that **the image of a woman and the tail of a fish and the head of the triangle and the image of a bull rise there**, this is because stars that are similar to these images rise there. The same explanation applies to everything that Ptolemy said rises there; but as for **everything the Indians said rises in any of the decans**, we do not know their secret. As for what they said, namely, that **the body of one native in it will be mixed and his ears flaccid**, they found these things through experience.

APPENDIX 3

DIGRESSIONS IN *ṬEʿAMIM I*

<i>Subject</i>	<i>Ta</i>
Names and sizes of the signs; motion, number, and names of stars and constellations; orbs of the planets and their relative height	§ 1.2:1–6; § 1.3:1–12
Nature of the signs	§ 1.4:1–7
Nature of the planets	§ 1.5:1–17
Four seasons and the beginning of the solar year	§ 2.1:2–6
Pain of the planets in the signs	§ 2.3:3–7
Planetary houses	§ 2.4:1–12; § 2.5:1–12
Beginning and length of the solar year; motion of the stars of the eighth orb; division of the zodiacal signs	§ 2.12:1–15
Exaltations	§ 2.16:1–14
Aspects	§ 3.1:2–6; § 3.1:1–11
Mundane houses	§ 3.5:1–12; § 3.6:1–19
Orbs of the planets and their links with the mundane houses	§ 4.1:1–7
Planets and days of the week	§ 4.2:10
Joys of the planets	§ 4.9:1
Calculation of the aspects	§ 10.1:1–5; § 10.2:1–6; § 10.4:1–8; § 10.6:1–6; § 10.7:1–7; § 10.8:1–10
Calculation of the directions	§ 10.3:1–6
Calculation of the mundane houses	§ 10.5:1–19

APPENDIX 4

QUOTATIONS FROM AN UNDERLYING TEXT IN *ṬE'AMIM II*

The three examples presented here show that *Ṭe'amim II* is commenting on quotations from an underlying text. The quotations are in bold type; other stylistic features revealing the presence of quotations are indicated by an underline.

(I) The first example relates to the description of various categories of zodiacal signs and cites a fragment of a larger section (Tb §2.3:1–23, §2.4:1–21). In each case relatively short explanations or definitions are headed by lemmata. These lemmata, as will be shown in the notes, are quotations:

Tb §2.3:17–23, §2.4:1–2:

המומים. דבר זה ידעוהו חכמי המזלות בדרך הנסיון, או כי המזלות שהם על צורת בן אדם אין במ מום, גם קשת עמהם; וזה הוא הנכון בעיני. **המתכות.** הם המזלות בעבור שכולם יכנסו באש. **האילנים.** זה נודע בדרך הנסיון. **המטר.** יש באריה צורה ונקראת ספינה, על כן תורה על המים, ומזל דלי בעבור המים. והטעם כי כאשר המטר יתחיל באחת מאלה יהיה רב ותקיף מאד, וזה הדבר מנוסה. **המעוותים.** נקראו כן בעבור עלותם בכל הישוב פחות משתי שעות ישרות, והפך זה הישרים. **המלכים.** בעבור היות תולדת האש להיות גבוהה היו מזלות האש, והאוויר לסגנים, ויותר טלה בעבור כבוד השמש בו, ומזלות המים לבינוניים, ומזלות העפר שאין למטה המנה לעבדים. **הנביאים.** מזלות האש מבקשים שררה בכח ומזלות צורת בן אדם הם ממוסכים ישרים. **הרופאים.** למאדים ולנגה שותפות בחכמת הרפואות, ויהיה כן בעבור שמאדים יורה על הפצעים ונגה על כל עקרים שיש להם ריח טוב. והנה, עקרב הוא בית מאדים וביתו יורה על התחלואים בעבור שהוא הששי, כאשר אפשר. מאזנים עם שור. ויאמר תלמי כי אלה שניהם חסרי דעת בעבור שהבית הששי יורה על התחלואים והמומים והחסרון, והנה בעל המזל הצומח, שורה על הנולד, הוא בעל מום וחסרון.

Deformities. Astrologers discovered this through experience, or because the signs that have a human shape have no deformities, and Sagittarius is included among them; this is the correct ⟨explanation⟩ in my opinion. **Metals.** These are the signs ⟨that are so-called⟩ because all of them can withstand fire. **Trees.** This is known through experience. **Rain.** There is a constellation in Leo called “Ship,” so it indicates water, so too Aquarius, on account of the water. The reason is that when it begins to rain ⟨and the Moon is⟩ in any of these ⟨constellations⟩, it will be abundant and very strong; and this has been verified by experience.

Crooked. They are so named because they rise anywhere in the ecumene in less than two equal hours, and the opposite applies to the straight (signs). **Kings.** Because the nature of fire is to rise, the fiery signs (were assigned to the kings), and the airy to the **nobles**—particularly Aries, because the exaltation of the Sun is in it—and the watery signs to the **commoners**, and the earthy signs, the lowest of all, to the **slaves**. **Prophets.** The fiery signs seek power by force, and the signs with a human shape are mixed and temperate. **Physicians.** Mars and Venus have a partnership in the science of medicine, because Mars indicates wounds and Venus all the essences with a pleasant smell. Scorpio is the (planetary) house of Mars and its house indicates diseases because it is the sixth, as I shall explain. Libra and Taurus. Ptolemy said that these two are foolish because the sixth (mundane) house indicates diseases, deformities, and foolishness, but the lord of the sign of the ascendant, which gives an indication about the native, is deformed and foolish.

Some of the lemmata—“deformities,” “crooked,” “kings,” “viceroys,” “commoners,” “slaves,” and “physicians”—certainly refer to various categories of zodiacal signs. It may be safely posited that here *Te’amim II* is commenting on and quoting from another text where the same type names appeared, followed by the zodiacal signs belonging to each of these categories. Note that the same categories are found in other introductions to astrology, as shown in the corresponding notes. Now we turn to the peculiar characteristics of the remaining lemmata and their explanations. With regard to “metals,” note that “the signs” in the ensuing explanation remain unspecified. For the “trees,” nothing substantial is said except that “this is known through experience.” As for the mysterious “prophets,” the purported meaning is totally divorced from the explanation that follows. And as for “rain,” note that there is no astrological connection between this word and the constellations referred to. In sum, the peculiar and curious manner in which these lemmata and their explanations are formulated imply that they were not written as self-contained statements; rather, Ibn Ezra meant them for readers in possession of another text to which they were supposed to turn for additional information.

(II) The second example, which relates to the properties of Saturn, may be considered typical of the full section (§5) on the properties of the seven planets as well as of the Head of the Dragon and its Tail:

Tb §5.3:1–11:

שבתאי. חלקו נקבי הראש על השבעה משרתים, ונתנו האוזן הימנית, בעבור שהאוזנים עלינו, לשבתאי העליון, ובעבור היותו עליון גם על צדק נתנו לחלקו הימנית, והטחול כי שבתאי יוליד המרה שחורה שהיא קרה. ואמרנו עליו שהוא מוליד קור בעבור היותו רחוק מהארץ, והנה החום שלו איננו כתולדת החיים ... ואמרנו על שבתאי כי בהיותו בגבהות הגלגל המוצק הוא יבש, כי בהיותו קרוב אל הארץ יחמם יותר ויוליד ליחה, א' ע' פ' שלא יחמם מה שיש צורך לאדם לו. ושנוי תולדתו מפאת גלגל הקטן, כדרך הלבנה. ויורה על תחלואים ארוכים מהקור, וטעם ארוכים שאין לך משרת שילך מעט כמוהו, והקדחת הרביעית שהיא ממרה השחורה שהיא קרה, והשטות שיש ממנו שיבוא בעבור הקור והלחה, והצרעת גם כן, ונפיחות הפנים בעבור הלחה, וחשך העין כי הוא הפך המאורות ודמותו חשוכה, ושמות הנפש בעבור המרה השחורה. ויורה על האב בעבור היותו רחוק ממנו, ויורה על כל דבר קדמון וישן, וטעם הקבר בעבור כי הוא יורה על הקרקעות, בעבור שיש לו הטחול והוא יעצור כח הגוף והקבר מקום שלא יזוז אדם ממנו, וככה תולדתו כי הוא כבד בתנועתו, ומלאך המוות כי הוא הפך החיים ... וטעם רב חובל או מלה בעבור שהוא מוליד ליחה רבה, והנה היא המים והמים, ומעבדי עורות כי עבודתם במים, וככה הקלפים, וקוברי מתים כי הוא יורה על העפר, על כן שלו העצמות. ויורה על חכמת האמת בעבור היותו עליון, ועומד על דרך אחת בעבור שאיננו רץ בהליכתו, ויורה על כובנות בעבור היות תולדתו משונה. ובית הסוהר מקום שיעמוד שם האדם, כטעם הקבר, ולא יצא במהרה, וזה טעם הכבל ומכות בעצים ובאבנים, בעבור שהם קרים, והוא עצל כי איננו מהיר.

Saturn. They divided the orifices of the head among the seven planets. To Saturn, the uppermost, they assigned the right ear, inasmuch as the ears are uppermost, and because it is higher than Jupiter they assigned to it the right (ear). (They assigned it) the spleen, because Saturn produces the black bile, which is cold. They said that it produces cold because it is far from the Earth; hence its heat is not in accord with the nature of life ... They said of Saturn that when it is at the apogee of the eccentric circle it is dry, because when it is close to the Earth it warms more and generates moisture, even though it does not warm as much as man needs. The change in its nature is because of the epicycle, as in the case of the Moon. It indicates chronic diseases, on account of the cold; chronic, because no planet is as sluggish as it is. (It also indicates) quartan fever, which comes from the black bile, which is cold, and madness, which sometimes comes because of cold and moisture, and also leprosy, and facial edema, on account of the moisture, and blindness because it is the opposite of the luminaries and its image is dark, and emotional depression because of the black bile. It indicates the father because it is far from it [the Earth], and it indicates anything that is ancient and old. The reason (it indicates) the grave is that it indicates the ground, since it has the spleen (assigned to it), which checks the power of the body; and the grave is a place from which a man does not move. Similarly with its nature, because its motion is sluggish. (It indicates) the angel of death because it [Saturn] is the opposite of life ... The reason (it indicates) a ship's captain or sailor is because it generates abundant moisture, which is

the water and the seas; and ⟨it indicates⟩ **curriers** because they work with water, and similarly **tanners**; and **gravediggers**, because it indicates the dust, and this is why the bones belong to it. **It indicates the science of truth** because it is uppermost, and **it is stable in one way** because it does not run in its course, and **it indicates deceitfulness** because its nature is ill-assorted. Also **prison**, a place where a man stays, just like the grave, and ⟨which⟩ he does not leave quickly; this is the reason for the fetters and blows on trees and stones, because they are cold. **It is idle** because it is not quick.

Three points deserve our attention. (1) Note the use, in the opening statements of this fragment, of the third person plural, before some property is recorded; the same device is often used in *Ṭe'amim I* to introduce verbatim quotations from *Reshit Hokhmah* (see Appendix 2). This idiosyncratic feature helps us discern possible quotation in other parts of *Ṭe'amim II* as well (see, for example, §2.2:3,4; §2.8:1–11; §2.9:4,7,8,9; §3.1:2,4,8,11,12; §3.2:2,3,5; §3.3:2,4 *et passim*). (2) An unequivocal link between a quotation and the explanation that follows is the use of the formula “and the reason for ... is because....” (**וּטַעַם... בַּעֲבוּר**), from which one may learn that the “grave,” “angel of death,” “ship’s captain or the sailor,” “curriers,” “tanners,” “gravediggers,” and particularly “fetters and blows on trees and stones,” are all of them quotations. This formula enables the detection of quotations in many other parts of *Ṭe'amim II* (see, §2.2:7; §4.1:2; §4.3:4,7,9,10,11; §4.1:2; §4.11:1; §5.1:11; §5.2:17; §5.4:15; §5.5:8; §6.4:1; §7.2:4–5). (3) The disjointed manner in which properties like “chronic diseases,” “quartan fever,” “leprosy,” “facial edema,” “blindness,” and “emotional depression” are mentioned indicates that they were extracted from another text and inserted into *Ṭe'amim II* to be explained there. Similar examples reflecting the same stylistic formulas can be found in the descriptions of the other planets.

(III) The third example is a fragment that explains chronological values. It may be considered to be representative of sections §6 and §8, which deal with nativities:

Tb §8.4:1–4, §8.5:1–5:

השבועים ... **וּטַעַם שְׁנֵי הָעֶשֶׂר כִּי כֵן הַמְּזוּלוֹת. וְטַעַם שְׁלֹשָׁה שְׁבוּעִים בַּעֲבוּר כִּי חֲשֹׁבֹן** שבועות כל השנה הם חמישים ושנים, הוצא מהם תשעה וארבעים, שהם שבעה על שבעה, ישארו שלשה, ונשאר יום ורביעית יום. **וְטַעַם לִקְחַת לַתְּקוּפָה הַמְּזוּלוֹת אַרְבַּעַה שְׁבוּעִים לְכָל שָׁנָה כִּי חֲשֹׁבֹן הַשְּׁבוּעִים הֵם חֲמִישִׁים וּשְׁתֵּים**, הוצא מהם ארבעים ושמנה, שתוציאם שנים עשר שנים עשר, ונשארו ארבע שבועות גם היום ורביעית היום, שהוא נוסף בכל שנה על שבועות השנה. **תְּקוּפַת הַיָּמִים. טַעַם לִתֵּת לְכָל מַעֲלָה שְׁנֵי עֶשֶׂר יוֹם**

ועוד שתי שעות ושלישית שעה שכן יתחלקו כל ימות השנה על שלשים מעלות ישרות, שהם בית הסוף. וטעם יעקב אל כנדי לתת לכל יום מעלה אחת פחות חלק בעבור שזה הוא מהלך השמש האמצעי ביום אחד ... וטעם לתת בשתי שעות מעלה אחת כי ביום ובלילה יתן שתים עשרה המעלה.

The weeks. ... The reason for “12” is that (this is the number of) the signs. The reason for “3 weeks” is that the number of weeks in a complete year is 52; subtract 49, which is seven times seven, and the remainder is three (weeks); and there is still a remainder of one and a quarter days. The reason for “subtracting 4 weeks for the revolution of the signs for every year” is that the number of weeks (in one year) is 52; subtract 48 by casting out twelves and the remainder is four weeks plus a day and a quarter, which is the excess each year to the (full) weeks of the year. Revolution of the days. The reason for assigning “12 days plus two and a third hours to each degree” is that in this manner all the days of the year are divided into 30 equal degrees, which is the terminal house. Ya‘qub al-Kindi’s reason for assigning ‘one degree less one (arc) minute to each day’ is that this is the mean motion of the Sun in one day. ... The reason for assigning “one degree to (every) two hours” is that day and night together are equal to 12 degrees.

Two features indicate that all six chronological values (underlined) commented on in this fragment are quotations: (1) all six emerge out of the blue and are completely unconnected to any other part of *Te‘amim II*; (2) the use of the formula (marked with an underline) “the reason for ... is ...” (... בעבור ... וטעם), which precedes the explanations here and elsewhere (e.g., §4:3;4:7,9,10,11).

APPENDIX 5

AUTHORITIES AND SOURCES MENTIONED IN *ṬEʿAMIM I* AND *ṬEʿAMIM II*

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
Abraham Bar Ḥiyya, the Prince	ר' אברהם הנשיא	§ 10.3:6; § 10.4:3		
Abū Ma'shar	אבו מעשר	§ 4.5:1; § 4.8:8		
(the) Ancients	הקדמונים	§ 1.2:6; § 1.3:5; § 2.12:7,9; § 2.13:8; § 2.17:9; § 2.18:1,3; § 3.5:1; § 3.6:3,4; § 4.2:12; § 4.7:1,3; § 10.1:1; § 10.59:2	הקדמונים	§ 2.5:10; § 3.1:1; § 5.2:19; § 5.7:3,5; § 5.8:2; § 5.9:2; § 6.2:5; § 7.1:1,3; § 7.2:6,9; § 8.2:2; § 8.7:2,11
Andruzagar ben Sadi Faruk the Jew	אנדרוזגר בן זאדי פרוך היהודי	§ 3.6:19		
Arab scholars	חכמי ישמעאל	§ 2.12:5; § 3.6:19	חכמי ישמעאל	§ 4.8:3; § 8.7:5
Aristotle	אריסטוטלס	§ 2.5:7; § 4.5:2; § 4.7:3		
Astrologers	חכמי המזלות	§ 1.3:10; § 2.4:2; § 2.5:3; § 2.12:2; § 3.6:18,19; § 4.2:6,10; § 7.1:1; § 10.2:6,7	חכמי המזלות	§ 1.2:4; § 2.1:7; § 2.3:17; § 2.6:7; § 5.1:12
Astrology			חכמת המזלות	§ 1.3:3
Book by Abraham Bar Ḥiyya, the Prince	ר' אברהם הנשיא בספרו	10.3:6		
Book by Abū Ma'shar	ספר אבו מעשר	§ 2.2:17		
Book by Andruzagar ben Sadi Faruk the Jew	ספר אנדרוזגר בן זאדי פרוך היהודי	§ 3.6:19		
Book by Doronius	ספר דורוניוס	§ 6.2:4; § 9.1:2		
Book of Conjunctions (Ibn Ezra)	ספר המחברות	§ 2.4:5		

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
Book of Nativities (Ibn Ezra)	ספר המולדות	§ 1.5:5; § 8.1:9; § 10.5:20	ספר המולדות	§ 6.2:11; § 6.6:1
Book of the Astrolabe (Ibn Ezra)	ספר כלי הנחושת	§ 10.5:19		
Book of the Beginning of Wisdom (Ibn Ezra)			ספר ראשית חכמה	§ 1.1:1
Book of the Longitude (Enoch)	ספר הארך	§ 1.2:3		
Book of the Tables (Ibn Ezra)			ספר הלוחות	§ 2.3:5; § 5.1:11; § 8.3:3
Book of the World (Ibn Ezra)	ספר העולם	§ 6.3:6; § 10.9:4	ספר העולם	§ 6.2:1
Book on the Use of Tables (Ibn Ezra)			ספר מעשה הלוחות	§ 8.5:6; § 8.6:3
Books of the Ancients	ספרי הקדמונים	§ 3.5:1; § 3.6:19		
Books of the astrologers	ספרי חכמי המזלות	§ 2.4:1		
De Anima by Aristotle	ספר הנפש לאריסטוטלוס	§ 4.5:2		
Doronius	דורוניוס	§ 3.6:13; § 6.2:4; § 9.1:2	דורוניוס	§ 2.1:5
Doronius, the King	דורוניוס המלך	§ 2.18:2		
Egyptian scientists	חכמי מצרים	§ 2.3:3; § 2.8:3; § 4.2:11	חכמי מצרים	§ 2.9:2; § 6.8:1
Enoch	תנוך	§ 1.2:3; § 2.4:3,4; § 2.5:1; § 2.16:8; § 3.6:13; § 4.4:2; § 9.3:4; § 10.1:2	תנוך	§ 2.7:7,8; § 6.1:5; § 7.2:18,22,31
Expert in the zodiacal signs	בעל המזלות	§ 2.12:14	בעל המזלות	§ 5.4:9
Experts in (astrological) judgments	בעלי הדינין	§ 1.3:10; § 6.2:3	בעלי המשפטים	§ 2.9:2
Experts in the astrolabe	בעלי כלי הנחושת חכמי כלי הנחושת	§ 3.4:9 § 10.2:6		

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
Experts in the images			בעלי הצורות	§5.6:4
Experts in the science of the proportions	בעלי חכמת הערכים	§3.2:10		
Geometricals	בעלי המדות	§3.1:3		
Greek scholars			חכמי יון	§5.1:2; §8.7:5
Hipparchus	אברכס	§2.12:4		
Ibn Abi Damina	אבן דמינה	§4.1:5		
Indian scientists	חכמי הודו	§2.2:3; §2.6:2; §2.10:1; §2.12:1, 6,8,11,13; §2.16:2,4,7,9,11,12; §4.2:10; §4.5:7; §4.6:4; §5.2:3; §5.3:5; §6.2:3; §8.1:7; §10.9:1	חכמי הודו	§2.7:4,9; §2.9:1; §5.1:11; §7.2:26; §8.3:1; §8.7:11
	אנשי הודו	§2.2:19; §2.8:2; §6.3:1	אנשי הודו	§2.7:6
knowledgeable about the poles	בעלי הסדנים	§2.12:11		
Māshā'allāh	מאשא אללה	§2.18:2; §3.5:7; §10.1:5	משאללה	§6.1:1
Persian scientists	חכמי פרס	§4.2:11; §8.1:5; §9.3:11; §10.9:1	חכמי פרס	§2.9:1; §5.1:13; §5.5:12; §5.8:3; §6.6:1
philosophers			חכמי התושייה	§2.1:1
physicians	רופאים	§1.5:12		
Ptolemy	בטלמיוס	§1.2:3,5; §1.5:1,5; §2.2:3,19; §2.5:12; §2.9:1; §2.12:5,9,12; §2.13:8; §2.15:4; §2.16:3,9; §2.18:1,2; §3.5:7; §3.6:4; §4.1:2; §4.2:8; §5.2:3,4; §5.3:3; §6.2:3; §7.1:1; §7.3:1; §8.1:6; §9.1:1,2; §9.3:1; §10.1:3; §10.9:1,2	תלמי	§2.4:2; §2.6:2; §2.7:1; §2.9:2; §3.1:8; §4.8:1; §5.1:13,15; §5.3:14; §5.4:5; §6.1:3,4; §6.2:2; §6.9:1; §8.5:3; §8.7:5
Ptolemy, the King			תלמי המלך	§5.5:6; §7.1:1
Scholars of our generation	חכמי דורנו	§10.10:1		
Scholars of the images			חכמי הצורות	§2.3:10; §5.7:8

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
Scholars who rely on experience	חכמי הנסיון	§2.5:5; §2.12:14,15		
Science of medicine			חכמת הרפואות	§1.3:2; §2.4:1; §5.5:6
Science of proportions	חכמת הערכים	§3.2:10; §4.1:2		
Science of the images (of the stars)			חכמת הצורות	§8.3:2
Sphaera recta table	לוח גלגל הישר	§10.5:13; §10.7:1; §10.8:7	לוח גלגל הישר	§6.5:2
Tables of India			לוחות הודו	§5.1:11; §6.1:4
Tables of Persia			לוחות פרס	§6.1:4
Tables of Ptolemy			לוחות תלמי	§6.1:4
Tables of the scholars who rely on experience	לוחות חכמי הנסיון	§2.12:14		
Tables of the seven planets			לוחות לשבעה המשרתים	§8.7:6
Tetrabiblos (Ptolemy)	ספר הארבעה שערים	§1.5:1; §10.1:3	ספר הארבעה ראשים	§5.5:1
Vettius Valens	ואליס	§3.6:13		
Ya'qub al-Kindī	יעקב אל כנדי	§1.4:2; §2.13:9; §3.1:2; §10.1:5	יעקב אל כנדי	§4.8:1; §8.5:2
Year of India	שנת השמש של הודו	§2.12:11	שנת הודו	§8.7:2

APPENDIX 6

DIGRESSIONS IN *ṬE'AMIM II*.

<i>Subject</i>	<i>Tb</i>
Nature of the signs	§ 2.1:1–13
Planetary houses	§ 2.5:1–10; § 2.6:1–7
Exaltations	§ 2.7:1–14
Mundane houses	§ 3.1:1–12; § 3.2:1–6; § 3.3:1–7
Aspects	§ 4.6:1–6; § 4.7:1–8; § 4.8:1–3
<i>Nimubar</i>	§ 6.1:1–5
Selection of the <i>hyl'eg</i>	§ 6.2:1–11
Beginning and length of the solar year; dark and bright degrees, pits; physical properties of the planets and signs; astrological influence of the stars of the eighth orb	§ 8.7:1–11

APPENDIX 7

A COMPARATIVE SCRUTINY OF *ṬE'AMIM* *II* AND *MISHPEṬEI HA-MAZZALOT*

This appendix subjects to scrutiny two parallel fragments from *Ṭe'amim II* (Fragment A: Tb §2.3:1–23; §2.4:1–12) and *Mishpeṭei ha-Mazzalot* (fragment B: *Mishpeṭei ha-Mazzalot*, bnf 1058, ff. 13b–14a), in an attempt to determine whether the latter could be the underlying text of the former. These two fragments—enumerating and describing various categories of zodiacal signs—were selected for this purpose for several reasons:

- (I) Fragment A was chosen because, as shown in the first example of Appendix 4, it includes quotations from an underlying text.
- (II) Fragment B was chosen because it is organized in the form of a double-entry list of the names of categories of signs and their corresponding signs, which is the precisely the organization of fragment A.

Four types of links between fragments A and B are studied and marked in the Hebrew texts and English translations, as follows: (a) double underline: identical phrasing in both texts; (b) bold: similar but not identical phrasing; (c) underline: totally different names in the two texts for the same categories of signs; (d) bold underline: quotations in fragment A that are not mentioned at all in fragment B.

Tb §2.3:1–23; §2.4:1–21:

המתהפכים. בעבור שישתנה הזמן בהכנס השמש במזל טלה, והנה אחר שהיה האויר קר ולח יהיה חם, נקרא מתהפך. וככה סרטן, שתסור הלחות ותהיה במקומה היבשות, וככה מאזנים, יסור החום ויתהפך אל הקור, וככה בגדי, שתסור היבשות ותתהפך הלחות. ונקראו האחרים עומדים, והם שור אריה עקרב דלי, בעבור שהם אמצעיים ויעמוד האויר בם על תולדת אחת. ונקראו האחרים שני גופים, והם תאומים בתולה קשת דגים, בעבור שהם בסוף התולדת הראשונה והם אמצעיים עם התולדת הבאה. מזלות ארוכים. נקראו כן בעבור המזל שיעלה בכל מקום בשוב ביותר משלשים מעלות, כל אחד מהם, והקצרים הפך זה כמו שכתוב בספר חלוחות. החלק הגדול. עוד אדבר על זה ... מזלות הצורות. בעבור שאלה הצורות בדמות בן אדם, וככה חצי קשת הראשון צורת חצי אדם בידו חץ. על כן יורה על כאשר הם כדמותם וחכמי הצורות נסו ככה וככה משפט שהם על צורת בהמה. הזכרים החמים. הם הזכרים כי הזכר לעולם חם מהנקבה. היופי. שהם על צורת האדם הם יפים, ולא כן דלי בעבור

היותו בית שבתאי, גם גדי כמו צורה שלימה, וככה דגים ולא כן טלה והאחרים. הקול. המזלות שהם על צורת האדם יש להם קול שלם, שהאדם הוא המדבר לבדו, והבהמות יש להם קול ואין להם דבור. סרטן ועקרב ודגים אין להם קול אף כי דבור, על כן הם אלמים, והטעם שיורו על מיעוט דברים. הכת. אריה כי הוא גבור בבהמה, גם בתולה בעבור הכוכב הגדול שיש בו הנקרא זנב האריה, ולאריה כח גדול בזנבו. ודלי בעבור היותו בית שבתאי והוא בית זכר, ולא כן גדי כי הוא בחלק הנקבות והוא קר, ושבטאי תקיף מכל המשרתים שהוא עליון. המומים. דבר זה ידעוהו חכמי המזלות בדרך הנסיון, או כי המזלות שהם על צורת בן אדם אין בם מום, גם קשת עמהם; וזה הוא הנכון בעיני. המתכות. הם המזלות בעבור שכולם יכנסו באש. האילנים. זה נודע בדרך הנסיון. המטר. יש באריה צורה ונקראת ספינה, על כן תורה על המים, ומזל דלי בעבור המים. והטעם כי כאשר המטר יתחיל באחת מאלה יהיה רב ותקיף מאד, וזה הדבר מנוסה. המעוותים. נקראו כן בעבור עלותם בכל הישוב פחות משתי שעות ישרות, והפך זה הישרים. המלכים. בעבור היות תולדת האש להיות גבוהה היו מזלות האש, והאוויר לסגנים, ויותר טלה בעבור כבוד השמש בו, ומזלות המים לבינוניים, ומזלות העפר שאין למטה המנה לעבדים. הנביאים. מזלות האש מבקשים שררה בכח ומזלות צורת בן אדם הם ממוסכים ישרים. הרופאים. למאדים ולגנה שותפות בחכמת הרפואות, ויהיה כן בעבור שמאדים יורה על הפצעים וגנה על כל עקרים שיש להם ריח טוב. והנה, עקרב הוא בית מאדים וביתו יורה על התחלואים בעבור שהוא הששי, כאשר אפשר. מאזנים עם שור. ויאמר תלמי כי אלה שניהם חסרי דעת בעבור שהבית הששי יורה על התחלואים והמומים והחסרון, והנה בעל המזל הצומח, שיוורה על הנולד, הוא בעל מום וחסרון. בעלי כנפים. יש בבתולה כוכבים בדמות כנפים גם כן בדגים. השמים. תאומים הוא ממזלות הרוח ואין מזל במזלות גבוה ממנו בעבור שהוא סוף צפון, ולא כן סרטן כי הוא מתולדת המים, והשמים הוא אויר. השדים. אמרו כי דלי מזל שדים בעבור שהוא בית שבתאי, כי הוא יורה על המרה השחורה המראה השדים, ואמרו כי דלי ככה ולא גדי, בעבור הראות כח שבתאי בו. מזל העולם. בעבור היות הלבנה קרובה אל הארץ תורה על כל דבר שיקרה בעולם. גם היא דומה באורה לולד בצאתו מרחם אמו ויגדל עד זמן ידוע, ואחר כך יחל אורה להחסר. ובעבור היות סרטן ביתה שמוהו מזל העולם, כי כל מה שיוורה הכוכב ככה יורה ביתו ... הגלגל. ידוע כי בהיות השמש בשלשה המזלות הראשונים יהיה האוויר לח וחס, וזה יועיל לדעת תולדת הגולגלים, וככה שאר המזלות. בתי עבודת השם. בעבור היות טלה ומאזנים מזלות טובים וממוסכים יותר מכל המזלות, מפני השתוות בהם היום עם הלילה, על כן יורו על דבר הצדק, ומהצדק בתי עבודת השם ... המשגל. אלה הם על צורת טלה, ושור ואריה יש להם תואה גדולה, ובעבור דמות הצורות דנו אותם ככה. העקרים. כל מזלות שהם על צורת האדם הם עקרים בעבור כי בני אדם מולידים בנים מועטים. הבינוניים, שהם על צורת בהמות ואשר הם במים, יולידו רבים. מזל הים סרטן, בעבור שהוא בית הלבנה, והלבנה תורה על המים בתולדתה ... מזל טלה. בעבור היותו תחלת המזלות שמוהו להיות לאות על הראש, כי כל נולד שיהיה הפקיד עליו במזל טלה, ואם הוא עם כוכב מויק, לא יהיו לו רעות בראש. וחלקן כל מזל על אברי בני האדם עד היות דגים לאות על הרגלים.

Tropical (signs). Because the weather changes when the Sun enters Aries, hence, inasmuch as after the air was cold and moist it turns hot, (Aries) is called tropical. Similarly with Cancer, since moistness departs and is replaced by dryness, and similarly with Libra, since heat departs and is transformed into cold, and similarly with Capricorn, since dryness departs and is transformed into moistness. The other (signs) are called fixed—namely, Taurus, Leo, Scorpio, and Aquarius—because they are

intermediate and the air in them keeps them in one nature. The others are called **bicorporal**—namely, Gemini, Virgo, Sagittarius, and Pisces—because they are at the end of the first nature and are intermediate with respect to the next nature. **Long signs.** They are called this because each of these signs rises more than 30 degrees anywhere in the ecumene, and the **short** ⟨signs⟩ are just the opposite, as is written in the *Book of the Tables*. **The larger portion.** I shall say more about that ⟨in due course⟩. ... **Signs** ⟨with⟩ **shapes.** ⟨They were called this⟩ because these shapes have a human image, such as the first half of Sagittarius, which has the shape of half a man with an arrow in his hand. Hence, ⟨such a sign⟩ gives an indication about things that resemble its shape, and the scholars of the images verified by experience such and such an ⟨astrological⟩ judgment about ⟨the constellations that have⟩ the shape of an animal. **Masculine** ⟨and⟩ **hot.** These are the masculine ⟨signs⟩ because the male is always hotter than the female. **Beauty.** ⟨The signs⟩ that have the shape of a human being are handsome, except for Aquarius, because it is the house of Saturn; Capricorn, too, which is like a whole image, and similarly with Pisces but not Aries and the others. **Voice. The signs that have the shape of a man have a complete voice,** for man is the only speaker; animals **have a voice but do not have speech.** Cancer, Scorpio, and Pisces have neither voice nor speech; therefore they are mute, meaning that they indicate brevity of speech. **Power.** ⟨This refers to⟩ Leo, because it is the mightiest among the animals, and also ⟨to⟩ Virgo, on account of the big star in it, which is called the *Tail of the Lion*, and a lion has great strength in its tail. ⟨This also refers to⟩ Aquarius, because it is the house of Saturn and it is a masculine house, but not to Capricorn, because it belongs to the feminine ⟨signs⟩ and is cold. Saturn is the strongest of the planets inasmuch as it is uppermost. **Deformities.** Astrologers discovered this through experience, or because the signs that have a human shape have no deformities, and Sagittarius is included among them; this is the correct ⟨explanation⟩ in my opinion. **Metals.** These are the signs ⟨that are so-called⟩ because all of them can withstand fire. **Trees.** This is known through experience. **Rain.** There is a constellation in Leo called “Ship,” so it indicates water, so too Aquarius, on account of the water. The reason is that when it begins to rain ⟨and the Moon is⟩ in any of these ⟨constellations⟩, it will be abundant and very strong; and this has been verified by experience. **Crooked.** They are so named because they rise anywhere in the ecumene in less than two equal hours, and the opposite applies to the straight ⟨signs⟩. **Kings.** Because the nature of fire is to rise, the fiery signs ⟨were assigned to the kings⟩, and the airy to the nobles—particularly Aries, because the exaltation of the Sun is in it—and the watery signs to the commoners, and the earthy signs, the lowest of all, to the slaves. **Prophets.** The fiery signs seek power by force, and the signs with a human shape are mixed and temperate. **Physicians.** Mars and Venus have a partnership in the science of medicine, because Mars indicates wounds and Venus all the essences with a pleasant smell. Scorpio is

the ⟨planetary⟩ house of Mars and its house indicates diseases because it is the sixth, as I shall explain. **Libra and Taurus.** Ptolemy said that these two are foolish because the sixth ⟨mundane⟩ house indicates diseases, deformities, and foolishness, but the lord of the sign of the ascendant, which gives an indication about the native, is deformed and foolish. **Winged.** There are stars in Virgo that resemble wings, and in Pisces as well. Heavens. Gemini is one of the airy signs and no sign is higher than it is because it is ⟨in⟩ the extreme north; not so Cancer, because it is of a watery nature, and the heavens are air. **Demons.** They said that Aquarius is the sign of demons because it is the house of Saturn, since it indicates the black bile which makes the demons visible, and they said that Aquarius is like that but not Capricorn, since the power of Saturn is perceptible in it. **Sign of the world.** Because the Moon is close to the Earth, it indicates anything that occurs in the world. In its light, it is also similar to the fetus that emerges from its mother's womb and grows until a certain time, and then its light begins to wane. And because Cancer is its house, it was made the sign of the world, because anything that is indicated by the planet is also indicated by its house. ... **The circle.** It is known that when the Sun is in the three first signs the air is moist and hot, and this is useful for knowing the nature of the natives, and similarly with the other signs. **Houses of divine worship.** Because Aries and Libra are more benefic and temperate than the other signs, inasmuch day and night are equal in them, they indicate justice, and the houses of divine worship begin at the equator; ... **Sexual intercourse.** Those ⟨signs⟩ that have the shape of a ram, bull, and lion are lustful, and it is on account of these shapes that they concluded that they are like that. Sterile. All the signs that have a human shape are sterile, because human beings produce few children. **Intermediate ⟨signs⟩,** which have the shape of animals that live in water, produce many ⟨offspring⟩. **The sign of the sea** ⟨is⟩ Cancer, because it is the house of the Moon, and the Moon by its nature indicates water; ... **The sign of Aries.** Since it is the first sign, they made it signify the head; no harm will befall the head of any native whose lord is in the sign of Aries, even though it is together with a malefic planet. All the signs were assigned to the limbs and organs of the human body down to Pisces, which represents the feet.

Mishpētei haMazzalot, bnf 1058, fols. 13b–14a:

ועתה אחל לדבר על ראשית משפטי המזלות. המתהפכים: טלה וסרטן, מאזנים וגדי; פ' כי באלה המזלות מתהפך העת, כי הם ד' תקופות השנה. הנאמנים: שור, אריה, עקרב, דלי; פ' שבהם עומדים העתים במתכונתם. בעלי שתי גופות: תאומים, בתולה, קשת, דגים; פ' כי אלה יש להם שתי כחות, מכח ענין עת שהיה לפניהם ומכח ענין העת שאחריהם, מעט מזה ומעט מזה. מראש טלה עד סוף בתולה צפוניים, ומראש מאזנים עד סוף קשת ישרים, שהשמש יורד, ומראש גדי עד סוף תאומים או מצוותים, שהשמש עולה. מראש אריה עד סוף גדי, חצי חלק הגלגל הגדול לשמש, ומסוף גדי עד סוף סרטן, החצי הקטן ללבנה. מזלות האש: טלה, אריה, קשת. מזלות העפר: שור, בתולה, גדי. מזלות הרוח: תאומים, מאזנים, דלי. מזלות המים: סרטן,

עקרב, דגים. הזכרים: טלה, תאומים, אריה, מאזנים, קשת, דלי. הנקבות: שור, סרטן, בתולה, עקרב, גדי, דגים. מורחיים: טלה, אריה, קשת. הדרומיים: שור, בתולה, גדי. המערביים: תאומים, מאזנים, דלי. צפוניים: סרטן, עקרב, דגים. בעלי קול גדול: תאומים, בתולה, מאזנים, קשת, דלי. בעלי חצי קול: טלה, שור, אריה, גדי. האלמים: סרטן, עקרב, דגים. המתנאים המושלים: טלה, אריה, קשת. השפלים: שור, בתולה, גדי. האמצעיים: תאומים, מאזנים, דלי. עמי הארץ: סרטן, עקרב, דגים. המתבודדים: אריה, דלי. החזקים: אריה, בתולה. צורת האדם: תאומים, בתולה, מאזנים וחצי הראשון של קשת גם דלי. הנכרתים: שור ואריה. בעלי המומין: טלה, שור, סרטן, עקרב, גדי, דגים. בעלי המשגל: טלה, שור, אריה, דגים. היפים: תאומים, בתולה, מאזנים. חצי יופי: עקרב, קשת, דגים. הרופאים: שור, עקרב. הקרחים: סרטן, אריה.

Now I commence speaking about the beginning of the judgments of the signs. Tropical: Aries, Cancer, Libra, and Capricorn; explanation: because within these signs the weather varies, since these are the four annual turning points. Faithful: Taurus, Leo, Scorpio, Aquarius; explanation: because within them the weather maintains its pattern. **Bicorporeal**: Gemini, Virgo, Sagittarius, Pisces; explanation: because these <signs> have two powers, one power derives from the circumstances of previous weather and the other power from the circumstances of subsequent weather, a little from the former and a little from the latter. From the head of Aries until the end of Virgo <the signs are> northern, and from the head of Libra until the end of Sagittarius <the signs are> direct, because the Sun descends, and from the head Capricorn until the end of Libra they are crooked, because the Sun ascends. From the head of Leo until the end of Capricorn, half **of the great circle** <is assigned> to the Sun, and from the end of Capricorn to the end of Cancer, the smaller half <is assigned> to the Moon. Fiery signs: Aries, Leo, Sagittarius. Earthy signs: Taurus, Virgo, Capricorn. Airy signs: Gemini, Libra, Aquarius. Watery signs: Cancer, Scorpio, Pisces. **Masculine**: Aries, Gemini, Leo, Libra, Sagittarius, Aquarius. Feminine: Taurus, Cancer, Virgo, Scorpio, Capricorn, Pisces. Eastern: Aries, Leo, Sagittarius. Southern: Taurus, Virgo, Capricorn. Western: Gemini, Libra, Aquarius. Northern: Cancer, Scorpio, Pisces. **Strong-voiced**: Gemini, Virgo, Libra, Sagittarius, Aquarius. **Half-voiced**: Aries, Taurus, Leo, Capricorn. Mute: Cancer, Scorpio, Pisces. Haughty rulers: Aries, Leo, Sagittarius. Despised: Taurus, Virgo, Capricorn. Intermediate: Gemini, Libra, Aquarius. Commoners: Cancer, Scorpio, Pisces. Solitary: Leo, Aquarius. Strong: Leo, Virgo. **Image of a man**: Gemini, Virgo, Libra and the first half of Sagittarius and Aquarius. Cut in their limbs: Taurus, Leo. **Maimed**: Aries, Taurus, Cancer, Scorpio, Capricorn, Pisces. **Libidinous**: Aries, Taurus, Leo, Pisces. Handsome: Gemini, Virgo, Libra. Half beauty: Scorpio, Sagittarius, Pisces. Physicians: Taurus, Scorpio. Bald: Cancer, Leo, Sagittarius.

The comparison of fragments A and B focuses on 39 likely quotations and yields the following conclusions:

- 44 % of the quotations in fragment A (17 of 39) do not appear in fragment B.
- 41 % of the quotations in fragment A (16 of 39) are mentioned in fragment B; of them, 13 % are exact matches (5 of 39) and 28 % approximate matches (11 of 39).
- 15 % of the quotations in fragment A (6 of 39) are alluded to in fragment B, but use different nomenclature.
- After the three first quotations, the correspondence in the order of presentation of the quotations of fragments A in B disappears gradually. For example, the “Physicians” (הרופאים), found in the middle of fragment A, are the last to be presented in fragment B.

APPENDIX 8

MANUSCRIPTS

Abbreviations

BNF	Paris, Bibliothèque nationale de France
BS	Berlin, Staatsbibliothek
CUL	Cambridge, University Library
CUL	New York, Columbia University Library
DSL	Dresden, Sächsische Landesbibliothek
IMHM	Institute for Microfilmed Hebrew Manuscripts, Jewish National and University Library, Jerusalem.
JB	Jerusalem, Benyahu
JTS	New York, Jewish Theological Seminary
MBR	Madrid, Biblioteca de la Real Academia de la Historia
MBS	Munich, Bayerische Staatsbibliothek
NCUL	New York, Columbia University Library
NS	Nürnberg, Stadtbibliothek
OBL	Oxford, Bodleian Library
RSL	Moscow, Russian State Library
SPI	St. Petersburg, Institute of Oriental Studies of the Russian Academy of Sciences
VAV	Vatican, Biblioteca Apostolica Vaticana
WÖN	Wien, Österreichische Nationalbibliothek
WŻIH	Warsaw, Żydowski Instytut Historyczny

Manuscripts of Tē'amim I

- 1 BNF, MS héb. 1058 (IMHM: F 14642), ff. 99a–123a (13th cent.).
- 2 OBL, Add. Qu. 160 [Neubauer 2518] (IMHM: F 22230), ff. 65b–87b (1367).
- 3 BNF, MS héb. 1055 (IMHM: F 14658), ff. 28a–38a (14th cent.).
- 4 BNF, MS héb. 1044, ff. 192b–217a (14th cent.).
- 5 VAV, ebr. 47 (IMHM: F 00686), ff. 25a–34b (14th–15th cent.).
- 6 MBS, Cod. Hebr. 304 (IMHM: F 01109), ff. 30b–55b (14th–15th cent.).
- 7 CUL, Add. 1517, (IMHM: F 17454), ff. 15b–21b (14th–15th cent.).

- 8 VAV, ebr. 390 (IMHM: F 00472), ff. 85a–108a (1436).
- 9 WŽIH, 255, (IMHM: F 10122), ff. 25b–37a (1460).
- 10 BNF, MS héb. 189 (IMHM: F 04173), ff. 72b–87b (15th cent.).
- 11 BNF, MS héb. 1045 (IMHM: F 33996), ff. 117b–127a (15th cent.).
- 12 MBS, Cod. Hebr. 202 (IMHM: F 01649), ff. 52b–68b (15th cent.).
- 13 DSL, Eb 384, (IMHM: F 20765), ff. 32a–41^a (15th cent.).
- 14 BNF, MS héb. 1056 (IMHM: F 14659), ff. 3a–34a, (15th–16th cent.).
- 15 JTS, Mic 2623, (IMHM: F 28876), ff. 2a–69b (1512).
- 16 CUL, Add. 1186, (IMHM: F 17052), ff. 36b–51b (1590).
- 17 CUL, Add. 1501, (IMHM: F 17118), ff. 1a–33b (16th cent.).
- 18 BRESLAU, 54, (IMHM: F 46890), ff. 20a–31a (16th cent.).
- 19 BNF, MS héb. 1057 (IMHM: F 14641), ff. 46a–63b (16th–17th cent.).
- 20 BS, 220 [Or. Qu. 679], (IMHM: F 01779), ff. 1a–32a (16th–17th cent.).
- 21 OBL, Mich. 56 [Neubauer 1662] (IMHM: F 17403), ff. 18a–34a (17th cent.).
- 22 OBL, Mich. 45 [Neubauer 2024] (IMHM: F 19309), ff. 3a–28b (17th cent.).
- 23 SPI, B447, (IMHM: F 53618), ff. 69a–83b (17th cent.).
- 24 RSL, Günzburg 414, (IMHM: F 43036), ff. 97a–114a (17th cent.).
- 25 RSL, Günzburg 421, (IMHM: F 47781), ff. 31a–20b (17th cent.).
- 26 NS, Cent.V.app. 4, (IMHM: F 08783), ff. 129a–187a (17th–18th cent.).
- 27 JB, 2133, (IMHM: F 44867), ff. 1a–29b (1750) (starts with the introduction to *Ṭe'amim II* but continues with the text of *Ṭe'amim I*).
- 28 JTS, Mic 9356, (IMHM: F F49957), ff. 34a–46b (1770).
- 29 JTS, Mic 2636, (IMHM: F 28889), ff. 160a–196b (1772).
- 30 NCUL, X 893 Ib 53, (IMHM: F 42426), ff. 1a–19a (18th cent.).
- 31 JTS, Mic 9531, ff. 1a–1b [fragment] (19th cent.).
- 32 OBL, Mich. 221 [Neubauer 2246], ff. 99a–116a.

Manuscripts of Tē'amim II

- 1 BNF, MS héb. 1058 (IMHM: F 14642), ff. 98b–123a (13th cent.).
- 2 CUL, Add. 481, (IMHM: F 16778), 143a–157b (beginning is lacking) (14th cent.).
- 3 BNF, MS héb. 1044, ff. 217b–239b (14th cent.).
- 4 VAV, ebr. 47 (IMHM: F 00686), ff. 44b–53b (14th–15th cent.).
- 5 MBS, Cod. Hebr. 304 (IMHM: F 01109), ff. 30b–55b (14th–15th cent.).
- 6 WÖN, Cod. Hebr. 132 [Schwarz 185], (IMHM: F 01406), ff. 18a–19b (14th–15th cent.).
- 7 OBL, Opp. 707 [Neubauer 2025] (IMHM: F 19310), ff. 191b–113a (1410).
- 8 BNF, MS héb. 259 (IMHM: F 27838), ff. 137a–153b (1489).
- 9 BNF, MS héb. 1058 (IMHM: F 14642), ff. 26a–38b (15th cent.).
- 10 MBS, Cod. Hebr. 202 (IMHM: F 01649), ff. 37b–52b (15th cent.).
- 11 JTS, Mic 2626, (IMHM: F 28879), ff. 143a–160a (15th cent.).
- 12 JTS, Mic 2625, (IMHM: F 28878), ff. 52b–73b (15th cent.).
- 13 MBR, 7, (IMHM: F 07370), ff. 125a–139a (15th cent.).
- 14 Firenze, Biblioteca Nazionale Centrale, Magl. III.139 (IMHM: F 11978), ff. 118b–133b (15th cent.).
- 15 VAV, ebr. 477 (IMHM: F 00530), ff. 44b–53b (1545).
- 16 MBS, Cod. Hebr. 45 (IMHM: F 01139), ff. 461a–477b (1532).
- 17 CUL, Add. 1186, (IMHM: F 17052), 87a–100a (1590).
- 18 WŻIH, 282, (IMHM: F 11609), ff. 18a–31b (16th cent.).
- 19 BS, 220 [Or. Qu. 679], (IMHM: F 01779), ff. 33a–40a (16th–17th cent.).
- 20 JB, 2133, (IMHM: F 44867), ff. 31a–42b (1750).
- 21 NCUL, X 893 Ib 53, (IMHM: F 42426), ff. 30a–32a (18th cent.).
- 22 SPI, B70, (IMHM: F 53005), ff. 138a–152b (18th cent.).
- 23 SPI, B294, (IMHM: F 53427), ff. 17a–31a (18th–19th cent.).
- 24 JTS, Mic 2629, (IMHM: F 28882), ff. 91a–122a (19th cent.).
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GLOSSARY OF TECHNICAL TERMS

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
active nature	תולדת פועלת	§ 3.3:3; § 3.6:16	תולדת פועלת	§ 4.7:8
agent	פועל	§ 1.4:2,3	פועל	§ 2.1:7,8,10
airy nature	תולדת האוויר	§ 1.4:7; § 2.14:2	תולדת האוויר	§ 3.8:10
apogee	(מקום) גבהות	§ 1.3:2; § 2.14:2; § 5.2:2-4; § 6.1:1; § 6.2:2; § 7.1:4-5	(מקום) גבהות	§ 1.3:1; § 3.1:5; § 4.4:2-3; § 5.2:6; § 5.3:4; § 6.1:4
arc			קשת	§ 4.6:3,4,6
arc of sight			קשת המראה	§ 2.7:4
arc of the day	קשת היום	§ 2.2:1		
arithmetic	דרך חשבון	§ 2.6:3; § 2.8:4; § 9.3:1		
ascendant (degree and sign)	הצומחת, מזל צומח, מעלה צומחת	§ 2.10:3; § 2.12:14; § 3.4:1,8; § 3.5:6,8,9,11; § 3.6:1,10,16; § 9.1:1,8; § 10.1:3,4; § 10.2:2,5; § 10.3:5; § 10.4:5,6; § 10.5:1,3,4,10,11; § 10.7:1,7; § 10.8:2-6	הצומחת, מזל צומח, מעלה צומחת	§ 2.4:2; § 3.1:2-7; § 3.2:4; § 3.3:5; § 4.11:3-5; § 6.2:1,4,9,11; § 6.5:2-5; § 7.1:1,2; § 7.2:7; § 8.5:3; § 8.6:1
	זורחת מזל עולה	§ 10.5:17 § 2.11:1; § 8.1:2	מזל עולה	§ 2.1:5; § 2.4:9; § 2.4:13; § 7.1:3
aspect	מבט	§ 1.4:6; § 2.4:12; § 3.1:1,3; § 3.2:1,3,10; § 3.5:11; § 10.1:1,2,5; § 10.4:1; § 10.6:1	מבט	§ 2.1:10; § 2.5:7; § 4.2:4; § 4.6:1; § 4.8:3,4; § 4.9:1,3; § 5.1:2; § 6.5:1-5; § 8.6:3
aspect of absolute love	מבט אהבה גמורה	§ 3.2:5; § 3.6:9	מבט אהבה גמורה	§ 2.1:10; § 4.7:4
aspect of antagonism	מבט איבה	§ 2.4:12; § 3.5:10; § 3.2:9	מבט איבה מבט מריבה	§ 4.7:5 § 2.5:7; § 2.6:2
aspect of half love	מבט חצי אהבה	§ 3.2:8; § 3.6:10	מבט חצי אהבה	§ 2.1:10; § 2.5:6; § 4.2:3; § 4.3:2; § 4.7:4
aspect of love	מבט אהבה	§ 8.1:3	מבט אהבה	§ 2.5:6; § 3.2:1;
aspect of opposition	מבט נכח	§ 1.3:11; § 2.6:3; § 2.16:11; § 3.2:2,12; § 3.3:3 <i>et passim</i>	מבט נכח	§ 2.6:2; § 3.1:10
aspect of quartile	מבט רביעית	§ 2.5:10; § 3.1:4; § 3.2:9; § 3.2:12; § 8.1:3; § 10.1:3; § 10.4:2 <i>et passim</i>	מבט רביעית	§ 4.6:5; § 4.8:1,2,4,5

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
aspect of sextile	מבט ששית	§ 2.5:10; § 3.1:6; § 3.2:7; § 3.5:8,11; § 3.6:15; § 4.5:1; § 10.4:2 <i>et passim</i>	מבט ששית	§ 2.1:10; § 4.6:3; § 4.8:1
aspect of trine	מבט שלישית	§ 2.5:9; § 3.1:5; § 3.2:5; § 3.5:9,11; § 4.5:1; § 8.1:3; § 10.1:4 <i>et passim</i>	מבט שלישית	§ 2.5:6,7; § 4.6:2; § 4.7:6
astrolabe	כלי הנחושת	§ 3.4:9; § 10.2:6; § 10.5:19		
astrologers	חכמי המזלות	§ 1.3:10; § 2.4:2; § 2.5:3; § 2.12:2; § 3.6:18,19; § 4.2:6,10; § 7.1:1; § 10.2:6,7	חכמי המזלות	§ 1.2:4; § 2.1:7; § 2.3:17; § 2.6:7; § 5.1:12
astrology			חכמת המזלות	§ 1.3:3
benefic	טוב	§ 1.6:3; § 2.2:2; § 2.5:10; § 4.3:1; § 4.5:1-3; § 5.3:2-5; § 8.1:8	טוב	§ 2.4:10,13; § 2.5:6; § 2.8:4; § 5.4:1,2; § 5.6:1,3,4; § 5.8:1,2; § 5.9:3,4; § 6.4:2; § 7.1:2
bicorporal	שני גופות שתי צורות	§ 2.14:1 § 2.15:6	שני גופים	§ 2.3:4
black bile	מרה שחורה	§ 2.13:3; § 4.2:2,3,4,7	מרה שחורה	§ 2.4:5; § 5.3:1,6,17; § 7.2:20
bright degrees	מעלות מאירות	§ 2.12:1; § 2.12:14	מעלות נוגהות	§ 8.7:2
burnt	נשרף	§ 2.16:5	נשרף	§ 4.3:2
cardinal point	פאה צד	§ 2.2:1,9; § 2.4:6; § 3.6:7,8; § 4.2:9; § 4.3:5; § 4.4:6; § 4.8:7; § 5.2:1,2; § 6.1:1; § 7.1:6,9; § 7.2:2; § 9.1:6 § 2.13:8; § 10.2:4	פאה צד	§ 2.2:1,4,5; § 2.3:8; § 2.5:10; § 3.1:5; § 4.3:11; § 4.4:1; § 4.5:3; § 5.8:1 § 1.2:7; § 2.2:1; § 4.3:1
cardines	יתדות	§ 3.1:4; § 3.2:12; § 3.5:4-10; § 3.6:2,5; § 6.10:11,12,14; § 10.2:7; § 10.3:5,6; § 10.8:3	יתדות	§ 3.1:11,12; § 3.2:5; § 4.8:3; § 4.10:3; § 6.1:3,4; § 6.2:3,9; § 6.5:1; § 8.7:11
cardo of the lower midheaven			יתד הארץ יתד השפל	§ 3.1:6 § 2.21
center	מוצק נקודה	§ 5.2:3; § 6.1:1 § 1.3:2	מוצק	§ 2.5:1; § 4.1:1; § 4.4:3; § 5.2:6; § 5.3:4
chord	יתר	§ 3.1:5	יתר	§ 4.6:3
circle	גלגל עגול/ה	§ 1.1:1,4; § 1.3:5; § 2.2:1; § 2.12:3; § 2.12:6-7; § 3.1:3-6; § 3.3:12; § 3.4:1,3; § 3.5:2; § 8.1:6; § 10.5:18; § 10.8:9 § 2.12:7; § 3.1:3,4; § 3.2:2; § 3.5:2.	גלגל עגול/ה	§ 2.4:12; § 2.7:10; § 3.1:11; § 3.3:4; § 3.5:1,2,4; § 3.6:1,5; § 4.8:3; § 4.9:5; § 5.1:3; § 5.4:14; § 8.1:4; § 8.7:5 § 2.12:2; § 2.2:1; § 4.6:1,2,6
circumference			קו הגלגל	§ 4.5:1

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Th</i>	<i>Chapter, section, passage</i>
climate	גבול	§ 2.1:2; § 2.2:13; § 2.13:6; § 2.15:1; § 4.2:2; § 4.3:2; § 4.4:2; § 4.5:2; § 4.6:2; § 4.7:4; § 4.8:2; § 10.1:2; § 10.2:2; § 10.2:5		
cold (noun)	קור	§ 1.4:2; § 1.5:11; § 2.2:2,3; § 2.4:9; § 2.13:2; § 3.4:5; § 4.2:1	קור	§ 2.1:7,8; § 2.3:2; § 2.6:1; § 5.2:19,20; § 5.3:2,6; § 5.4:7; § 5.6:4; § 8.7:8
	קרה	§ 4.2:4		
cold (adjective)	קר	§ 1.4:5–7; § 1.4:1,4,7,12,14,15; § 2.7:2,3; § 2.13:1,3; § 4.1:1,5,9; § 4.4:6; § 4.6:3; § 4.7:5; § 4.8:3; § 5.1:2	קר	§ 2.1:3,4,11,12,13; § 2.3:1,16; § 2.6:1; § 2.8:4,10; § 5.1:7; § 5.2:3,6; § 5.3:1,6,11,15,19,20; § 7.1:2
complete aspect	מבט שלם	§ 7.2:1,2,3,4		
complete astrolabe	כלי שלם	§ 10.5:19		
complexion	ממסך	§ 1.5:12; § 2.6:2	ממסך	§ 2.1:3; § 5.4:6; § 5.6:4; § 5.7:6; § 8.7:3
composite (bodies)	מורכבים	§ 2.18:4	מורכבים	§ 2.1:1
conjunction	מחברת	§ 2.4:5; § 2.12:6; § 4.7:3; § 7.1:2,3,8	מחברת	§ 2.4:10; § 4.3:1,11; § 5.1:13; § 6.1:2,13; § 7.1:2,3,8
	התחברות	§ 4.6:2		
in conjunction with	דבק	§ 1.3:11; § 6.2:1,3,4		
	מתחבר/חבר	§ 1.3:2,6,8; § 1.5:2; § 2.16:3; § 4.5:1,7; § 4.7:1; § 6.3:2; § 7.1:4,9; § 10.9:4	מתחבר/חבר	§ 1.2:3; § 2.5:1; § 2.7:3; § 5.1:9,11; § 6.3:2
constellation	צורה	§ 1.2:5; § 1.3:1,3	צורה	§ 1.2:4; § 2.3:20
correction	תקן	§ 10.1:2; § 10.2:1,7; § 10.4:5; § 10.5:1; § 10.6:3,4,6	תקן	§ 6.1:4
crooked (signs)	(מזלות) מעוותים	§ 2.2:2; § 2.15:2; § 3.3:2	(מזלות) מעוותים	§ 2.3:21
crooked (degrees)			(מזלות) מעוותות	§ 8.6:3
dark degrees	מעלות חשוכות	§ 2.6:2; § 2.12:1; § 2.12:14	מעלות חשוכות	§ 8.7:2
decans	פנים	§ 2.8:1–6	פנים	§ 3.9:4
degrees	מעלות	§ 1.1:1,4,5,6; § 1.2:2,3; § 1.3:8,9,10,11 <i>et passim</i>	מעלות	§ 1.2:4; § 1.3:3; § 2.3:5,8; § 2.7:4–8 <i>et passim</i>
degrees for phaera recta	מעלות גלגל הישר	§ 10.1:3; § 10.3:2; § 10.5:9,12,16		

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
degrees of the zodiac	מעלות גלגל המזלות	§ 10.2:2; § 10.3:2; § 10.4:1	מעלות גלגל המזלות	§ 2.3:8
dejection	קלון	§ 2.16:5–6,9,14; § 5.2:9	קלון שפלות	§ 2.4:10; 2.7:4–5,7; § 5.5:5 2.7:2
descendant	שוקעת	§ 3.4:3,8; § 3.5:10; § 10.3:4; § 10.5:3,15	שוקעת	§ 3.1:5,7
desiring soul	נפש מתאוה	§ 4.6:1;		
diameter	אלכסון	§ 3.1:3–6; § 6.2:1	אלכסון	§ 4.3:1; § 4.6:1–3
digit	מספר	§ 2.10:1	חשבון	§ 2.9:9
direct	לנהג	§ 10.3:2–5; § 10.4:4	לנהג	§ 6.2:11; § 8.5:6; § 8.6:2
direct (in its motion)	ישר	§ 5.2:8; § 7.3:4	ישר	§ 4.1:1; § 5.4:14
directions	ניהויים	§ 10.3:1–2; § 10.3:6; § 10.9:1–2		
distance	מרחק	§ 1.2:3; § 1.3:11; § 1.5:8; § 1.6:6; § 2.8:4; § 2.16:4 <i>et passim</i>	מרחק	§ 1.3:11; § 5.4:9; § 6.1:2; § 7.1:1; § 7.2:18; § 8.1:1
diurnal stars	כוכבי היום	§ 1.6:4	כוכבי היום	§ 2.8:8; § 5.3:21; § 7.2:17
dodeca-temoria	שנים העשר	§ 2.11:1,2	שנים העשר	§ 2.9:7
domain (of the Sun, Moon)	חלק	§ 2.5:2,3,4,5,9	חלק	§ 2.3:6; § 8.1:4
domain of burning	גבול השריפה	§ 1.5:2; § 6.2:5		
dry	יבש	§ 1.4:4,5,6; § 2.13:3; § 4.2:1,5; § 4.4:4; § 4.7:5; § 5.1:2,3	יבש	§ 2.1:4,12,14; § 2.2:7; § 2.4:19; § 2.5:4; § 2.8:1; § 5.1:14; § 5.2:5; § 5.3:4; § 5.5:1
dryness	יבשת	§ 2.6:1; § 3.4:5; § 4.2:1	יבשות יבושת	§ 2.3:2; § 5.3:21; § 5.5:8; § 2.1:12; § 2.3:2
earthy nature	תולדת הארץ	§ 2.13:4		
eccentric circle	גלגל המוצק	§ 2.5:1; § 4.4:1; § 4.4:3; § 5.2:6; § 5.3:4	גלגל המוצק	§ 2.5:1; § 4.4:1; § 4.4:3; § 5.2:6; § 5.3:4
	גלגל שמוצקו רחוק ממוצק הארץ הגלגל הגדול	§ 5.2:3; § 6.1:1		
ecliptic	חשב אפודת הגלגל	§ 1.2:1; § 1.3:3		
	חשב האפודה	§ 3.3:3; § 7.1:3; § 7.2:1; § 7.2:4		
	אפודת הגלגל	§ 7.1:6	אפודת הגלגל	§ 4.5:3

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
ecumene	הישוב	§ 2.1:4,6; § 5.4:6,7; § 2.6:1; § 5.2:1; § 7.1:7	הישוב	§ 2.1:7; § 2.3:5,8,21; § 2.5:3; § 2.7:11; § 4.4:1; § 5.8:1
epicycle	גלגל הקטן	§ 6.2:2; § 6.3:5; § 7.1:5	גלגל הקטן	§ 1.3:1; § 4.1:1; § 4.4:3; § 5.3:5; § 5.4:14
equal degrees	מעלות ישרות	§ 10.2:2; § 10.3:2; § 10.2:2; § 10.4:2,4; § 10.5:12,13; § 10.6:2–3	מעלות ישרות	§ 8.5:1; § 8.6:3
	מעלות שוות	§ 7.2:1; § 7.3:1;	מעלות שוות	§ 3.1:9
equal hours			שעות ישרות	§ 2.3:21; § 8.2:3,5,6,7
equator	קו הצדק קו היושר	§ 1.2:3; § 2.2:1; § 2.2:14 § 2.4:4	קו הצדק הצדק	§ 2.2:5 § 2.4:13
established in the ecliptic	בחשב האפודה נכונים	§ 3.3:3		
exaltation	כבוד	§ 2.6:2; § 2.16:1,4,7,8,9,11, 12	כבוד	§ 2.3:22; § 2.7:1,2,4,6,7,8,9; § 2.8:5,11; § 5.3:19; § 7.2:27
experience	נסיון	§ 1.4:1; § 1.5:5,6; § 2.2:17,20; § 2.4:2; § 2.13:6,7; § 2.16:7,13; § 2.18:1,3; § 3.6:18; § 4.2:6,10,12; § 4.5:7; § 4.6:1; § 5.2:7; § 6.2:4	נסיון	§ 1.1:5; § 1.3:2; § 2.1:5; § 2.3:10,17,19; § 2.5:3; § 2.6:7; § 2.9:2,5,7; § 4.3:9; § 5.1:12; § 5.2:13,22; § 1.4:1; § 5.3:13; § 5.5:12; § 5.6:4; § 5.7:8; § 5.8:4; § 5.9:2; § 6.1:4; § 6.6:1; § 6.8:3; § 7.2:9
falling (from the cardines)	נופל	§ 3.5:11; § 3.6:16	נופל	§ 3.1:12; § 3.2:1; § 4.1:5; § 6.2:7,10; § 6.6:1
<i>jardār</i> years	שנות אלפרדאר	§ 4.2:11; § 10.9:2	שנות אלפרדאר	§ 5.1:13; § 5.2:16; § 5.4:12; § 5.6:7; § 5.8:3; § 6.6:1
feminine	נקבה	§ 1.6:1,4,5; § 2.13:1; § 3.6:7; § 4.6:3; § 5.1:4	נקבה	§ 2.1:12; § 2.3:11; § 3.1:9; § 5.2:3; § 5.4:14; § 5.6:1; § 6.1:1; § 6.2:3,5,6,7,8; § 7.2:22
fiery nature	תולדת האש	§ 1.4:1,2; § 2.2:12	תולדת האש	§ 2.3:22
fifth element	תולדת חמישית	§ 1.5:7	תולדת חמישית	§ 2.1:1
fixed (sign)	עומד	§ 2.13:1	עומד	§ 2.2:3
four elements			הארבעה תולדות מוסדים הארבעה	§ 8.7:8 § 2.1:1
fraction	שבר	§ 1.1:1,2,4,5	שבר	§ 1.3:3
geometry	המדות	§ 2.6:3	חכמת המדות	§ 1.1:5
getting close	קירוב	§ 7.1:1		

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
good fortune	טוב/טובה	§ 5.1:1,2; § 8.1:8	טוב/טובה	§ 2.7:10; § 5.1:2; § 5.4:1; § 5.8:1; § 5.9:1,3; § 6.5:1; § 6.5:3; § 6.7:3; § 6.9:3; § 7.1:4,10; § 7.2:28; § 8.6:1
	מול טוב	§ 4.9:1	מול טוב	§ 4.12:5; § 5.1:2
governor	נִיד	§ 3.3:2		
great circle	גִּלְגֵּל הַגְּדוֹל	§ 2.12:3; § 6.2:2; § 6.3:5; § 7.1:4; § 8.1:6		
great years	שָׁנִים גְּדוֹלוֹת	§ 2.9:1; § 4.2:11; § 4.5:7; § 4.6:4; § 4.8:8;	שָׁנִים גְּדוֹלוֹת	§ 2.9:3; § 5.1:10,13; § 5.2:14–16; § 5.3:13; § 5.4:12; § 5.5:12; § 5.6:6; § 5.7:10
greatest years	שָׁנִים עֲצוּמוֹת	§ 4.2:11; § 4.3:5; § 4.5:7; § 4.6:4; § 4.8:8	שָׁנִים עֲצוּמוֹת	§ 5.1:11; § 5.4:12
Head of the Dragon	רֹאשׁ הַתַּלִּי הָרֹאשׁ	§ 2.16:9; § 5.3:4 § 6.3:2,5	רֹאשׁ הַתַּלִּי הָרֹאשׁ	§ 5.8:1 § 2.7:11,14; § 5.8:1,3; § 5.9:3,4
Head of the Dragon and its Tail	רֹאשׁ הַתַּלִּי וְהַזֶּנֶב	§ 2.16:9; § 5.3:1,3,4	רֹאשׁ הַתַּלִּי וְהַזֶּנֶב רֹאשׁ תַּנִּין וְזֶנֶב הָרֹאשׁ וְהַזֶּנֶב	§ 2.7:9,13 § 2.7:12; § 5.9:5 § 2.7:10
heat	חֹם	§ 1.4:2; § 1.5:10,11,12,14; § 1.6:1,3,4; § 2.2:1,3; § 2.4:7; § 2.13:12; § 2.14:1	חֹם	§ 2.1:2,3,7; § 2.3:3; § 2.8:3; § 5.1:4,14; § 5.2:4,5; § 5.3:2,3; § 5.4:2,17; § 5.5:2,4; § 8.7:8
hot	חֶם	§ 1.4:4,7; § 1.5:2,3,4,6,12,15, 16; § 2.2:1,2; § 2.7:2,3; § 2.13:3; § 5.1:2,3	חֶם	§ 2.1:3,4,11,13,14; § 2.2:7; § 2.3:1,11; § 2.4:12; § 2.5:4; § 2.8:4; § 5.1:14; § 5.3:3; § 5.4:1,7,15,19; § 5.5:1,9
house (mundane)	בֵּית	§ 3.2:5; § 3.5:1–11; § 3.6:1–18; § 4.1:5–7; § 4.9:1; § 8.8:8; § 9.2:1–3; § 10.1:2–5; § 10.2:1–7; § 10.1:2–5; § 10.3:2; § 10.4:4–7; § 10.5:1–17; § 10.6:2–5	בֵּית	§ 2.4:13; § 3.1:1–12; § 3.2:1–7; § 4.12:1–6; § 5.4:3–6; § 5.4:10; § 6.2:3,4,6,7,9; § 6.4:3; § 6.5:1–5; § 7.2:1,4,7; § 7.2:15; § 7.2:23,24,25,31
	מול	§ 3.6:1	מול	§ 3.2:2
house (planetary)	בֵּית	§ 2.2:14; § 2.3:4–8; § 2.4:1–12; § 2.5:1–12; § 2.6:3; § 2.7:1; § 2.2:14; § 2.13:2; § 2.13:5; § 2.15:6; § 4.2:2; § 4.5:3–4; § 4.8:2; § 5.1:3; § 9.3:2	בֵּית הַבֵּית הַטּוֹב	§ 2.3:7,12,16; § 2.4:1,2,5,8,10,17; § 2.5:1–9; § 2.6:1–7; § 2.8:2,4,8,9,11,12; § 4.9:1; § 4.10:1–7; § 6.9:1; § 7.2:15; § 8.1:1–2; § 8.7:6 § 2.4:10; § 7.1:4
house of dejection	בֵּית קֶלֶן	§ 6.2:9	בֵּית קֶלֶן	§ 2.4:10; § 2.7:7; § 4.5:5

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
house of detriment	בית שואה	§ 2.6:3	בית רעה	§ 2.4:10
house of exaltation	בית כבוד	§ 2.6:1; § 2.16:1–14; § 4.3:2; § 5.1:15	בית כבוד	§ 2.4:10; § 2.7:1–9; § 4.9:1; § 8.7:6
house of mourning			בית אבל	§ 6.2:6
incompatible	משונה	§ 3.2:9; § 3.6:16	משונה	§ 4.7:5; § 5.3:10
intersection	מחברת	§ 2.12:3,6; § 5.3:3; § 8.1:6	מחברת	§ 2.7:10; § 8.7:5
intersects			מתחבר	§ 1.2:6; § 4.9:4
judgments	משפטים דין	§ 2.18:2 § 2.18:2; § 3.1:1; § 6.3:1; § 8.1:1	משפטים דין	§ 2.3:10; § 2.7:12,14; § 5.4:9 § 4.9:2
judgments of the world			משפטי העולם	§ 2.9:7
keys of the Moon	מפתחות הלבנה	§ 6.3:6		
latitude	מרחב רחב	§ 7.1:8; § 7.2:2–4; § 10.1:4; § 10.2:4; § 10.4:3 § 7.1:8; § 7.2:2,3	מרחב רחב	§ 2.7:11,12; § 4.3:9,10; § 4.4:1; § 5.1:15; § 6.5:1 § 4.3:5; § 4.5:3; § 4.8:2; § 8.7:10
latitude plate (of the astrolabe)	לוח הארץ	§ 10.5:3, 15, 17; § 10.7:2, 5; § 10.8:2, 3, 5, 6, 7.	לוח הארץ	§ 4.8:2; § 4.9:5; § 6.5:3; § 6.5:4
least years	שנים קטנות	§ 2.2:16; § 4.1:11; § 4.5:7; § 4.6:4; § 4.8:8	שנים קטנות	§ 5.1:9,10; § 5.2:13,14; § 5.3:13; § 5.4:12; § 5.5:12; § 5.6:7; § 5.7:10
left aspect	מבט שמאלי	§ 10.4:6,7		
light (of the planets)	אור	§ 4.2:12	אור	§ 4.2:1
line of the lower midheaven	קו התהום	§ 30.4:8; § 3.5:3; § 3.6:2; § 10.4:5; § 10.5:2,9,12,13,15,16; § 10.7:7; § 10.8:3,4,7		
long (signs)			ארוכים	§ 2.3:5
lord	בעל	§ 9.3:4	בעל פקיד שליט	§ 2.8:8 § 2.4:20; § 5.1:12; § 6.7:1 § 6.2:5; § 7.1:4
lord of the ascending sign	בעל המזל הצומח בעל המזל העולה	§ 9.1:8 § 2.11:1	בעל המזל הצומח	§ 2.4:2

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
lord of the aspects			בעל המבטים	§7.8:3
lord of the black bile	בעל המרה השחורה	§4.2:3		
lord of the day	בעל היום	§4.2:10	בעל היום	§5.1:12
			פקיד על היום	§5.1:12
lord of the decan	בעל הפנים	§2.8:4,5		
lord of the exaltation	בעל הכבוד	§2.17:3	בעל הכבוד	§2.8:5
lord of the hour			בעל השעה	§6.7:2,3; §8.2:7; §8.4:1
lord of the (planetary) house	בעל הבית	§2.8:1,2,5; §2.15:6; §2.17:9; §3.6:13	בעל הבית	§2.4:18; §2.9:4; §3.2:5; §4.10:2,7; §7.9:1
lord of the nativity	מושל על מולד אדם	§1.5:14	ממונה על המולד	§2.1:5
lord of the sign	בעל המזל	§2.11:1,2; §2.17:5-7,9; §9.1:6	בעל המזל	§2.8:3,7,10
lord of the terms			בעל הגבולים	§6.8:2,3
lord of the triplicity	בעל השלישות	§2.7:1; §2.17:2,5,6; §3.6:19	בעל השלישות	§2.8:2; §2.8:5,9,11; §7.9:1
lot	גורל	§9.1:1; §9.2:2,3,6; §9.3:3	גורל	§7.1:1,3,4,5; §7.2:3; §7.3:3
lot of beauty			גורל החן	§7.2:28
lot of firmness	גורל המסעד	§9.2:3		
lot of fortune			גורל הטוב	§6.2:1,10; §7.1:5,7
lot of gathering			גורל הלקט	§7.2:5
lot of honor			גורל הכבוד	§7.2:27
lot of journey			גורל הדרך	§7.2:24
lot of Jupiter			גורל צדק	§7.1:8
lot of kingship	גורל המלוכה	§9.3:1		
lot of life	גורל החיים	§9.2:1	גורל החיים	§7.2:1
lot of Mars			גורל מאדים	§7.1:9
lot of Mercury			גורל כוכב חמה	§7.1:11
lot of poverty	גורל העוני	§9.1:4		
lot of prostitution			גורל הזנות	§7.2:21

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
lot of rain	גורל הגשם	§9.3:4		
lot of Saturn	גורל שבתאי	§9.1:3	גורל שבתאי	§7.1:6
lot of the absent	גורל התעלומה	§9.1:2		
lot of the body			גורל הגוף	§7.2:3
lot of the brothers			גורל האחים	§7.2.8
lot of the diseases			גורל התחלואים	§7.2.16
lot of the enemies			גורל האויבים	§7.2.31
lot of the estate			גורל הקרקע	§7.2.13
lot of the father			גורל האב	§7.2.10
lot of the journey by water			גורל על דרך המים	§7.2.25
lot of the lovers			גורל האוהבים	§7.2.30
lot of the male sons			גורל הבנים הזכרים	§7.2.15
lot of the males			גורל הזכרים	§7.2.22
lot of the merchandise			גורל הסחורה	§7.2.29
lot of the moon	גורל הלבנה	§9.1:1,2	גורל הלבנה	§7.1:1,11
lot of the mother			גורל האם	§7.2.26
lot of the second house			גורל הבית השני	§7.2.4
lot of the slaves			גורל העבדים	§7.2.19
lot of the sons			גורל הבנים	§7.2.14
lot of the Sun	גורל השמש	§9.1:2; §7.1:5,11		
lot of understanding	גורל הדעת	§9.1:5	גורל הדעת	§7.2:2
Lot of Venus			גורל ננה	§7.1:10
lot of women			גורל הנשים	§7.2.20

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
lots of the (mundane) houses	גורלות הבתים	§9.2:1	גורלות הבתים	§7.2:1
lunar months	לבנות	§1.1:4		
malefic	רע	§3.5:12; §5.3:2; §9.1:7,8	רע	§2.4:11; §4.11:5; §5.7:2,6; §5.8:2; §5.9:3,4; §6.3:11; §6.4:2
masculine	זכר	§1.6:1,3,4,5; §2.2:1; §2.17:6; §3.4:6; §4.6:7; §5.1:4	זכר	§2.3:11,16; §2.8:8; §3.1:10; §5.1:4,7,8; §5.3:20; §4.1:13,14; §5.5:4; §6.1:1; §6.2:3,6,8; §7.2:15,22
mean conjunction of Sun and Moon			מולד	§5.1:9
mean motion	מהלך שוה	§1.3:8	מהלך אמצעי	§5.1:9,11; §8.5:2
middle years	שנים אמצעיות	§4.2:11; §4.5:7; §4.6:4; §4.8:8	שנים אמצעיות	§5.1:10; §5.2:14; §5.3:13; §5.4:12; §5.5:12; §5.6:7; §5.7:9
midheaven	חצי שמים	§2.4:4; §3.4:1,3,8; §3.5:6,7,14; §10.2:5; §10.3:5; §10.4:5; §10.7:1,5; §10.8:1,2	חצי שמים	§2.2:1; §3.1:3,6; §3.3:3
	רום	§3.6:2		
minute	חלק	§6.2:1; §10.5:4,7,10,13,14; §10.6:2; §10.7:3; §10.8:1–3	חלק	§4.3:1; §5.4:12; §6.1:2,4; §6.3:2–4; §6.5:1–2; §8.2:6; §8.5:2; §8.7:4
	חלק ראשון	§1.1:6;		
misfortune	רע/רעה	§5.1:1; §5.3:1; §8.1:3,8	רע/רעה	§2.7:10; §2.4:11; §5.7:2; §5.9:3; §6.5:1; §6.8:2; §6.9:3; §7.1:4; §8.6:1
mixed	ממוסך	§1.4:7; §1.5:4; §2.2:10,13,20; §2.13:2	ממוסך	§2.3:23; §2.4:13; §2.7:4; §2.8:4; §5.1:14; §5.3:20; §5.4:16; §5.6:1; §5.7:1; §5.8:2; §8.7:8
moist	לח	§1.4:7; §1.5:1,15; §2.13:3; §4.4:6; §4.8:3; §5.1:2	לח	§2.1:4,11,13; §2.3:1; §2.4:12; §4.8:1; §5.2:6; §5.3:3; §5.4:1,7; §5.4:15
moisture	לחה	§1.5:9,10; §3.4:5	לחה	§5.1:14; §5.2:4,5,20; §5.3:4,6,9; §5.4:2,17,19; §5.6:4; §8.7:8
	לחות	§4.8:1,4;		§2.3:2; §2.4:18;
month	חודש	§2.2:17	חודש	§6.4:2; §6.5:2; §8.2:1,2,8,10

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Th</i>	<i>Chapter, section, passage</i>
native	נולד	§ 2.2:20; § 3.6:1,11; § 5.1:6,7; § 9.1:6,7; § 10.1:4	נולד	§ 2.1:5; § 2.4:2,12,20; § 3.1:2; § 5.2:17; § 5.3:14; § 6.1:1; § 6.2:1,11; § 6.4:2; § 6.5:1; § 6.7:3; § 7.2:8; § 8.2:5,9
nativity	מולד	§ 1.5:14; § 2.8:5; § 2.15:4; § 4.7:1	מולד	§ 2.1:5; § 2.5:10; § 2.6:7; § 5.4:5; § 6.1:1; § 6.3:1; § 6.9:2
nature	תולדת	§ 1.2:5; § 1.4:1,2,3,7; § 1.5:1,2,4, 6,7,9, 11, 15, 17; § 1.6:4; § 2.2:1, 12, 14; § 2.5:9; § 2.7:1,3; § 2.10:2; § 2.11:1; § 2.13:2–4; § 2.14:1,2; § 2.16:6,11,12; § 2.70:7,8; § 2.18:3,4; § 3.2:5,7; § 3.6:9,16; § 4.1:6,7; § 4.2:2,3,4,8; § 4.3:1,3,4; § 4.4:1,4,6; § 4.5:7; § 4.6:1,3; § 4.7:1; § 4.8:1,5,6,8; § 5.1:2,3; § 9.1:3–7; § 9.3:4		§ 1.3:2; § 2.1:1,7,10,11; § 2.2:2,7; § 2.3:3,4,22; § 2.4:4, 12, 17; § 2.6:7; § 2.7:2,4,7; § 2.8:4,10; § 2.9:6,9; § 3.2:1–8; § 4.12:2,3; § 5.1:4,10,14; § 5.2:4,5,17,22; § 5.3:2–21; § 5.4:1,10,13,16,17; § 5.5:4,5,9; § 5.6:2,4; § 5.7:1,2; § 6.1:5; § 6.4:2; § 6.8:2; § 7.1:2,23; § 8.7:8
ninth-part	תשיעי	§ 2.10:1,2,3	תשיעי	§ 2.9:9
nocturnal sign	מזלות הלילה	§ 2.13:1		
nocturnal stars	כוכבי הלילה	§ 1.6:4	כוכבי הלילה	§ 2.8:9; § 7.2:17
number	מספר	§ 1.1:2,5,6; § 1.2:4,16; § 2.9:2; § 2.13:7; § 3.2:2; § 3.2:4,9,12; § 4.2:11; § 4.5:7; § 7.2:1; § 9.3:1; § 10.6:3,4,5; § 10.8:6	מספר	§ 1.3:3; § 2.6:3; § 2.9:3; § 3.1:5; § 4.7:1,5; § 4.9:3; § 5.1:9,11; § 5.3:13; § 5.4:12; § 5.5:12; § 5.6:7; § 5.7:10; § 6.1:1–4; § 6.3:1–5; § 6.5:3; § 7.1:1; § 8.2:1–9
	חשבון	§ 1.1:1–4; § 3.2:1,4; § 4.1:2; § 4.2:11; § 7.1:5	חשבון	§ 4.7:1; § 5.5:6; § 8.4:3,4
orb	גלגל	§ 1.3:2,10; § 2.4:10,11,12; § 2.5:6–7; § 2.8:2–5; § 2.18:2; § 4.1:2,5; § 4.2:10; § 4.5:3; § 4.6:2; § 4.7:4; § 4.8:2; § 6.2:4	גלגל	§ 1.2:1,4,5; § 2.6:2,5; § 2.9:4; § 4.3:3; § 4.5:3; § 5.5:6; § 5.9:5; § 8.7:7
orb of the zodiacal signs	גלגל המזלות	§ 1.3:1; § 2.12:7–8 <i>et passim</i>	גלגל המזלות	§ 1.2:5–6; § 6.9:3; § 8.7:7 <i>et passim</i>
parecliptic	גלגל הדומה לגלגל המזלות	§ 5.3:3		
partner	שותף	§ 2.7:3,4; § 2.17:4,9; § 8.1:2	שותף	§ 2.8:12; § 6.7:1
path of darkness			דרך החושך	§ 2.7:5

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
perigee	שפלות (מקום)	§ 1.3:2; § 2.6:3; § 5.2:3; § 5.2:7	שפלות (מקום)	§ 1.3:1; § 4.4:3
perimeter			קו הסוכב	§ 4.6:1
pits	בורות	§ 2.12:14; § 8.1:7	בורות	§ 8.7:2
place of burning	מקום השריפה	§ 2.16:5		
planet	משרת	§ 1.3:2–4,6,12; § 1.5:1; § 2.5:1, 2, 4,7,11; § 2.8:3; § 2.9:1; § 2.12:14; § 3.1:1; § 4.2:6; § 4.7:3; § 4.8:3,6; § 5.1:1; § 6.2:4; § 6.3:4; § 9.1:7; § 9.2:2	משרת	§ 1.2:1,3,4; § 1.3:1; § 2.3:7,16; § 2.5:9; § 2.7:5,12,13; § 2.9:3; § 4.3:3,10; § 5.3:1,6,14,16,20; § 5.4:9; § 5.5:6; § 5.9:5; § 6.9:3; § 8.7:3,4,6,7,8
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reckoning	חשבון	§ 2.12:11,14; § 3.2:9; § 10.5:3,5,6,13,14; § 10.6:3,5; § 10.7:3		
recompense	גמול	§ 7.3:1		
red bile			מרה אדומה	§ 2.1:5; § 5.5:2
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<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Th</i>	<i>Chapter, section, passage</i>
revolution	תקופה	§ 10.5:20	תקופה	§ 6.3:1; § 8.2:8
revolution of the days			תקופת הימים	§ 8.5:1
revolution of the months			תקופת החדשים	§ 8.2:1; § 8.2:10
revolution of the signs			תקופת המזלות	§ 8.4:4
revolution of the world	תקופת העולם	§ 2.11:3		
revolution of the year			תקופת השנה	§ 8.2:7–9; § 8.5:3; § 8.6:2–3
revolving circle			גלגל המקיף	§ 6.3:2
right aspect	מבט ימני	§ 3.2:11; § 10.4:6		
rising times	מצעדים	§ 2.2:1,2; § 3.3:1; § 3.4:7; § 3.6:8; § 7.3:1; § 10.1:3; § 10.2:4; § 10.3:3; § 10.4:5,7; § 10.5:4,11,15,17,18; § 10.7:5; § 10.8:3,6,7		
ruler			מושל	§ 2.3:6; § 5.1:7,15,16; § 6.2:1,11
science of laws	חכמת המשפטים	§ 5.4:9		
season			תקופה	§ 2.1:6,7,8,9; § 2.9:9
seasonal hours	שעות מעוותות	§ 3.3:1; § 10.5:3; § 10.5:6–19; § 10.7:2–5; § 10.8:5	(שעות) מעוותות	§ 5.1:12; § 7.7:2; § 8.2:5–7;
seconds	שניים חלקי שעה מששים	§ 1.1:6 § 10.7:3		
sensitive soul	נפש מרגשת	§ 4.5:2		
short (signs)			קצרים	§ 2.3:5; § 4.8:2
sign (zodiacal)	מזל בית	§ 1.1:5; § 1.2:1–2; § 1.4:2–7; § 2.1:1–5; § 2.2:1–2 <i>et passim</i> § 2.10:1; § 5.1:3	מזל	§ 2.1:1,5,7,9; § 2.2:1–4; § 2.3:1,5,8,9 <i>et passim</i>
solar year	שנת החמה/השמש	§ 1.1:3; § 2.12:4,11	שנת החמה	§ 6.3:2
sphaera recta	גלגל היושר	§ 10.1:3; § 10.3:2; § 10.5:9,12,13,16; § 10.7:1,5; § 10.8:3,7	גלגל היושר	§ 6.5:2,4
			גלגל הישר	§ 1.2:7
star	כוכב	§ 1.2:1,4; § 1.3:2; § 1.4:4; § 1.5:11; § 2.2:12,14,18; § 2.6:2; § 2.12:8,14,15; § 4.2:12; § 8.1:7	כוכב	§ 1.2:3; § 2.1:2; § 2.3:15; § 2.4:3; § 2.6:7; § 2.7:4; § 4.3:4; § 5.7:7; § 8.7:3,5,7,9,10

<i>English</i>	<i>Ta</i>	<i>Chapter, section, passage</i>	<i>Tb</i>	<i>Chapter, section, passage</i>
station	מעמד	§5.2:8	מעמד	§4.3:8
straight (signs)	ישרים	§2.15:1–2; §3.3:2;		
succedent (house)	סמוך	§3.5:5,8,10; §3.6:10–12		
tail of the Dragon	הונב	§5.3:2	הונב	§2.7:11,14; §5.9:1,3,4
taste	מטעם טעם	§2.2:11; §2.13:3,5 §4.7:5	מטעם טעם	§2.2:7 §5.2:22; §5.3:15
temperate/ tempered	ישר	§1.6:4; §2.7:3; §2.17:7; §4.2:9; §4.3:4; §4.4:6; §5.1:2,3	ישר	§2.1:3; §2.3:23; §5.3:21; §5.4:6,10,16; §5.5:4,5; §6.7:2
term	גבול	§2.5:4; §2.9:1; §4.2:11; §4.3:2	גבול	§2.3:8; §2.9:1–3; §5.3:13; §5.4:12; §5.5:12; §5.6:7; §5.7:10; §6.8:1–3; §8.7:6
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triangle	משולש	§2.2:18; §3.1:5–6	צורה שלישיה	4.6:2
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tropical	מתהפך	§1.5:2; §1.6:5; §2.2:1; §2.10:4	מתהפך	§2.3:1; §2.9:9; §7.2:18
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week			שבוע	§8.2:4; §8.4:1–4
year	שנה	§1.1:4; §1.2:3; §1.3:7; §1.5:2; §2.1:2–6 <i>et passim</i>	שנה	§1.2:4; §2.4:10,11,17; §2.7:14; §5.1:10 <i>et passim</i>
zodiac	גלגל המזלות	§1.3:7; §10.2:2 §10.3:2; §10.4:2	גלגל המזלות	§1.3:3; §2.3:8 §4.4:1–2; §8.7:2
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