

Understanding the Length of Life: the Glosses on Plato of Tivoli’s Translation of the *Quadripartitum*

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Abstract

This article presents an edition and translation of the 12th-century glosses to chapter III.10 of Ptolemy’s *Quadripartitum*. It focuses in particular on their appearance as a continuous commentary in a late-14th-century manuscript. The article outlines the importance of the *Quadripartitum* in its Latin translations, and the centrality of chapter III.10 to medieval astrology. It explains the contents and scientific priorities of the glosses and discusses whether the glosses may be attributed to Gerard of Cremona, and whether they originally took the form of a lemmatised commentary. It explores the purpose of copying the explanatory glosses separately from the main text of the *Quadripartitum*, within the scholarly context of the late-medieval university. The edition collates the commentary against the glosses which survive in nine manuscripts, and presents a facing-page translation.

I. Introduction

Ptolemy’s *Quadripartitum* (*Tetrabiblos* in Greek) was the foundational text of medieval astrology. It survives, in whole or in part, in at least 103 copies, compared with 86 known for the *Almagest* (Project Ptolemaeus 2022). Nearly half of the extant Latin copies are of the mid-13th-century translation by Aegidius de Tebaldis; a slightly smaller number survive of the first Arabic-to-Latin translation, executed by Plato of Tivoli in 1138 (Minio-Paluello 2008, 32).

Despite the evident medieval interest in this text, there has been surprisingly little study of how the Latins read their *Quadripartitum*.¹ Where and how was it read? To what extent did it influence astrological practices? How did astrologers study the text in relation to other authorities, such as Albumasar and Alcabitius? These are just some of the questions that have, as yet, received comparatively scant consideration from historians of the astral sciences.

¹ Notable exceptions to this exist in the work of Giuseppe Bezzi (see, for example, Bezzi 1990), as well as in the introductions to some translations of Ptolemy’s text, such as Vuillemin-Diem and Steel (2015). There have also been valuable studies of individual astronomers who worked on Ptolemy’s text, such as Simon Bredon (see Snedegar 1999) or John Ashenden (Snedegar 1988). For a recent discussion of some issues relevant to III.10, see Avelar (2021).

When beginning to assess how later readers studied their Ptolemy, it is natural to begin by studying the commentaries and glosses on the *Quadripartitum*, some of which became authoritative in their own right. This article presents an edition and translation of one such, a collection of glosses on book III, chapter 10, presented almost as a commentary, which survives in Oxford, Bodleian Library MS Digby 57, ff. 165r-171r (henceforth Od). This is a late-14th-century copy, probably produced in Oxford. I will survey the incidence and possible authorship of these glosses, before turning to their unusual presentation in this unique copy. The article will discuss why their writer copied them separately from the main text, and what the selectivity of the copying, and their codicological context, can tell us about the copyist's astrological interests.

The separate appearance of the glosses, I argue, points to their authoritative status almost independent from the *Quadripartitum* itself. While not all readers could have understood them without Ptolemy's original text, there were certainly some scholars in late-medieval Oxford who could. For these scholars, the glosses may well have had a mnemonic function, serving as cues to help them recall details of a text they knew well. In addition, I show how the copying of the glosses was a thoughtful activity. While the original glosses sketch over theoretical matters and dedicate greater detail to calculations and worked examples—perhaps suggesting that the glossator had reasons to leave some matters obscure to the uninitiated reader—it is clear that the copyist wanted more background information. Finally, these collected glosses provide further evidence of the blurred boundaries between theoretical texts, glosses and other paratextual materials. While historians have studied such issues in relation to medieval reading of the classics, they have hitherto largely focused on grammar and rhetoric; this article points to the distinct characteristics of medieval reading and writing within a specifically scientific context. Study of these practices has the potential to shed important light on the daily life of the late-medieval universities (Clanchy 1993, 132–135; Reynolds 1996, 28–33).

II. *Quadripartitum III.10 and the Glosses*

Book III, chapter 10, is the longest chapter in Ptolemy's *Tetrabiblos*. It has aroused more interest—and more confusion—than most. It covers the subject of length of life in considerable detail. As will be discussed below, Ptolemy introduces a complex method enabling the length of a person's life to be predicted based on the configuration of the heavens at the moment of birth. He explains the doctrine at length, albeit not always transparently, with several worked examples.

It is hardly surprising that the scribe of Od chose this particular chapter to copy out most of the glosses. As Ptolemy himself wrote at the beginning of it: "The consideration of length of life takes the leading place among inquiries about events following birth, for ... it is ridiculous to attach particular predictions to one who, by the constitution of the years of his life, will never attain at all to the time of the predicted events." (Ptol. *Tetr.* 3.10 (Robbins 1940, 271).)² The chapter thus has significance beyond simply knowing an individual's lifespan; it gives meaning and reliability to other astrological calculations.

Of the thirty-three known copies of Plato of Tivoli's translation of the *Quadripartitum*, nine contain some or all of the same set of glosses. The earliest manuscript in which they appear is Pommersfelden, Gräflich Schönbornsche Schloßbibliothek (GSB), MS 60, dating from the late twelfth or early thirteenth century; the others range across the thirteenth and fourteenth centuries, with one from the mid-fifteenth century (Juste 2021a). They are as follows; the folio ranges reference the complete *Quadripartitum* text, followed by the extent of III.10, which will be discussed below:

Br = Brussels, Bibliothèque Royale, 18678-18681, ff. 59r-98v, 82r-85r (s. xiv)

Ca = Cambrai, Bibliothèque Municipale, 955 (853), ff. 41r-128v, 92v-99v (s. xiv)

Ce = Cesena, Biblioteca Comunale Malatestiana, Plut. S.XXVII.3, ff. 67r-93r, 82r-84r
(c. 1263)

Pa = Paris, Bibliothèque nationale de France, lat. 7302, ff. 1r-102v, 51v-62v (s. xv^{med})

Po = Pommersfelden, GSB, 60 (2633), ff. 1r-138r, 78r-88v (s. xii^{ex} or xiiiⁱⁿ)

Sa = Salamanca, Biblioteca Universitaria, 2051, ff. 37r-55v, 48r-49v (s. xiv¹)

Vp = Vatican, Biblioteca Apostolica Vaticana, Pal. lat. 1420, ff. 1r-34v, 20v-22v (s. xiii^{ex})

Vr = Vatican, Biblioteca Apostolica Vaticana, Reg. lat. 1285, ff. 103r-138r, 123r-126r
(s. xiii)

Vv = Vatican, Biblioteca Apostolica Vaticana, Vat. lat. 7616, ff. 1r-44v, 26r-29v (s. xiii)

In most of the manuscripts the glosses appear in the margins, often keyed to the main text with a range of *signes-de-rendu*; some shorter glosses appear between the lines of the main text. In Pa, the scribe wrote out the glosses with the main text, each gloss following

² Several of Ptolemy's (near-)contemporaries, such as Dorotheus of Sidon and Vettius Valens, showed an interest in the same issues.

the text it refers to in the same columns, but using a slightly smaller hand. In Ca, the scribe planned his task carefully, leaving an appropriate amount of space in the margins for the glosses. Thus on some pages (notably f. 96r), the main text occupies only a small section of the page, allowing the glosses to remain close to the text they refer to, and avoiding any need to compromise the quality of the copying.

Such careful *mise-en-page* makes it clear that these glosses were assigned authoritative status by copyists. Although their author cannot be identified with certainty, it is likely that he worked across a range of astrological materials. In their study of al-Qabīṣī's *Introductorius*, Burnett, Yamamoto and Yano (2004, 219–220) identified certain characteristic phrases which appear alongside some copies of the Latin translation of that text, as well as Abū Ma'shar's *De magnis coniunctionibus* and *Liber introductorii maioris*, and the *Liber erarum*. These appear with the *Quadripartitum* in MS Vr, as well as eight other manuscripts. Some of the distinctive turns of phrase that Burnett, Yamamoto and Yano identify appear frequently in the glosses to *Quadripartitum* III.10. The most notable are “Sensus huius litere est quod” (“the meaning of this passage is that”), or simply “Sensus est quod”, which often begins glosses, and “et hoc est quod dicit” (“and this is what he/it says”), which often ends them. Another formula they identify, “subaudi” (“understand”), appears in glosses to other chapters of the *Quadripartitum*.³

The glosses range in length from as few as ten words, to over five hundred. They clarify the meanings of ambiguous words, emphasise the steps or results of arithmetical processes, and highlight the differences between discrete examples or cases given by Ptolemy. The longest passages are self-contained commentaries, which restate Ptolemy's sometimes opaque calculation methods, pointing out variations depending on the position of the *hileg* (prorogator) and *interfector* (killer). In several places Ptolemy's methods are compared with those of the “moderns” (“moderni”), as well as with named authorities from the Islamic world: “Haly” ('Alī ibn Rīdwān), “Omar” ('Umar al-Ṭabarī), and “Alkabicius” (al-Qabīṣī).

In one of the last glosses in the chapter, the glossator writes:

Et post ea consideranda est differentia horum duorum servatorum minuendo scilicet unum ab alio, de qua debemus accipere talem partem qualis pars sunt hore longitudinis a medio celi de 6 ... Et hunc eundem modum ponit Alkabicius cum tractat de directione etcetera.⁴

In the section of al-Qabīṣī's *Introductorius* that deals with directions (IV.[12]), we find a gloss that begins:

³ e.g. gloss to III.4 (Ca f. 88r). Burnett, Yamamoto and Yano also note the incidence of “vult ut” (“[the author] means that”); a common formula in the *Quadripartitum* glosses (albeit not in III.10) is “vult intelligi.” See e.g. gloss to III.9 (Ca f. 92r).

⁴ ‘And after that we must consider the difference between those two noted [numbers], that is, subtracting one from the other, from which we must take a fraction equivalent to the fraction of 6 [hours which] the longitudinal hour is from midheaven ... And Alcabicius puts this the same way, when he considers direction, etc.’ Od, f. 171r.

Sensus huius est quod de residuo quod est inter duos significatores debet accipere talem partem qualis pars sunt hore longitudinis ab angulo predicto de .6. et hoc est quod dicit (Burnett, Yamamoto and Yano 2004, 219–220, IV.[12] p. 333; see also Gaida 2017, 135–136).

The author of the *Quadripartitum* gloss had thus surely read the glosses to the *Introductorius* (or vice versa), and may even have written them himself. If so, as Burnett, Yamamoto and Yano suggest (2004, 201–202, 219–220), this person was working soon after the *Introductorius* was first translated in the 1120s or 1130s, was familiar with the *Almagest*, and could read Arabic (Burnett 2001, 96–99).

This individual, according to Stefan Georges, was none other than Gerard of Cremona. In an as-yet-unpublished survey of the glosses on Gerard's translation of Ptolemy's *Almagest*, Georges shows that the author of at least some of the glosses was involved in the translation from Arabic and revision of the text. His firm and convincing conclusion is that the translator and glossator were the same person: Gerard himself. He also identifies phrases characteristic of the glosses, which include “sensus huius litere” and others discussed above. The commonalities of language, content and style between these glosses and those to the *Quadripartitum* make it likely that Gerard was the author of the glosses discussed in this article.

III. Practices of Astrological Calculation

Discussing the “directions” method for finding the length of life, John North (1988, 225) commented that “the procedure was wrapped up in so convoluted a way that one might be excused for wondering whether it was ever meant to be understood.” To add to the complexity of the method itself, one might also mention the impenetrability of Ptolemy's own language. “It would be impossible to commend his literary style or even the clearness of his exposition,” noted his twentieth-century translator, Frank Robbins. “He is fond of long, involved sentences and has a number of mannerisms, among them a fondness for the infinitive with the article and an almost Teutonic habit of piling up long strings of modifiers between article and substantive, which often results in sequences of two or even three articles. It would, under the circumstances, be almost impossible to make him crystal clear.” (Robbins 1940, xxiv) All this being the case, it is hardly surprising that the glossator chose to dedicate large expanses of marginal space to patiently paraphrasing Ptolemy's instructions relating to the system of prorogations. Equally, it is hardly surprising that, in places, the glosses do little to clarify the method. The method was explained to some extent by Robbins (1940, esp. 271n4, 279n3, 286n3, 292n2), drawing on the work of Auguste Bouché-Leclercq (1899, 411–419). More recently, it has been studied alongside several systems of “progressions” by Josep Casulleras and Jan Hogendijk (2012). The following discussion, therefore, highlights only a few features of the method, to permit a better understanding of the way it was glossed.

The first part of the process is to locate the significant places in the horoscope, namely the four prorogators, “or signifiers of life”: the Sun, Moon, ascendant and the Lot of Fortune. The Lot of Fortune is calculated from the positions of the Sun and Moon, in a process which may, according to the glossator, be subject to alteration at night.⁵ Any one of the four can be the *hyleg*, or prorogator, depending on their locations in the mundane houses and in relation to the planets.⁶ The interfactor, or destructive place, also needs to be identified, though as the glossator stresses, this is only the degree of the western horizon, modified in some cases by the aspects of planets to the prorogator. In general it seems that the glossator was reasonably satisfied with the clarity of Ptolemy’s explanation, and restricted himself to a few clarifications, particularly concerning the Lot of Fortune. He does not discuss the houses, though, as we shall see, Od includes an additional section giving some detail on this subject.

We find far more detail alongside the passages of *Quadruplicatum* III.10 dealing with the complex techniques of calculation. The longest gloss to the chapter comes at the beginning of the section where Ptolemy introduces his “general method”: a “universal rule” for computing how long it will take for the place of interfection to come to the place of prorogation.⁷ Here the glossator turns Ptolemy’s relatively sparse description, which precedes a series of four worked examples, into a step-by-step series of instructions more than five hundred words in length. He highlights the essential preparatory work to look up a series of ecliptic coordinates in tables of ascensions, and he explains the use of seasonal hours. He notes that the process differs based on which of four quadrants the prorogator is located in: between the ascendant and the midheaven; between the midheaven and the descendant point, and so on. Sometimes right ascensions should be used, and sometimes oblique ascensions. In addition, he emphasises the use of semicircles which run from the point where the meridian cuts the horizon in the north, to the equivalent point in the south, at various angles to the horizon. The principle, stated clearly in an earlier gloss, is that two points are equivalent if they lie on the same semicircle.⁸ The degree of the midheaven is then used as a reference point, and the differences in time between that and the two key points, the prorogator and interfactor (killer), are either added or subtracted, depending on their locations.

In the final third of the chapter Ptolemy provides four worked examples, explaining how to calculate the length of life when the prorogator is at the ascendant, at the midheaven, at the descendant, and at a point between those three cardines. His explanation here is the clearest part of the chapter, but the glossator nevertheless supplies a number of clarifications and expansions. These include giving more detail on how to work when the prorogator is beneath the horizon, clarifying the basic arithmetic, and, for the final case, supplying an additional example to show that the system remains symmetrical.

⁵ Ptolemy employed a consistent formula for the Lot of Fortune, but he was in the minority of astrologers in this respect. (Ptol. *Tetr.* 3.10 (Robbins 1940, 275).)

⁶ The method of deciding is summarised neatly by North (1988, 223).

⁷ Casulleras and Hogendijk (2012, 48–59, sections 3.1.3–3.1.4) divide this into the “Position Semicircle Method” and the “Hour Line Method.”

⁸ Explained in greater detail in Casulleras and Hogendijk (2012, 48–49).

If the glosses fail to make the system of prorogations crystal-clear, their author can hardly be blamed. Given that the system follows “a series of rules,” as John North (1988, 214–215) complains, “that are so intricate and seemingly pointless that at least a part of their function must have been to keep the dilettante at bay,” one may reasonably question the purpose of a gloss at all. When was it advantageous to make the method transparent for readers, and might it sometimes be disadvantageous? Such questions are not posed—and should not be answered—with cynical assumptions about the motives of astrologers, but with acceptance that Ptolemy’s method was potentially underdetermined, that attempts to simplify it might distort it, and that there might be important reasons *not* to make such difficult and potentially dangerous material comprehensible outside of a restricted circle of experts. We should therefore think carefully about who the intended readership for these glosses was, and what information the glossator aimed to provide for them. It may be significant, for example, that in this chapter the underlying theoretical foundations of the prorogative system receive less thorough commentary than the specifics of calculation. At any rate, we should bear the question of audience in mind as we move to consider the 14th-century copy of the glosses that removes them entirely from their original context.

IV. An Oxford Compilation of Astrology

Oxford, Bodleian Library MS Digby 57 is a quarto volume of 179 well preserved leaves, written in a few late-14th-century hands (Macray 1999, II.29; Juste 2021b, Falk 2016, 131–133). It appears to have been composed in four sections, but an early-14th-century contents page (f. 2*v) indicates that the whole volume was a unit from soon after its texts were copied. It changed hands several times in Oxford; the names of three fifteenth-century owners are recorded on a flyleaf (f. 1*v), including the rector of Exeter College who sold it in 1468. In the early 17th century it belonged to the Oxford astrologer and collector Thomas Allen, who bequeathed most of his manuscripts to Kenelm Digby (Watson 1978).⁹

The first three sections of the book contain mainly materials of mathematical astronomy, chiefly tables and works on instruments. It contains the double-entry tables of planetary latitudes and longitudes known as the “Oxford Tables,” with mean motions starting in 1348.¹⁰ It also contains tables of syzygies for 1376–1390 (111r–118v), and an almanac of eclipses for the same date, calculated for the meridian of Oxford (119v–120r). Following this are tables of equations, which reference instruments including Richard of Wallingford’s *Albion*, and a treatise on an equatorium, beginning *Quia nobilissima scientia astronomie*, which may be a description of an instrument still extant at Merton College, Ox-

⁹ Allen wrote a commentary on the *Quadruplicatum*, which survives in Bodl. MS Ashmole 388, ff. 1r–117r (Juste 2022).

¹⁰ North (1977) remains an essential introduction to the Oxford Tables. For more recent discussion, see Chabás and Goldstein 2003, 2016.

ford (North 1976, I.248–401; Falk 2016).¹¹ The third section contains one astrological text (137v-141v), a reworking of Raymond of Marseille’s *Liber iudiciorum* known as the “Leicester *Judicia*” (Burnett, 2019). The final item in the third section (142r-143r) is an extract from Gerard of Cremona’s preface to his translation of the *Almagest*, together with a partial chapter index.

The fourth section of the book contains texts of astrological interpretation, all but the last in a single hand. These are as follows (numbered as in Macray’s 1883 catalogue of Digby manuscripts):

15. 144r-145v. A near-complete copy of Robert Grosseteste’s *De impressionibus aeris* (TK 57i; Baur, 1912, 41–51).
16. 145v-151v. Extracts from Roger of Hereford’s *De iudiciis astrorum* (TK 1425i; French 1996, 465–475).
17. 151v-161r. Extracts from Albohali (Abū ‘Alī al-Khayyāt) on nativities (*Kitāb al-Mawālid*), translated by Plato of Tivoli. These are mostly from chapters 37–48, but are somewhat disordered (Albohali 1549; Dykes 2009, 227–332).
18. 161r-165r. A treatise, entitled “De cadentibus in quaque infirmitate luna existente in quoque signo”; beginning “Cum infirmitas acciderit aliter cum fuerit luna in ariete.” It is attributed here to Albohali (TK 309e; cf Dykes 2011, 179–83; see also Burnett 2006).
19. * 165r-171r. Collected glosses from *Quadruplicatum III.10*, beginning “Cap. 10 De spacio vite. Sensus huius litere est quod vita continuator” (TK 1429c).
20. 171r-176v. An introduction to astrology, beginning “Ad honorem dei et ad habendum cognitionem iudiciorum astrologie, oportet primo narrare naturam zodiaci qui dicitur circulus.” (TK 43j). This was attributed to the Carmelite friar Nicholas of Lynn by Thomas Tanner, but there is no evidence to support this attribution (Tanner 1748, 546; Thomson 2011, 64–66).
21. 176v-178r. Extracts amounting to about half of Pseudo-Ptolemy, *De imaginibus super facies signorum* (TK 1015j; Boudet 2008).
22. 178r-178v. A series of notes, beginning “Nota quod locus lune in nativitate fuit ascendens in concepcione.” Ending “hic limpoldus.” At the bottom of 178v are the opening eight lines of Messahala, *Libellus de intentionibus secretorum astronomiae* or *De cogitationibus ab intentione*, beginning “Cum astrorum scientia difficilis fuerit” (TK 284; Thorndike 1956, 57). The remainder of the treatise has been lost.
23. 179r-179v. A quire comprising seven leaves of lighter parchment has been inserted, of which only the first leaf has been written on. This carries two short extracts of astro-medical texts. One (179r) is in a contemporary but more current hand than the earlier texts; the other (179v) appears to be in the same hand as items 15–22.

¹¹ The introduction to this treatise is taken from that by John of Lignieres, but after the introduction they differ substantially.

Item 19 contains the glosses to *Quadripartitum* III.10. Of the 76 standard glosses to the chapter, 44 are present here. These include all of the more significant items of commentary. The 32 omitted consist of the first seven to the chapter, the last seven, and a haphazard set scattered throughout (including a cluster of six towards the middle). The omitted items are all relatively short: all but one have fewer than fifty words (and that one is only 86).

What is most striking about the presentation in this manuscript is that the text of the *Quadripartitum* itself is not present, and that the glosses have been written out as a continuous text, giving the appearance of a commentary. Indeed, that is what all cataloguers have hitherto assumed that it was.¹² The glosses are often preceded by a lemma consisting of a few words from the main text, but this is not always present. Where lemmas are present, they are not consistently indicated as such. We frequently find a double solidus mark (//) between glosses, but those are not used consistently, and sometimes they appear part-way through a gloss. The same is true of *litterae notabiliores*, which are often rubricated.

It is possible that the glosses were originally a single commentary. This, Stefan Georges believes, is what occurred with Gerard of Cremona's glosses to the *Almagest*: A continuous stand-alone text, entitled the *Notule Almagesti*, survives in four manuscripts.¹³ Georges describes "one big lemmatised commentary, i.e. a commentary which moves closely alongside the text explaining one passage after the other, each of which is quoted by its beginning." (Georges n.d.) Although the relationship between this and the glosses he surveys is complex, Georges argues that the continuous commentary came earlier, and that the glosses mostly consist of—sometimes shortened—excerpts from it.

Could the same be true of the *Quadripartitum* glosses? If they are by the same author as the glosses/commentary to the *Almagest*, as seems likely, it must be possible that they started out in the same continuous form. However, unlike the commentary to the *Almagest*, the unique text in Od is incomprehensible without the main text of the *Quadripartitum*. Although the longer glosses are somewhat intelligible as freestanding notes, the shorter ones—for instance, "That is, with these 58 parts the start of Gemini comes to the midheaven"—make no sense at all.¹⁴ Crucially, this and other short glosses are presented without a lemma. If, as in the *Almagest*, a stand-alone commentary was split and abridged into bitesize glosses, perhaps by Gerard of Cremona himself, what we find in Od seems most likely to be a commentary that has been (re)assembled from the separate glosses.

We must ask what the purpose was of copying the glosses separately from the main text of the *Quadripartitum*. It is possible that they were copied more or less accidentally, by someone who had little or no understanding of the material. The relatively high rate of scribal errors, which make some phrases astrologically incomprehensible, would support such an assumption. However, it seems more likely that the glosses were deliberately abstracted by an astrologer who wanted them for his own personal reference, and perhaps already had a copy of the *Quadripartitum*. Such a scholar might know the main text well,

¹² Macray (1883, ed. 1999, 61) described it as "an astrological excerpt from some anonymous commentary" ("Excerpta astrologica ex anonymo quodam commentario: [qu. in Ptolomaei Quadripartitum ?]").

¹³ Madrid, Real Academia de la Historia MS 97, 2r–138v; Paris, BNF MS lat. 7266, 1v–47r; Vatican, BAV, Vat. lat. 3100, 1v–109r; Vatican, BAV, Vat. lat. 6795, 2r–97v.

¹⁴ "id est cum istis 58 partibus veniet principium Geminorum ad medium celi," f. 170r.

and thus have less need to demarcate the glosses. Placed within the codex alongside other short texts on related material, the abstracted glosses are consistent with the image of an Oxford astronomer compiling a collection of useful materials, in a notebook that made more sense to its author than to any stranger, then or now.

Recent work by historians of scholarship has emphasised how mnemonic schemes could function to link written texts with memorised materials.¹⁵ While it is perhaps implausible to suppose that a scholar would memorise the *Quadripartitum* in the same way as monks routinely learned the complete set of psalms, we may reasonably suggest that a learned astrologer would know Ptolemy's work well enough to remember what each gloss refers to (or, if he was reading the glosses alongside a copy of the original text, could quickly find the relevant passage). Memorised cues could function in the same way as the impressive repertoire of *signes-de-rendre* we find in better quality copies of the *Quadripartitum* (above all Ca), and the lemmas that are included for the majority of glosses could jog the reader's memory.

There were certainly scholars in 14th-century Oxford with sufficient knowledge of astrology to make use of such abstracted glosses. The work of William Merle, John Ashenden and William Rede, to name but three from the decades around 1350, testify both to intense interest in the subject in and around Merton College (Snedegar 1988). They also exemplify creative practices of textual scholarship. A contemporary of theirs, Simon Breton, collected two translations of the *Quadripartitum* (by Aegidius of Tebaldis and William of Moerbeke) together with Haly's commentary. He "glossed" these by copying out sections of Plato of Tivoli's translation in the margins, adding a short proemium, possibly of his own composition.¹⁶

Such practices highlight that the boundaries between new and copied texts, between primary works and commentaries or glosses, could be blurred. We have already noted that the space allotted to the glosses in some copies of the *Quadripartitum* indicates that the glosses were ascribed an authority almost equal to that of Ptolemy himself. The inclusion of references to famous names like al-Qabīṣī would surely have heightened their power. In general, one must not assume an automatic hierarchy of authority between the centre of the page and its margin. In some cases, glosses could be seen as more important than the text they interpreted (O'Donnell 2017, 17). More commonly, the presence of glosses might confer prestige on the main text, or could be used as signposts, their roles overlapping with rubrics and tituli. At any rate, there was certainly sufficient reason to copy the glosses by themselves, and we can assume that they would have been useful to their scribe, whether alongside a copy of the *Quadripartitum* in another codex, or in conjunction with his memorised understanding of that text.

In place of the omitted glosses at the beginning and end of the chapter, we find different commentaries that do not seem to be present in any other manuscript. The one at the beginning is almost five hundred words long. It summarises some of the same material that is found in the absent glosses, adding some basic astrological guidance such as the fact that

¹⁵ See, for example, Carruthers 2008, 99–106.

¹⁶ Oxford, Bodleian Library MS Digby 179; Vuillemin-Diem and Steel 2015, 3–6.

the first house begins five degrees above the horizon, and listing the houses in order of their power. It begins with the characteristic formula “Sensus huius litere,” which may mean it was copied from some unidentified text by the same author as the rest of the glosses. However, in general this and other characteristic phrases appear inconsistently across different manuscripts, in some cases only being found in later copies; it could have been added later by someone imitating the style of the original glossator.¹⁷ The final passage of commentary, just a hundred words long, likewise largely re-emphasises material found earlier; it begins with a simple “Nota.” Such theoretical and recapitulatory additions highlight the thoughtfulness of the copying process.

V. Editorial Practices

The edition of the Latin text largely follows the “Transcription Principles for authors” of the *Ptolemaeus Arabus et Latinus* project. Since this article arises from research on Od *qua* manuscript and material text, with less attention to the status of the glosses to chapter III.10 within the *Quadruplicatum* as a whole, it was natural to make Od the base text for an edition and translation. However, it must be acknowledged that Od is a late, unreliable copy, even of those glosses it does include. As the existence of other glosses came to light, it seemed sensible to correct the Od text from older or better copies (or, occasionally, to correct the most obvious errors of Latin grammar, particularly in the first 25 lines where Od is the unique witness). Thus what is presented here is a composite text, since none of the manuscript copies is adequate in accuracy, legibility or completeness. Where I have made corrections or insertions to the base text, those are marked with [].

The order of glosses in Od does not always perfectly match the order of the glossed *Quadruplicatum* passages. This is noted where relevant.

Apart from Od, the main manuscripts used for the edition were Ca, Ce and Po. Po is the oldest witness, and a good quality copy. Ca is a very fine copy, but not all the text was visible in the digital images available for this study; it was therefore supplemented with Ce, which is textually almost identical. I have noted differences between the witnesses, but have ignored minor transpositions and small orthographical differences (including the very widespread variation in the spelling of *hyleg/hileg/yleg/alhileg* etc.). Occasionally such alternative spellings appear as part of more significant variants; these will give curious readers an indication of their range (including the use of the Italianate C in some copies). The glosses which Od omits, but are present in other manuscripts, are given in the Appendix, together with their lemmas.

I have maintained the spelling used in Od, but have expanded abbreviations using conventional spelling (including using *-ti-* where it is not clear whether a *t* or *c* is used). For ease of reading I have distinguished consonant *v* from vowel *u*. To enhance readability I have inserted punctuation into the Latin, but have not added paragraph breaks; this is to emphasise the codicological context of a running text, which is such an important feature

¹⁷ e.g. the first gloss in the chapter, with lemma “Primum est vite sermocination”, which does not appear in Od.

of Od. For the same reason, I have included the // signs where Od has them, in addition to the modernised punctuation. The breaks between glosses are made clear in the parallel translation.

The English translation was made on the basis of the composite text. Like the texts it translates, it is imperfect but, one hopes, mostly comprehensible. The Ptolemaic lemmas, where they appear, are marked in bold (in both the English and Latin). Each gloss is laid out as a discrete paragraph in the translation; this is intended to make their varying lengths clear.

VI. Text and Translation

The Latin text and English translation are set on facing pages, starting from the following page.

Latin Text

[165r] Capitulum 10 de spacio vite. Sensus huius litere est quod vita continuatur et durat per loca [ylegiorum]¹ et per planetas eadem loca disponentes, id est in eisdem locis maiorem dignitatem habentes. Et loca vitam abscindentia sunt loca planetarum contrariorum ylegiorum, unde convenit ut quantitas vite sit tanta quantum est inter yleg et locum intersectoris sive abscisoris de gradibus equinoctii; linea enim equinocialis est que facit continuare et durare omnem [generacionem].² Et linea zodiaci facit generationem et corruptionem. Loca alhyleget sunt illa loca in quibus convenit planeta dispositio ipsius alhyleg cum [loco]³ alhyleget: sunt signum ascendentis, quod est a 5 gradibus qui sunt supra orizontem usque ad 25 gradus qui sunt sub orizonte de ascidente, et (nota) domus que est in dextro ascendentis et in sextili eiusdem, et medium celi que est in quarta eius super terram, et (nota) domus que [est] in trino ab ascidente, et septima domus que est in oppositio[ne] ascendentis. Unde divisio domorum est ut fuit qualibet domus 30 graduum quorum 5 precedent locum initii domus et 25 gradus sequuntur initium domus // In ordinatione tamen 12 domorum quis earum sit [maioris]⁴ virtutis est 10 domus omnibus preferenda quia totum virtus eius est apparet super terram equaliter sine aliqua perturbatione // Deinde ascendens // Deinde undecima // Deinde occidens // Deinde 9 domus. Et iam prius dicta sunt loca alhileg: post 9 domum est 4 maiorem posse et virtutis forcioris // Deinde 5 // Deinde 2a // Deinde 8a [165v] Deinde 3a // Deinde 12a // Deinde 6 sicut sequuntur in figura. Item 4 res principales sunt alhileg sive signatores vite que sunt Sol, Luna, ascendens nativitatis et pars fortune. Et planetae dispositores sunt maiorem vim habentes in locis istarum 4 rerum, unde quando principalis alhileg non est aptus ad disponendum [vitam]⁵ nati, planeta maiorem vim habens in loco alhileg dum tamen idem planeta sit in loco apto pro alhileg erit alhyleg. Verbi gratia ut sit si gradus coniunctionis Solis existens in domo Saturni et in eius triplicitate et in loco apto ut sit yleg, et Saturnus, quoniam est dispositio Solis, in hoc statu erit in 10a domo vel in aliquo locorum aptorum pro yleg, et quando sic invenerimus convenit ut accipiamus Saturnum pro yleg vite Solis id est loco Solis quoniam habet dominium supra Solem.⁶ //

¹ ylegiorum] plegiorum Od

² generationem] gnerationem Od

³ loco] loca Od

⁴ maioris] maiorum Od

⁵ vitam] vita Od

⁶ Lines 1-25: Sensus ... Solem] *om.* CaCePo

English Translation

Not For each gloss, the first footnote to the translation gives a short lemma, i.e. the phrase of the *Quadruplicatum* that is being glossed, where copyists marked *signes-de-renvoi* in the manuscripts.

[165r] Chapter 10. On the length of life. The meaning of this passage is that life is prolonged and lasts through the places of prorogation and through the planets that rule those places; that is, that have greatest dignity in those places. And the places where life is curtailed are the places of the planets opposite the prorogator [*hyleg*], whence it follows that the quantity of life is as much as there is between the prorogator and the intercident—or cutting-off—place, in degrees of the equator, for it is the equinoctial line that prolongs and makes each generation endure. And the zodiacal line causes generation and corruption. The places of prorogation are those places where a planet ruling the same prorogator comes to the place of prorogation: they are the sign of the ascendant, which is from the 5 degrees which are above the horizon up to 25 degrees below the horizon from the ascendant, and (note) the house which is to the right of the ascendant and in sextile to it, and the midheaven, which is in quartile to it above the earth, and (note) the house which is in trine from the ascendant, and the seventh house which is in opposition to the ascendant. Whence the houses are divided; that is, each house is 30 degrees, of which 5 precede the place of the start of the house and 25 degrees follow the start of the house. // In the order, however, of which of the 12 houses have greater power, the 10th house is to be preferred to all others, since all its power is apparent equally above earth without any interference. Next, the ascendant, then the eleventh, then the setting, then the 9th house. The prorogative places have already been mentioned: after the 9th house, the fourth is of greater power and stronger virtue; then the fifth, then the second, then the eighth; [165v] then the third; then the twelfth; then the sixth, as they follow in the figure.¹ And four principal things are the prorogators, or signifiers of life, which are the Sun, the Moon, the ascendant at birth, and the Lot of Fortune. And the ruling planets are those having most power in the places of those four things; whence when the principal prorogator is not suitable to grant life to the newborn, the planet having most power in the prorogative place, provided that the same planet be in a place suitable to be prorogator, will be prorogator. So, for instance, if the degree of Solar conjunction is in a house of Saturn and in its triplicity, and in a suitable place to be prorogator; and Saturn, since it is a dispositor of the Sun, in that state will be in the 10th house or any place suitable for a prorogator, and when we find it thus it makes sense for us to take Saturn for the prorogator of life of the Sun; that is, in place of the Sun, since it has dominion over the Sun. //

¹ No such figure appears in any of the surviving manuscript copies.

Hic¹ ostendit que loca possunt esse² alhileg et³ vult ostendere que⁴ planetarum cum fuerint in illis debeat⁵ habere dominium super alhileg. Et dicit quod sunt 5.⁶ Sol, Luna, ascendens, pars fortune et post istos planete que disponunt illorum⁷ loca. Verbi gratia in Sole: quia si Sol fuerit⁸ in domo duodecima vel octava [in]⁹ quibus non potest esse¹⁰ yleg et fuerit in domo et triplicitate Saturni et Saturnus fuerit in loco apto yleg ut pote in decima tunc Saturnus erit yleg. **Partem igitur fortune:**¹¹ Sensus huius literae¹² est quod quot gradus erunt semper inter Solem et ascendens tot erunt¹³ inter Lunam et partem fortune; et hoc idem¹⁴ provenit nobis quod provenit illis qui in nocte accipiunt illud quod est inter [Lunam et Solem];¹⁵ et proiciunt ab ascendentे retro. Moderni autem aliter faciunt. Dicunt vero¹⁶ quod in nocte ascendens dicitur ascendens Lune et pars fortune dicitur ascendens Solis; et ideo¹⁷ in nocte accipiunt quicquid¹⁸ est inter Lunam et Solem et proiciunt ab ascendentе secundum successionem signorum; et tunc ita se habet gradus Lune [ad]¹⁹ ascendens, ut²⁰ gradus Solis ad partem fortune. Dicit Haly quod isti male faciunt, eo quod non servant naturam rerum²¹ et astrologiam. Nam in natura rerum plus operatur Sol quam Luna vel aliquis planetarum, et secundum astrologiam omnes planete ligati sunt cum Sole quare ascendens in die et in nocte non est nisi per²² Solem. Hic videtur [velle]²³ Ptholomeus quod Sol sit yleg sub terra sed in oppositione [locorum]²⁴ [166r] in quibus est super terram prout habetur in Alkabicio [et]²⁵ in Omar²⁶ //

¹ Hic] Postquam CaCePo

² possunt esse] possent esse Po possunt Ca

³ et] om. CePo

⁴ que] qui CaCe

⁵ debeat] debent Ca

⁶ 5] adds scilicet Po

⁷ disponunt illorum] dispositionem illorum Ca disponunt super illorum Po istarum dispositionum Ce

⁸ si Sol fuerit] Sol Ca

⁹ in] om. Od

¹⁰ esse] om. CaCe

¹¹ Partem igitur fortune] om. CaCePo

¹² huius literae] om. Po huius CaCe

¹³ tot erunt] adds semper CaPo tunc erunt semper inter Ce

¹⁴ idem] quidem Ce

¹⁵ Lunam et Solem] Solem et Lunam Od

¹⁶ vero] enim CaCe

¹⁷ ideo] om. Po

¹⁸ quicquid] quidem Po

¹⁹ adj] a Od

²⁰ ut] sicut se habet Po

²¹ natura rerum] naturis rerum CeCe rerum naturis Po

²² per] om. Po

²³ velle] om. Od

²⁴ locorum] lorum Od

²⁵ et] etiam Od

²⁶ Omar] Aomar unde licet superius dixerit quod videlicet sub terra est aptum ad hic ut sit locus hyleg. Intelligendum est in nativitate diurna, aliter non possent dictam (sic) sua similiter stare. Hali tamen ponit solummodo Solem sub terra in 9 gradu ante qui loca descenderunt et in 29 gradus ascendentis qui adhuc oriendi sunt Po

Here¹ he shows which places can be prorogator and aims to clarify which of the planets, when they are in them, must have dominion over the prorogator.

And he says that there are five: the Sun, the Moon, the ascendant, the Lot of Fortune; and subsequently those planets which rule their places. For instance, in the case of the Sun: if the Sun is in the 12th or 8th house, where it cannot be prorogator, and it is in a house and triplicity of Saturn, and Saturn is in a suitable place to be prorogator, such as in the 10th, then Saturn will be the prorogator. //

So the Lot of Fortune.² The meaning of this passage is that however many degrees there are at any time between the Sun and the ascendant, there will be the same number between the Moon and the Lot of Fortune; and we obtain the same result as those who at night take what is between the Moon and Sun,³ and measure backwards from the ascendant. However, the moderns work differently.⁴ They say, indeed, that at night the ascendant is called the Lunar Ascendant and the Lot of Fortune is called the Solar Ascendant; and therefore at night they take whatever is between the Moon and Sun and project from the ascendant in succession of signs; and so one then has the degree of the Moon from the ascendant, just as the degree from the Sun to the Lot of Fortune. Haly says that they do this incorrectly, in that they do not respect the nature of things, and astrology. For in the nature of things the Sun is more effective than the Moon or any other of the planets, and according to astrology all the planets are bound to the Sun, hence the ascendant in daytime and at night is not other than through the Sun. //

Here⁵ Ptolemy seems to want the Sun to be the prorogator below the Earth but in opposition to the places [166r] where it is above the Earth, as we have in Alkabicius and in Omar.⁶ //

¹ “eorumque locorum dispositores.” [This and subsequent footnotes refer to the phrase of the *Quadruplicatum* being glossed.]

² “eadem erit societatis figure qualitas.” This passage is an addition to Ptolemy’s text.

³ In astronomical texts, measurements are generally taken along the ecliptic in succession of signs, so the order of “Moon and Sun” does make a difference.

⁴ See, for example, Albumasar ed. Lemay 1995–1996, VIII.6, V.369, 1675–1677; cf. al-Qabisi ed. Burnett, Yamamoto and Yano 2004, V.6–9.

⁵ “In nocte vero convenit ut Lunam primitus eligamus; postea solem.”

⁶ Omar 1551, 120.

Modo dicit quod si duo vel 3 equales fuerint [fortiores]¹ quis sit proponendus.² Fortiora loca ut diximus [sunt]³ medium celi postea ascendens etcetera⁴ // Duo alahiz sunt⁵ quorum unum est et est diurnum cum aliquis planetarum 5 habuerit plures⁶ auctoritates in loco Solis et⁷ ascendentis et gradus coniunctionis. Et alterum est et est nocturnum cum aliquis planetarum habuerit plures auctoritates in loco⁸ Lune et partis fortune et gradus preventionis preterita.⁹ Cum ergo contigit¹⁰ quod aliquis planetarum fuerit in loco apto yles et cum¹¹ habuerit in predictis duabus allihiz et¹² in predictis locis plures auctoritates, tunc ipse preferendus est luminaribus in alhileg. Notandum etiam est¹³ quod moderni dicunt quod dominus loci hileg semper debet ipsum¹⁴ aspicere ad hoc ut ille sit hileg. Ptholomeus vero¹⁵ hoc non considerat. Sensus huius literae¹⁶ est quod gradus qui tantum interficiunt secundum hanc speciem scilicet que fit retro est gradus occidens et nullus alias; [id est]¹⁷ natus vivet quoisque yleg pervenerit ad gradum occidentem secundum directionem et tunc morietur. Sed gradus stellarum que applicantur vel testificantur ipsi hileg tantum addunt ac¹⁸ minuunt ipsi numero [annorum]¹⁹ que dat hileg, scilicet usque dum occidat. Et dicit quod bone addunt et male minuunt et hoc est quod dicit²⁰ // Item **ad locum alhileg ipse non eunt** // Ex hac litera habetur quod quando alhileg dirigitur secundum successionem signorum tunc gradus planete perimentis vadit ad locum hileg et quando dirigitur ad contrarium successionis signorum tunc hileg vadit ad loca perimentium et propter hoc planete que fuerint inter alhileg et occidentem²¹ non interficiunt.²² **At ille que superaddunt Fortune.** Addunt et stelle fixe²³ que sunt de complexione Iovis et Veneris si²⁴ localiter assint²⁵ et nulla vel parva fuerit in eis latitudo, sed sint in zodiaco.²⁶

¹ fortiores] vel fortune Od

² Modo ... proponendus] *This gloss om.* Po

³ sunt] super Od

⁴ Fortiora ... etcetera] *This gloss om.* Po

⁵ sunt] sint Ca

⁶ habuerit plures] planetes habuerit Po

⁷ et] vel Po

⁸ loco] domo Ca

⁹ preterita] predicta Ce

¹⁰ contigit] contingit CaCe

¹¹ cum] om. Po

¹² et] id est CaPo

¹³ etiam est] est Ca etiam Po est etiam Ce

¹⁴ debet ipsum] ipsum locum debet Po

¹⁵ vero] om. Ca

¹⁶ huius literae] om. Po

¹⁷ id est] om. Od

¹⁸ ac] vel Po aut Ce

¹⁹ annorum] aliorum Od

²⁰ Et hoc est quod dicit] fortune addunt et stelle fixe que sunt, sunt de natura Jovis et Veneris vel complexione si loca qualite assint et nulla parva fuerit in eis latitudo set sint in zodiaco Po

²¹ occidentem] adds vel radii Po

²² interficiunt] adds sed addent vel minuent fortune addent et stelle fixe que sunt de natura Jovis et Veneris et sint localiter radiantes et nulla sit eis latitudo vel parva sed sint in zodiaco Po

²³ fixe] adds et Ca

²⁴ si] scilicet Ca

²⁵ assint] adsint CaCe

²⁶ Fortune addunt ... zodiaco] *This gloss om.* Po, but Po adds much the same information to two previous glosses (see notes above).

Now¹ he says that if two or three stronger ones are equal, which one ought to be preferred. //

The² strongest places, as we said, are the midheaven, then the ascendant, etc. //

There are two *sects*,³ of which there is one, and it is daytime, when any of the five planets will have greater authority in the place of the Sun and ascendant and degree of conjunction [of Sun and Moon]. And there is another, and it is nocturnal, when any of the planets will have greater authority in the place of the Moon and the Lot of Fortune and the previous degree of opposition [full Moon]. Therefore when it happens that any planet is in a place suitable to be prorogator and when it has greater authority in the two above-mentioned sects and in the above-mentioned places, then it is to be preferred to the luminaries as prorogator. It should also be noted that the moderns say that, for this, the lord of the prorogative place must always make an aspect to it, in order for it to be the prorogator. Ptolemy, however, does not observe this.

The meaning of this passage⁴ is that the degrees which are so damaging in this case—that is, which proceeds backwards, is the western [descendant] degree and no other; [that is], the child will live until the prorogator reaches the western degree in direct motion, and then he will die. But the degree of the other stars which are applied or bear witness to this prorogator add or subtract as much to or from the number of years that the prorogator gives, that is until it sets. And he says that the good add and the bad subtract, and this is what he says. //

Item: They do not move toward the prorogative place.⁵ From this passage, we gather that when the prorogator is directed in succession of signs, then the degree of the destructive planet moves towards the prorogator; and when it is directed against the succession of signs, then the prorogator moves toward the places of destruction. And owing to this the planets that are between the prorogator and the west do not kill.

And those that add [are called] fortunate.⁶ And the fixed stars which are of the complexion of Jupiter and Venus also add, if they are close by and have little or no latitude, that is, on the zodiac.

¹ “Si autem preventio precedit fortune partem.”

² “illud quod loco maioris et fortioris.”

³ “habens in dispositione secundum duo alaiz auctoritates.” The term *alaiz* (*halaiz*, *alhays*) here comes from the Arabic *hayyiz* (حَيْيز) meaning “domain”). See *Quadruplicatum* I.19, I.23, II.7-8. However, *sect* is the more commonly used term for this concept in astrology.

⁴ “gradus interitum significantes.”

⁵ “ad locum hyleg ipse non eunt.”

⁶ “At ille que superaddunt fortune.”

Planete vero¹ vel radii qui [fuerint]² inter hileg et occidentem non interficiunt.³ Sed addent vel minuent.⁴ **Quod intelligendum est esse dictum.** Sensus⁵ huius est quod planete qui applicantur vel testificantur gradui hileg si [fuerint]⁶ in ipso ascendentे tunc ipse tot⁷ addit vel minuit annos quot sunt partes horarum gradus // Post hoc si non fuerit in⁸ ascendentе si fuerit elongatus ab eo, verbi gratia in 10, tunc videndum est⁹ quot horis [166v] ipse sit elongatus ab ascendentе et denominabimus eas de¹⁰ 12 que verbi gratia sint 6 scilicet medietas et talem partem [minuemus]¹¹ de partibus horarum¹² gradus planete scilicet medietatem et remanebit alia medietas, et secundum numerum graduum huius medietatis residue¹³ addemus vel minuemus annos. Et secundum hoc cum venerimus¹⁴ ad punctum occidentis id est si fuerit planeta in occidente hora nativitatis vel¹⁵ addet vel minuet eo quod elongatio eius ab oriente¹⁶ est 12 hore quas cum minuimus de 12 nihil remanebit¹⁷ ita nihil accipiendo est de partibus horarum gradus planete¹⁸ secundum quod addat vel minuat et hoc est quod dicit litera.¹⁹ Et hoc²⁰ idem voluit Haly qui hunc locum exposuit qui dixit²¹ secundum longitudinem planete ab occidente²² ex 12 horis accipiendo est de partibus horarum gradus planete et secundum illas partes addat vel minuet et hoc secundum [4]²³ numeros proportionales²⁴ quorum primus est longitudine planete ab occidente hora nativitatis. Que verbi gratia sit 4 et ab oriente 8 et 2 [secundus] 12 et tertio²⁵ quantitas addicionis vel diminu[cioni]s et hec est ignota;²⁶

¹ vero] *om.* CaCe

² fuerint] fuerit Od

³ interficiunt] interficient CaCe

⁴ Planete vero ... minuent] *This gloss is out of the natural order of the Quadripartitum text in Od; it should be immediately after Et hoc ... ab occidente*

⁵ Sensus] *adds* est Ce

⁶ fuerint] fuerit Od

⁷ tot] tunc Ca

⁸ in] *adds* ipso Po

⁹ est] *om.* Ce

¹⁰ eas de] easdem CaCe

¹¹ minuemus] invenimus Od

¹² horarum] *om.* Po

¹³ residue] *om.* CaPo

¹⁴ venerimus] pervenerimus Po

¹⁵ vel] nichil CaCe

¹⁶ elongatio eius ab oriente] elongata ab ascendentе Po

¹⁷ remanebit] *om.* CaCe *adds* et Po

¹⁸ gradus planeti i. Po

¹⁹ litera] *om.* Ca

²⁰ hoc] *om.* Ce

²¹ hunc locum exposuit qui dixit] exponit hunc textum dicens quod Po

²² ab occidente] ad occidentem Ca

²³ 4] *om.* Od hoc 4 Po

²⁴ proportionales] *adds* sumamus Po

²⁵ tertio] tertius CaCe

²⁶ hec est ignota] hic est ignotus Po

And planets or rays which are between the prorogator and the west do not kill, but add or subtract.¹

We should take this as stated.² The meaning of this is that planets which approach or bear witness to the prorogative degree, if they at the ascendant itself, then he adds or subtracts as many years as there are hour-segments³ in the degree. After that if it is not in the ascendant—if it is elongated from it, for instance in the 10th—then we consider by how many hours [166v] it is elongated from the ascendant, and we take them [as a fraction] of 12; so if, for instance, there are 6, that is half. And we subtract the same fraction of the hour-segments of the degree of the planet, i.e. half, and the other half will remain, and according to the number of degrees of this remaining half we add or subtract years. And consequently, when we come to the western [i.e. descendant] point, that is if the planet is in the west at the hour of birth, he will either add or subtract its elongation from the east [i.e. rising point], that is 12 hours; and since we subtract these from 12 nothing remains, so there is no fraction of the hour-segments of the degree of the planet for him to add or subtract; and that is what the passage says.

And Haly, who explicated this section,⁴ agreed: he said that according to the longitude of the planet from the west, from 12 hours the fraction of hours of the degree of the planet is to be taken, and according to that fraction one should add or subtract, and this according to four proportional numbers, of which the first is the longitude of the planet from the west at the hour of birth: let it be 4, for instance, and 8 from the east. And the second is 12, and thirdly the quantity of addition or subtraction, and this is the unknown.

¹ “loca stellarum infortuniarum, id est Saturni et Martis.” This gloss is out of order in Od, but it repeats what is just above so makes some sense in this position.

² “Quod intelligendum est esse dictum.”

³ These hour-segments are rising times on the oblique sphere, as explained in *Almagest* II.8-9. An hour-segment is the arc of the ecliptic rising in one equinoctial (equal) hour, which varies with both ecliptic longitude and the observer’s geographical latitude.

⁴ “secundum ipsius elongatione.”

et quarto¹ partes² horarum gradus planete [multiplica itaque primum scilicet 4 in quartum scilicet in³ partes horarum gradus planete]⁴ que verbi gratia sint [12] et⁵ aggregatum divide⁶ per secundum scilicet per 12 et tunc exibit tertius qui erat ignotus scilicet quantitas addicionis vel diminucionis que addenda est vel minuenda ab annis quos dat hyleg. Et secundum hoc exemplum essent 5 anni et due tertie anni. Sed primum ita reperies scilicet longitudinem ab occidente accipe⁷ ascensiones que sunt a gradu planete usque in orientem hora nativitatis quas [divide]⁸ per partes horarum gradus planete et exibunt tibi hore quas minue de 12 et residuum est longitudine planete ab occidente. **Ex sextilibus.** Id est [radiationibus],⁹ id est sextilis [radiatio]¹⁰ Saturni et Martis¹¹ aliquando interficit scilicet tunc cum¹² ipsa planeta¹³ et hileg sunt¹⁴ in signis obedientibus aut¹⁵ aspicientibus aut¹⁶ equantibus in fortitudine sed que [sint]¹⁷ hec in¹⁸ primo libro [dictum est]¹⁹ // Id est cum eadem fuerit longitudine alhileg et [infortuna]²⁰ ab aliquo puncto solsticiali vel equinoctiali // Scilicet sextilis et hoc erit cum fuerit in domo aut exaltacione [aut triplicitate]²¹ vel termino malorum vel respicietur²² a malis. Dicit Haly²³ quod ex hiis verbis habetur quod²⁴ directio debet fieri per gradus ascencionum et non per gradus eequales, quem si fieret per gradus eequales non diceret²⁵ hoc. // **Interficiet locus Solis quandoque.** Ideo dicit [167r] quandoque²⁶ quia cum Sol et Luna fuerint in terminis vel forte in aliis dignitatibus bonorum, Sol tunc habet vim salvandi. [Sed]²⁷ tunc dominium²⁸ [Solis]²⁹ interficiet cum ipsis fuerint in signis³⁰ contrariarum qualitatum, vel in terminis,

¹ quarto] quarta CaCe quartus est Po

² partes] pars Ce

³ in] om. Po

⁴ multiplica itaque ... planete] om. Od

⁵ sint 12 et] 12 Ca 17 et Ce sint 12a et Od

⁶ divide] dividit Ca

⁷ accipe] et tunc Ca

⁸ divide] deinde Od dividit Ca

⁹ radiationibus] radiciacionibus Od

¹⁰ radiatio] radiciacio Od

¹¹ et Martis] om. Po

¹² cum] om. Po

¹³ planeta] om. CaCePo

¹⁴ sunt] fuit Po

¹⁵ aut] vel Ce

¹⁶ aut] et CaCePo

¹⁷ sint] sunt Od

¹⁸ hec in] in huius Po

¹⁹ dictum est] dicta sunt Od

²⁰ infortuna] in fortitudine Od

²¹ aut triplicitate] om. Od

²² respicietur] aspicietur Ca

²³ Dicit Haly] Sensus huius est quando hyleg coniungeretur planete vel stelle fixe male et fuerit inter alhileg et eas latitudo non interficiet set si non fuerit latitudo aliqua tunc interficiet. Haly dicit Po. This is transposed from Similiter etiam ita below

²⁴ quod] adds per hic quod debet multarum ascencionum habetur Po

²⁵ diceret] dicit Ca dicent Ce

²⁶ quandoque] quando Po

²⁷ Sed] Et OdCaCe

²⁸ dominium] om. Ce

²⁹ Solis interficiet] interficiet Sol OdCaCe

³⁰ signis] signo Po

and fourthly the hour-segment of the degree of the planet. Then multiply the first, that is 4, by the fourth, that is the hour-segments of the degree of the planet, let us say 12; and divide the product by the second, that is by 12, and this will give the third, which was unknown, that is the quantity of addition or diminution which was to be added to or subtracted from the years which the prorogator gives. And according to this example they would be 5 years and two-thirds of a year.¹ But you will find the first, that is, the longitude from the west: take the ascensions which are from the degree of the planet toward the east at the hour of birth; divide it by the hour-segments of the degree of the planet, and they will give you the hours, which you subtract from 12, and the remainder is the longitude of the planet from the west.

In sextile.² That is, to the rays, that is, the sextile aspect of Saturn and Mars destroys at certain times, namely, when the same planet and the prorogator are in “hearing” or “seeing” signs or equal in strength; but this is said in the first book.³

That is,⁴ when the longitude of the prorogator is the same and afflicted by any solstitial or equinoctial point.

That is,⁵ sextile [can destroy], and this will be when it is in the house or exaltation or triplicity or a term of the malefics, or is looked upon by the malefics.

Haly says that from these words⁶ we gather that direct motion must happen by degrees of ascensions [ecliptic], and not by equal [equatorial] degrees; if it happened by equal degrees he [Ptolemy] would not say this.

The place of the Sun sometimes destroys.⁷ He says [167r] ‘sometimes’ because when the Sun and Moon are in the terms or perhaps other dignities of the benefics, the Sun then has the power to preserve. But then the lordship of the Sun will kill when they are in signs of contrary qualities, or in the terms,

¹ The mathematical principles here are sound, but the calculation seems mistaken. It is possible that 17 was misread as 12 for the fourth number, since $4 \times 17 \div 12 = 5\frac{1}{3}$.

² “ex sextilibus.”

³ *Quadruplicatum I.15.*

⁴ This comes before the previous gloss in most manuscripts, but they have the same lemma (“ex sextilibus”).

⁵ “idem operabitur sextilis.”

⁶ “in signo multarum ascensionum.”

⁷ “Interficiet locus solis quandoque.”

vel forte in aliis dignitatibus malorum, vel unus eorum in termino vel alia dignitate boni et alter mali. // **Cum infortunabuntur solummodo** // Hic ostendit quando supradicta loca interficiant et quando non et ostendit similiter quando illa loca infortunantur [scilicet cum sint¹ in termino malorum et fortunantur]² cum sint³ in termino fortunarum.⁴ **Similiter et[iam].**⁵ Sensus huius [est]⁶ quod quando alhileg iungetur planete⁷ vel stelle fixe male, et fueri[t]⁸ inter alhileg et eas⁹ latitudo, non interficiet, sed si¹⁰ non fuerit latitudo aliqua tunc interficiet.¹¹ // Dicit Haly quod ideo Ptholomeus dimisit sextilem aspectum in [hoc]¹² loco [quia]¹³ ipse non est adeo fortis ad salvandum ut alii 3 quos [ponit]¹⁴ // Dicit Haly quod si latitudo unius fuerit septentrionalis [et alterius meridionalis]¹⁵ ei equalis¹⁶ quod¹⁷ tunc interficiet.¹⁸ **Cum autem stelle.** Sensus huius litere est quod quando in loco in quo timetur mors nato fuerint stelle plures interficientes, et plures salvantes, tunc duobus modis considerandum est scilicet secundum multitudinem earum¹⁹ et secundum fortitudinem ipsarum²⁰ // Nam ille²¹ que fuerint plures et²² fortiores, id est in locis sibi convenientibus, et contrarie²³ non sint²⁴ in locis, illis vincent, id est si²⁵ fuerint fortune salvabunt et si²⁶ mali interficiant. **Numerus autem annorum.** Viso que loca et [qui]²⁷ planete sint alhileg²⁸ et qui etiam sint²⁹ interficientes, et qui salvantes in hoc loco, consequenter [tractat]³⁰ de numero annorum vite,

¹ sint] fuerint CaCe

² scilicet ... fortunantur *om.* Od

³ sint] sunt CaCe

⁴ fortunarum] bonorum vel fortunarum Po

⁵ etiam] et Od

⁶ huius est] huius Od est huius litere Ce

⁷ planete] *adds* infortune Ce

⁸ fuerit] fueri Od

⁹ alhileg et eas] eas et alhyleg et Ce

¹⁰ si] quando Ce

¹¹ Sensus huius ... tunc interficiet] *This gloss is higher in Po*

¹² hoc] quo Od

¹³ quia] quem Od

¹⁴ ponit] potuit Od. Dicit Haly ... quos ponit] *This gloss comes before "similiter etiam ita" in CaCePo. Perhaps the scribe of Od, or of its source, wanted to place the two "Dicit Haly" glosses together.*

¹⁵ et alterius meridionalis] meridiana Od

¹⁶ ei equalis] *om.* Ca

¹⁷ quod] *om.* Po

¹⁸ interficiet] *adds* id est tunc Sol non erit interf[ector] set ipsa infortuna licet sit sub radiis Ca

¹⁹ earum] *om.* Po

²⁰ et secundum fortitudinem ipsarum] et secundum fortitudinem earum CaPo *om.* Ce

²¹ ille] illi Ce

²² et] *adds* fuerint Ce

²³ contrarie] contrarii Po

²⁴ sint] sunt Ce

²⁵ id est si] et si Po

²⁶ et si] si vero Po

²⁷ qui] que Od

²⁸ sint alhileg] possint esse hyles Po

²⁹ etiam sint] sunt Po

³⁰ tractat] tractare Od

or perhaps in other dignities of the malefics, or one of them is in a term or other dignity of a benefic, and the other [is in a term or dignity] of a malefic.

But only when they are afflicted.¹ Here he shows when the above-mentioned places kill and when not, and he shows similarly when those places are afflicted, that is when they are in a term of the malefics; and they are favoured when they are in a term of the benefics.

Also if.² The meaning of this is that when the prorogator is joined with a malefic planet or fixed star, and there is latitude between the prorogator and them, it will not kill, but if there is no latitude at all then it will kill.

Haly says³ that Ptolemy thereby dismisses the sextile aspect, since in this place something does not have as much power to preserve as the other three which he proposes.

Haly says⁴ that if the latitude of one is northerly and the other is southerly, equal to it, then it will kill.

When stars.⁵ The meaning of this passage is that when there are multiple killing stars in a place in which death to the child is feared, and multiple protective ones, then it should be addressed in two ways, that is, according to their number and according to their strength. For those that are more numerous and stronger, that is, in places congenial for them, and [provided that] contrary [stars] are not in such places, they will be victorious; that is, if they are fortunate they will preserve, and if they are bad they will kill.

However, the number of years.⁶ Having seen which places and which planets are prorogative and also which are destructive, and which preserving in that place, consequently he discusses the number of years of life,

¹ “cum infortunabuntur solummodo.”

² “similiter etiam.”

³ “seu ex oppositione.”

⁴ “nec eorum duorum latitudo fuerit eadem.” Cf. Haly Abenrudian’s commentary on the *Quadruplicatum*, in Paris, Bibliothèque nationale de France MS lat. 16653, f. 104r: “vult dicere quod gradus interficiens sic fuerit quod non interficiet nisi quando in eo est planeta infortuna et non per radios eius et fuerit latitudo eius elongata a latitudo yleg euntis ad eam, si ita fuerit gradus in coniunctio[ne] moratur infortuna non interficiet in statu tali, quia interficere non potest nisi quando fuerit yleg in uno circulo de circulis maioribus et si tamen quicquam de arismetica intelligis scies quod in aliquibus locis quando fuerit yleg septentrionalis a zodiaco et infortuna meridionalis et latitudines amborum equales una eadem infortuna abscidit super yleg in statu tali qualis est iste quando acciderit quod ambo sint similiter unum circulum.”

⁵ “Cum autem stelle.”

⁶ “Numerus autem annorum.”

et non qualitercunque¹ sed opponendo illis qui in hoc errabant quousque ponat sententiam suam. Et est quod² ipsi dicebant³, quod numerus ille habebatur⁴ ex numero⁵ temporum ascencionum que sunt⁶ inter alhileg et locum mali per ascensiones regionis.⁷ Sed Ptholomeus dicit quod non debet fieri hoc, nisi quando hileg fuerit in orizonte orientali vel fuerit in septimo, et cum fuerit extra hec duo loca, scilicet in nona vel in decimo vel undecimo aliter erit operandum sicut ipse [dicit].⁸ Id est tunc Sol non erit interfector sed ipsa infortuna licet sit sub radiis.⁹ // **Vel unus locorum ascendentium.** Id est septimum vel nonum¹⁰ et nota quod nonum vel¹¹ septimum ideo dicuntur [ascensiones]¹² [167v] ad ascendens quoniam occasus eorum sunt equales¹³ ortibus eorum oppositorum. // **Convenit ergo.**¹⁴ Hic incipit¹⁵ ostendere qualiter operandum sit cum fuerit alhileg in ipso¹⁶ orizonte orientali et qualiter cum fuerit in medio celi, et qualiter cum fuerit in septimo¹⁷ et qualiter cum fuerit extra hec¹⁸ tria¹⁹ loca et hec est universalis regula quam hic dat²⁰ // **Ad differentia loca pervenient.** Sensus huius literae²¹ est quod quando hileg non fuerit in aliquo trium predictorum²² locorum scilicet in ascidente vel²³ medio celi vel in occidente [sed]²⁴ fuerit in medio, scilicet inter medium celi et ascendens vel inter medium celi et occidens tunc non fiet directio sicut fit cum est aliquo horum²⁵ trium locorum sed fiet commixti²⁶ ex illis et hoc est quod ipse dicit. Cum [dicit]²⁷ quod tempora ascencionum in quibus venerit locus interfectoris ad locum hileg cum ipse fuerit in ascidente, et hoc per ascensiones vel²⁸ tempora ascencionum eiusdem interfectoris cum ad locum hileg

¹ qualitercunque] *adds* modo Po

² Et est quod] Quidem autem Po

³ dicebant] *adds* est Po

⁴ habebatur] habebat CaPo

⁵ numero] numerorum Po

⁶ sunt] fuerunt Po

⁷ regionis] *adds* earum Po

⁸ ipse dicit] ipso dicet Od dicit Po

⁹ Id est ... sub radiis] This gloss om. CaPo. It should precede the previous one ("numeris autem annorum"). Ce has two interlinear glosses: **eum**: "id est sol"; **considerabimus**: "id est tunc non erit interfector sed ipsa infortuna licet sit sub radiis."

¹⁰ Id est septimum vel nonum et] Id est septimum et CaCe om. Po

¹¹ vel] et CaCe

¹² ascensiones] ascendentia OdCaCe

¹³ equales] om. Ce

¹⁴ Convenit ergo] Lemma in *Quadrivariatum* is convenit igitur

¹⁵ incipit] om. Po

¹⁶ ipso] loco Ce

¹⁷ et qualiter cum fuerit in septimo] om. CePo

¹⁸ hec] om. Ca

¹⁹ tria] 2 Po

²⁰ hic dat] ipse dat hic Ce

²¹ huius literae] om. Po

²² trium predictorum] predictorum Ce trium predictorum scilicet Od

²³ vel] et in Po

²⁴ sed] si OdPo

²⁵ aliquo horum] in aliquo illorum CaPo aliquo illorum Ce

²⁶ commixti] commixtio Ce

²⁷ dicit] om. Od

²⁸ vel] regionis Ca regionis vel CePo

and not unsystematically, but against those who were mistaken in this, to the point of setting out his own opinion. And it is because they said that that number could be obtained from the number of the times of ascensions which are between the prorogator and the place of misfortune, through the ascensions of the region.¹ But Ptolemy says that this must not be, except when the prorogator is on the eastern horizon or in the seventh [house]; and when it is outside those two places, that is, in the ninth, tenth or eleventh it will be done differently, as he says.

That is,² then the Sun will not be the killer but [its place] itself is destructive if it is beneath the rays.

Or one of the places of ascendents.³ That is, the seventh or ninth, and note that the seventh or ninth are therefore called ascensions [167v] to the ascendant, since their settings are equal to the risings of their opposite [places].⁴

It is therefore fitting.⁵ Here he begins to show how it is to be done when the prorogator is on the eastern horizon itself, and how when it is at the midheaven, and how when it is in the seventh [house] and how when it is outside these three places, and this is a universal rule which he gives here.

They will reach different places.⁶ The meaning of this passage is that when the prorogator is not in any of the three above-mentioned places, that is, in the ascendant, or the midheaven, or in the descendant but is in the middle, that is between the midheaven and the ascendant or between the midheaven and the descendant then *direction* will not be done as it is done when it is at any of these three places, but will be a mixture of them, and this is what he says. When he says that the times of ascensions in which the killing place comes to the prorogative place when this is in the ascendant, this is through regional [oblique] ascensions or times of ascensions of the interactor itself to the prorogative place when the prorogator itself is at the midheaven, and through right ascensions or times of setting of the interactor itself when it comes to the prorogative place

¹ i.e. on the oblique sphere.

² “nulla fortunarum eum adiuverat considerabimus.”

³ “vel unus locorum ascendentium.”

⁴ The seventh house is opposite the first (ascendant) house, and so rises and sets in equal times. The inclusion of the ninth house is an error (which only appears in Od).

⁵ “Convenit igitur.”

⁶ “Ad differentia loca pervenerint.”

cum ipse hileg¹ fuerit [in medio celi et hoc per ascensiones circuli directi vel tempora occasus² eiusdem intersectoris cum venerit ad locum hyleg cum ipse hyleg fuerit]³ in occidente et hoc fiet per ascensiones oppositi gradus intersectoris in regione. Dicit quod illa⁴ tempora ascencionum non sunt equalia temporibus ascencionum in quibus venerit gradus intersectoris ad locum hileg cum fuerit hileg,⁵ verbi gratia in undecimo vel in fine⁶ decimi vel in 5 gradibus ante ascendens vel⁷ altera parte in 9, sed sunt⁸ diversa ab illis temporibus. Et est sensus⁹ quod si nos opera[r]emur¹⁰ per ascensiones regionis tantum¹¹ vel per ascensiones [circuli]¹² directi tantum cum hileg est in hiis¹³ locis sicut operamur per eas cum est in illis angulis; perveniret intersector ad alium locum quod [ad locum]¹⁴ hileg, et [diversum habet];¹⁵ hic reddit¹⁶ causam quare hoc contingat et est ideo quod hileg¹⁷ ad quem venit locus intersectoris non est similis nec est talis qualis est locus intersectoris; id est partes horarum gradus hileg sunt diverse a partibus horarum gradus interficiens et etiam quia sunt in diversis locis et unus plus distat a circulo meridiei quam aliis, et¹⁸ ab orizonte quam aliis et hoc secundum horas; nisi cum fuerit similis,¹⁹ id est tunc erint similes quando locus hileg fuerit in loco intersectoris vel econtrario,²⁰ quem quando similes fuerint tunc per quot horas unus distat a medio celi, per tot distat alter et per quot unus distat ab orizonte, per totidem distat alter, licet partes horarum unius sint²¹ [168r] diverse a partibus alterius horarum et eius pars respectu²² et expositio est precedentis literae. **Nec contingit ut.** Hic²³ ostendit in quo loco erit gradus hileg respectu medii celi et orizontis una et similis cum positione gradus intersectoris, ut autem hoc clarius fiat. Sciendum est quod inter circumflexum meridiei et orizontis sunt de equinoctiali 90 gradus et hoc manifestum est. Cum ergo divisoris hanc partem²⁴ per 6 horas provenient cuique²⁵ 15;

¹ hileg] *om.* Po

² tempora occasus] temporum occasus Ce tempora huius casus Po

³ in medio celi ... cum ipse hyleg fuerit] *om.* Od cum fuerit hyleg Ca

⁴ illa] ista CePo

⁵ cum fuerit hileg] *om.* Po

⁶ in fine] *om.* Ce

⁷ vel] *adds* ex CaCe

⁸ sunt] *om.* Ce

⁹ sensus] *adds* casus Po

¹⁰ nos operaremur] operaremur Ce nos operaemur Od

¹¹ tantum] *om.* Po

¹² circuli] circa OdPo

¹³ hiis] illis Po

¹⁴ ad locum] sit locus CaCeOd

¹⁵ diversum habet] ab eo quod locus CaCe ab eo quod est locus Od

¹⁶ reddit] recedit Ce

¹⁷ hileg] locus hyleg CePo *adds cancelled* ‘et diversum ab eo quod est locus’ Od

¹⁸ et] *om.* Ca

¹⁹ similis] *om.* CaCe

²⁰ econtrario] econverso Ca

²¹ sint] *om.* CaCe

²² alterius horarum et eius pars respectu] horarum alterius in medio celi; et hic per ascensiones circuli directi vel tempora occasus eiusdem intersectoris cum venerit ad locum hyleg Po

²³ Hic] *om.* Po

²⁴ partem] quartam CaCePo

²⁵ cuique] *adds* hore Ce

when the prorogator itself is in the west; and this will be done through oblique ascensions of the opposite degree of the interfactor. He says that those times of ascensions are not equal to the times of ascensions in which the degree of interfection comes to the prorogative place when it is prorogator, for example, in the eleventh, or at the end of the tenth, or in five degrees before the ascendant, or, on the other hand, in the ninth, but they are different from those times. And it means that we work through oblique ascensions as much as through ascensions on the direct circle when the prorogator is in these places, just as we work through them when it is in those cardines; the interfactor reaches to another place than that of the prorogative place, and is different; this is correct since it turns out that the prorogator to which the place of interfection comes is not the same, nor is it equivalent to the place of interfection; that is, the hour-segments of the degree of the prorogator are different from the hour-segments of the degree of interfection, and also because they are in different places and one is more distant from the meridian circle than the other, and from the horizon than the other, and this according to the hours—except when they are similar: that is, then they will be similar when the prorogative place is in the place of interfection, or the reverse; and when they are similar, then however many hours one is distant from the midheaven, the other is the same and however many hours one is distant from the horizon the other is distant, granted that the hour-segments of one be [168r] different from the hour-segments of the other; and its segment is considered and explained in the previous passage.

Nor does it happen.¹ Here he shows in which place the degree of the prorogator will be with respect to the midheaven and horizon together, and similarly in the arrangement of the degree of interfection, so that this is clearer. Note that there are 90 degrees of the equator between the meridian circle and the horizon, and this is evident. When, therefore, you divide this segment by six hours the result is 15;

¹ “Nec contingit (etiam) ut.”

cum ergo protraxeris a loco sectionis¹ orizontis et circuli meridiei que est in meridie per unam quamque illarum, scilicet divisionem² usque ad aliam sectionem eorum que est in [septentrione],³ scilicet semicirculos, dividunt hii⁴ semicirculi 6 horas que sunt a mane usque ad meridiem id est⁵ dividunt unamquamque [portionem]⁶ circulorum equidistantium equatorum diei cadentium inter orizontem et circulum meridiei in 6 partes equales ita scilicet quod cum⁷ queque pars illarum que sunt ex parte meridiei cadentium inter hos semicirculos sunt pauciores⁸ 15 et unaqueque illarum etiam minor alia ordinatim⁹ cum elongatur ab equatore diei et ille¹⁰ que sunt ex parte septentrionis sunt plures 15 et unaqueque scilicet maiorem¹¹ alia¹² ordinatim Ex hoc ergo constat quod archus illarum portionum predicti que cadunt inter predictos semicirculos denotant numerum partium horarum graduum orbis signorum super quos transeunt; et sit inter unumquemque istorum semicirculorum, et alterum est tantum una hora inequalis. Ex hoc etiam satis patet equatio domorum. Sic ergo cum gradus hileg fuerit super unum horum¹³ semicirculorum et gradus interfectoris similiiter fuerit super illum eundem, erint¹⁴ similes et eorum positio erit una respectu medii celi et orizontis, quem per quot horas distat¹⁵ unus eorum ab uno [illorum]¹⁶ semicirculorum,¹⁷ per tot distat alter ab eodem, licet partes horarum sint inequaes et hoc scito levis est litera. Et¹⁸ eodem modo facies¹⁹ de illa quarta sequenti²⁰ que est sub terra et tunc arcus qui cadunt inter illos scilicet semicirculos determinant partes horarum noctis. **Cum autem hic semicircul[u]s.**²¹ Id est unusquisque illorum²² semicirculorum cum circumvolvunt aliquando fit ipse orizon aliquando ipse circulus²³ meridiei et aliquando non est aliquis eorum etc²⁴ //

¹ sectionis] *om.* Ce

² illarum scilicet divisionem] istarum divisionem Ca istarum scilicet divisionem Ce

³ septentrione] coniunctione Od

⁴ dividunt hii] hii scilicet Po

⁵ id est dividunt] et dividunt Po et divident Ce

⁶ portionem] portioni Od

⁷ cum] *om.* Po

⁸ sunt pauciores] *cancelled, replaced by* est minor vel Po

⁹ inter orizontem et circulum meridiei ... alia ordinatim] *om.* Ce (partially inserted below)

¹⁰ et ille] vero Po

¹¹ et unaqueque scilicet maiorem] quod scilicet maior Ca et scilicet maior Ce et queque illarum maior Po

¹² alia] *adds* cadentium inter hos semicirculos sunt pauciores 15 et unaqueque illarum etiam minor alia ordinatim Ce

¹³ horum] istorum Ce

¹⁴ erint] erunt Ca

¹⁵ distat] *om.* CaCePo

¹⁶ illorum] illo CaOd

¹⁷ semicirculorum] circulorum CePo

¹⁸ Et] *om.* Po

¹⁹ facies] faciens] Ca

²⁰ illa quarta eequenti] sequenti quarta scilicet Po

²¹ Cum autem hic semicirculus] *om.* Ce Cum autem hic semicirculos Od

²² illorum] istorum CePo

²³ ipse circulus] *om.* Ce

²⁴ eorum etc] istorum. Erunt tempora Po

when, therefore, you draw from the intersection in the south of the horizon and meridian circle, through one of them, that is the divisions, to their other intersection which is in the north, these semicircles¹ divide 6 hours which are from morning to noon, that is they divide any portion of the equidistant circles of the equator of the day² falling between the horizon and the meridian circle into six equal parts, that is, so that when any of those parts which are on the southern side falling between these semicircles are smaller than 15 and any one of them also less than the others in sequence when it is elongated from the equator of the day, and those that are on the northern side are more than 15 and any one of them that is greater than the others in sequence. From this therefore it is evident that arcs of those above-mentioned portions which fall between the above-mentioned semicircles denote a number of hour-segments of degrees of the circle of signs on which they travel; and between any one of these semicircles and another is as much as one unequal hour. And this equation of houses is also sufficiently clear. Thus when the prorogative degree is on one of these semicircles and the killing degree is similarly on the same one they will be similar and their position will be one, relative to the midheaven and the horizon, and however many hours one of them is distant from one of the semicircles, the other is distant from the same one by the same amount, though the hour-segments be unequal; and, knowing this, the passage is easy. And you will work in the same way with the following quadrant which is below the Earth, and then the arcs which fall between them, that is the semicircles, determine the hour-segments at night.

However, when this semicircle.³ That is, any one of these semicircles, as they revolve, at some time becomes the horizon itself, at some time the meridian circle itself, and at some time it is not any of them, etc. //

¹ This is what Casulleras and Hogendijk (2012, 48–53) term the “Position Semicircle Method.”

² “equator diei et noctis” refers to the fact that day and night are of equal length on the equator. The same phrase appears in Sacrobosco, *De sphaera* II.

³ “Cum autem hic semicirculus.” This gloss runs on from the “Nec contingit” gloss in all manuscripts.

Sensus est huius in equalibus temporibus pertranseunt¹ orizontem et per² circulum meridie et etiam³ unumquemque illorum semicircularum [168v] cum fuerint in aliis locis ab illis tribus.⁴ Id est differentium⁵ loca que in medio sunt differentia sunt in longitudine eo quod nec per elevationis regionis nec per elevationis circuli directi tantum poterimus scire quando venerit locus intersectoris ad locum hileg, sed per conmixtionem eorum et hoc est quod dicit // **Generalem autem modum** // Sensus huius est quod⁶ ex quo tot sunt diversitates⁷ dirigendi quem aliter operandus est cum hileg fuerit in ascidente,⁸ aliter cum fuerit in medio celi, et aliter cum fuerit⁹ in occidente, et aliter cum fuerit alibi.¹⁰ Nunc vult dare universalem regulam, unam¹¹ que sufficiat omnibus illis modis, ad sciendum cum quot temporibus equatoris diei venerit locus intersectoris ad locum hileg, que est huiusmodi // Scendum [est] primo quis¹² sit gradus medii celi hora nativitatis, et hoc¹³ per tabulas scietur // Deinde sciendus¹⁴ locus hileg et locus intersectoris¹⁵ eadem hora // Post hoc¹⁶ scias ascensiones circuli directi que sunt inter gradum medii celi qui est super terram et gradum hileg ubicumque fuerit hileg in quarta orientali que est super terram. Et si fuerit in quarta occidentali¹⁷ scias ascensiones que sunt inter hileg et medium celi¹⁸ super terram et tunc divides¹⁹ illam longitudinem ascensionum et²⁰ divides per partes horarum gradus diei hileg; et que exierint hore sunt hore longitudinis gradus hileg a medio celi super terram. Quod si fuerit hileg²¹ in reliquis duabus quartis que sunt sub terra scias ascensiones circuli directi que sunt inter ipsum et medium²² celi sub terra et eas divides per partes horarum noctis gradus hileg; et que exierint hore sunt²³ hore longitudinis circuli meridiei sub terra ab angulo gradus hileg.²⁴ Cumque hoc sciveris accipe²⁵ tunc partes horarum diurnalium gradus intersectoris et multiplica eas semper in horas longitudinis gradus hileg ab angulo medii celi si fuerit hileg super terram,

¹ pertranseunt] transeunt CePo

² per] om. CePo

³ etiam] est Ca om. Ce

⁴ tribus] duobus Po

⁵ Id est differentium] **Qui sunt differentium** [as lemma] id est Po

⁶ Sensus huius est quod] Hic est Po

⁷ diversitates] operationes Po

⁸ hileg fuerit in ascidente] fuerit in ascidente alhyleg CaCe

⁹ fuerit] om. CaCe

¹⁰ alibi] in aliis locis Po

¹¹ universalem regulam unam] regulam generalem unam Po unam regulam universalem Ce

¹² quis] qui Ca quid Ce

¹³ et hoc] quod Po

¹⁴ sciendus] adds est CePo

¹⁵ intersectoris] interficiens CaCe

¹⁶ Post hoc] Post hec Ca Postea Ce

¹⁷ occidentali] gradu occidentali Od occidentali scilicet circuli directi Ce

¹⁸ hileg et medium celi] gradum hyleg et medium celi Ca medii celi et gradum yleg Ce

¹⁹ divides] om. CaCePo

²⁰ et] om. CaCePo

²¹ Quod si fuerit hileg] Quid si fuerit hyleg Ca Quod fuerit yleg Ce

²² medium] medi Ca

²³ sunt] erint Ca

²⁴ exierint hore ... gradus hileg] exierint erunt hore longitudinis gradus hyleg ab angulo medii celi sub terra Po

²⁵ accipe] acciperentur Po

The meaning of this¹ is, they cross the horizon and the meridian circle in equal times and also any one of those semicircles [168v] when they are in places other than those three.

That is,² different places which are in the middle are different in longitude, which we cannot know either by oblique ascensions or by right ascensions when the place of interfection comes to the prorogative place, but through the mixture of them, and that is what he says.

A general method.³ The meaning of this is that there are many differences of method, in that it is done one way when the prorogator is in the ascendant, another way when it is in the midheaven, and another way in the descendant, and another way when it is somewhere else. Now he wants to give one universal rule, which will suffice for all these ways, to know with what times of the equator of the day the place of interfection will come to the place of prorogation, which is of this kind. One should first ascertain what is the degree of midheaven at the hour of birth, and this is known through tables. Then the prorogative place and place of interfection at the same hour should be ascertained. After this you should know the ascensions of the direct circle which are between the degree of midheaven which is above earth and the degree of the prorogator wherever the prorogator is in the eastern quadrant above Earth. And if it is in the western quadrant, find the ascensions which are between the prorogator and the midheaven above the Earth and then you will divide that longitude of ascensions and you will divide the prorogator's degree of the day by hour-segments; and the hours that come out are the longitudinal hours of the prorogative degree from the midheaven above earth. And if the prorogator is in the other two quadrants which are below Earth you should find the right ascensions which are between it [the prorogator] and midheaven below the Earth and those you divide by hour-segments of the nocturnal prorogative degree, and the hours that come out are the longitudinal hours of midheaven under the earth from the cardine of the prorogative degree. And when you know this, then take the parts of diurnal hours of the degree of interfection and multiply them always by the longitudinal hours of the prorogative degree from the cardine of midheaven if the prorogator is above earth,

¹ “erunt tempora.” This gloss runs on from the “Nec contingit” gloss in all manuscripts.

² “qui differentium sunt longitudinum.” This gloss runs on from previous glosses in CaCeOd.

³ “Generalem autem modum.”

scilicet super unum ex semicirculis predictis.¹ Et hoc ideo facis ut cum fuerit gradus² interactoris super illum eundem semicirculum³ habeas⁴ per quot tempora equatoris diei interactor pervenitur ad gradum medii celi vel per quot tempora sit separatus interactor a gradu medii celi quousque veniat super illum semicirculum in quo est hileg. Deinde hec tempora⁵ ascensionum sic inventa sunt [169r] minuenda de ascencionibus circuli directi que sunt inter circulum meridiei et gradum interactoris. Et hoc erit cum fuerit hileg inter gradum medii celi et gradum interficiens in quarta orientali super terram, quoniam tunc ille ascensiones erunt plures istis. Vel debent addi eis, et hoc erit cum gradus medii celi fuerit inter gradum hileg et gradum interactoris, ita quod gradus hileg sit in 4 [quarta] occidentali super terram, et gradus interactoris sit in quarta orientali. Vel de istis temporibus sunt minuende ascensiones que sunt inter gradum interactoris vel⁶ medium celi et hoc erit cum fuerit gradus interactoris inter gradum hileg et⁷ medium celi et hoc in quarta occidentali. Et quod provenit⁸ post diminucionem unius longitudinis ad alteram⁹ vel additionem unius cum alia¹⁰ erunt tempora in quibus veniet¹¹ gradus interactoris ad semicirculum super quem est gradus hileg. Cum vero gradus hileg fuerit sub terra, tunc semper multiplicabiles partes horarum noctis gradus interactoris in horas longitudinis gradus hileg¹² a gradu medii celi sub terra. Et quod [provenerit]¹³ debes minuere ab ascencionibus que sunt inter gradum medii celi sub terra vel eis addere vel illas ab istis diminuere¹⁴ quod modo diximus.¹⁵ Et quod [provenerit]¹⁶ post augmentum vel diminutionem erunt tempora in quibus gradus interactoris veniet ad gradum hileg et hoc est quod dicit // **Quod si gradus alhileg.** Hic determinat qualiter operandum sit, scilicet¹⁷ si fuerit gradus hileg super terram debes operari tantum¹⁸ per gradum medii celi super terram et si fuerit hileg sub terra debes operari tantum¹⁹ per gradum medii celi sub terra. **Quapropter quia circuli signorum partes.** Hoc superius satis expositum,²⁰ scilicet²¹ quando duo gradus fuerint²² super unum ex semicirculis quod ipsi per equales horas distant ab angulo²³ medii celi

¹ predictis] supradictis

² gradus] adds hyleg Po

³ eundem semicirculum] locum semicirculi Po

⁴ habeas] om. Ca

⁵ tempora] adds scilicet Po

⁶ vel] et Po

⁷ et] adds gradum Po

⁸ provenit] provenerit Po

⁹ ad alteram] ab altera CaCe ab alia Po

¹⁰ alia] altera Ce

¹¹ veniet] eveniet Po

¹² gradus hileg] yleg Ce

¹³ Et quod provenerit] Quod provenerit Ce Et quod perveneris Od Et quod proveniet Po

¹⁴ ab istis diminuere] adds secundum CaCe minuere ab istis Po

¹⁵ quod modo diximus] secundum quod modo prediximus Po

¹⁶ provenerit] pervenerit Od

¹⁷ Hic determinat qualiter operandum sit scilicet] Nota quod Po

¹⁸ debes operari tantum] operandum est Po

¹⁹ debes operari tantum] operandum est Po

²⁰ Hoc superius satis expositum] Hoc superius satis expositum est CaCe Superius satis expositum est Po

²¹ scilicet] licet Ce

²² fuerint] sunt Po

²³ ab angulo] a Po

that is on one of the above-mentioned semicircles. And so you do this so that when the degree of interfection is on that same semicircle, you have in how many times of the equator of the day the interfactor comes to the degree of midheaven, or by how many times the interfactor is separated from the degree of midheaven until it comes to that semicircle where the prorogator is. Then the ascensional times thus found should [169r] be subtracted from the right ascensions which are between the meridian circle and the degree of the interfactor. And this will be when the prorogator is between the degree of midheaven and the degree of interfection in the eastern quadrant above earth, since then the ascensions will be greater than this. Or they must be added to them, and this will be when the degree of midheaven is between the prorogative degree and the degree of interfection, so that the prorogative degree be in the western quadrant above earth, and the degree of interfection be in the eastern quadrant. Or from these times the ascensions which are between the degree of interfection and the midheaven should be subtracted, and this will be when the degree of interfection is between the prorogative degree and the midheaven and in the western quadrant. And what comes out after the subtraction of one longitude from the other, or addition of one to the other, will be the times in which the degree of interfection comes to the semicircle on which is the prorogative degree. But when the prorogative degree is below Earth then you will always multiply the nocturnal hour-segments of the degree of interfection by longitudinal hours of the prorogative degree from the degree of midheaven below earth. And what comes out you must subtract from the ascensions which are between the degree of midheaven below earth, or add them, or subtract these from those, in the way that we said. And what comes out after the addition or subtraction will be the times in which the degree of interfection comes to the prorogative degree, and this is what he says.

Now if the prorogative degree.¹ This determines how to do the work; for example, if the prorogative degree is above earth you must work as much through the degree of midheaven above the earth; and if the prorogator is below the Earth you must work as much through the degree of midheaven below Earth.

But since the sections of the zodiac.² This is adequately explained above, that is, when two degrees are on one of the semicircles which are distant through equal hours from the cardine of midheaven,

¹ "Quod si super terram."

² "Quapropter quia circuli signorum partes."

sed partes horarum unius plures¹ sunt partibus² horarum³ alterius et econverso scilicet quando [aliqui]⁴ gradus per equales horas distant a circulo meridiei⁵ ipsi sunt super [eundem]⁶ semicirculum et hanc conversam ponit a[u]ctor; et quia [hoc]⁷ est, oportet ut sciamus quot⁸ tempora equinoctialis circuli reddunt [horas]⁹ equales horis hileg a circulo meridiei; et hoc sciemos multiplicando tempora ho[ra]rum gradus intersectoris diurnales in horas longitudinis gradus¹⁰ hileg a circulo meridiei super terram et hoc est quod dicit // **Post** [169v] **hec ergo [o]bservabimus.**¹¹ Sensus huius est quod postquam sciimus longitudinem elevacionum que est a gradu medii celi usque ad gradum intersectoris, observabimus iterum longitudinem que est inter eundem gradum medii celi et ipsum gradum intersectoris cum fuerit super semicirculum in quo est hileg; et hoc¹² sciemos scilicet¹³ multiplicando partes horarum gradus intersectoris¹⁴ in [horas]¹⁵ longitudinis ab angulo. Hoc sepe dictum est.¹⁶ // **Deinde id quod inter utramque longitudinem.** Vocat hic¹⁷ illam, scilicet que est inter gradum medii celi et gradum intersectoris, [prima, et aliam illam, scilicet que est inter gradum medii celi et gradum intersectoris]¹⁸ cum fuerit super semicirculum super quem est hileg, [vocat]¹⁹ secundam, et aliquando prima minuenda est ab aliqua scilicet secunda et aliquando²⁰ econverso²¹ et aliquando una addenda [est]²² alii,²³ ut in²⁴ superioribus exposatum est. // **Et ut hoc quod diximus.** Hic Ptholomeus ponit²⁵ quattuor exempla secundum hanc regulam, ut ipsa sit apertior, et ponit ea respectu medii celi quod est super terram et non respectu medii celi quod est²⁶ sub terra et ponit in eis quod gradus hileg sit in principio Arietis, et gradus intersectoris sit in principio Geminorum;

¹ plures] planetē Ca

² partibus] adds alterius Po

³ horarum] om. Ce

⁴ aliqui] aliquod Od

⁵ a circulo meridiei] ab angulo medii celi Po

⁶ eundem] dimidium Od

⁷ hoc] hic Od

⁸ ut sciamus quot] quod sciamus quod Po ut sciamus ergo quod Ce

⁹ reddunt horas] redeant horas Ca reddunt hores Od

¹⁰ gradus] gradus gradus Od

¹¹ ergo observabimus] ergo observabimus Od igitur observabimus Po

¹² hoc] hic Ca

¹³ scilicet] om. Po

¹⁴ gradus intersectoris] intersectoris gradus CaCePo

¹⁵ horas] horis Od

¹⁶ Hoc sepe dictum est] Hic sepe dictum est Ca Et hoc est quod dicit Po

¹⁷ hic] om. Po

¹⁸ prima ... intersectoris] om. CaOd

¹⁹ vocat] scilicet CaCeOd

²⁰ prima minuenda ... aliquando] om. Ca prima minuenda est ab alia vel Po

²¹ econverso] adds secunda scilicet a prima

²² est] om. Od

²³ alii] adds vel econverso Po

²⁴ ut in] et CaCe

²⁵ ponit] om. Ce

²⁶ super terram et ... quod est] om. Ca

but the hour-segments of one are greater than the hour-segments of the other, or vice versa, that is when any degrees are distant from the meridian circle through equal hours, they are on the same semicircle; and the author puts this in reverse. And since this is so, it is important to know how many times of the equinoctial circle give back equal hours to the hours of the prorogator from the meridian circle; and we know this by multiplying the times of day-hours of the degree of the interfactor by the longitudinal hours of the prorogative degree from the midheaven above Earth, and this is what he says.

After [169v] this we therefore observe.¹ The meaning of this is that after we know the longitude of elevations [oblique ascension] which is from the degree of midheaven to the degree of interfection, we will observe again the longitude which is between the same degree of midheaven and that degree of interfection when it is on the semicircle on which is the prorogator; and we know this, that is, multiplying the hour-segments of the degree of interfection by longitudinal hours from the cardinal point. This has often been said.

Then what is between the two longitudes.² Here he calls this one—that is, what is between the degree of midheaven and the degree of interfection—“first”; and that other—that is, what is between the degree of midheaven and the degree of interfection when it is on the semicircle on which the prorogator is—he calls the “second”; and sometimes the first should be subtracted from the other, that is, the second, and sometimes the reverse, and sometimes one should be added to the other, as is explained above.

And so that what we have said.³ Here Ptolemy inserts four examples according to this rule, so that it be clearer, and puts them relative to the midheaven which is above the Earth and not relative to the midheaven that is below the Earth, and posits in them that the prorogative degree be at the beginning of Aries, and the degree of interfection be at the beginning of Gemini,

¹ “Post hoc igitur observabimus.”

² “Deinde id quod intra utramque longitudinem.”

³ “Et ut hoc quod diximus.”

et in hoc primo modo ponit quod hileg, scilicet primus gradus Arietis, sit in orizonte in¹ orientali et operatur semper per ascensiones circuli directi; litera levius est hoc scito.² // Nota quod si tamen in primo exemplo vis³ operari respectu medii celi sub terra poteris⁴ hoc modo // Nam cum Aries est⁵ super orizontem orientalem⁶ unde⁷ Cancer est in medio celi sub terra et distat initium Arietis ab eo⁸ per 6 horas et tunc principium Geminorum distat ab eodem celi medio sub terra per 32 tempora et⁹ partes horarum noctis [principii]¹⁰ Geminorum sunt 13; quas cum multiplicas¹¹ in [6]¹² fiunt 78, quibus¹³ cum minueris¹⁴ 32, scilicet longitudinem intersectoris ab angulo, remanent 46, scilicet illud¹⁵ idem quod invenit Ptholomeus et eodem modo operandum esset ubicunque esset hileg¹⁶ inter orientem et angulum terre. Et etiam eodem modo¹⁷ poteris habere¹⁸ respectum ad angulum terre in 3 exemplo,¹⁹ scilicet quando principium Arietis est in occidente tunc enim est²⁰ Capricornus in medio celi sub terra et²¹ distat hileg, scilicet principium Arietis ab eo²² per 6 horas. Et principium Geminorum ab eodem angulo terre distat tunc per 148 tempora. Cumque multiplicamus 13 que sunt partes horarum noctis²³ principii Geminorum in 6, fiunt 78 [partes]²⁴ quas si minueris²⁵ de 148 remanent 70 illud²⁶ idem quod invenit Ptholomeus, et eodem modo operaberis cum fuerit [170r] hileg²⁷ alicubi inter occidentem et angulum terre.

¹ in orizonte in] oriçonte Ca in oriçonte Ce

² Et ut ... hoc scito] *This gloss om.* Po; appears twice in Ca, the first marked “vacat.” *Ce adds* Et nota quod iste due glose debent esse in margine precedenti istius eiusdem tractate sed non potui ipsas ibi ponere propter magnam copiam de ipsis glosis. Et require primam est isto signo presenti [sign] super illo [sign]. Deinde id quod in utramque longitudinem et cetera et ibi est predictum signo notatum. Secunda glosula esse debet in eodem margine modicum infra per duas lineas vel sic ubi tu invenies istud signum [sign]. Incipit sic ille [sign] et ut hic quod diximus fit evidentius et cetera.

³ vis] poteris Po

⁴ poteris] *om.* Po

⁵ est] fuerit Po

⁶ orizontem orientalem] oriçonte orientali Ca orientalem oriçontem Ce

⁷ unde] tunc CaCePo

⁸ ab eo] *om.* Ce

⁹ et] *om.* Ce

¹⁰ principii] principio CaCeOd

¹¹ multiplicas] multiplicles Po

¹² 6] que Od

¹³ fiunt 78 quibus] fiunt 78 ex quibus Po fiunt 78 ex quibus Ce

¹⁴ cum minueris] minuas

¹⁵ illud] *om.* Po

¹⁶ esset ubicunque esset hileg] erit ubicunque fuerit hyleg Po

¹⁷ etiam eodem modo] etiam eodem Ca in eodem Ce eodem modo Po

¹⁸ habere] *adds* eadem Po

¹⁹ 3 exemplo] tertio ex principio Ca tertio exemplo Po

²⁰ est] *om.* Po

²¹ et] *om.* Po

²² eo] eodem Po

²³ noctis] *adds* que sunt Po

²⁴ partes] *om.* Od

²⁵ minueris] minuas] Po

²⁶ illud] illam Po

²⁷ hileg] *om.* Po

and in this first method he places the prorogator, that is the first degree of Aries, on the eastern horizon and works always with ascensions on the direct circle. The passage is thus easily understood.

Note that if, nevertheless, in the first example¹ you want to work relative to midheaven under the Earth, you can do it in this way: for when Aries is on the eastern horizon, whence Cancer is in midheaven below Earth and the start of Aries is distant from it by 6 hours, and then the beginning of Gemini is distant from the same midheaven below Earth by 32 times and the nocturnal hour-segments of the beginning of Gemini are 13; which when you multiply by 6 make 78, and when you subtract 32, that is the longitude of the intersector from the cardinal point, 46 are left, that is the same as Ptolemy finds, and it should be done in the same way wherever the prorogator is between east and the cardine of the Earth [midheaven below the earth]. And the same method can be used in relation to the cardine of the Earth in the third example, that is when the beginning of Aries is in the west, so then Capricorn is at midheaven below the Earth and the prorogator, that is the beginning of Aries, is distant from it by 6 hours. And the beginning of Gemini from the same cardine of the Earth is then distant by 148 times. And when we multiply 13, which are nocturnal hour-segments of the beginning of Gemini, by 6, it makes 78 parts, which if you subtract from 148, 70 are left, the same as Ptolemy finds, and you will work in the same way when [170r] the prorogator is anywhere between the descendant and the cardine of the Earth.

¹ “ascendatque primitus arietis.”

Nota quod in hoc exemplo prima longitude,¹ scilicet 148, est² maior secunda, scilicet 102 et ideo secunda minuitur a prima.³ // **Erit tempus huius longitudinis.** Id est cum fuerit initium⁴ Geminorum in ipso orizonte, erit⁵ inter ipsum et celi medium super terra[m]⁶ 102 tempora.⁷ // **Sequens igitur locus.** Id est⁸ si nos minuerimus 102 tempora, scilicet hanc secundam⁹ longitudinem de prima scilicet de 148, remanent 46 in quibus veniet primus gradus Geminorum ad orizontem et tot annis vivet natus et cum tot temporibus, scilicet 46 fere oriuntur¹⁰ Aries et Taurus¹¹ in predicto clymate scilicet Rodio¹² // **Tempora iterum ascensionum** // In [hoc]¹³ loco [innuit]¹⁴ Ptholomeus quod hec¹⁵ directiones possunt fieri etiam per ascensiones regionis sed ipse non dirigit nisi per ascensiones¹⁶ circuli directi secundum hunc modum. Hic ponit secundum exemplum et ponit principium Arietis¹⁷ in medio celi et sic distat principium Geminorum ab eo per 58 tempora. Id est cum istis 58 partibus veniet principium Geminorum ad medium celi.¹⁸ **Item sit occidens principium Arietis.** In hoc¹⁹ exemplo tertio²⁰ fit contrarium eius quod fit²¹ in primo, quem in hoc²² prima longitudo, scilicet 32, est minor secunda, scilicet²³ 102, et ideo prima minuitur a secunda et residuum est quod querimus, scilicet 70. // **Item non sit Arietis initium in aliquo angulorum.**²⁴ // In hoc loco ponit Ptholomeus quartum exemplum in quo non ponit principium Arietis in aliquo angulorum, sed ponit eum²⁵ in quarta occidentali, distans a medio celi per 3 horas, et quando²⁶ hoc fuerit, erit²⁷ 18 gradus Tauri in medio celi et erint inter eos tunc [51]²⁸ tempora.

¹ longitudo] adds est Ce

² scilicet 148 est] est 148 Po

³ Nota quod ... a prima] *This gloss should precede the previous one, beginning "Nota quod si tame." It is also out of place in Ce.*

⁴ initium] primum Po

⁵ orizonte erit] oriōnte erunt Ce oriente erunt tempora Po

⁶ terram] terra Od

⁷ tempora] om. Po

⁸ Id est] om. Po

⁹ secundam] om. Po

¹⁰ oriuntur] orientur Po

¹¹ in quibus veniet ... Aries et Taurus] om. Ca

¹² Rodio] Rodo Ce Redio Po

¹³ hoc] quo Od

¹⁴ innuit] iniit Od

¹⁵ hec] adds ex Ce

¹⁶ regionis sed ipse non dirigit nisi per ascensiones] om. Ca

¹⁷ Arietis] oriens Ca

¹⁸ Id est cum istis 58 partibus veniet principium Geminorum ad medium celi.] *This gloss om. Ce*

¹⁹ hoc] hic Ca. *The sign for this gloss in Ca is at in hoc secundo loco, a few lines earlier.*

²⁰ tertio] om. CaPo

²¹ fit] est Po

²² hoc] isto Po

²³ scilicet] que est Po

²⁴ angulorum] Od adds cancelled sed post eum

²⁵ eum] idem Po

²⁶ quando] cum Po

²⁷ erit] erunt Ce

²⁸ 51] 5 Od

Note¹ that in this example the first longitude, that is 148, is greater than the second, that is 102, and so the second is subtracted from the first.

The time of this longitude.² That is, when the start of Gemini is in the same horizon, there will be 102 times between that and midheaven above the Earth.

Therefore the subsequent place.³ That is, if we subtract 102 times, that is this second longitude from the first, that is of 148, 46 remain, in which the first degree of Gemini comes to the horizon, and the child will live that number of years, and Aries and Taurus will rise in that many times, that is about 46, in the above-mentioned climate, that is Rhodes.

Again, the times of ascensions.⁴ In this place Ptolemy suggested that these directions can be done also through oblique ascensions, but he only directed by right ascensions according to this method.

Here⁵ he puts the second example and he places the beginning of Aries in the midheaven and thus the beginning of Gemini is distant from it by 58 times.

That is,⁶ with these 58 parts the beginning of Gemini comes to the midheaven.

In the same way, let the beginning of Aries be setting.⁷ In this third example the opposite happens to what happens in the first, since in this first longitude, that is 32, it is less than the second, that is 102, and so the first is subtracted from the second and the remainder is what we are seeking, that is, 70.

Likewise, let the start of Aries not be at any cardine.⁸ In this place Ptolemy puts a fourth example, in which he does not place the beginning of Aries in any of the cardines, but puts it in the western quadrant, 3 hours distant from the midheaven, and when that is the case, the 18th degree of Taurus will be at the midheaven and there will be 51 times between them then.⁹

¹ “Et ut hoc quod diximus.”

² “erit tempus huius longitudinis.”

³ “Sequens igitur locus.”

⁴ “Tempora igitur/iterum/verum ascensionum.”

⁵ “Sit iterum celi medium arietis initium.”

⁶ “circuli temporibus 58 temporum / quando erit in medio celi.”

⁷ “Item sit occidens arietis principium.”

⁸ “Item non sit Arietis initium in aliquo angulorum.”

⁹ 3 hours (45°) of right ascension takes us from Ari 0 to Tau 17. The equinoctial hour “time” of the start of Gemini (17;6,30), multiplied by 3 = 51;19,30. See the method described in Almagest II.9, elucidated by Robbins (1940, 292n2 and 297n1). The hour-length is found from the table of oblique ascensions, and the right ascensions table is used for the rest of the process.

Et erit principium Geminorum a celi medio versus orientem¹ 13 tempora que iuncta cum 51 facient² 64 et hoc est quod querimus et [in]³ hoc exemplo utreque longitudines adduntur.

Et iam perambulaverat locus alhileg. Sciendum est quod in hoc loco ideo Ptholomeus [repetit]⁴ supradictos⁵ numeros temporum ascencionum, ut ipse⁶ ostendat quod illi numeri differunt inter se una et eadem proportione qua differunt inter se hore quibus inventi fuerint⁷ et per hoc etiam ostenderunt quod hic modus est universalis et verus. In primo vero⁸ exemplo posuit ipse hileg in principio horarum diei et invenit tunc tempora ascencionum esse 46. In secundo vero exemplo⁹ posuit¹⁰ hileg¹¹ in medio celi et¹² invenit tunc tempora¹³ 58 que addunt¹⁴ super 46 12;¹⁵ est ergo superfluitas horum [170v] temporum 12 et superfluitas horarum 6. Deinde posuit in tertio exemplo hileg in occidente et invenit tunc tempora 70 que addunt 58 12;¹⁶ superfluitas vero¹⁷ horum temporum est 12¹⁸ et superfluitas horarum est 6.¹⁹ Sic ergo proportio superfluitatum horum temporum est una cum proportione horarum. In quarto autem exemplo posuit ipse hileg super 3 horas a medio die, scilicet super 9 horas a principio diei, scilicet²⁰ in medio inter occidentem et medium celi que sunt medietas de 6 [et]²¹ invenit tunc tempora²² esse 64 que sunt in medio inter 58 et 70; sed²³ addunt super²⁴ 58 medietatem de 12, scilicet 6. Sic ergo patet quod eadem²⁵ proportio superfluitatum²⁶ et horarum in [hoc]²⁷ exemplo, scilicet quod hileg sit in principio Arietis et locus interfectoris²⁸ in principio Geminorum.

¹ orientem] adds per Po

² facient] fuerit CaCe

³ in] om. Od

⁴ repetit] reperit CaCeOd

⁵ supradictos] predictos Po

⁶ ipse] om. Po

⁷ fuerint] fuerunt Ca

⁸ vero] enim CaCe

⁹ exemplo] ex principio Ca

¹⁰ posuit] adds ipse Po

¹¹ in principio horarum diei ... posuit hileg] om. Ce

¹² et] om. Ce

¹³ tempora] adds esse Po

¹⁴ addunt] ad addunt Od superaddunt Po

¹⁵ super 46 12] super 46 gradus 12 Ca supra 46 12 Po super 146 612 Ce

¹⁶ 12] 14 Po

¹⁷ vero] ergo Po

¹⁸ 12] 14 Po

¹⁹ 6] 7 Po

²⁰ super 9 horas a principio diei scilicet] om. Po

²¹ et] etiam Od

²² tempora] ipsa Ca

²³ sed] scilicet Po

²⁴ super] om. Ca

²⁵ eadem] adds est Ce

²⁶ superfluitatum] adds que CaCe adds temporum Po

²⁷ hoc] quo Od

²⁸ interfectoris] adds sit Po

And the beginning of Gemini will be 13 times from the midheaven towards the east, which joined with 51 make 64, and this is what we seek, and in this example the two longitudes are added.

And the place of prorogation had already gone around.¹ Note that in this place, for that reason, Ptolemy repeats the stated numbers of the times of ascensions, so that he shows that these numbers vary amongst themselves in one and the same proportion as the hours in which they are found, and through this they also show that this method is universal and true. Now, in the first example he put the prorogator itself at the beginning of the hours of the day and found then the times of ascensions to be 46. In the second example he put the prorogator at the midheaven and found then 58 times, which is 12 greater than 46; 12 is therefore the excess of its [170v] times, and [that is] the excess in 6 hours. Then in the third example he put the prorogator in the descendant and found then 70 times, which is 12 greater than 58; so the excess of its times is 12 and the excess in hours is 6. Thus the proportion of excesses of their times is one with the proportion of hours. But in the fourth example he put the prorogator itself at 3 hours from midday, that is at 9 hours from the beginning of the day, that is midway between the west and midheaven, which are half of 6, and then he found the times to be 64, which are midway between 58 and 70; but that is half of 12—that is, 6—greater than 58. Thus it is clear that the proportion of excess and of hours is the same in this example, that is, provided that the prorogator be at the beginning of Aries and the place of interfection at the beginning of Gemini.

¹ “Et iam perambulaverat locus alhileg.”

Et etiam si tu poneres¹ hileg² in hoc quarto exemplo distare a medio celi per 2 horas que sunt 3 [tertia] de 6, tu invenires³ tunc tempora esse 62 que addunt super 58 4⁴ que sunt teritia de 12. Et hanc eandem proportio[nem] superflu[itatum] invenies tu que⁵ [et]⁶ horarum cum tu posueris hileg alibi quam in principio Arietis; sed non semper [erit] superflu[itas] de quarta in quartam, scilicet 6 horarum 12 immo⁷ quandoque erit plus 12 aut⁸ minus et ex hoc habetur quod hic modus est verus. Et hoc est quod dicit. // **Modum autem hiis omnibus rebus convenientem.** Hic ponit Ptholomeus alium modum et aliam regulam qua levius⁹ et apertius reperitur¹⁰ illud quidem¹¹ quod invenitur per primum modum quem superius posuit.¹² Et hic modus est abbreviatus et extractus ex¹³ primo.¹⁴ Quem licet Ptholomeus satis intelligibiliter ponat; tamen nos ponamus eum ut nobis fiat levior. Si fuerit hileg in ascidente ipso,¹⁵ tunc minuende sunt¹⁶ ascensiones gradus hileg¹⁷ regionis illius de ascensionibus gradus intersectoris, et quod remanet erit¹⁸ tempora quibus veniet intersector ad ascendens. Quod si fuerit hileg in medio celi, minuemus ascensiones¹⁹ gradus hileg de ascencionibus gradus intersectoris per circulum direct[um] et quod remanet est²⁰ quod querimus // Si autem fuerit hileg in occidente, tunc minue²¹ ascen[siones] nadir²² gradus hi[leg] de ascen[sionibus] nadir²³ gradus inter[sectoris] per cir[culum] regi[onis] et quod rema[net] est quod queri[mus]. Quod si non fuerit hi[leg] in hiis²⁴ tribus angulis,²⁵ sed in medio; tunc semper considerandum est per quot ho[ras] ipse distet ab angulo²⁶ medii celi et hoc qualiter sciatur in precedenti modo satis dictum est.

¹ poneres] ponens Ca

² hileg] hyleg esse Po

³ tu invenires] tunc tu invenies Po

⁴] om. Po

⁵ Et hanc eandem proportionem superfluitatum invenies tu que] Hanc ergo superfluitatum proportionem eadem et Po

⁶ et] 2 Od

⁷ 12 immo] et 12 Po

⁸ aut] vel Po

⁹ levius] levius Ca

¹⁰ reperitur] invenitur Ce

¹¹ quidem] idem CaCe

¹² posuit] posuimus Ce

¹³ ex] a Ce

¹⁴ et aliam regulam qua levius et apertius reperitur illud quidem quod invenitur per primum modum quem superius posuit. Et hic modus est abbreviatus et extractus ex primo] qui extractus est a primo, per quem levius invenitur quam per primum idem quod querimus, et in hic est abbreviatus Po

¹⁵ Si fuerit hileg in ascidente ipso] Sed si fuerit yleg in ascidente Ce

¹⁶ sunt] om. Ca

¹⁷ hileg] yleg ascensiones Ce

¹⁸ erit] erunt Po

¹⁹ ascensiones] om. Ce

²⁰ est] adds idem Po

²¹ minue] minuimus Po

²² nadir] guadayr Po

²³ nadir] adayr Po

²⁴ hiis] istis Ce

²⁵ angulis] articulis Ca

²⁶ ipse distet ab angulo] distat hyleg a Po

And also, if you put the prorogator in this fourth example to be distant from the midheaven by 2 hours, which are a third of 6, you will find then the times to be 62, which exceed 58 by 4, which are a third of 12. And you find this same symmetry of excess and hours when you put the prorogator elsewhere than the beginning of Aries, but the excess will not always be four, that is, 12 in six hours, but rather sometimes it will be more than 12, or less, and from this we gather that this method is true. And that is what he says.

But with all these things, a convenient method.¹ Here Ptolemy proposes another method and another rule, by which we can more clearly and easily discover what we found by the first method which was stated above. And this method is abbreviated and extracted from the first. Although Ptolemy put it sufficiently clearly, let us however state it, so that it is easier for us. If the prorogator is at the ascendant itself, then the ascensions of the prorogative degree of this region are subtracted from the ascensions of the degree of interfection, and what remains will be the times with which the interfector comes to the ascendant. Now if the prorogator is at the midheaven, we subtract the ascensions of the prorogative degree from the ascensions of the degree of interfection on the direct circle [right sphere], and what remains is what we are seeking. If, however, the prorogator is in the descendant, then subtract the ascensions of the nadir of the prorogative degree from the ascensions of the nadir of the interficient degree through the circle of the region [on the oblique circle], and what remains is what we are seeking. And if the prorogator is not in these three cardines, but in between, then we must always consider by how many hours it is distant from the cardine of midheaven and how this is known has just been adequately explained above.

¹ “Modum autem hiis omnibus rebus convenientem.” This is what Casulleras and Hogendijk (2012, 53–59) term the “Hour-Line Method.” As Casulleras and Hogendijk note, despite Ptolemy’s claim (apparently accepted by most commentators) that this is a close approximation to the “Position Semicircle Method,” there are significant differences between them.

Quo scito post ea¹ semper reducendus est gradus hi[leg] ad [unumquemque]² angulorum inter quos inventus est // Quod si fuerit in orientali quarta [reducendus]³ est ad ascen[dens] [171r] et minuende sunt tunc ascensiones eius⁴ de⁵ ascen[sionibus] gradus⁶ interfectoris per cir[culum] re[gionis] et quod rema[net] est se[r]vandum; postea reducendus est ad angulum medii celi et minuende sunt ascen[siones] eius de⁷ [ascensionibus] gradus⁸ interfectoris per cir[culum] directum et quod rema[net] est servandum.⁹ Et post ea¹⁰ consideranda est differentia horum duorum servatorum minuendo scilicet unum ab alio, de qua debemus accipere talem partem qualis pars scilicet¹¹ hore longitudinis a medio celi de 6. Et hoc fiet per quatuor numeros propor[tionales], quorum primus est 6¹² pars quam volumus accipere et¹³ est ignotus et secundus est differentia que remansit; tertius est hore longitudinis a medio celi; et quartus¹⁴ 6 hore. Multiplicatur¹⁵ ergo secundus in tertium¹⁶ et dividetur¹⁷ per quartum et provenit primus, scilicet pars quam debemus addere ascen[sionibus] cir[culi] directi¹⁸ si fuerint pauciores ascen[sionibus] regi[onis] vel ab eis diminuere si fuerint¹⁹ plures. Et quod post augmentum vel diminutionem pervenerit erit²⁰ tempora quibus veniet²¹ interfector] ad locum hi[leg].²² Quod si fuerit²³ in quarta occidentali²⁴ tunc redu[cendus] est hi[leg] ad angulum occidentalis²⁵ et ad angulum medii celi et faciendum est sicut fecimus modo²⁶ in alia quarta. Et hunc exequetur²⁷ Ptholomeus in libro et litera eius satis levis est.²⁸ Et hunc eundem modum ponit Alkabicius²⁹ cum³⁰ tractat de directione etcetera.³¹

¹ post ea] postea Po

² unumquemque] unumquamque Od

³ reducendus] producendus Od

⁴ tunc ascensiones eius] ascensiones Ce

⁵ eius de] eiusdem Ca illius de Po

⁶ gradus] om. Po

⁷ eius de] eiusdem Ca de Ce

⁸ gradus] om. CaCe

⁹ servandum] observandum Po

¹⁰ Et post ea] Postea Po

¹¹ scilicet] sunt Ca

¹² est 6] hic 6 Ca hic Ce est hoc Po

¹³ et] adds hoc Po

¹⁴ Et quartus] Quartus est Ce Et quartus est Po

¹⁵ multiplicatur] multiplicantur Ca multiplicetur Po

¹⁶ secundus in tertium] secundum initium Ca tertius in secundum vel econverso Po

¹⁷ dividetur] dividitur Ce dividatur Po

¹⁸ directi] adds scilicet Po

¹⁹ fuerint] adds maiores vel Po

²⁰ pervenerit erit] provenit Ca provenerit erit Ce proveniet erunt Po

²¹ veniet] perveniet Po

²² hileg] yleg in quarta occidentali Ce

²³ fuerit] adds hyleg CaCePo

²⁴ occidentali] orientali Ca

²⁵ occidentalis] occidentis CaCe

²⁶ modo] om. Po

²⁷ hunc exequetur] hanc exequetur Ca hanc sequitur Po

²⁸ litera eius satis levis est] eius litera est satis plana Po

²⁹ Alkabicius] Alcabitus Ca Alchabitius Ce

³⁰ cum] ubi Po

³¹ etcetera] om. CaCePo

Once this is known, after that the prorogative degree is always to be brought to any of the cardines between which it is found. So if it is in the eastern quadrant, it is to be reduced to the ascendant and [171r] then its ascensions are to be subtracted from the ascensions of the interficient degree through the circle of the region [oblique ascensions] and what remains is noted; after that it is to be drawn to the cardine of midheaven and its ascensions are to be subtracted from the ascensions of the interficient degree through the direct circle [right sphere] and what remains is noted. And after that we must consider the difference between those two noted [numbers], that is, subtracting one from the other, from which we must take a fraction equivalent to the fraction of 6 [hours which] the longitudinal hour [is] from the midheaven.¹ And this will be done through four proportional numbers,² of which the first is the 6th part which we want to take, and is unknown; and the second is the difference that remains; the third is the longitudinal hour from the midheaven; and the fourth is six hours. Therefore the second is multiplied by the third and divided by the fourth, and the first comes out, that is the part which we must add to the ascensions on the direct circle if they are smaller than the ascensions of the region, or subtract from them if they are greater. And what results from the addition or subtraction will be the times in which the intersector comes to the place of prorogation. And if it is in the western quadrant, the prorogator should then be reduced [drawn] to the western cardine and to the cardine of midheaven, and it should be done as we did earlier in the other quadrant. And Ptolemy sets this out in the book, and his text is sufficiently clear. And Alcabitius puts this the same way, when he considers direction, etcetera.

¹ This part of the gloss is worded very similarly to al-Qabīṣī's *Introductorius*; see Introduction, section 2.

² This repeats "secundum ipsius elongation" above.

Nota quando hi[leg] fuerit in locis orientalibus que sunt a medio celi usque ad ascendens in 12a vel 11a aut in ascendentे semper faciemus atiazir directum et conversum, id est secundum successionum signorum donec applicet ad malos vel eorum radios et donec conversum perveniat ad gradum occidentalis, necnon iudicabimus per ascencionum unius earum duarum directionum factarum quando hileg cadens a medio celi ubi alia concordaverit cum ea, et si ambe concordaverint cum ea primum est ut figurat, hoc est sequetur effectum ascencionis. Et si discordaverint utreque abscisiones, sciemus quia tempus illud convenit cons[er]vationi complexionis eiusdem hominis.

Note¹ that when the prorogator is in eastern places which are from the midheaven to the ascendant, in the 12th [house], or the 11th, or in the ascendant, we always make Tasyir direct and converse: that is, in succession of signs until it comes into contact with the malefics or their rays, and converse until it comes to the western degree; furthermore, we judge through the ascensions of one of the two directions made when the prorogator descends from the midheaven, where the other is in alignment with it; and if both are in alignment with it, the first is as it is drawn; that is, it will follow the effect of the ascension. And if the intersections are different, we will know because that time serves the preservation of the same man's complexion.

¹ Not in other glosses, but this covers similar material to “grece urime appellatur.” That gloss is omitted from Od, but there is some similar material under “ad locum hyleg ipse non eunt” (note 10).

VII. Appendix: Glosses not present in Od

This section presents the glosses that appear in one or more of Ca, Ce and Po, but not in Od. Many of them are also omitted by Po. They are all relatively short.

Ca was used as the base text (unless absent from Ca, in which case Ce was used). Minor variant readings have been omitted. Very short glosses that only appear in a single manuscript have not been included.

At beginning of chapter (before all glosses in Od)

Lemma	Text
Primum est vite sermocinatio	Sensus huius est quod nos ¹ primo debemus ostendere quantum vivet natus, et postea ostendere ea que contingent ei in vita. Quem si nos primo ostenderemus ea que contingunt in fine, ut ipsum habere uxorem, et postea inveniemus ipsum non habere tantam vitam nobis [risum] ² habere convenit.
qui multis modis observatur	Sensus est quod multi de hoc diverso modo dixerunt a Ptholomeo. ³
loca alhileg illa sunt in quibus stella	Sensus est quod planete qui erunt alhileg semper erunt in locis ⁴ qui erunt alhileg, et que sunt illa loca et planete ipse ostendet statim.
in eorum oppositione	Nota quod ⁵ hec loca secundum Ptholomeum sunt tantum quinque.
ad premittendum conveniens est	Hoc ostendit que istorum aliis sint fortiora, [moderni] ⁶ tamen huic [addunt] ⁷ 8 et sub terra 3, 4, 5 et sic dicunt ista loca esse posse hileg, quedam in die et quedam in nocte.
observanda non sunt	Et per hoc removet octavum quod nec in qualitate nec [in] ⁸ aspectu cum ascendentे convenit.
ob hoc quod cum hoc	Hic reddit causam quare 12 non potest esse hyleg, scilicet quia cadit ab ascendentе, et quia stelle que in eo apparent, [apparent] ⁹ maiores vel minores quam sint propter aerem spissum.

¹ Sensus huius est quod nos] id est Po

² risum] om. Ca

³ This gloss] Id est multi in hoc diversificati sunt a Ptholomeo Po

⁴ locis] locum Ca

⁵ Nota quod] Et nota Ce om. Po

⁶ moderni] om. Ca

⁷ addunt] addit Ca

⁸ in] om. Ca

⁹ apparent] om. Ca

Interspersed with other glosses

Lemma	Text
Partem igitur fortune sciemus	Et quia multotiens fecit mentionem de parte fortune, et non dixit quid esset, in hoc loco vult ostendere quid sit et qualiter inveniatur. ¹
Convenit etiam	Hic vult docere ² que illorum 5 dominatorum sit fortior et debeat proponi ³
Grece urime appellatur	Urime id est recedens et est ⁴ tractum ad umbram ⁵ que post meridiem recedit, et retrogradatur, id est cum sol vadat naturali motu ab oriente in occidentem, umbra revertitur retro, scilicet ab occidente in ori- entem. ⁶
collectis numeris superadduntur	scilicet annorum quos aliquot quod deus dat ⁷
etiam quartus aspectus	In hoc etiam affinitatem habent cum quarto ⁸
et salvandi vim habebit	Eo quod sol est calidus et siccus et luna frigida et humida et hoc cum fuerit unum in signo vel gradu calido et sicco ⁹

¹ *This gloss*] Nota de parte fortune Po

² docere] dicere Ce

³ *This gloss*] Hic incipit eligere hyleg Po

⁴ et est] vadit et retrogradatur, et etiam Po

⁵ ad umbram] ab umbra Po

⁶ umbra revertitur retro, scilicet ab occidente in orientem] motu umbra eius motu. Po

⁷ *This gloss*] om. Po

⁸ *This gloss*] In hoc etiam affinitatem habent cum quarta Ce om. Po

⁹ *This gloss*] om. Ce

per quos consimiles
longitudines locales
accipiuntur

Sensus huius¹ est quod per ascensiones circuli directi scitur quantum elongatur unusquisque locus qui est a circulo² meridiei ad ascendens, vel a quarto ad septimo a circulo meridiei,³ et iste sunt consimiles longitudines. Et per elevationes regionum scitur quantum elongatur⁴ unusquisque locorum que sunt ab oriçonte⁵ in quartum, vel a⁶ septimo in decimum ab ipso oriçonte, et iste similiter sunt consimiles longitudines, quoniam per has duas maneries ascensionum equantur domus, id est⁷ tot gradus equinoctialis circuli sunt in una domorum quot in alia domo⁸ quartarum oppositarum.

loco unius anni

hoc per experientiam invenitur⁹

solaris constituitur

Scilicet interfectoris¹⁰

tempus transitus
in quibus unaqueque
illarum longitudinum

Scilicet tertia quarta sextili vel alia que fuerit inter locum et alhyleg et locum mali,¹¹ si locus mali fuerit inter medium celi et occidens [vel regionis],¹² scilicet accipiemus tempora occasus eius, et ipsa¹³ sunt equalia ortibus eius oppositis

locus alhileg cum
precesserit non in
aliquo istorum trium

Scilicet interfectorum motum firmamenti¹⁴

constitutis fuerit
prefatum

In alio non ergo erunt tempora ascensionum quorum narratio precesserit¹⁵ aut tempora occasus,¹⁶ aut tempora transeuntia in medio celi, ipsa in quibus perveniant in eis ad loca precedentia, ipsa set perveniant in eis¹⁷ ad loca diversa.

supra semicirculum

Scilicet semicirculum ex circulis. Scilicet qui semicirculus est ex circulis.¹⁸

¹ huius] *adds* litere Ce

² circulo] *adds* tantum Po

³ a circulo meridiei] *om.* Po

⁴ elongatur] *om.* Po

⁵ oriçonte] oriente Po

⁶ a] *adds* loco Po

⁷ id est] et Po

⁸ quot in alia domo] *om.* Po

⁹ *This gloss*] *om.* Po

¹⁰ *This gloss*] *om.* Po

¹¹ ad locum mali] *om.* Po

¹² vel regionis] *om.* Ca

¹³ ipsa] tempora Ce

¹⁴ *This gloss*] scilicet ascendentis et medii celi et septima Ce *om.* Po

¹⁵ precesserit] precessit CePo

¹⁶ aut tempora occasus] *om.* Po

¹⁷ in eis] loca sequentia CePo

¹⁸ *This gloss*] Scilicet qui semicirculus est ex circulis. Ce *om.* Po

Nam cognito gradu medii celi	Scilicet ascensiones circuli directi in hora nativitatis ¹
a medii celi circulo	In alio et quando circuli signorum partes ²
Cumque hoc sciverimus considerabimus	Sensus est quod nos accipiemus ascensiones circuli directi, que sunt inter circulum meridie et locum intersectoris primum, scilicet in quo est in hora nativitatis.
Deinde id quod inter utramque longitudinem (1)	Id est id cum quo una longitudine maior est alia ³
in 17	que sunt partes diurne principii geminorum ⁴
Nunc diximus extiterit enim 64 temporum	scilicet 64 addunt super 58 sex, que sic se habent ad 12 ut 3 hore se habent ad sex horas ⁵

At end of chapter (after all glosses in Od)

Lemma	Text
aspiciemus illorum graduum ascendentia	Scilicet per tabulas regionis hic invenias accidentia que sunt equalia ascensionibus oppositorum ⁶
in supra posita longitudine arietis	Id est primo accipiemus differentiam que erit inter ascensiones [circuli directi et ascensiones] ⁷ regionis cum principium ⁸ fuerit positum in medii celi angulo ⁹ et in angulo occidentis

¹ *This gloss] om. Po*

² *This gloss] om. Po*

³ *This gloss] Id est id est cum quo una longitudine maior est altera Ce om. Po*

⁴ *This gloss] om. Po*

⁵ *This gloss] om. Po*

⁶ *This gloss] que sunt scilicet equalia ascensionibus opositorum Po*

⁷ *circuli directi et ascensiones] om. Ca*

⁸ *principium] om. Po*

⁹ *angulo] om. Po*

et oportet addiscamus.	In alio iam autem remansit super nos ¹ disertio cuiusque specierum rerum que occurunt yleg et occasum ² eius ex eo cuius permissimus rememorationem ex rebus que sunt ultimi horis ³ temporis que sunt ⁴ ex eis interfidentia et que sunt ex eis quedam felimentaris ⁵ et relique res que occurunt ei
Nec non ex initiosis annorum	hic satis potest intelligi de anno directionis vel de anno profectionis ⁶
initiosis impedimentia loca dominantia	loca dominantia sunt ⁷ solis et lune et ascendentis et partis fortune ⁸
impedimenta grandia magni timoris	alias generalia. Scilicet accidentia in separabilia ut cecitas et epilensia et paralisis et his similia ⁹
similitudine loci rei obviantis	scilicet planetis dominantibus in nativitate et compositioni ¹⁰ nati atque complexioni ¹¹

References

Original Sources

Manuscripts:

- Brussels, Bibliothèque Royale, 18678-18681 (here: **Br**)
 Cambrai, Bibliothèque Municipale, 955 (853) (here: **Ca**)
 Cesena, Biblioteca Comunale Malatestiana, Plut. S.XXVII.3 (here: **Ce**)
 Oxford, Bodleian Library MS Digby 57 (here: **Od**)
 Paris, Bibliothèque nationale de France, lat. 7302 (here: **Pa**)
 Pommersfelden, GSB, 60 (2633) (here: **Po**)
 Salamanca, Biblioteca Universitaria, 2051 (here: **Sa**)
 Vatican, Biblioteca Apostolica Vaticana, Pal. lat. 1420 (here: **Vp**)
 Vatican, Biblioteca Apostolica Vaticana, Reg. lat. 1285 (here: **Vr**)

¹ super nos] *om.* Po

² occasum] *occasum* Po

³ ultimi horis] *ulterioris* Po

⁴ que sunt] *quando* Po

⁵ felimentaris] *felimecatuptaque* Po

⁶ *This gloss*] *om.* Ca

⁷ loca dominantia sunt] *que sunt locus*

⁸ *This gloss*] *om.* Ca

⁹ *This gloss*] *om.* Ca id est separabilia ut epylentia paralisis et similia Po

¹⁰ compositioni] *compositionem* Po

¹¹ atque complexioni] *This gloss om.* Ca et complexione Po

Vatican, Biblioteca Apostolica Vaticana, Vat. lat. 7616 (here: **Vv**)

Early-modern editions:

- Albohali, John of Toledo, tr., Montanus, J., ed., 1549. *Albohali Arabis astrologi antiquissimi, ac clarissimi de iudiciis Nativitatum liber unus*, Nuremberg
 Omar, Pruckner, N., ed., 1551. *De Nativitatibus Book 1*, in *Iulii Firmici Materni [...] Astronomicon Libri VIII*, Basel.

Modern Editions and Scholarship

- Avelar, H., 2021. “Who Wants to Live Forever? Astrological Methods for Calculating Lifespan in Western Culture and Perspectives on Determinism in Astrology,” *International Journal of Divination and Prognostication* 2, 161–188.
- Baur, L., ed., 1912. *Die Philosophischen Werke des Robert Grosseteste, Bischofs von Lincoln*, Münster.
- Bezza, G., 1990. *Commento al primo libro della Tetrabiblos di Claudio Tolomeo, con una nuova traduzione e le interpretazioni dei maggiori commentatori*, Milan.
- Bouché-Leclercq, A., 1899. *L'astrologie grecque*, Paris.
- Boudet, J-P., 2008. “Un traité de magie astrale arabo-latin: Le *Liber de imaginibus* du Pseudo-Ptolémée,” in Leonardi, C., Santi, F., eds., *Natura, scienze e società medievali. Studi in onore di Agostino Paravicini Baglioni*, Florence, 17–35.
- Burnett, C., 2001. “The Strategy of Revision in the Arabic-Latin Translations from Toledo: The Case of Abu Ma’shar’s On the Great Conjunctions,” in Hamesse, J., ed., *Les Traducteurs au Travail: Leurs Manuscrits et Leurs Méthodes*, Turnhout, 51–113.
- 2006. “A Hermetic Programme of Astrology and Divination in mid-Twelfth-Century Aragon: The Hidden Preface in the *Liber novem iudicium*,” in Burnett, C., Ryan, W.F., eds., *Magic and the Classical Tradition*, London, 99–118.
- 2019. “Astrology for the Doctor in a Work Addressed to Robert, Earl of Leicester,” in Weill-Parot, N., Ausécache, M., Chandelier, J., Moulinier-Brogi, L., Nicoud, M., eds., *De l’homme, de la nature et du monde. Mélanges d’histoire des sciences médiévales offerts à Danielle Jacquart*, Geneva, 179–196.
- Burnett, C., Yamamoto, K., Yano, M., 2004. *Al-Qabīṣī (Alcabitus): The Introduction to Astrology. Editions of the Arabic and Latin Texts and an English Translation*, London.
- Carruthers, M., 2008. *The Book of Memory: A Study of Memory in Medieval Culture*, 2nd ed, Cambridge.
- Casulleras, J., Hogendijk, J.P., 2012. “Progressions, Rays and Houses in Medieval Islamic Astrology: a Mathematical Classification,” *Suhayl* 11, 33–102.
- Chabás, J., Goldstein, B.R., 2003. *The Alfonsine Tables of Toledo*, Dordrecht.
- 2016. “The Moon in the Oxford Tables of 1348,” *Journal for the History of Astronomy* 47, 159–167.
- Clanchy, M., 1993. *From Memory to Written Record: England 1066-1307*, 2nd edition, Oxford.

- Dykes, B.N., tr., 2009. *Persian Nativities, vol. I: Māshā'allāh and Abū'Ali*, Minneapolis.
- Dykes, B.N., tr., 2011. *The Book of the Nine Judges*, Minneapolis.
- Falk, S., 2016. “A Merton College Equatorium: Text, Translation, Commentary,” *SCI-AMVS* 17, 121–159.
- French, R., 1996. “Foretelling the Future: Arabic Astrology and English Medicine in the Late Twelfth Century,” *Isis* 87, 453–480.
- Gaida, M., 2017. *Encounters With Alcabitius: Reading Arabic Astrology In Premodern Europe*, PhD Dissertation, University of Oklahoma.
- Georges, S., n.d. *Glosses as Source for the History of Science. The Case of Gerard of Cremona's Translation of Ptolemy's Almagest* (provisional title; publication envisaged for 2023).
- Juste, D., 2021a. “MS Pommersfelden, Gräflich Schönbornsche Bibliothek, 60 (2633)”, *Ptolemaeus Arabus et Latinus. Manuscripts*, <http://ptolemaeus.badw.de/ms/497>. (Accessed on November 7, 2022.)
- 2021b. “MS Oxford, Bodleian Library, Digby 57”, *Ptolemaeus Arabus et Latinus. Manuscripts*, <http://ptolemaeus.badw.de/ms/731>. (Accessed on November 29, 2022.)
- Juste, D., 2022. “Thomas Allen, Commentary on the Quadripartitum,” *Ptolemaeus Arabus et Latinus. Works*, <http://ptolemaeus.badw.de/work/135>. (Accessed on November 29, 2022.)
- Lemay, R., ed., 1995–1996. Albumasar, *Liber introductorii maioris ad scientiam iudiciorum astrorum*, Naples.
- Macray, W.D., 1999. *Bodleian Library Quarto Catalogues IX: Digby Manuscripts. A reproduction of the 1883 catalogue by W.D. Macray, with notes by R.W. Hunt and A.G. Watson*, Oxford.
- Minio-Paluello, L., 2008. “Plato of Tivoli,” in Gillispie, C.C., Holmes, F.L., Koertge, N., eds., *Complete Dictionary of Scientific Biography*, Detroit, XI.31–33.
- North, J.D., ed., 1976. *Richard of Wallingford: An Edition of his Writings*, Oxford.
- North, J.D., 1977. “The Alfonsine Tables in England,” in Maeyama, Y., Saltzer, W.G., eds., *Prismata: Naturwissenschaftsgeschichtliche Studien: Festschrift für Willy Hartner*, Wiesbaden, 269–301.
- North, J.D., 1988. *Chaucer's Universe*, Oxford.
- O'Donnell, T., 2017. “The Gloss to Philippe de Thaon's *Comput* and the French of England's Beginnings,” in Fenster, T., Collette, C.P., eds., *The French of Medieval England: Essays in Honour of Jocelyn Wogan-Browne*, Cambridge, 13–37.
- Project Ptolemaeus Arabus et Latinus, 2022. *Ptolemaeus Arabus et Latinus: Manuscripts, Latin*, https://ptolemaeus.badw.de/manuscripts_latin. (Accessed on November 7, 2022.)
- Reynolds, S., 1996. *Medieval Reading: Grammar, Rhetoric and the Classical Text*, Cambridge.
- Robbins, F.E., tr., 1940. Ptolemy, *Tetrabiblos*, Cambridge, MA.
- Snedegar, K.V., 1988. “John Ashenden and the Scientia Astrorum Mertonensis,” D.Phil. Thesis, University of Oxford.

- 1999. “The Works and Days of Simon Bredon, A Fourteenth-Century Astronomer and Physician,” in Nauta, L., Vanderjagt, A., eds., *Between Demonstration and Imagination: Essays in the History of Science and Philosophy Presented to John D. North*, Leiden, 285–309.
- Tanner, T., 1748. *Bibliotheca Britannico-Hibernica : sive, de scriptoribus, qui in Anglia, Scotia, et Hibernia ad saeculi XVII initium floruerunt, literarum ordine juxta familiarum nomina dispositis commentarius*, London.
- Thomson, R.M., 2011. *A Descriptive Catalogue of the Medieval Manuscripts of Corpus Christi College Oxford*, Cambridge.
- Thorndike, L., 1956. “The Latin Translations of Astrological Works by Messahala,” *Osiris* 12, 49–72.
- Vuillemin-Diem, G., Steel, C., 2015. *Ptolemy’s Tetrabiblos in the Translation of William of Moerbeke*, Leuven.
- Watson, A.G., 1978. “Thomas Allen of Oxford and His Manuscripts,” in Parkes, M.B., Watson, A.G., eds., *Medieval Scribes, Manuscripts and Libraries: Essays Presented to N. R. Ker*, London, 279–314.

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