

The Transmission of Ptolemy's Terms: An Historical Overview, Comparison and Interpretation

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Abstract

The planetary rulership of terms has always been a contentious issue. Astrologers such as Ptolemy and Valens recorded the heated disagreements of their time, and demonstrated the differences between competing national 'systems'. The Egyptian system was clearly predominant in the preserved records of classical astrologers, but by the end of the medieval period its popularity waned as support moved to the table 'deemed worthy of record' by the illustrious Ptolemy. Supposed to have been his preferred choice, this table of 'Ptolemaic terms' was later said to have settled all disagreements and to have helped standardize European technique. Even if this were true (it is not), the inconsistency by which the Ptolemaic terms are recorded makes this table the most problematic and controversial of all! What the inconsistencies are, and why they exist, is the focus of this paper.

Introduction

With the renewed interest in Hellenistic techniques, many modern astrologers who employ the planetary terms are choosing to adopt the older, Egyptian system, which was evidently favoured by early classical astrologers. By far the majority, however, employ the so-called 'Ptolemaic terms' as set out in William Lilly's 17th century textbook *Christian Astrology*.¹ The continued reproduction of Lilly's text and the influence it maintains upon astrologers studying traditional techniques² has given this particular rendering of the terms a position of such authority that even software products which allow their computation are

¹ Lilly, William, *Christian Astrology* (London, 1647) [hereafter *CA*]. The terms, shown in Figure 1, are recorded on p.104.

² *CA* is one of the most comprehensive and readily available traditional works aimed at the student astrologer, the horary volume of which contains 35 of Lilly's own charts which are studied for precedence of technique.

set to Lilly's values by default. This is despite the lack of any attempt by Lilly to explain the logic of the table, and that a sequence within his presentation is contradicted by all recent publications of Ptolemy's *Tetrabiblos*. This sequence is in Gemini, where Lilly records the 4th set of terms as ruled by Saturn, and the 5th by Mars (see **Figure 1**). All English translations of the *Tetrabiblos* have these two positions reversed, as do the Greek critical editions of Boll-Boer³ and Hübner.⁴

Figure 1. Terms from Lilly's *Christian Astrology* (1647)

A Table of the Essentiall Dignities of the PLANETS according to Ptolemy.											
Signes.	Houses of the Planets.	Exaltation	Triplicity of Plan.	The Terms of the Planets.				The faces of the Planets.			
Di.	Noc.	Di.	Noc.	Di.	Noc.	Di.	Noc.	Di.	Noc.	Di.	Noc.
♈	♌	♈	♌	♈	♌	♈	♌	♈	♌	♈	♌
♉	♍	♉	♍	♉	♍	♉	♍	♉	♍	♉	♍
♊	♎	♊	♎	♊	♎	♊	♎	♊	♎	♊	♎
♋	♏	♋	♏	♋	♏	♋	♏	♋	♏	♋	♏
♌	♐	♌	♐	♌	♐	♌	♐	♌	♐	♌	♐
♍	♑	♍	♑	♍	♑	♍	♑	♍	♑	♍	♑
♎	♒	♎	♒	♎	♒	♎	♒	♎	♒	♎	♒
♏	♓	♏	♓	♏	♓	♏	♓	♏	♓	♏	♓
♐	♈	♐	♈	♐	♈	♐	♈	♐	♈	♐	♈
♑	♉	♑	♉	♑	♉	♑	♉	♑	♉	♑	♉
♒	♊	♒	♊	♒	♊	♒	♊	♒	♊	♒	♊
♓	♋	♓	♋	♓	♋	♓	♋	♓	♋	♓	♋
♈	♌	♈	♌	♈	♌	♈	♌	♈	♌	♈	♌
♉	♍	♉	♍	♉	♍	♉	♍	♉	♍	♉	♍
♊	♎	♊	♎	♊	♎	♊	♎	♊	♎	♊	♎
♋	♏	♋	♏	♋	♏	♋	♏	♋	♏	♋	♏
♌	♐	♌	♐	♌	♐	♌	♐	♌	♐	♌	♐
♍	♑	♍	♑	♍	♑	♍	♑	♍	♑	♍	♑
♎	♒	♎	♒	♎	♒	♎	♒	♎	♒	♎	♒
♏	♓	♏	♓	♏	♓	♏	♓	♏	♓	♏	♓

Why does this divergence exist, and why do astrologers continue to support the values recorded by Lilly in disregard of the mounting evidence against it? Ptolemy declares the table to be built upon a natural and consistent rationale, which should make its principles of construction readily extractable. But they are not. The enigma of its arrangement is evident in the fact that no one has been able to propose a philosophical justification that fully supports any record of their sequence and number.

Establishing which (if any) of the recorded table of terms can be accepted as authoritative, requires discovery of the elusive principles upon which it is based. The objective of this paper is to consider the

³ *Claudii Ptolemaei Opera quae exstant omnia*, ed. F. Boll and E. Boer (Leipzig, 1940; repr. 1957) [hereafter Boll-Boer].

⁴ *Claudii Ptolemaei Opera quae exstant omnia. Vol. III, 1: Apotelesmatika*, ed. W. Hübner (Stuttgart/Leipzig, 1998) [hereafter Hübner].

instruction available in the *Tetrabiblos* and the commentaries made upon it, and to explore whatever logic may be implicit in its overall design. The way that records of the table have altered over time also demands some knowledge of the historical transmission of Ptolemy's text; so the first part of this paper explores the divergence of the manuscript tradition, which highlights salient points of conflict which are considered in the later review of the table's construction. The conclusion has led me to shift considerably from the position I held at the start of this research, and proposes a clearer, and more specific meaning for one of Ptolemy's remarks which significantly impacts upon the fundamental principles of this table of terms, whilst allowing it more meaning as a system used to rank the positive influence of the planets within the signs.

Upon examination, it is discouraging to realise how much disagreement exists in the recording of the Ptolemaic terms by historical sources. **Figure 2** presents a selection of arrangements by various translators and astrologers, all of whom disagree with Lilly and each other. The list is not comprehensive, but enough to illustrate the diversity of opinion that exists regarding the correct intention of Ptolemy's manuscript. Each table will be referred to in the subsequent analysis, as a demonstration of where, when or why alterations in transmission occurred (**Figure 2** presents them in the order by which they are discussed). The Ashmand rendition (**Fig. 2, table 2**) is considered first, as a typical example of the 18th/19th century English language translations that are based upon a paraphrase of the *Tetrabiblos* rather than the manuscripts which claim to reproduce it exactly. All the *Paraphrase*-based translations derive from one common source, a point which illustrates that frequency of repetition is, by itself, no guarantee of veracity.

The Influence of the 'Paraphrase'

J. M. Ashmand, who produced one of the early English translations of the *Tetrabiblos* in 1822, seemed keen to draw upon the weight of Lilly's reputation for being knowledgeable in Ptolemy's work,⁵ drawing attention to Lilly's remark, that of all the translations he had personally read, it

⁵ In drawing attention to the remark, Ashmand also referred to Lilly as 'no light authority in these matters'. *Ptolemy's Tetrabiblos, or Quadripartite, being Four Books of the Influence of the Stars, Newly Translated From the Greek Paraphrase of Proclus*, tr. J.M. Ashmand (London, 1822) [hereafter Ashmand]; preface, p. xvii, note 1.

was the source used by Ashmand – the Latin translation ‘performed by [Leo] Allatius’ in 1635 – which Lilly conceived to be the ‘most exact’.⁶

**Figure 2. Various arrangements of Ptolemaic terms
(compared with those of Lilly)**

[illegible]

Allatius, Greek by birth but holding office in the Vatican Library at

⁶ At the end of his bibliography Lilly writes of the translations of Ptolemy: ‘that printed at Leiden I conceive to be the most exact, it was performed by Allatius’.

Rome, had based his own work upon an anonymous Greek paraphrase of the *Tetrabiblos* which is speculatively attributed to the 5th century philosopher Proclus (and therefore known as the '*Proclus*' *Paraphrase* even though the authorship remains unsettled).⁷ Allatius reproduced the text in Greek and made the first widely available translation in Latin.⁸ The content of the *Paraphrase* remains close in meaning to that of translations made from copies of the *Tetrabiblos*, but its use of a simpler form of Greek language allows the text to seem more accessible and therefore (according to some) clearer in its purpose. Lilly's positive review no doubt helped fuel a dubious belief that it was more reliable than existing translations of the actual manuscript, so that Ashmand was to write of it: 'Proclus's *Paraphrase* of the *Tetrabiblos* should properly be considered as superior to the other readings of that book'.⁹

Ashmand, of course, was boosting the value of the source used in his own translation, to which he was presumably biased. Although the attention to detail paid by Allatius is held in high regard, the claim of superiority of the *Paraphrase* over manuscripts of the actual text is open to question. Nonetheless, credible support for the value of the *Paraphrase* is also given by Frank Eggleston Robbins who, in the introduction to his own translation of the *Tetrabiblos*, argued that the *Paraphrase* must be

⁷ Robert Hand expresses a generally held opinion in writing: 'It is almost certainly not the work of Proclus, but of a Byzantine writer of several hundred years later'. Ptolemy, *Tetrabiblos Book I*, tr. R. Schmidt (Berkeley Springs, WV, 1994) [hereafter Schmidt]; 'Introduction' by R. Hand; p. iv, note 1.

⁸ Philip Melanchthon prepared a preface and translated some of the text into Latin in 1554, but this was not widely circulated. The preface of Ashmand's edition translates the anonymous 'Address to the Reader' given in Allatius' text, which contains information on Allatius (a.k.a. Allatio/Allici), and the history of the publication (pp.xvii-xviii). From this it appears that Allatius did not intend publication of his manuscript but that it 'escaped his control' after a copy brought to Venice was forwarded to the author of the 'Address', who thereupon: 'delayed not to avail myself of the advantages I possessed in having access to our excellent and most accurate typesetters, the Elzevirs, and I earnestly solicited them to publish it: they, in their love for the commonwealth of letters, took upon themselves the charge of printing it in the form you see'. An online reproduction of Allatius' text is available to researchers courtesy of the Warburg Institute at: <http://warburg.sas.ac.uk/pdf/fah450paraw.pdf> - *Procli Diadochi Paraphrasis in Ptolemæi libros IV de Siderum effectionibus, e Graeco in Latinum conversa*, tr. Leone Allatio. Lugd. 1635 (hereafter *Procli Paraphrasis*).

⁹ Ashmand, Preface: xxiii, note 1.

given considerable importance in any study of the original text: 'Since it follows the *Tetrabiblos* very closely, and since, as it happens, one manuscript of the *Paraphrase* is older than any of those of the *Tetrabiblos*, this document must be taken into consideration by any editor of the later work'.¹⁰

Before Robbins published his version of the *Tetrabiblos* in 1940, all of the early English translations that purported to offer its text were mainly based upon the Latin translation of the *Paraphrase* produced by Allatius. The first widespread publication was by John Whalley in 1701, with a supposedly 'revised, corrected, and improved' version appearing again in 1786. Ashmand, scathingly critical of both editions of the Whalley translation,¹¹ published his own in 1822, and around the same time James Wilson also undertook the task.¹² Since they all use the *Paraphrase* as

¹⁰ Ptolemy, *Tetrabiblos*, tr. F.E. Robbins (Cambridge, MA, 1940) [hereafter Robbins], Intro., III, pp. xvi-xvii. Later Robbins writes: 'The earliest text of the *Tetrabiblos* itself is one of the thirteenth century. There is but one full manuscript even of this degree of antiquity, and only two or three from the fourteenth century; most of them are from the fifteenth and sixteenth. In view of this fact it is fortunate that we have one (but only one) manuscript of the *Paraphrase* which antedates all of these, having been written in the tenth century'. (Intro., IV, p. xviii).

¹¹ Ashmand lamented that Whalley's first edition was full of misinterpretations which rendered most of its pages unintelligible, and that the corrected edition was 'not, in any one instance, purified from the blunders and obscurities which disgraced its predecessor' (Preface, p. xvii).

¹² The date of Wilson's text is disputed and entries in the British Library are marked with a question mark. Some accounts say it was first published in 1820 (therefore pre-dating Ashmand), whilst others say 1828. Ashmand seemed unaware of Wilson's text when publishing his in 1822, referring to the Whalley edition as 'The only English translation of Ptolemy's *Tetrabiblos*, hitherto published' (Preface, p. xvii). There were however, earlier English translations that were circulated privately. Luke Broughton, in his *Elements of Astrology* (New York, 1898) makes the following remarks: 'Ptolemy's Four Books on Astrology are to the European and American Student what the Bible is to the student of Christian Theology, consequently we have had a great number of translations of "Ptolemy's *Tetrabiblos*". I have some six or eight translations myself; for instance Sibley's, Whalley's, Wilson's, Ashmand's, Cooper's, Worsdale's and a few others that I cannot bring to mind.' (p.7). The references to 'Sibley's' and 'Cooper's' works are misleading; the second edition of Whalley's version, published in 1786, was revised by the Sibley brothers, and so sometimes

their primary source it is not surprising that all of these authors base their arrangement of the Ptolemaic terms on the details tabulated by Allatius, as shown in **Figure 3**.

Figure 3. The table of Ptolemy's terms reproduced from Allatius' *Procli Paraphrasis* (1635), p. 72

Finis secundum Ptolemaum

<i>Arietis</i>	<i>Tauri</i>	<i>Geminorum</i>
♂ 6 6	♀ 8 8	♀ 7 7
♀ 8 14	♀ 7 15	♂ 6 13
♀ 7 21	♂ 7 22	♀ 7 20
♂ 5 26	♂ * 2 24	♂ 6 26
♂ 4 30	♂ † 6 30	♂ 4 30
<i>Cancer</i>	<i>Leonis</i>	<i>Virginis</i>
♂ 6 6	♂ 6 6	♀ 7 7
♀ 7 13	♀ 7 13	♀ 6 13
♂ 7 20	♂ 6 19	♂ 5 18
♀ 7 27	♀ 6 25	♂ 6 24
♂ 3 30	♂ 5 30	♂ 6 30
<i>Libra</i>	<i>Scorpi</i>	<i>Sagittarii</i>
♂ 6 6	♂ 6 6	♂ 8 8
♀ 5 11	♀ 7 14	♀ 6 14
♀ 8 19	♂ 7 21	♀ 5 19
♂ 8 24	♀ 6 26	♂ 6 25
♂ 6 30	♂ 5 30	♂ 5 30
<i>Capricorni</i>	<i>Aquarii</i>	<i>Pisces</i>
♀ 6 6	♂ 6 6	♀ 8 8
♀ 6 12	♀ 6 12	♂ 6 14
♂ 7 19	♀ 8 20	♀ 6 20
♂ 6 25	♂ 5 25	♂ 6 26
♂ 5 30	♂ 5 30	♂ 4 30

Referring to these earlier English versions, Robbins was to comment: 'In truth, Ptolemy is not easy to translate accurately, and though Whalley's version is worse than the others, all show a certain willingness to disguise the difficulties with smooth-sounding but non-committal phrases'.¹³

Non-committal is an apt description for the presentation of the table of Ptolemaic terms in the *Paraphrase* and the texts that follow it. It seems unsure about what some of the values should be, in ten places including an option of two planets, and creating an alternative for the length of the final terms in Taurus by way of a margin note. Ashmand stated that he cross-referenced his main source against the 16th century texts of Camerarius, Melancthon, and Junctinus, so he took it upon himself to change the rulership of the 4th term of Leo from Venus

to Jupiter, thereby finding agreement with those texts. He was no doubt

referred to as their edition, whilst the 'Cooper' edition actually refers to John Cooper's translation of *Primum Mobile*, a work produced by Placidus and heavily influenced by Ptolemy's *Tetrabiblos*. Of the 'Worsdale' edition, Broughton writes: 'Worsdale's translation has never been printed, and those who have the book either had to copy it by hand, as I have done, or else buy it at a very high price as it is extremely scarce.' (p.5).

¹³ Robbins, Intro., III, p. xvi.

influenced by his translation of a comment in the text of the *Paraphrase* which, in spite of offering an option for either Jupiter or Saturn to rule the 1st terms of Leo in the table, specifically declares that the rulership should be given to Saturn: 'In Cancer and Leo, however, the malefics occupy the first degrees; as those signs are the houses of the Sun and Moon which take no terms'.¹⁴ If Saturn rules the 1st set of terms, Venus alone is left to rule the 3rd set in that sign, and cannot then also rule the 4th set whilst leaving Jupiter unaccounted for. The consequence is that Ashmand's rendering of the terms, although appearing at first glance to differ substantially from the table found in the critical Greek editions of Boll-Boer and Hübner, actually can always agree with those tables, in one of the two options presented.

Figure 4. Tables to demonstrate influence of the *Paraphrase* values, as recorded by Allatius, upon Ashmand and Robbins

Table 1: Allatius (1635)						Table 2: Ashmand (1822)						Table 3: Robbins (1940)					
S	1	2	3	4	5	S	1	2	3	4	5	S	1	2	3	4	5
♈	♈	♀	♂	♂	♂	♈	♈	♀	♂	♂	♂	♈	♈	♀	♂	♂	♂
♉	♀	♀	♈	♂	♂	♉	♀	♀	♈	♂	♂	♉	♀	♀	♈	♂	♂
♊	♀	♈	♀	♂	♂	♊	♀	♈	♀	♂	♂	♊	♀	♈	♀	♂	♂
♋	♂	♂	♈	♀	♂	♋	♂	♂	♈	♀	♂	♋	♂	♈	♀	♀	♂
♌	♈	♀	♂	♀	♂	♌	♈	♀	♂	♂	♂	♌	♈	♀	♂	♀	♂
♍	♀	♀	♈	♂	♂	♍	♀	♀	♈	♂	♂	♍	♀	♀	♈	♂	♂
♎	♈	♀	♂	♂	♂	♎	♈	♀	♂	♂	♂	♎	♈	♀	♂	♂	♂
♏	♈	♀	♂	♂	♂	♏	♈	♀	♂	♂	♂	♏	♈	♀	♂	♂	♂
♐	♈	♀	♂	♂	♂	♐	♈	♀	♂	♂	♂	♐	♈	♀	♂	♂	♂
♑	♈	♀	♂	♂	♂	♑	♈	♀	♂	♂	♂	♑	♈	♀	♂	♂	♂
♒	♈	♀	♂	♂	♂	♒	♈	♀	♂	♂	♂	♒	♈	♀	♂	♂	♂
♓	♈	♀	♂	♂	♂	♓	♈	♀	♂	♂	♂	♓	♈	♀	♂	♂	♂
♈	♀	♈	♂	♂	♂	♈	♀	♈	♂	♂	♂	♈	♀	♈	♂	♂	♂

contradicts Allatius

agrees with the first option from Allatius

Ultimately the *Paraphrase* yields an ambivalent version of the Ptolemaic terms. It may be that integrity is better preserved in ambiguity than in error, but the lack of clarity left an unsatisfactory result for astrologers, who needed precise definitions to apply the terms in practice.

¹⁴ Ashmand, p. 35. Ashmand, however, has changed the meaning from that recorded by Allatius, his source. We will return to this point, and the inaccuracy of Ashmand's translation, later in the paper.

Subsequently this table of terms became increasingly dropped from 19th and 20th century publications of western astrological texts, either entirely or with reference being made exclusively to the more ancient tradition of the Egyptian system. Of course the discovery of new planets and the impossibility of integrating these into the scheme added its own negative impact, but dissatisfaction with the order of terms as presented within the early English translations of Ptolemy's work can be seen in how the few remaining astrologers who continued to use the Ptolemaic terms rejected their versions entirely, and chose to settle the matter amongst themselves by unanimously following Lilly.¹⁵

In 1940, Frank Eggleston Robbins produced the first English language translation of the *Tetrabiblos* to rely more heavily on manuscripts of the actual text rather than the *Paraphrase*. He referred to various sources, but mainly followed the 1553 Greek reproduction and Latin translation produced by Joachim Camerarius,¹⁶ the pagination of which he marked in his own reproduction of the Greek text. However, for his tabulated values of the Ptolemaic terms Robbins chose to follow the tables recorded in the oldest (10th century) Greek manuscript of the 'Paraphrase of Proclus'.¹⁷

¹⁵ Robert Cross Smith, the first 'Raphael', in his *Manual of Astrology* (London, 1828), p. 133 reproduced Lilly's table. So did Nicholas deVore, in his *Encyclopedia of Astrology*, (New York, 1947), p. 416, though he declared the terms to be no longer of any value except for horary astrologers. W. J. Simmonite's *Horary Astrology*, published in 1896, was an important text in the transmission of techniques used by Lilly but it was one of the first horary textbooks to present a 'Table of Essential Dignities' with the terms omitted (p. 222) and he made no reference to them in his text. Other astrologers such as Alan Leo (*Horary Astrology*, 1909) and Sepharial (*The Manual of Astrology*, 1898) ignored the Ptolemaic terms but included tables showing the Egyptian system. Although their use was becoming isolated to horary practice, many well known horary writers such as Ivy Goldstein-Jacobson, Marc Edmund Jones, Barbara Watters, Robert de Luce, and Robert Thomas Cross, (the last 'Raphael') avoided all mention of the terms in their textbooks.

¹⁶ This was the second edition of a work that was first published in 1535, and which is notable for offering the first Latin translation based upon a Greek rather than Arabic source. Robbins writes (p. xxiii): 'My collations have been made against Camerarius' second edition, because thus far this has been the standard text and it was most convenient'.

¹⁷ Ms. Vaticanus gr.1453, S. X. The *Paraphrase* is included on ff.1-219; the tables of Ptolemaic terms are on folio 50r-v. Robbins details his sources in a Latin footnote placed under the Greek representation of the table on p. 106.

By isolating the first planet of the areas where dual options are presented (see **Figure 4**, **Table 3**), he claimed agreement with Camerarius in all but one place: the end terms of Capricorn. Robbins gives Saturn rulership over the 4th term in Capricorn and places Mars at the end. Camerarius has these positions reversed, as does Lilly and the Greek critical editions of Boll-Boer and Hübner.

Robbins listed all the areas of 'double notation' in his 10th century source, (as repeated by Allatius), but failed to mention the dual option of Jupiter or Saturn in the first term of Leo. This does exist, but the original manuscript also makes clear that Jupiter and Saturn do not stand as equally viable alternatives. Whereas Allatius accurately transcribed the values, he did not show the emphasis that can be seen in the older source, where the glyph for Jupiter is not only presented first but is much larger than the glyph for Saturn and sits squarely in the centre of the table cell, as if the smaller alternative could have been added as an afterthought (see **Figure 5** on the next page). That the first options are intended to be the main values is proven by a comment under the table where the total term values for each planet are listed.¹⁸ These are accurate only if the first planets and their associated numbers are used. We can therefore conclude that the *Paraphrase*, whilst appearing to support alternative values, demonstrates a preference for the first values of the double notations, as Robbins presumed.

Dorian Greenbaum translates this to read: 'I am following the tables which are found in codex Vaticanus graecus 1453 (containing the Paraphrase of Proclus). These agree with those which were published by Camerarius except alone for ll. 4-5 under Capricorn, where the order of Camerarius is: Mars 5, Saturn 6. However Proclus has some double notations, to wit: l. 4 under Taurus, Saturn 2 or 4; l. 2 under Cancer Mercury or Jupiter, l. 3 Jupiter or Mercury; l. 3 under Leo Saturn or Venus; l. 3 under Libra Mercury or Jupiter, 5 or 8, l. 4 Jupiter or Mercury, 8 or 5; l. 2 under Scorpio Venus or Jupiter, 7 or 8, l. 3 Jupiter or Venus, 8 or 7; l. 4 under Capricorn Saturn or Mars, l. 5 Mars or Saturn; l. 4 under Pisces Mars 5 or 6, l. 5, Saturn 5 or 4'.

¹⁸ 'ἡ 57 degrees; ♃ 79; ♂ 66; ♀ 82; ♄ 76; total 360.' ἡμοῖραι ὡς· ♃ 79· ♂ 66· ♀ 82· ♄ 76·
 ♀ πβ· ♄ ος· τὸ πᾶν τξ.

Figure 5. Leo terms as recorded in the oldest record of the *Paraphrase*.

ΛΕΟΝΤΟΣ			LEO		
ζ ^h	ς	ς	2 ^h	6	6
γ	ζ	ιγ	♀	7	13
hι	ς	ιθ	η♀	6	19
φ	ς	ικε	♀	6	25
θ	ε	λ	♂	5	30

The ‘Commentary Template’

Although the presumed ambiguity of the Paraphrase-based values led to a decline of interest in the terms during the 19th and 20th centuries, more recently the urge to understand the origin and application of traditional technique has flourished amongst astrologers, boosted by a recent surge in translations of classical texts.

In 1994 Project Hindsight combined the translation skills of Robert Schmidt with the editorial skills of astrologer Robert Hand to publish a serialised English translation of the *Tetrabiblos* (the first since Robbins’) which aimed to focus upon the needs of astrologers. Criticism levelled at the Robbins translation was that although ‘widely regarded as the proper scholarly academic translation, Robbins’ translation is as far off the beam as anything that preceded him’.¹⁹ The introduction and preface of Book I particularly raise the matter of the Ptolemaic terms, with complaints that these are indistinct in the Ashmand and Wilson translations and ‘badly garbled’ by Robbins.²⁰

Schmidt based his translation upon the Greek text in the critical edition of the *Tetrabiblos* produced by the joint efforts of Professor Franz Boll and Emilie Boer, published by Teubner in Germany in 1940. The long

¹⁹ R. Hand in Schmidt, ‘Introduction’, p. iv.

²⁰ Ibid., p. v.

preparation and careful scholarship applied to this edition makes it widely considered superior to that of the Robbins English translation published in the same year, and even Robbins confessed his disappointment at not being able to avail himself of the benefits of their experience.²¹

The Boll-Boer edition, and Schmidt's translation based upon it, present an arrangement of term rulers that are almost identical to those of Lilly. A footnote to Schmidt's translation declares that astrologers, having the weight of Lilly *and* an authoritative translation of the *Tetrabiblos* combined, can now have full confidence in this 'totally definitive' arrangement:

Of the existing translations of Ptolemy into English, this is the first to present Ptolemy's terms based on the authoritative Teubner edition. While the precise order of degrees in each term may not be totally definitive here, the order of the rulers is. This is important because the terms presented here are almost exactly the same as those used by William Lilly and the other astrologers of 17th century England. The only difference is in Gemini where Lilly has Jupiter 6, Venus 14, Mercury 21, Mars 26 and Saturn 30, due to a difference of one degree in the length of the term of Venus. From what we know, the Lilly variant has as much claim to authenticity as the version given in the Teubner text.²²

In fact, this footnote is in error in its comments about Lilly. There is the failure to realise that Lilly's table does not only deviate by the number of terms allocated in Gemini but also by the order (in the attribution of Saturn to the 4th place and Mars to the 5th). The error is obscured by

²¹ In his Introduction (III, p. xiv) he wrote of it: 'Professor Franz Boll, whose studies of Ptolemy have been cited many times already, had begun work upon a new edition of the *Tetrabiblos* prior to his lamented death, July 3, 1924. His pupil, Fräulein Emilie Boer, however, continued Boll's task, and the appearance of their completed text has been awaited since 1926. I regret very much that my own work on the present text and translation could not have profited from the results of the textual studies of these two scholars.'

²² R. Hand in Schmidt, p. 43, note 4.

another in which the terms purportedly demonstrating Lilly's arrangement in Gemini are actually demonstrating his values for Aries.²³

The latest critical edition of the Greek text of the *Tetrabiblos* was produced by Professor Wolfgang Hübner in 1998. Based on an examination of 33 complete manuscripts and 14 mutilated ones, Hübner incorporated the unpublished notes of Boer, the indirect tradition of Hephaestio and the reasoning incorporated in the Robbins and Boll-Boer editions. A reviewer's comment in *The Classical Review* declared of it 'Progress over previous editions is evident on virtually every page'.²⁴ Hübner also adheres to the order of terms presented by Boll-Boer edition, and in doing so the weight of critical opinion seems firmly sealed in its favour, leaving Lilly's deviant value for Gemini appearing erroneous.

Was Lilly mistaken in the recording of those Gemini terms, and if not, where did he obtain his values? They were obviously not taken from the Allatius translation of Ptolemy that he conceived to be 'the most exact'. As a working astrologer and tutor of technique he would not have been able to tolerate the apparently vague suggestions of the *Paraphrase*, but would more likely have been guided by the tables presented in the works of the reputable astrologers preceding him. Amongst the books that he owned are two with towering reputations, considered to be of the greatest value to a student aiming to understand the teachings of Ptolemy. These are the elaborate commentaries published by Jerome Cardan (1578) and Franciscus Junctinus (1583). Both of these highly influential texts reveal the order exactly as perpetuated by Lilly. Cardan agrees with both the order and numeration²⁵ whilst Junctinus agrees with the order but varies

²³ The terms that Lilly recorded for Gemini are: Mercury 7, Jupiter 14, Venus 21, Saturn 25 and Mars 30 (*CA*, p. 104).

²⁴ Tiziano Dorandi, *The Classical Review* (2000), New Ser., Vol. 50, No. 1, pp. 30-32.

²⁵ Cardan however, has two typographical errors in his table: Venus is given 6° in Aries instead of 8° and Mars is given 6° in Leo instead of 5°. Since the rest of the terms are left unaltered these are obviously errors in reproduction that would take the total number of terms allocated in those signs over 30. Hieronymi Cardani, *In Cl. Ptolemaei De Astrorum Iudiciis, Avt (Vt Vlgo appellant) Quadripartitae Constructionis lib. IIII. Commentaria*,. (Basileae, 1578). The text is reproduced in digital format courtesy of the Herzog August Bibliothek at <http://diglib.hab.de/wdb.php?dir=drucke/n-50-2f-helmst-1>. The table of terms is found on p.196 (00216 of this digital file).

with the number in two places, one of which is an obvious mistake.²⁶ An earlier precedent for Lilly's table can also be found in the 11th-century text of the Arabic astrologer Al-Biruni.²⁷

Another essential text that Lilly had access to was the anonymous Greek *Commentary on the Tetrabiblos*, which is particularly important in regard to its influence upon the order of the terms because of its attempt to expand and clarify the principles that the values depend upon. This work is also speculatively attributed to Proclus (and thus generally referred to as the '*Proclus*' *Commentary*) yet the fact that the *Paraphrase* and the *Commentary* differ in their statement of the Ptolemaic terms is a telling argument that both cannot be the work of the same author. A copy of this *Commentary* was published in Greek with a Latin translation by Hieronymus Wolf in 1559, and has not so far been published in English (the reasoning this text expresses on the arrangement of the Ptolemaic terms will be explored later in this paper).²⁸

It is possible that the agreement found between Lilly and his sources exists because each considered the logic of the *Commentary* to be the

²⁶ Junctinus agrees exactly with regard to the arrangement but varies on the number of degrees for Saturn and Mars in Taurus (his table shows 2° for Saturn and 6° for Mars – note how these terms were annotated by Allatius; they are alternative values that are frequently recorded elsewhere). His table also shows an obvious mistake in allocating 5° instead of 3° to Saturn at the end of Scorpio, since the degrees for Scorpio then add up to 32. Junctinus (Francesco Giuntini), *Speculum astrologiae vniuersam mathematicam scientiam in certas classes digestam complectens*, Lugduni 1583. Reproduced by Universad de Sevilla at http://fondosdigitales.us.es/books/digitalbook_view?oid_page=212625. The table of terms is found on p. 76 (lr a: 93 of this digital file).

²⁷ Al-Biruni agrees with the order but the degrees differ slightly in Gemini (Jupiter gets 1° less and Saturn gets 1° more) and in Scorpio (Jupiter gets 2° less, Mercury gets 1° less and Saturn gets 3°). The Ramsay Wright translation has Mars at the beginning and end of Scorpio (which should read Saturn). This obvious mistake makes me wary that this whole line has been copied incorrectly from the original. *The Book of Instruction in the Elements of the Art of Astrology*, tr. R. Ramsay Wright (London, 1934) [hereafter Al-Biruni]; ch. 453.

²⁸ I am indebted to Robert Hand and Dorian Greenbaum for their help in my exploration of the relevant passages in this text. Dorian Greenbaum provided me with copies of the original text in Greek and Latin and Robert Hand provided me with his translation of the Latin into English (this currently remains unpublished). Dorian Greenbaum also helped to clarify suspicions of typographical errors in the Latin text through cross-reference with the Greek.

most persuasive account of the arrangement of the terms. When encountering conflicting accounts of the values, astrologers are likely to incline towards those that are supposedly capable of explanation. For this reason I will refer to the *Commentary* as a primary source for one of two main stems of influence that has affected most of the variant renderings.²⁹ The other significant ‘template of influence’ extends from the preservation of the Ptolemaic terms as recorded by the 5th century astrologer Hephaestio of Thebes.³⁰ The *Paraphrase*-based values do not suggest a ‘template’ by themselves, but rather an attempt to leave the main differences unresolved. The first – obviously preferred – options offer support for the Hephaestio template, whereas the alternatives allow agreement with the values of the *Commentary*.

Hephaestio and the Arabic line of transmission

In addition to the manuscripts and commentaries on the *Tetrabiblos*, some of its passages can be substantiated through references found in the texts of other ancient writers. But despite the misleading statement of William Lilly, that after the time of Ptolemy Greek astrologers unanimously followed his system of terms,³¹ very few classical (or even

²⁹ I shall treat the Boll-Boer and Hübner editions as extending from this stem of influence since they mainly agree with the order and deviate only in the two end terms of Gemini. Although the translators relied upon Greek manuscripts of the *Tetrabiblos*, I am accepting the possibility that those manuscripts were themselves influenced by the *Commentary*.

³⁰ Hephaestio of Thebes, *Apotelesmatics Book I*, tr. R. Schmidt (Berkeley Springs, WV, 1994), pp. 4-24. The Schmidt translation contains an error regarding the Virgo terms (which total 29°). I was therefore aided in the compilation of the table by Dorian Greenbaum, who checked the figures against the critical edition of David Pingree (Schmidt’s source). Hephaestio, *Hephaestionis Thebani Apotelesmaticorum libri tres, 2 vols.*, ed. David Pingree (Leipzig 1973-74). Stephan Heilen (personal communication) has pointed out that an alternative set of values are attributed to Hephaestio outside of his main work, found in Pingree’s edition of *Hephaestionis Thebani Apotelesmaticorum Epitomae Quattuor* (vol. 2, Leipzig 1974), Epitome 4, 1.80, p. 144.12-13. These reveal a closer alignment to the values found in the Greek *Commentary*, but confidence in their authenticity is undermined by an editorial note added by Pingree (vol. 1, Preface, p. xx, note 1), which suggests that whoever transcribed this Epitome corrected its orthographical errors by reference to Ptolemy.

³¹ Lilly’s misleading quote, familiar to many astrologers as his introduction to the table of essential dignities, reads: ‘There hath been much difference between

medieval) astrologers made reference to them. In classical astrology they were virtually ignored in favour of the Egyptian system.³² Hephaestio is the earliest classical astrologer (since Ptolemy, of course) to include details of both systems, and the values that he recorded, whilst conflicting with those of the *Commentary*, found a relatively faithful line of transmission through Arabic sources.

Figure 6. The Ptolemaic terms according to Hephaestio										
S	1		2		3		4		5	
♈	♂	6	♀	8 (14)	♀	7 (21)	♂	5 (26)	♂	4 (30)
♉	♀	8	♂	7 (15)	♂	7 (22)	♂	6 (28)	♂	2 (30)
♊	♂	7	♂	6 (13)	♀	7 (20)	♂	6 (26)	♂	4 (30)
♋	♂	6	♂	7 (13)	♀	7 (20)	♀	7 (27)	♂	3 (30)
♌	♂	6	♀	6 (12)	♀	7 (19)	♂	6 (25)	♂	5 (30)
♍	♂	7	♀	6 (13)	♂	5 (18)	♂	6 (24)	♂	6 (30)
♎	♂	6	♀	5 (11)	♀	5 (16)	♂	8 (24)	♂	6 (30)
♏	♂	6	♀	7 (13)	♂	8 (21)	♀	6 (27)	♂	3 (30)
♐	♂	8	♀	5 (13)	♀	5 (18)	♂	6 (24)	♂	6 (30)
♑	♀	6	♂	6 (12)	♂	7 (19)	♂	6 (25)	♂	5 (30)
♒	♂	6	♀	6 (12)	♀	8 (20)	♂	5 (25)	♂	5 (30)
♓	♀	8	♂	6 (14)	♀	6 (20)	♂	5 (25)	♂	5 (30)

the Arabians, Greeks and Indians concerning the Essentiall Dignities of the Planets; I meane how to dispose the severall degrees of the Sign fitly to every Planet; after many Ages had passed, and untill the time of Ptolomey, the Astrologians were not well resolved hereof; but since Ptolomey his time, the Grecians unanimously followed the method he left, and which ever since the other Christians of Europe to this day retain as most rationall; but the Moores of Barbary at present and those Astrologians of their Nation who lived in Spaine doe somewhat at this day vary from us' (*CA*, p. 103).

³² Besides the noticeable absence of reference to Ptolemaic terms in classical texts, O. Neugebauer and H. B. Van-Hoesen report in *Greek Horoscopes* (Philadelphia, 1959) [hereafter *Greek Horoscopes*], pp. 12-13 that all of their charts utilise the Egyptian system, with only one chart also including 'the terms according to Ptolemy'. That horoscope is a late 5th century chart, L497, translated on p. 152ff. The oldest horoscope to show the use of terms is dated to 46 CE (pp. 19-20) and was found at Behnesa, Egypt. Antiochus, in his *Thesaurus*, mentions the Egyptian terms and the fact that Ptolemy did not agree with them, but he does not include details of the alternative arrangement. The earliest text I have seen

We should keep in mind that the oldest extant Greek manuscripts of the *Tetrabiblos* are dated to the 13th century,³³ so even our oldest ‘original sources’ may have been influenced by a desire on the part of the copyist to correct obscure or ‘faulty’ figures, or lean towards a set of values that had found common acceptance at that time. It may be significant that most of the Greek manuscripts present values that are close to those explained in the anonymous Greek *Commentary*, whereas texts transmitted via Arabic sources appear unaffected by its arguments, more happily prepared to retain the values as found in the work of Hephaestio.

The oldest known Arabic translation predates the extant Greek manuscripts by four centuries, being that of the 9th century Nestorian physician Ishaq ibn Hunayn (809-873).³⁴ This was subsequently translated from Arabic into Latin in 1138 by Plato de Tivoli. Another anonymous translation from Arabic to Latin was made in 1206; and the 11th century *Commentary* on Ptolemy’s *Tetrabiblos* produced by Ali ibn Ridwan (Haly) was translated in the mid-13th century by Aegidius de Thebaldis of Parma. These works were the initial means by which knowledge of the *Tetrabiblos* was circulated in the West until the flurry of interest in new translations based on Greek manuscripts in the 16th century (beginning with the Greek transcription and Latin translation of Camerarius). The influence of these Arabic transmissions therefore fell more heavily upon Medieval Latin authors such as the 13th-century Italian astrologer Guido Bonatti, who shows complete agreement with the terms as presented by Plato de Tivoli and Ali ibn Ridwan.³⁵ F.E. Robbins

which offers details of the Ptolemaic terms *instead* of the Egyptian terms is that of Guido Bonatus.

³³ The manuscripts are detailed by Robbins, Intro., IV, p. xviii and Hübner, Preface, p. xiii.

³⁴ L. Thorndike, *History of Magic and Experimental Science* (8 vols, New York, 1923-1958), I, p. 110.

³⁵ Plato de Tivoli: *Cl. Ptolomaei Pheludiensis Alexandrini Quadripartitum*. I have used the Johannes Hervagius, 1533 (Basel) reproduction, available online courtesy of the Warburg Institute. The Ptolemaic terms are shown on p. 27 of the manuscript (p. 20 of this pdf file). warburg.sas.ac.uk/pdf/fah750pto.pdf. Ali ibn Ridwan: My thanks to Robert Hand for providing me with a digital reproduction of the table of terms as shown in the Aegidius de Thebaldis Latin translation (folio 27 recto: Venice, 1493). Also on Warburg Bibliotheca

also finds close agreement, because these values generally present the first planet of the two options recorded by the *Papraphrase*. (The only place where Robbins differs from the Arabic authors is where he aligns himself even more closely with the ancient record of Hephaestio in his selection of Jupiter rather than Saturn as the ruler of the first terms in Leo).

Figure 7. Comparison of terms recorded by Hephaestio, Plato, Haly, Bonatus & Robbins

Plato of Tivoli, Haly, Bonatus and Robbins generally agree with Hephaestio, except:

In Taurus the order and number of terms ruled by Mars and Saturn are reversed (so Saturn rules the 4th set of terms and is allocated 2°, whilst Mars rules the final set and is allocated 6°). In Sagittarius there is closer agreement with the *Paraphrase* in attributing 6° to Venus and 5° to Mars.

The terms of Leo, however, are problematic for these authors. Plato of Tivoli, Haly and Bonatus replace Jupiter with Saturn in the first set of terms, and because Jupiter has been displaced it is allocated to the end. Mars is given rulership over the central set of terms, even though this seems to go against a clear rule given in the *Tetrabiblos* that where malefics do not take the first place, they should be placed at the end. Robbins maintains the position of Jupiter in the first place and Mars at the end, placing Saturn instead in the central position. The deviation for the terms in Leo by Plato, Haly, Bonatus and Robbins are shown below:

Plato de Tivoli, Haly & Bonatus	♄: ♄ 6 - ♀ 7 - ♂ 5 - ♀ 6 - ♄ 6
Robbins:	♄: ♄ 6 - ♀ 7 - ♄ 5 - ♀ 6 - ♂ 6

Both of these conflicting stems of influence have a legitimate claim to be taken seriously. As a general principle, manuscripts of classical works that remain in the original Greek are considered less susceptible to corruption than translations; yet the Arabic translations find support in

Numerica. Guido Bonatus: *Foroliviensis Mathematici De Astronomia Tractatus X*. (Basel, 1550), pp. 49-50. Available online, Johannes A. Lasco Bibliothek: hardenberg.jalb.de/display_dokument.php?elementId=5257.

the work of the astrologer who was the closest contemporary of Ptolemy to write on the issue. Both can claim a 'weight of authority' and frequency of repetition, so this alone cannot help us to decide which of the two is most correct. The greater strength of the *Commentary* is that it supposedly demonstrates the 'natural and consistent' order which Ptolemy claimed as the point in favour of the alternative table of terms he presented. Astrologers would naturally lean towards this if it does so. But is its logic as reliable as we expect it to be? Or has it actually 'fudged the issue' because the true principles of this table of terms were never clearly understood? With these questions in mind, let us explore the reasoning for the order of terms as explained by the *Tetrabiblos* with the additional explanation provided by the anonymous commentator.

Ptolemy's Introduction to the Terms

Ptolemy begins his section on the terms with an outline of the two systems most prevalent in his time: those of the Chaldeans and Egyptians. He then presents an additional scheme which appears to be generally unknown, based upon information he has found in an 'ancient and much deteriorated manuscript'.³⁶ Although these are now referred to as 'Ptolemy's terms', and despite the frequent implications that this was his preferred arrangement, Ptolemy played no part in their design; admitted that he struggled to understand their logic himself; and takes a fairly neutral stance in regard to their value. He nowhere claims that they are better or more effective than the Egyptian terms (in fact he declares the Egyptian system to be the most credible on account of their longer tradition and proven reliability); but he includes this scheme because the ancient document supposedly relates a benefit that the Egyptian terms lack: 'a natural and consistent explanation of their order and number'.³⁷ Unfortunately Ptolemy's own description of what this *natural/consistent/harmonious/rational* order is lacks clarity, possibly because Ptolemy assumed a level of understanding amongst his contemporaries that modern researchers have lost. But that consistency of

³⁶ Schmidt, p. 42.

³⁷ Robbins, p. 103. Schmidt (p. 42) has 'a natural and harmonious account of the order and number of the boundaries'; Ashmand (p. 34) has 'a rational and consistent account of the nature of the terms, of the order of which they are to be taken, and the quantity belonging to each'.

principle must exist, since it is the only real point of merit upon which Ptolemy deemed the alternative arrangement worthy of record.

It will help to review what Ptolemy explains of the **Chaldean terms**, which are based upon a very simple and consistent logic, and depend only on the planetary rulership of the triplicities. Since the Sun and Moon are denied governorship of the terms,³⁸ their omission from the triplicity rulership scheme results in the following associations:

Aries, Leo, Sagittarius	(fire)	- Jupiter
Taurus, Virgo, Capricorn	(earth)	- Venus
Gemini, Libra, Aquarius	(air)	- Saturn, Mercury
Cancer, Scorpio, Pisces	(water)	- Mars

This order – ♈ > ♀ > ♋ > ♎ > ♂ – is used through all the signs of the Chaldean terms, and changes only occur in the commencement of the sequence (with the first term always allocated to the planet associated with the sign through triplicity rulership). For example, the first term in Aries is allocated to Jupiter (its own triplicity ruler), the second term is allocated to Venus (triplicity ruler of Taurus, the subsequent sign), the third term is allocated to Saturn, the fourth term to Mercury (the two rulers of Gemini), and the fifth term to Mars (triplicity ruler of Cancer). Since the pattern is repeated through the triplicities, this order also serves for Leo and Sagittarius. In Taurus the order commences with Venus instead of Jupiter, and follows on by the same logic. The only complexity in the arrangement is that the order between Saturn and Mercury alternates by day and night, so there are differences in the arrangement of some of the terms according to whether the chart is diurnal or nocturnal.

The number of degrees of each term is also very simply designed, with the first set of terms spanning 8°, and a loss of 1° for each subsequent group, resulting in the assignation: 8 + 7 + 6 + 5 + 4 = 30.

³⁸ Valens however, (III, 6), presents his own system of terms (based upon the logic of the Chaldean order) which incorporates the Sun and Moon and has seven terms for each sign rather than five. This seems to be an attempt to match the terms more closely with the seven-zoned sphere. Despite presenting this alternative, Valens leaves no evidence of actually using it, and both in his chart examples and where he details the meanings of the terms in book one, he adheres to the Egyptian system. *The Anthology, Book I*, tr. R. Schmidt (Berkeley Springs, WV, 1993); *Book II (end) & III*, tr. R. Schmidt (Berkeley Springs, WV, 1994).

Figure 8. The Chaldean Terms

by day						by night					
	8	7	6	5	4		8	7	6	5	4
♈	♈	♀	♂	♀	♂	♈	♈	♀	♂	♂	♈
♉	♀	♂	♀	♂	♈	♉	♀	♂	♂	♈	♈
♊	♂	♀	♈	♈	♀	♊	♀	♂	♈	♈	♀
♋	♈	♈	♀	♂	♀	♋	♈	♈	♀	♂	♈
♌	♈	♀	♂	♀	♈	♌	♈	♀	♂	♈	♈
♍	♀	♂	♀	♈	♈	♍	♀	♂	♈	♈	♈
♎	♈	♀	♈	♈	♀	♎	♀	♂	♈	♈	♈
♏	♈	♈	♀	♂	♀	♏	♈	♈	♀	♂	♈
♐	♈	♀	♈	♈	♀	♐	♈	♀	♂	♈	♈
♑	♀	♈	♈	♀	♈	♑	♀	♈	♈	♈	♈
♒	♈	♈	♀	♈	♈	♒	♀	♈	♈	♈	♈
♓	♀	♈	♈	♀	♈	♓	♀	♈	♈	♈	♈
♈	♈	♀	♈	♈	♀	♈	♈	♀	♈	♈	♈

Ptolemy commends the simplicity of this system, but considers it disadvantaged by the somewhat artificial association between the planets and the areas they rule. There is indifference as to whether each area is appropriately associated with a malefic, benefic, or suitably dignified planet – they fall where they will – and a greater disadvantage is that throughout the table the total number of terms allocated to each planet differs substantially from that of the Egyptian system. For example, in a diurnal chart Saturn rules a total of 78° in this table,³⁹ more than any other planet, as opposed to the 57° it always rules in the Egyptian system, which is less than any other planet.

This was a difficult matter for Ptolemy to overlook since in classical astrology the total number of terms for each planet is integrated into the techniques used to establish life-expectancy. The Egyptian term totals generate the ‘final years’ for each of the planets,⁴⁰ known as the ‘greater years’ in medieval and renaissance astrology, where they set the expectancy for the years of life when the planet in question is well

³⁹ In a nocturnal chart Saturn rules 66°. The other planetary totals in the Chaldean system are: Jupiter 72; Mars 69; Venus 75; Mercury 66 by day, 78 by night.

⁴⁰ See for example Valens, *Anthology*, IV, 6 and Paulus Alexandrinus, *Introductory Matters*, 3.

situated.⁴¹ The oft-repeated totals, derived from the Egyptian terms yet demonstrating sensitivity to both the speed and natural qualities of each planet, are as follows:

$$\text{♄} - 57 \mid \text{♅} - 79 \mid \text{♆} - 66 \mid \text{♇} - 82 \mid \text{♈} - 76 \mid \text{ (total: 360)}$$

This is a point to keep in mind. Ptolemy dismissed the value of the Chaldean arrangement because it disagreed with the Egyptian term totals which had been proven by experience: '... those in the Egyptian manner have more credibility ... because in the Egyptian writers their totals have been deemed worth recording as being useful'.⁴² Yet Ptolemy was prepared to record the alternative arrangement found in the ancient manuscript on account of 'the number of the totals being found to be in agreement with the record of the ancients'.⁴³ Hence any table of Ptolemaic terms that records different planetary totals to those found in the Egyptian system must contain some error of numeration. (This offers support for the values proposed by Robbins and the first options of the *Paraphrase*, and the tables of Boll-Boer, Schmidt and Hübner. The *Commentary* is close but results in an extra degree given to Jupiter and taken from Mars.⁴⁴ The terms recorded by Hephaestio are similarly close, with an extra degree allocated to Mars and taken from Venus; those proposed by Plato of Tivoli and Bonatus drift further from the totals in the places where they disagree with Hephaestio's text.)

Although Ptolemy outlined the Chaldean system of term rulership, his commentary illustrates that he did not consider it a serious contender in practical application. As soon as this table is presented its importance is dismissed, but its inclusion brings up two potentially important considerations. The first is that Ptolemy expects more than simplicity of design or consistency of principle in the arrangement – it is important to retain the total term values that are widely accepted by tradition and approved of by his contemporaries. The second is that a precedent has been revealed to show that the designation of term rulership can flow

⁴¹ William Lilly explains their use in the example of Saturn '... if in ones Nativity Saturne is well dignified, is Lord of the Geniture, &c. then according to nature he may live 57 yeers' (*CA*, p. 61).

⁴² Schmidt, p. 41.

⁴³ Ibid.

⁴⁴ The tables of Cardan, Junctinus and Al-Biruni are blighted by obvious errors in the numeration.

through sequential consideration of the signs. That is, the first term ruler of any sign is taken from the planet that has the best claim to dignity within that sign; the second term ruler is taken from the planet that has the best claim to dignity in the following sign, and so on. A similar approach is utilised in the arrangement of the Ptolemaic terms, though incorporating the additional values of exaltation and sign rulership.

The Egyptian terms, as far as Ptolemy is concerned, are not only more commendable because of the value of their totals, but also because they are ‘adduced by the majority ...adduced by many as trustworthy because of immemorial tradition’.⁴⁵ Unfortunately this system defeats all of Ptolemy’s attempts to identify clear principles of construction. It is evident that the table recognises some system of priority based on familiarity by governorship, and Ptolemy surmises that priority has been partly given to the rulers of the signs, partly to the rulers of triplicity and partly to the rulers of exaltation. Ptolemy’s primary intention in writing the *Tetrabiblos* was to give a natural and logical account of astrological technique, and his frustration at being unable to explain rationally this enigmatic issue becomes palpable where he asks:

...if it is true that they have followed the houses, why have they assigned precedence to Saturn, say, in Libra, and not to Venus, and why to Jupiter in Aries and not to Mars? And if they follow the triplicities, why have they given Mercury, and not Venus, first place in Capricorn? Or if it be exaltations, why give Mars, and not Jupiter, precedence in Cancer; and if they have regard for the planets that have the greatest number of these qualifications, why have they given first place in Aquarius to Mercury, who has only his triplicity there, and not to Saturn, for it is both the house and the triplicity of Saturn? Or why have they given Mercury

⁴⁵ Schmidt, pp. 39-40. The earliest documentary Greek horoscope mentioning the terms is P. Oxy. II 307 (46 CE; *Greek Horoscopes* #46). The earliest reference in a literary Greek horoscope is found in the writings of Antigonos of Nicaea (ca. 150) (in Hephaestio II, 18), who mentions all the terms in a chart dated to 40 CE (see note 32). Various authors have suggested that they derive from the techniques of Nechepso and Petosiris, which seems likely but remains unproven.

first place in Capricorn at all, since he has no relation of government to the sign?⁴⁶

These questions remain unanswered, but perhaps a clearer understanding of the logic built into the additional table that Ptolemy presents will move us closer to resolving them.

Since Ptolemy has no clear understanding of the order of the planets in the Egyptian system of terms, it follows that he cannot understand the rationale for their numbers either. But it is clear that the numbers are not simply determined by the order of the placement of the terms, as in the Chaldean system, but vary in some way that is connected to the benefic qualities of the planet involved and its claim to dignity within that area. These are the Egyptian terms:

Figure 9. The Egyptian terms

S	1	2	3	4	5
♈	♂ 6	♀ 6 (12)	♂ 8 (20)	♂ 5 (25)	♂ 5 (30)
♉	♀ 8	♀ 6 (14)	♂ 8 (22)	♂ 5 (27)	♂ 3 (30)
♊	♂ 6	♂ 6 (12)	♀ 5 (17)	♂ 7 (24)	♂ 6 (30)
♋	♂ 7	♀ 6 (13)	♂ 6 (19)	♂ 7 (26)	♂ 4 (30)
♌	♂ 6	♀ 5 (11)	♂ 7 (18)	♂ 6 (24)	♂ 6 (30)
♍	♂ 7	♀ 10 (17)	♂ 4 (21)	♂ 7 (28)	♂ 2 (30)
♎	♂ 6	♂ 8 (14)	♂ 7 (21)	♀ 7 (28)	♂ 2 (30)
♏	♂ 7	♀ 4 (11)	♂ 8 (19)	♂ 5 (24)	♂ 6 (30)
♐	♂ 12	♀ 5 (17)	♂ 4 (21)	♂ 5 (26)	♂ 4 (30)
♑	♂ 7	♂ 7 (14)	♀ 8 (22)	♂ 4 (26)	♂ 4 (30)
♒	♂ 7	♀ 6 (13)	♂ 7 (20)	♂ 5 (25)	♂ 5 (30)
♓	♀ 12	♂ 4 (16)	♂ 3 (19)	♂ 9 (28)	♂ 2 (30)

It is worth noting how much agreement there has been in the reproduction of this table. All of the English and critical editions of the *Tetrabiblos* have it as it is presented here, as do Neugebauer and Van-Hoesen in *Greek Horoscopes*. I have seen this sequence and number accurately reproduced in the works of Critodemus,⁴⁷ Dorotheus,⁴⁸

⁴⁶ Robbins, p. 93.

⁴⁷ *Astrological Records of the Early Sages in Greek*, tr. R. Schmidt, ed. R. Hand (Berkeley Springs, WV, 1995), 'Effects of the Bounds from Critodemus', pp. 53-57 (= *CCAG* 8/1, pp. 257-61).

Valens,⁴⁹ Hephaestio,⁵⁰ Paulus Alexandrinus,⁵¹ Firmicus,⁵² Abu Ma'shar,⁵³ Alchabitius,⁵⁴ Al-Biruni,⁵⁵ Plato of Tivoli,⁵⁶ Ibn Ezra,⁵⁷ Dariot,⁵⁸ and Allatius.⁵⁹ So far, the only slight discrepancies I have found have been in works that followed the translation of the *Tetrabiblos* produced by Camerarius, which held two obvious typographical errors.⁶⁰

⁴⁸ *Carmen Astrologicum*, tr. D. Pingree (Leipzig 1976) [hereafter *Carmen Astrologicum*], Appendix II, p. 431.

⁴⁹ *Anthology*, I, 3. Valens does not include reference to the Ptolemaic terms.

⁵⁰ *Carmen Astrologicum*, Appendix II: *Fragmenta e Hephaestionis*, pp.427-431.

⁵¹ *Introductory Matters*, tr. R. Schmidt (Berkeley Springs, WV, 1993), p. 3 (= p. 11 Boer). Paulus does not include reference to the Ptolemaic terms.

⁵² *Mathesis*, tr. J.R. Bram (Park Ridge, New Jersey, 1975), II, 6. Firmicus does not include reference to the Ptolemaic terms.

⁵³ *The Abbreviation of the Introduction to Astrology*, tr. C. Burnett (Reston, VA, 1994), 7.10. Abu Ma'shar refers to these as 'The terms according to the Medes' and does not include reference to the Ptolemaic terms.

⁵⁴ *Introduction to the Art of Judgments of the Stars*, tr. John of Saxony (Paris, 1331). Anthony Louis (who has been very helpful in his correspondence with me on this matter), has placed online a scan of the 1502 publication of this text, showing the page with this table of terms: hometown.aol.com/tonylouis/alchabitius.jpg. Alchabitius does not include reference to the Ptolemaic terms.

⁵⁵ Al-Biruni, p. 452. Al-Biruni includes both Egyptian and Ptolemaic terms.

⁵⁶ *Quadripartitum I*. Page 18 of the pdf file referenced in footnote 34.

⁵⁷ *The Beginning of Wisdom*, tr. R. Levy and F. Cantera (Baltimore, 1939), chap. 2. Ibn Ezra includes both Egyptian and Ptolemaic terms.

⁵⁸ *A Brief and Most Easie Introduction to the Judgement of the Stars*, tr. F. Withers (London, 1583), chap. 3. Dariot does not include reference to the Ptolemaic terms.

⁵⁹ *Procli Paraphrasis*, p. 72.

⁶⁰ Camerarius attributed 7° to Venus in Capricorn (instead of 8°) and 5° to Mars in Capricorn (instead of 4°). This was copied by Junctinus and Cardan. He also

The consistency by which these Egyptian terms have been reproduced is an argument that the inconsistencies that appear in the representations of the Ptolemaic terms should not be treated as inattention to detail on the part of the transcribers, but more likely the result of confusion in early sources. This also explains the popularity and importance of the additional commentaries such as that attributed to Proclus.

The 'Ptolemaic Terms'

Despite his assertion of the natural and consistent order, it is not clear that even Ptolemy fully understood the principles of the alternative arrangement he presented, since he says of the ancient manuscript in his possession:

The book was very lengthy in expression and excessive in demonstration, and its damaged state made it hard to read, so I could barely gain an idea of its general purport; that too, in spite of the help offered by the tabulations of the terms, better preserved because they were placed at the end of the book.⁶¹

Nonetheless, Ptolemy attempts to present the 'general scheme' of their arrangement. In order to clarify the logic, I have re-ordered and slightly edited Ptolemy's subsequent passage (following the Robbins translation which is entirely reproduced in the footnote below):⁶²

reversed the positions of Jupiter and Saturn in Taurus so that the 3rd place (8°) is held by Saturn and the 4th place (5°) is held by Jupiter. This was copied by Junctinus but corrected by Cardan. It seems sensible to consider these deviations errors in production since they result in different totals to those so frequently reported.

⁶¹ Robbins, p. 103.

⁶² Ibid, pp. 103-105: 'For their arrangement within each sign, the exaltations, triplicities, and houses are taken into consideration. For, generally speaking, the star that has two rulerships of this sort in the same sign is placed first, even though it may be maleficent. But wherever this condition does not exist, the maleficent planets are always put last, and the lords of the exaltation first, the lords of the triplicity next, and then those of the house, following the order of the signs. And again in order, those that have two lordships each are preferred to the one which has but one in the same sign. Since terms are not allotted to the luminaries, however, Cancer and Leo, the houses of the sun and moon, are assigned to the maleficent planets because they were deprived of their share in

Since terms are not allotted to the luminaries, Cancer and Leo, the houses of the Sun and Moon, are assigned to the maleficent planets because they were deprived of their share in the order, Cancer to Mars and Leo to Saturn; in these the order appropriate to them is preserved.

As the planetary rulers of Cancer and Leo do not participate in the scheme, these signs are viewed as detrimented and associated with the malefics. The reference to the preservation of the appropriate order might suggest that the alignment is based upon sect (Mars, a nocturnal planet is associated with the house of the nocturnal luminary and Saturn, diurnal, the house of the diurnal luminary). The *Commentary*, and most subsequent astrologers, have assumed this to mean that the malefics take rulership of the first term of Cancer and Leo, but we should note that Ptolemy does not state this – he only says that the *houses* of the Sun and Moon are attributed to the malefics.⁶³ We will return to this point later when we consider why Hephaestio gave the first term in Leo to Jupiter, but for now we will set that point aside and accept the usual interpretation, that Mars governs the first term in Cancer and Saturn that of Leo, so that we can follow the reasoning contained in the *Commentary*.

The next principle allows us to determine the first term ruler for the remaining signs:

...the exaltations, triplicities, and houses are taken into consideration... the lords of the exaltation first, the lords of the triplicity next, and then those of the house... the planet that has two rulerships of this sort in the same sign is placed first, even though it may be malefic. But wherever this condition does not exist, the malefic planets are always put last.

the order, Cancer to Mars and Leo to Saturn; in these the order appropriate to them is preserved’.

⁶³ Dorian Greenbaum’s translation of this statement, following the Greek text in Hübner (p. 78.1149-54), reads: ‘However, since bounds [terms] are not given to the luminaries, Cancer and Leo, being the houses of the Sun and Moon, are assigned to the malefics on account of being surpassed in the order, Cancer to the [star] of Ares and Leo to the [star] of Kronos, in which [signs] the order appropriate to them is preserved’. Her belief is that the antecedent of ‘to them’ in the last phrase refers to the Sun and Moon, meaning that the order which would have been given to the luminaries is given to Saturn and Mars instead.

Having explored numerous options to establish which triplicity rulers should be taken into consideration, it seems clear – both from the areas of consistency in all tables, and from the implications of the '*Proclus*' *Paraphrase* – that they are those presented by Ptolemy in his preceding chapter, as shown in the table below.⁶⁴ Having disqualified the luminaries from taking part in the scheme, the priority of rulership is as follows:

Figure 10. Rulerships considered in determining the Terms

Sign	1. Exaltation	2. Trip. (day) or	2. Trip. (night)	3. House (Sign)
♈			♈	♈
♉		♀		♀
♊		♈	♉	♉
♋	♈	♈	♀	
♌			♈	
♍	♉	♀		♉
♎	♈	♈	♉	♀
♏		♈	♀	♈
♐			♈	♈
♑	♈	♀		♈
♒		♈	♉	♈
♓	♀	♈	♀	♈

If a planet has two claims to dignity in one sign, it automatically rules the first term in that sign. This rule only applies to malefics when establishing the first term ruler, however; if they fail to qualify for that position the malefics must be placed at the end of the signs (which suits their nature as the ends of the signs are generally considered more unfortunate in influence). Hence the middle terms are not associated with the malefics, and where the malefics rule the first set of terms, it is *only* where they are strongly dignified. The planets that rule the first set of terms on account of double-dignity are:

Taurus: *Venus* (triplicity, sign)

⁶⁴ This may seem obvious, but since Ptolemy was working in the district of Alexandria, and since he describes his manuscript as ancient, it is possible that the arrangement incorporates some use of the 'Egyptian' three triplicity-ruler scheme but, having exhausted all options, this does not appear to be the case. I considered whether there might be some alteration in weighting or priority, for example according to whether a nocturnal ruler was considered within a masculine sign (or vice versa), but again this was disproved by the sequences that are not subject to controversy.

Gemini:	<i>Mercury</i>	(triplicity, sign)
Virgo:	<i>Mercury</i>	(exaltation, sign)
Libra:	<i>Saturn</i>	(exaltation, triplicity)
Scorpio:	<i>Mars</i>	(triplicity, sign)
Sagittarius:	<i>Jupiter</i>	(triplicity, sign)
Aquarius:	<i>Saturn</i>	(triplicity, sign)
Pisces:	<i>Venus</i>	(exaltation, triplicity)

This leaves Aries and Capricorn. Where no planet has double-dignity within the sign, we use the ruler by exaltation, triplicity, and sign in that order of priority. For Aries the Sun as exaltation ruler is disqualified so we choose Jupiter, the triplicity ruler, over Mars the sign-ruler. Mars would be disqualified anyway, by the rule that a malefic planet can only govern the first term if it has two claims to dignity. Mars is similarly overlooked in Capricorn, despite the fact that exaltation is the preferred dignity, because one dignity is not enough to allow a malefic to take the first place. The first place goes instead to Venus, the ruler of Capricorn by triplicity.

The first term-rulers of each sign are therefore established. And since we know that where a malefic does not take first place, it must be placed at the end of the sign, we can also establish the end terms for those signs that commence with one of the malefics:

**Figure 11. Establishing first term rulers
(and end terms for signs leading with malefics)**

Sign	1st T.	2nd T.	3rd T.	4th T.	5th T.
♈	♂				
♉	♀				
♊	♂				
♋	♂				♂
♌	♂				♂
♍	♀				
♎	♂				♂
♏	♂				♂
♐	♂				♂
♑	♀				
♒	♀				
♓	♂				♂
♈	♀				

The rule for deciding the subsequent sets of term-rulers is obscure in the Robbins translation, and although Robert Schmidt points this out, his translation is equally capable of misunderstanding. I am therefore using Dorian Greenbaum’s translation of the Greek text in the Hübner edition,

which Professor Hübner has verified as accurate. We are told to follow the same principle '...in the subsequent order of the signs (*zōidia*), again, for those having two rulerships apiece, place [them] in front of the one having one [rulership] in the same sign (*zōidion*)'.⁶⁵

This is a critical comment for determining the order of the arrangement, but it allows for two possible interpretations. Discounting the malefics (which we know must come last where they cannot come first), the first interpretation (which I shall call Approach A) would repeat the same process in the following sign and take the planet best placed in the second sign to rule the second term in the first – just as in the Chaldean system, the term rulers are derived by moving sequentially through the signs. And again, where a planet in the next sign has two claims to dignity, it overcomes any planet with only one dignity, so that the order of priority is:

- | | |
|----------------------------------|-------------------------|
| <i>Discount malefics and the</i> | 1) double-dignity-ruler |
| <i>planet already used,</i> | 2) exaltation-ruler |
| <i>then select:</i> | 3) triplicity-ruler |
| | 4) sign-ruler |

Hence, in Aries the 1st term goes to Jupiter (most qualified in Aries); the 2nd term goes to Venus (most qualified in Taurus) and the 3rd term goes to Mercury (most qualified in Gemini). If we carry on to the next sign, Cancer, Mars would be the most qualified to take the 4th place because it has dignity by triplicity, leaving only Saturn to govern the final term (to which all tables agree).

Though this is the interpretation that the '*Proclus*' *Commentary* adopts, it gives an additional rule that is not explicit in Ptolemy's text,⁶⁶

⁶⁵ *Tetr.* I, 21.22-24, Hübner, p.78.1143-54. Schmidt, p. 42, has 'again with those having two rulerships upward in the next [*zoidion*] being placed ahead of the one having a single rulership in the same *zoidion*'. In his accompanying footnote, Robert Schmidt underlines the importance of the word 'upward' as meaning 'upcoming in the order exaltation, trigon, house', but Greenbaum points out that the word *ana* upon which it is based, is defined in the lexicon (LSJ, s.v.) as 'each' or 'apiece' when used with numerals, as it is here. Professor Hübner concurs and this also finds agreement with Robbins who has 'And again in order, those that have two lordships each are preferred to the one which has but one in the same sign' (p. 105).

⁶⁶ It is, however, intimated in the instruction for determining the number of degrees, where Ptolemy tells us to consider the sign in question and the other

stating that we do not move sequentially beyond the next two signs (*i.e.*, for Aries, we only move on through Taurus and Gemini). After that, the remaining places are determined by the best claim to dignity within the sign in question or the group of three signs considered. By this method, having obtained our first three term rulers in Aries as Jupiter, Venus, Mercury, we consider which of Mars or Saturn has the best claim to dignity in Aries (or if neither has dignity in Aries, then Taurus and Gemini). In Aries Mars has the best claim as the ruler of the sign, so for this reason Mars governs the 4th and Saturn rules the 5th.

The extract below is taken from Robert Hand's translation of the *Commentary*, to show how the terms of Aries are decided. I have edited this slightly to remove references to the allocation of degrees (considered later), in order to keep the principle of the arrangement clear.

In this sign I seek which planets have relations. I find Mars and Jupiter. For Aries is the domicile of Mars and the triplicity of Jupiter. But because Jupiter is a benefic and the ruler of the triplicity, and triplicity overcomes the dignity of domicile, Jupiter will take the first position. I seek in Taurus and I find that Venus has two relations, that of triplicity and domicile, she is placed in the second position ... Again employing the same method I come to Gemini. I seek the planet that has a relation in Gemini, and I find that Mercury in Gemini has two relations. ... Then I return to Aries. (One is not permitted to pass quickly over a group of three signs, because all of the ascensional times depend on signs in groups of three which must be considered in this inquiry.) I find that Mars has one relation ... Saturn remains.

If we follow these principles through and retain the rule of the *Commentary* (that we do not move beyond the group of three signs), then we can see how – for the most part – it creates the arrangement followed by Al-Biruni, Camerarius, Junctinus, Cardan and Lilly.

Taurus starts with Venus, takes Mercury from Gemini and Jupiter (exaltation ruler) from Cancer (see **Figure 10**). Then we return to Taurus to consider the placement of Saturn and Mars; neither planet has dignity in Taurus but Saturn has triplicity in Gemini and Mars has triplicity in

adjacent signs in its quadrant, Robbins, p. 105: 'As for the number of the terms, when no star is found with two prerogatives, either in the sign itself, or in those which follow it within the quadrant...'.
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Cancer. Gemini precedes Cancer so Saturn takes the 4th place and Mars takes the last.

Gemini starts with Mercury and takes Jupiter from Cancer. There is no remaining planet to be taken from Leo but we know that Venus must come next in order to precede the malefics (it follows Jupiter anyway as a triplicity ruler in Cancer). Next we evaluate the malefics: Saturn has dignity by triplicity in Gemini and so will take the 4th place, leaving Mars, which only has dignity by triplicity in Cancer, to take the 5th place.

The *Commentary* writes on this:

I assign 7° to Mercury which has two relations in Gemini: domicile and triplicity. Then [going] in order to Cancer, I find that Venus has triplicity and Jupiter exaltation in that sign. Therefore, I assign 7° to Jupiter and 7° to Venus. Having moved on to Leo, I find that Jupiter has at least triplicity, but he has already received [his allotment.] Therefore, reverting to Gemini, I find Saturn [as triplicity lord], and I give him 4° and Mars 5° because he has triplicity in Cancer.

So by the logic of this approach, and according to the instruction in the *Commentary*, the Gemini terms are settled: they end with Saturn and then Mars as Lilly had it, not the other way around as the recent critical editions of the *Tetrabiblos* have it.

Unfortunately however, the reasoning of the *Commentary*, although persuasive in being able to explain most of the table, is not entirely consistent. Consider how the arrangement of Aquarius ought to run according to this logic:

Figure 12. Dignities used for Aquarian terms

S.	E.	Trip.		H.
♊		♄	♀	♄
♈	♀	♂	♀	♄
♎			♄	♂

Saturn takes first place because of its double dignity in Aquarius; Venus has double dignity in Pisces, so takes second place; Jupiter has the best dignity in Aries (triplicity) and takes third place leaving Mercury, which has triplicity in Aquarius to take the fourth place, and malefic Mars to take the last, thus: ♄ > ♀ > ♄ > ♀ > ♂.

But no table of terms records this arrangement. The Aquarian order is consistent across all sources, and it runs: ♄ > ♀ > ♀ > ♄ > ♂. There is no explanation for this according to the rules given in the *Commentary*.

There is, however, a sense of logic in the order. After Saturn, Mercury is the only other planet to have dignity in Aquarius. Although Saturn has a double-dignity and so receives the first term of the sign, Mercury's remaining claim to dignity allows it priority over all other planets. This interpretation assumes that the greater dignity of Venus in Pisces would not supersede the influence of Mercury (which has dignity within Aquarius) *unless* Venus also had some form of dignity in Aquarius. In other words, where there are neutral or benefic planets that have dignity within the present sign, we attribute terms to those first, before moving on to the best placed planet in the following sign. Despite giving us what appears to have been a clear statement of principle so far (Approach A), the *Commentary* also abandons its earlier logic to demonstrate this alternate approach for Aquarius (I shall refer to this as Approach B). The anonymous author writes of this sign:

Moving on to Aquarius, I put Saturn first and assign to him the first in order, giving him 6°. Then after him Mercury 6° because he has triplicity in this sign, and to Venus I give 8° because of her exaltation and triplicity in Pisces. In the fourth position I give Jupiter 5° because additions were made to Saturn and Venus. Last, to Mars I give the five remaining degrees.

The *Commentary* is fundamentally flawed in offering two alternative approaches, neither of which is capable of justifying the arrangement of all of its signs. Approach A, as we have seen, fails with Aquarius. Consider how the two alternative approaches work out for Libra.

Figure 13. Dignities used in Libran terms

S.	E.	Trip.		H.
♎	♋	♋	♎	♀
♌		♂	♀	♂
♈			♌	♌

For both approaches Saturn takes first place on account of its double-dignity in Libra, forcing Mars into the end position. Approach A would dismiss the remaining planets with dignity in Libra (Mercury and Venus), taking Venus from Scorpio for the 2nd set of terms, Jupiter from Sagittarius for the 3rd, and then returning to Libra to prioritise the remaining planets. Mercury has triplicity rulership in Libra so it comes next – it would do so anyway since Mars, as a malefic, must be placed at the end. The result is: ♋ > ♀ > ♌ > ♎ > ♂.

This is the order that is recorded by the *Commentary*. In fact the text of the *Commentary* is clear in showing that the procedure I have outlined is indeed the approach that is used.⁶⁷

If we apply Approach B to Libra then we would give the first place to Saturn, but we would recognise that Mercury and Venus also have dignity in Libra, so must be placed next, before moving on to any other planets. Although triplicity rulership is preferable to sign rulership, Venus has the best claim to dignity in the following sign and so of the two receives priority, allowing Venus to follow Saturn, to be followed in turn by Mercury. Now we move on to the subsequent signs. The only qualifying planet from Scorpio has already been placed, so we continue on to Sagittarius and take Jupiter (we would do so anyway as it is the remaining benefic). Finally we allocate the remaining place to Mars. The result is: ♄ > ♀ > ☿ > ♃ > ☊.

Approach A does not work for the Aquarian terms listed in the *Commentary*, but Approach B does not work for the arrangement it claims for Libra. The *Commentary* changes its logic without any explanation of why *here* and not *there*. This is hardly natural and it is definitely not consistent. There is no way to recreate the table offered by the *Commentary* according to its stated principles, unless we first know the results we are aiming for and fudge our reasoning accordingly.

However, Approach B, whilst it conflicts with the results given for Libra in the *Commentary*, does yield the order given for Libra by Hephaestio and those who followed him. It also generates the result recorded as the first option values by the *Paraphrase*, whilst the second options offer the results that would follow Approach A. This explains why the *Paraphrase* editions appear unsure as to whether Mercury or Jupiter should take 3rd place here – two alternative methods of determining the rulerships have been demonstrated, and it depends upon which of these we apply.

The *Commentary* mainly relies upon Approach A to generate its values, but this is not fully reliable and so is effectively useless as a 'rule'. Approach B is not reliable either for the *Commentary* arrangement,

⁶⁷ Robert Hand's translation of the text in the *Commentary* reads: 'I come to Libra in which I find the exaltation and triplicity of Saturn. To Saturn therefore I assign 6°. To Venus which has triplicity in Scorpio 5°, for a subtraction is made from Venus, and single degrees are added to Saturn, Mars, and Jupiter. [This is done in the case of] Jupiter because of Sagittarius. In this sign in which Jupiter has domicile and triplicity, he takes 8°. Then going back I find that Mercury has a relation of triplicity and I assign to him 5° and the remaining degrees to Mars'.

but it is a much more robust theory in terms of explaining the ‘Hephaestio template’. Adopting this approach, Scorpio would not move from Mars to Jupiter without first incorporating Venus which has dignity in Scorpio – again we can see that the astrologers who follow the Hephaestio template adhere to this. Approach B also offers the only explanation for the Aquarian arrangement, and since *all* authors have agreed upon the order for this sign, we must surely dismiss any theory that fails to support it.

Approach B similarly justifies the logic in Hephaestio’s assignation of Saturn to the 4th place and Mars to the 5th in Capricorn. Mars and Saturn both have dignity in Capricorn and, whilst exaltation takes precedence over sign rulership, the two rulerships that Saturn holds in the subsequent sign of Aquarius allow it to move forward and precede Mars in Capricorn. The surprising fact is that when the logic of the *Commentary* is closely scrutinised, it does not support its own values. It lends more favour to the table recorded by Hephaestio, which is generally underestimated because of its areas of contradiction with the *Commentary*.

But this still leaves confusion over why Hephaestio attributed the first term in Leo to Jupiter. As we have seen, the *Paraphrase* includes it as the primary option for this position, for which reason Robbins is notable as the only recent translator to propose agreement with Hephaestio on this point. Elsewhere, the bewilderment of where to place Jupiter in Leo has appeared in too many texts for it to be dismissed as irrelevant. Plato of Tivoli, Haly and Bonatus removed Jupiter from the first position and placed it at the end of Leo – but in so doing they jut out in contrast to other tables and appear to break a fundamental rule given in the *Tetrabiblos*, that malefic planets, not benefics, should be allocated to the last terms of a sign. Something seems wrong here, as if there have been attempts to ‘correct’ the placement of Jupiter by removing it from the first set of terms without properly understanding where it should go instead. Approach B also fails to explain why Mars should take precedence over Saturn in Gemini. Without the logic of Approach A this makes no sense – we know that for the end terms of Gemini we must evaluate the better claim of the two malefics within the whole quadrant, but why would Mars, with triplicity in the subsequent sign, take precedence over Saturn which has triplicity in the current sign? This would only make sense if there were some missing factor by which Mars held double-dignity in Cancer.

To explain both of these anomalies, let us accept a more literal interpretation of the comment that appears in the manuscript of the *Tetrabiblos*: 'the houses of the Sun and Moon, are assigned to the maleficent planets'.⁶⁸ Ptolemy did not state that the *first terms* are assigned to the malefics, but that their *houses* are assigned to them.⁶⁹ If we take this to mean that it is the equivalent level of dignity that the Sun and Moon would have had in these signs, which is handed over to the malefics instead, the revised dignity-values considered in establishing the terms would run as follows:

Figure 14. Revised Rulerships considered in determining the Terms (with ♂ and ♀ assuming the dignity of 'House' which ☿ and ♀ receive in ♋ and ♌)				
Sign	1. Exaltation	2. Trip. (day) or	2. Trip (night)	3. House (Sign)
♈			♌	♈
♉		♀		♀
♊		♂	♏	♏
♋	♌	♈	♀	♈
♌			♌	♌
♍	♏	♀		♀
♎	♌	♌	♏	♀
♏		♈	♀	♈
♐			♌	♌
♑	♈	♀		♌
♒		♌	♏	♌
♓	♀	♈	♀	♌

⁶⁸ Robbins, p. 105.

⁶⁹ All manuscripts of the *Tetrabiblos* are clear on this point. Ashmand, in mistranslating this comment as 'In Cancer and Leo, however, the malefics occupy the first degrees; as those signs are the houses of the Sun and Moon which take no terms' has perpetuated a general misunderstanding. His source (*Procli Paraphrasis*, p. 69) reads (in Greek:) 'Cancer and Leo, being the houses of the Sun and Moon, since the luminaries do not take bounds, the malefics take them, on account of being surpassed in the order. And so Mars on the one hand takes Cancer, but Saturn on the other takes Leo, whence also the appropriate order is preserved'. (In Latin:) '...since the luminaries are not enclosed in the bounds, the malefics take Cancer and Leo, which are the domiciles of the Sun and Moon, because they are more powerful in the order. Mars therefore claims Cancer for itself, Saturn Leo, whereby the appropriate order is preserved for them'. (Translation provided by Dorian Greenbaum).

Mars does not replace the Moon to take priority in Cancer according to some sort of 'switch-over' rule, but does so according to the principle that any planet with two claims to dignity draws first place (which it now has). Even with its substituted dignity considered, Saturn still only has one claim to dignity in Leo and therefore fails to qualify for the leading position. Hence, in the Hephaestio terms (as in the Egyptian terms), Jupiter retains its position of precedence. This interpretation is proved to be correct when we consider how the numbers of degrees allocated to each planet are derived (see below). Only this interpretation allows for the generally good results which follow.

And this also explains why Mars should precede Saturn in the terms of Taurus and Gemini according to Approach B. In Taurus neither malefic has dignity, but Saturn has triplicity in Gemini and Mars has double-dignity in Cancer. By the principle that the planet with double dignity in the subsequent sign moves ahead of the one with single dignity in the sign before it, Mars is prioritised over Saturn in both these sets of terms. When Approach B is utilised, most of the Hephaestio arrangement is explicable, the only serious problem being why Venus should follow Jupiter in Leo rather than Mercury. No other author reports this – everyone else is agreed that Mercury takes second place – so it is possible that this really was an error in transmission. For the moment we can only bear this in mind as something to be verified against other ancient sources as they come to light.

Determining the Degrees

As for the number [of degrees] of the terms, when no star is found with two prerogatives, either in the sign itself or in those which follow it within the quadrant, there are assigned to each of the beneficent planets, that is, to Jupiter and Venus, 7°; to the maleficent, Saturn and Mars, 5° each; and to Mercury, which is common, 6°; so that the total is 30°. ⁷⁰

Recall that the total planetary terms create the 'greater year' for each planet, a number that is used in the consideration of life-expectancy and which reflects the planet's speed and quality. Saturn, the heaviest and slowest moving planet and the greater malefic, obviously has the lowest greater year. Although Jupiter is a slower moving planet than Mars, its

⁷⁰ Robbins, p. 105.

benefic qualities extend life expectancy, so it has a higher greater year than Mars. Venus, which is light, fast in movement and benefic, has the highest of all. The degrees attributed to the terms are manipulated in order to generate the appropriate value:

$$\text{♄} - 57 \mid \text{♅} - 79 \mid \text{♆} - 66 \mid \text{♇} - 82 \mid \text{♈} - 76 \mid (\text{total: } 360)$$

All things being equal, 30° split between 5 planets would allow them 6° each. But the malefics are inimical and the temperate nature of the benefics is life-enhancing, so only neutral Mercury receives the default value of 6°; Saturn and Mars receive 1° less and Jupiter and Venus receive 1° more. The basis for each calculation then is:

$$\text{♄} \ 7^\circ \mid \text{♅} \ 7^\circ \mid \text{♆} \ 6^\circ \mid \text{♇} \ 5^\circ \mid \text{♈} \ 5^\circ$$

But since some always have two prerogatives... there is given to each one of those in such condition, whether it be in the same sign or in the following signs within the quadrant, one extra degree... But the degrees added for double prerogatives are taken away from the others, which have but one, and, generally speaking, from Saturn and Jupiter because of their slower motion.⁷¹

It has been difficult for astrologers to verify the logic used to determine the numbers because of the two alternate approaches that have been used to establish the arrangement, and because Ptolemy only gives us the rules 'generally speaking'. He has not been specific about the details. But there are some additional rules that are built into the process, some of which are implied in the *Commentary* and others which can be seen to hold up to scrutiny in areas of the table that find the best agreement amongst all authors. They are:

- An additional degree is only given to planets that have two areas of dignity within *one* of the signs in the considered quadrant. (Not, for example, for a planet that has triplicity in one sign and exaltation in the following sign). Remember that in the Hephaestio values the malefics have assumed the dignity status equivalent to sign-rulers in Cancer and Leo, so that in Cancer Mars has double-dignity for sign and triplicity.
- No planet that qualifies for an additional degree on account of double-dignity should relinquish degrees to another. Also, whilst

⁷¹ Ibid.

planets in exaltation do not gain a degree, we avoid taking degrees away from them.

- Degrees are preferably subtracted from Saturn, but if two extra degrees are required and both Saturn and Jupiter are able to relinquish a degree, we take the first from Saturn and the next from Jupiter. If neither of these is able to relinquish a degree, we take it from the heaviest planet that is able to do so. But in general we aim to subtract from the heaviest planets and avoid taking them from lighter planets unless they are weakened by fall.

The following demonstrates the process following the logic of the ‘Hephaestio template’ (Approach B), compared against the values of the ‘Commentary template’. The results are impressive, but not perfect. Perhaps there is some as yet undiscovered extra rule that would make it so, but for the moment it appears that minor exceptions were made in some signs, purely to yield the term-totals that reflect the greater years.

Aries:

S.	E.	Trip.	H.
♈		♃	♂
♉		♀	♀
♊		♍	♂

Jupiter has the greatest dignity in the sign and so rules the 1st terms. Only Mars remains with dignity in Aries but as a malefic it is attributed to the end. We move to Taurus and find Venus with two dignities and so qualified to take second place; the third place goes to Mercury with two dignities in Gemini. Of the two malefics, Mars has dignity in Aries by sign and so precedes Saturn. **Numbers:** 1° extra is given to Venus and Mercury because of their dual-dignities in signs within this quadrant. To balance, 1° is subtracted from Saturn, and another from Jupiter:

Order and number should be:

♃ (7-1) 6°	♀ (7+1) 8°	♍ (6+1) 7°	♂ 5°	♍ (5-1) 4°
------------	------------	------------	------	------------

(All of the authors I have examined agree with this.)

Taurus:

S.	E.	Trip.	H.
♉		♀	♀
♊		♍	♂
♋	♃	♂	♂

Venus has dual-dignity in Taurus and rules the 1st terms. No other planets remain in Taurus, so second place is given to Mercury which has two dignities in Gemini; third place is given to Jupiter which is exalted in Cancer. Of the malefics, Mars has two dignities in Cancer and so supersedes Saturn which

has only one dignity by triplicity within the quadrant. **Numbers:** 1° extra is given to Venus, Mercury and Mars because each has two dignities within one of the signs of this quadrant. Jupiter, having exaltation in this quadrant does not relinquish its degrees⁷² and so Saturn, being the only planet able to relinquish degrees, loses three.

Order and number should be:

♀ (7+1) 8°	♂ (6+1) 7°	♂ 7°	♂ (5+1) 6°	♂ (5-3) 2°
------------	------------	------	------------	------------

(Hephaestio demonstrates this and there is good general agreement over the order and values for the first three terms. However, most authors [interpreting Ptolemy's comment on Mars being attributed to the house of the Moon differently] fail to recognise the relevance of its double-dignity in Cancer, which affects its score in Taurus. Even so, many retain the values that Hephaestio records: i.e. Saturn gets 2° and Mars 6° - surely the fact that Mars gets the extra allowance for its double-dignity in Cancer strengthens the argument that it ought to be prioritised over Saturn? The Paraphrase also acknowledges these numerical values but the authors that follow the Commentary only recognise the triplicity rulership of Mars in Cancer, so not only does Mars fail to receive the extra degree for a double-dignity in Cancer, it also becomes eligible to lose degrees. Hence Saturn and Mars both lose 1° to make up for those given to Venus and Mercury, receiving 4° each at the end of the sign.)

Gemini:

S.	E.	Trip.	H.
♊		♂	♂
♊	♂	♂	♂
♊		♂	♂

Mercury has double dignity in the sign and so rules the 1st terms. Saturn, which has dignity by triplicity in Gemini, is overlooked as it is a malefic planet with only one claim to dignity. The 2nd terms are given to Jupiter which has exaltation in Cancer; then the 3rd are given to Venus which has triplicity in this quadrant. Although Saturn has a triplicity in Gemini it is superseded by Mars which has dual dignity in Cancer. **Numbers:** 1° is given to Mercury and Mars. Jupiter, having exaltation in this quadrant does not relinquish its degrees and so both are taken from Saturn.

⁷² Hand's translation of the 'Proclus' Commentary reads on this point: 'Therefore I assign 7° to Jupiter, for indeed he does have [only] one relation but it is not an ordinary relation, but more distinguished than the other dignities. And I neither add nor take away anything from him, but I leave the 7° as appropriate for Jupiter'.

Order and number should be:

♄ (6+1) 7°	♅ 7°	♀ 7°	♂ (5+1) 6°	♁ (5-2) 3°
------------	------	------	------------	------------

(Most authors agree except those that follow the Commentary. These ignore the dual-dignity of Mars in Cancer and so deny its right to an extra degree. Only the degree given to Mercury is taken from Saturn so that the end of the terms reads: Saturn 4; Mars 5.)

Cancer:

S.	E.	Trip.	H.
☾	♅	♂	♀
♁			♅
♄	♀	♀	

Mars gets first place because of its dual-dignity in the sign.⁷³ Jupiter, which is exalted in Cancer, takes the second place and Venus, which has triplicity in Cancer takes third. Mercury, dignified in Virgo takes fourth place and Saturn is allocated to the end.

Numbers: 1° is added to Mars and Mercury for their signs of dual-dignity. Jupiter has exaltation in the quadrant so does not relinquish its degrees; instead Saturn loses them both. Order and number should be:

♂ (5+1) 6°	♅ 7°	♀ 7°	♄ (6+1) 7°	♁ (5-2) 3°
------------	------	------	------------	------------

(All authors agree with the numbers but all of the authors I have checked place Mercury before Venus. The logic of the Commentary is that we move from Mars in Cancer to take Jupiter from Leo and then Mercury from Virgo before allocating Venus over Mars. But this logic is inconsistently applied and in my experiment I am generating the results that would develop out of consistent principles. It seems that here, the fall of Venus in Virgo is accounted for, not by subtraction of a degree but by a reduction of place. On the other hand, if the arrangement for Cancer

⁷³ Failing to recognise Mars as a substitute house-ruler for Cancer, the ‘Proclus’ Commentary suggests that the two relations Mars receives in this sign are triplicity and fall, but no other manuscript intimates that the relation of fall is significant and where the significance of fall is considered in the table, it results in the loss of degrees, not the acquisition of them. The prospect that debilities are considered in the relationships used to determine the order of the terms was one I entertained early on, but integrating debilities played havoc with the overall results, regardless of how much I varied the emphasis.

was as consistent as it appears to be, then why does the Paraphrase present dual options for this sign?)

Leo:

S.	E.	Trip.	H.
♄		♄	♄
♅	♂	♀	♂
♆	♄	♄	♂

Although Saturn gets a 'dignity' in Leo, it fails to qualify for the 1st term, for which it needs two dignities. Hephaestio shows that Jupiter is taken instead, which has dignity by triplicity in Leo. The second place should go to Mercury which has two dignities in Virgo and is preferred over Venus.

Saturn qualifies for fourth place and Mars, which has no dignity in the quadrant, is last. **Numbers:** 1° is given to Mercury and Saturn. Since Saturn is gaining 1°, Jupiter becomes the candidate to lose the 1st degree. The 2nd might have been taken from Mars, but Venus is in fall in Virgo so Mars is overlooked and the extra degree is taken from Venus instead. Order and number should be:

♄ (7-1) 6°	♂ (6+1) 7°	♀ (7-1) 6°	♄ (5+1) 6°	♂ 5°
------------	------------	------------	------------	------

(All authors find agreement on these numerical values but only Hephaestio comes close to presenting this order. The Commentary would present this order if the positions of Jupiter and Saturn were reversed.)

Virgo:

S.	E.	Trip.	H.
♅	♂	♀	♂
♆	♄	♄	♂
♄		♂	♂

Mercury, with dual-dignity, takes the 1st term followed by Venus which has triplicity in Virgo. Jupiter supersedes the malefics to take third place. Saturn with dual-dignity in Libra takes precedence over Mars with dual-dignity in Scorpio. **Numbers:** 1° is given to Mercury, Saturn and Mars. 1° each is taken from the two planets able to relinquish degrees:

Jupiter and Venus, with the remaining 1° taken from Jupiter as the slowest planet and also having no dignity in this quadrant. Order and number should be:

♂ (6+1) 7°	♀ (7-1) 6°	♄ (7-2) 5°	♄ (5+1) 6°	♂ (5+1) 6°
------------	------------	------------	------------	------------

(All authors agree.)

Libra:

S.	E.	Trip.	H.
♎	♎	♎	♀
♍		♂	♀
♊			♂

Saturn, with dual-dignity in Libra, takes the first place followed by Venus with one dignity in Libra and another in the following sign. Mercury, with dignity in Libra, takes third place. Jupiter takes fourth place over malefic Mars. **Numbers:** 1° is given to Saturn, Mars and Jupiter. 1° each is taken from the two planets able to relinquish degrees:

Venus and Mercury, with another 1° taken from Venus as the slowest of these two planets. Order and number should be:

♎(5+1) 6°	♀(7-2) 5°	♂(6-1) 5°	♂(7+1) 8°	♊(5+1) 6°
-----------	-----------	-----------	-----------	-----------

(All authors agree on the numerical values, and Hephaestio and those that follow him agree with this order. But those who follow the Commentary allow Jupiter, with dual-dignity in Sagittarius, to come before Mercury and so take 3rd place after Venus.)

Scorpio:

S.	E.	Trip.	H.
♏		♂	♀
♊			♂
♏	♂	♀	♎

Mars, with dual-dignity in Scorpio, takes first place followed by Venus which also has dignity in Scorpio. Jupiter, dignified in Sagittarius, takes third place, followed by Mercury over malefic Saturn. **Numbers:** 1° is given to Mars and Jupiter for their dual rulerships. Both are taken from Saturn which is able to relinquish its degrees. Order and number

should be:

♊(5+1) 6°	♀ 7°	♂ (7+1) 8°	♂ 6°	♎ (5-2) 3°
-----------	------	------------	------	------------

(All authors agree on the numerical values, and Hephaestio and those that follow him agree with this order. But those who follow the Commentary allow Jupiter, with dual-dignity in Sagittarius, to come before Venus and so take 2nd place after Mars.)

Sagittarius:

S.	E.	Trip.	H.
♄			♄
♅	♂	♀	♄
♁		♄	♂

Jupiter with dual-dignity in Sagittarius takes first place, followed by Venus which has dignity in the following sign, and then Mercury, dignified in Aquarius. Saturn has greater dignity in the quadrant than Mars, so Mars is placed last. **Numbers:** 1° is given to Jupiter and Saturn for their dual-rulerships.

Although Mars does not gain a degree, it does not lose one either, because of its exaltation in the quadrant. Instead, 1° is taken from Venus and another from Mercury. Order and number should be:

♄ (7+1) 8°	♀ (7-1) 6°	♂ (6-1) 5°	♄ (5+1) 6°	♂ 5°
------------	------------	------------	------------	------

(All authors agree with this order and most agree with these numerical values. The figures recorded from Hephaestio however take an additional degree from Venus and give it to Mars. I suspect that this is an error since there is no justification for this and the Hephaestio values concur with the totals of the greater years only if this is not done.)

Capricorn:

S.	E.	Trip.	H.
♅	♂	♀	♄
♁		♄	♂
♁	♀	♂	♀

Venus takes first place with its triplicity dignity in the sign; Mercury, dignified in Aquarius, takes the second place followed by Jupiter, dignified in Pisces. Of the two malefics, Mars has the best dignity in Capricorn and so takes fourth place, leaving Saturn to take the last place. **Numbers:** 1° is given to Saturn

and Venus since both have dual-dignities in signs in this quadrant. Mars keeps its degrees because of its exaltation, so 1° is taken from Jupiter and another from Mercury. Order and number should be:

♀ (7+1) 8°	♂ (6-1) 5°	♄ (7-1) 6°	♄ 5°	♂ (5+1) 6°
------------	------------	------------	------	------------

(Most authors agree with this order but it is impossible to reconcile the rules that have stood firm so far with the traditional record of the degrees allocated to the planets. The Commentary does not allow an extra degree for either Saturn or Venus, and actually moves 1° from Venus to Mars because of his exaltation within this sign [so Venus gets only 6° and Mars

also gets 6°]. Although planets do not usually receive an extra point for exaltation within the quadrant, it might make sense that they would within their own sign – but why take that degree from Venus which has dignity within the sign and a double-dignity within the quadrant? Why not take the degree away from Jupiter which is not only the heavier planet but ripe to give away a degree on account of its fall in Capricorn? The Hephaestio values are a little more sensible but still puzzling in failing to recognise the double-dignity of Venus. Mars does not receive an extra degree and Saturn does, but the degree given to Saturn is again taken from Venus, as if her double-dignity does not exist. This inconsistent intervention was possibly designed to ensure that the term totals will generate the final years as established by the Egyptian terms.)

Aquarius:

S.	E.	Trip.	H.
♊		♄	♅
♋	♀	♂	♀
♌			♄

Saturn, with dual-dignity in the sign, takes first place. Mercury, dignified in Aquarius, takes the second place followed by Venus, dignified in Pisces. Jupiter takes the fourth place over the malefics, leaving Mars to take the last place. **Numbers:** 1° is given to Saturn and Venus. Both are taken from Jupiter although we might have argued that 1°

should be taken from Jupiter and another from Mars. Order and number should be:

♄ (5+1) 6°	♅ 6°	♀ (7+1) 8°	♄ (7-2) 5°	♂ 5°
------------	------	------------	------------	------

(All authors agree.)

Pisces:

S.	E.	Trip.	H.
♋	♀	♂	♀
♌			♄
♍		♀	♀

Venus, with dual-dignity in the sign, takes first place. Jupiter, dignified in Pisces, takes second place followed by Mercury which takes precedence over the malefics. Mars has dignity in Pisces and so takes the fourth place leaving Saturn at the end. **Numbers:** 1° is given to Venus. It should be taken from Saturn, the prime candidate to relinquish one of its degrees

as the heaviest planet that has no dignity within this quadrant. Order and number should be:

♀ (7+1) 8°	♄ 7°	♅ 6°	♂ 5°	♄ (5-1) 4°
------------	------	------	------	------------

(All authors agree with this order but bizarrely, the Hephaestio tables do not allow Saturn to take the extra degree from Jupiter, whilst the Commentary does take 1° from Saturn, but it also takes 1° from Jupiter to give to Mars.)

Conclusion

Ptolemy confessed that he could 'barely gain an idea' of the ancient document in his possession, so we have to wonder whether his decision to present the principles of numeration 'generally speaking' obscured some failure, even on his part, to understand it in detail. Did that ancient manuscript present a perfect match for the term totals? Or just a correspondence that was close enough for it to be taken as 'generally appropriate'? The latter would lead to a temptation to alter the values of the arrangement over time, in such a way that the initial consistency of the design became lost through the intention of perfecting the totals of the numbers. Because of the incorporation of conflicting principles in the sources that remain available, it now seems impossible to validate any historical table of Ptolemaic terms as demonstrably accurate and consistent in its logic.

Despite engaging in this research hoping that I would prove Lilly's table to be the most reliable, I find the values recorded by Hephaestio to prove most convincing, especially since the issue of whether Jupiter or Saturn should govern the first terms of Leo appears to be a pivotal one. I believe that the approach demonstrated by the Hephaestio values is correct, and that the unfortunate influence of the *Commentary* was to perpetuate a general misunderstanding on this point. Below is an experimental table that I created using a consistent application of the rules that seem most reliably expressed. Compared to the table described by Hephaestio there are minor disagreements in the numerical values, and two areas of disagreement in the arrangement, one of which (Cancer) is explicable through the consideration of the debility of Venus within its relevant quadrant, the other (Leo) appearing more likely as an error in transmission (since no other author, including those who followed Hephaestio, allow Venus priority over Mercury).

My motivation however, is not to champion the table of Hephaestio, nor forward a new proposition; but to understand more about our historical records, and to present the case for caution when dismissing ancient values purely because they do not run as expected. The well-meaning intention of translators and transcribers to correct the unfamiliar may have diminished the possibility of ever recovering Ptolemy's

original table in all its details; but beyond the value of the data, there is much to be gained from the attempt to understand the principles embedded in ancient arrangements such as this. These sorts of avenues of thought should remain open to investigation, because they are pregnant with insights that may not only solve the mystery of the Ptolemaic terms but possibly that of the Egyptian terms and other associated techniques. There is too much logic built into the Egyptian terms for them to be simply dismissed as random, meaningless figures. But, like Ptolemy, we do not have enough understanding of the values placed upon their planetary relationships to be able to crack that code just yet. For the moment all we can do is to clarify what is and (more importantly) what is not presently understood with regard to the underlying principles of planetary dignities and their relevance in ancient astrology, and hope that as we expand our knowledge of ancient sources, we become not only more capable not only of following classical techniques, but also of truly understanding them, so that we may be more competent in completing the gaps and highlighting potential errors of transmission.

Figure 15.

Experimental table of terms											Table of terms described by the <i>Commentary</i>										
Disagreements with Hephaistio are highlighted											(Finding agreement with Camerarius, Lilly, etc)										
Υ	24	6	♀	8	♂	7	♂	5	♂	4	24	6	♀	8	♂	7	♂	5	♂	4	
♂	♀	8	♂	7	24	7	♂	6	♂	2	♀	8	♂	7	24	7	♂	6	♂	4	
♂	♂	7	24	7	♀	7	♂	6	♂	3	♂	7	24	7	♀	7	♂	6	♂	5	
♂	♂	6	24	7	♀	7	♂	7	♂	3	♂	6	24	7	♂	7	♀	7	♂	3	
♂	24	6	♂	7	♀	6	♂	6	♂	5	♂	6	♂	7	♀	6	24	6	♂	5	
♂	♂	7	♀	6	24	5	♂	6	♂	6	♂	7	♀	6	24	5	♂	6	♂	6	
♂	♂	6	♀	5	♂	5	24	8	♂	6	♂	6	♀	5	24	8	♂	5	♂	6	
♂	♂	6	♀	7	24	8	♂	6	♂	3	♂	6	24	8	♀	7	♂	6	♂	3	
♂	24	8	♀	5	♂	5	♂	6	♂	6	24	8	♀	6	♂	5	♂	6	♂	5	
♂	♀	8	♂	5	24	6	♂	5	♂	6	♀	8	♂	6	24	7	♂	6	♂	5	
♂	♂	6	♂	6	♀	8	24	5	♂	5	♂	6	♂	6	♀	8	24	5	♂	5	
♂	♀	8	24	7	♂	6	♂	5	♂	4	♀	8	24	6	♂	6	♂	6	♂	4	