

RESEÑAS

STEPHAN HEILEN, Hadriani genitura - Die astrologischen Fragmente des Antigonos von Nikaia. Band 1: Edition und Übersetzung. Band 2: Kommentar. Texte und Kommentare, Band 43, Berlin - Boston, Walter de Gruyter 2015, XI + 1450 pp. [ISBN: 978-3-11-028847-6; e-ISBN (PDF): 978-3-11-028873-5; e-ISBN (EPUB): 978-3-11-038874-9; ISSN: 0563-3087].

This is a magisterial work in all senses of that word. Its author is indeed a master of the multiple subject areas covered in the work, as well as demonstrating the clarity, thoroughness and skill demanded of every effective teacher. While its size may seem daunting, and it should be admitted that this is not a tome for the casual reader, the information it contains, and the depth with which it is conveyed, make it an invaluable addition to the library of every person interested in the history, theory and practice of ancient astrology. It contains much more than the mere title would suggest: “Hadrian’s nativity” is only the starting point, and the exemplar, of the material covered in the book. Thus it delivers far more than that title states.

Let us begin, however, at the beginning. The book was conceived as the *Habilitationschrift* of the author, which was completed in 2006. Taking the fragments and testimonies of the nativity of Hadrian, as interpreted by the physician-astrologer Antigonos of Nicaea, Heilen has crafted an edition and German translation of these that comprises the first of the two volumes of this work. This first volume consists of sections on the history of research on ancient horoscopes, and specifically that of Antigonos of Nicaea; a biography of Antigonos both as physician and astrologer; the sources and reception of his work, in which there is a valuable section on the pseudeonymous “Nechepso” and “Petosiris” that recaps and complements Heilen’s 2011 article on the same topic¹; the manuscripts, including both direct and indirect witnesses; and an up-to-date (as of 2015), comprehensive and detailed list of ancient horoscopes. The first volume ends with an extensive bibliography of the primary and secondary sources consulted in the writing of the entire book. It should be noted in regard to the

¹ HEILEN 2011: 23-93.

edition and translation of the Antigonus fragments, that Heilen has departed from the editorial practice of David Pingree, author of a number of critical editions of astrological treatises (see pp. 65-73). In Pingree's view, as Heilen points out, most manuscript copies of authored astrological texts, aside from outliers like Ptolemy, whose authority was such that his texts (both *Syntaxis* and *Tetrabiblos*) tended to be reproduced more or less verbatim¹, were epitomised for use by practitioners. Such epitomes were not necessarily interested in the original language of the author as much as they were in transmitting the practices themselves (p. 65). Thus in making the critical edition of Hephaestio of Thebes' *Apotelesmatica*, in which the fragments of Antigonus are cited, Pingree provided one edition based on a "main" text from a limited number of manuscripts and, in a separate volume, other editions based on epitomes of that "main" text (p. 70). Because this may (and certainly did, in the case of Hephaestio's Antigonus fragments) result in a prose version that sometimes does not make astrological sense, in his new edition of the Antigonus fragments Heilen has made modifications to Pingree's version of the text, based not only on the manuscripts Pingree used in his "main" edition, but on the epitomes, other manuscripts and later excerpts, to present a more astrologically sensible version than the one that Pingree produced. Because of this there are a number of deviations from Pingree's edition here (listed on pp. 182-86), that happily result in a far more readable and instructive text. It should also be noted that in making these adjustments, Heilen himself is cautious in the decisions he makes, and fully explains his reasoning in producing this version – the integrity of his approach is plain and convincing².

Volume 2, by far the most lengthy of the two volumes at 969 pages, contains a copious and extensive commentary on the testimonies and fragments of the Greek text. This is the heart of the book, and where Heilen's expertise as a linguist, philologist and astrological historian, along with his thorough coverage of each topic and meticulous attention to detail, shines. Even the briefest mention of an astrological technique prompts a thorough analysis in many cases. It is well worth it for the interested reader to examine the contents and indices for topics of personal interest. The commentary is arranged in a lemma format: first, by the section numbers associated with each quotation (*Testimony* or *Fragment*), followed by a general introduction to the fragment(s), and then relevant phrases from that section being examined phrase by phrase. A description of the format of *Fragment 1* will demonstrate the style. *Fragment 1* (F1) consists of §§21-52 (referring to the passage in Heph., 2.18,21-52) and, following an introductory sentence, comments on significant phrases of that section in turn, beginning with §21. The thoroughness with which Heilen approaches his commentary is evident in two brief examples from this section. For the phrase "τὰς γενέσεις" (the nativities) (pp. 536-539), his analysis begins with the terms associated with this word "nativity" in antiquity and the use of *genesis* in both the original documentary and literary horoscopes. He then discusses the terms frequently used with *genesis*, such as *diathema* and related words.

¹ One could also strongly argue that Ptolemy's work (both *Syntaxis* and *Tetrabiblos*) had an outside influence on astrology in the medieval period, given the number of extant copies as well as its mention by medieval astrologers.

² See English versions of the above in HEILEN 2010: 300-303; HEILEN 2016: 3-4, 9-10.

Each is analysed in context and meaning both within the text and elsewhere, as well as within its transmission in later works. Though in this case the lemma is a single word (with the definite article), the commentary covers three pages. The second example is the phrase “Πετόσιριν καὶ Νεχεψὼ” (pp. 537-562). Heilen’s exposition on the pseudepigraphical Egyptian sages of ancient astrology, Nechepso and Petosiris, typifies the approach he takes when a significant topic just happens to be mentioned by Antigonus. Here he adds to the exposition on these authors in Volume 1 (pp. 39-52). From a discussion of the Egyptian roots and forbears of the names (with extensive bibliography of secondary sources), to the doctrines associated with them, Heilen makes a deep and enlightening dive into the topics associated with the names of these pseudepigraphical authors. (He provides a further exposition of the name “Nechepso” in the commentary on F5, §72, pp. 1324-1330.) The second volume ends with six appendices covering specific examples related to the Antigonus fragments, an index of the diagrams and tables; and four indices of 1) authors, 2) Greek words, 3) Latin words, and 4) names and subjects.

An Organisational Suggestion

The indices, along with the formatting of the commentary, bring up the issue of how best to organise such a voluminous amount of information and erudite analysis. In fact, it would not be inappropriate to say that, taken as a whole, the astrological material covered in these volumes becomes in many ways a modern update to Auguste Bouché-Leclercq’s massive *L’astrologie grecque* of 1899. There is no simple answer to this problem. On the one hand, the lemma format foregrounds the text itself, using it to highlight the issues to be addressed, and Heilen demonstrates how the phrasing of the texts can prompt commentary on numerous topics in ancient astrology, as well as emphasising how rich Antigonus’s material is. On the other hand, this method can cause important topics to be lost within a sea that contains not only minor bits of historical, grammatical and/or astrological flotsam but also significant examinations of the doctrines that make up the astrological ship as a whole. The table of contents for Volume 2 (p. xi) lists only the designated number of each testimony or fragment and the pages on which the commentary for it is given, with no indication of the topics covered within each piece of text. A brief list of the topics covered by each testimony or fragment is somewhat buried in the middle of Volume 1, pp. 187-192, but it does not go into additional detail¹. The beginning of each section of commentary itself briefly outlines the general contents of each fragment, sometimes listing the topics but not always, or not in enough detail to enable the reader to know what topics are being covered and in what depth. While the index of names and subjects (pp.1421-1450) does provide the topics covered within both volumes,

¹ For example, the listing for F1 (p. 190) merely says it is “natal astrology” exemplified in the nativity of Hadrian – without mentioning the goodly number of astrological doctrines examined in depth in this section. Some of these topics are not easy to find in the present indices, and those that are designated with Greek words appear mainly or only in the Greek word index. For example, the pages discussing the “horoscope” (pp. 637-644; the word is written in Greek) are fully indexed only in the Greek word index; and one must know to look for “Aszendent” in the subject index.

only the quantity of pages associated with a topic will alert the reader to how extensive the coverage is. Readers without much Greek may find it difficult to find topics listed only in that language, for example οἰκοδεσπότης (*oikodespotēs*: housemaster) and Σάλμεσχινιακά (*Salmeschiniaka*). Thus, it would have been useful to include, within the table of contents, a section listing the topics that are covered in extensive detail in order to alert the reader to their presence. This content section could be presented after the initial list of the testimonies and fragments on p. xi. In fact, as I scanned the commentary to get a sense of its arrangement and the material being covered, I found so many little gems of exposition that I actually started to create such a list for myself. Such a section would not, I think, be an unnecessary duplication of the subject index, but a further aid to easier exploration of the riches contained within the book¹.

All this is by way of saying that, at the very least, this commentary should be consulted as a matter of course for anyone examining a particular astrological doctrine. Heilen has performed a great service in examining so many techniques in depth, including, but certainly not limited to, such topics as the third, seventh and fortieth days of the Moon (F1 §§50-51, pp. 895-984; F2 §55, p. 1075-76); length of life (F1 §52, pp. 984-1030; F3 §63, pp. 1172-1177); the *oikodespotēs* (lit. “house master”, F2 §54, pp. 1057-1075); the technical term *aktinoblein* (to cast a ray) as used in the doctrine of aspects (F3 §66a, pp. 1215-1230); the doctrines of fixed stars (F5) and decans (F6). As a special interest of mine, Heilen also includes a fine and informative section on the doctrine of lots, especially the lots of Fortune and Daimon, which I will discuss later as an example of the depth of study present in this work. While I may have some differences of opinion on interpretation with him from time to time, his work is essential to any in depth discussion of a specific astrological practice and should be consulted by future scholars writing on these topics.

The following sections will showcase two examples of what I consider to be some of the most valuable parts of this work. These are among numerous others I could have chosen, but they will give the reader an idea of the breadth and depth of Heilen’s expertise.

A Catalogue of Ancient Horoscopes

Within the first volume is a section of utmost importance and utility to the historian of astrology: an updated list of every extant ancient “horoscope”², both documentary and literary, along with commentary and up-to-date (as of 2015) bibliography (pp. 204-333). The value of this section cannot be overstated. In my own work, it has already become the first port of

1 Although I must admit that I thoroughly enjoyed coming randomly upon bits of analysis that stimulated my own urges for investigating a topic myself – a kind of scholarly bibliomancy, if you will. A topic would grab my attention and force a digression from surveying the work as a whole to looking minutely at one of its myriad parts. I eventually found myself sitting with a pile of books around me propped open to appropriate pages. So despite my suggestions for additional ease in finding specific information, I can also recommend this sort of dipping in and out of the book.

2 By horoscope, I mean the astrological chart as a whole, not the Ascendant. Heilen has laid out a similar definition on p. 522, but not in this section on ancient “horoscopes”. It should be pointed out that this is a different meaning for “horoscope” than the term designating the astrological Ascendant; see GREENBAUM AND ROSS, 2010: 146-48, for a discussion of different meanings for this word.

call for any topic utilising ancient horoscopes. No previous lists of ancient horoscopes from the Mediterranean region have included all of the charts indigenous to this area¹. Heilen's collection contains in one place, for the first time, not only Greek horoscopes, but Babylonian, Demotic, Coptic, Latin, Persian, Arabic and Jewish examples, in dates ranging from 410 BCE to 1374 CE. Each horoscope is helpfully given a designation that notes its language provenance and date, e.g. *Hor. dem.* 13.IX.13 = Demotic horoscope of 13 September (ninth month), 13 CE. Then follows the source of the horoscope; the edition and additional coverage; its date; the identification, if known, of whose or what horoscope it is; further secondary scholarship on the horoscope; and remarks. More than a bare list, it provides the means for further exploration as well as being an instant literature review.

*The Commentary on Lots*²

The main exposition on the lots, particularly the lots of Fortune and Daimon, but including some others, can be found on pp. 1158-82. The lemma for this section is “ὁ κληρος τῆς Τύχης εἰς Ταῦρον πίπτει” (“The Lot of Fortune falls in Taurus”). Heilen lists the topics to be covered (p. 1158): 1) a general introduction to the astrological lots; 2) the specific concept of the Lot of Fortune; 3) the fragments of Nechepso and Petosiris on the Lot of Fortune; 4) calculations for the lots; 5) what Heilen describes as an “excursus” on a passage in Vettius Valens, 9.2,7; and 6) application of the above material to the three horoscopes detailed by Antigonus.

Heilen acknowledges that this review is not exhaustive, but it is an excellent introduction to this material. The section on the lots in Nechepso and Petosiris (pp. 1160-1177) is especially important and significant for our understanding of lot doctrine, so I shall discuss it in some detail. An excursus within the section contains original and crucial information on whether the Lot of Daimon is implicitly mentioned by these authors along with the Lot of Fortune, using a meticulous text-critical approach. The information and persuasive argument he presents here was exceedingly helpful to me as I prepared my book on the daimon in Hellenistic astrology for publication, and allowed me to correct some earlier positions I had taken on certain issues³. Heilen acknowledges that not all of his conclusions can be definitively proven by the extant text that we have, not only because of the vagaries of textual survival but also because of the difficulty and ambiguity of the content of the material itself. However, the circumstantial evidence is good, and his position is extremely well-argued, backed up by

¹ For example, previous lists tended to concentrate on just one geographical area, language or medium of composition, as in NEUGEBAUER 1943; NEUGEBAUER AND VAN HOESSEN 1959 (1987); BACCANI 1992; JONES 1999; ROCHBERG 1998; ROSS 2006, 2007, 2009, 2011.

² In the interests of full disclosure, note that I saw this section before its publication, since lots are a particular interest of mine, and I mentioned Heilen's work in my monograph published in 2016. Heilen, as well, consulted what was then my PhD thesis for his book, and cited my work. We also had further conversations on these topics orally and by email.

³ Here I must also thank him, as I did in my book, for his generous sharing of his work with me prior to publication.

his expert knowledge in several areas. Philologically, literarily (e.g. in examining evidence of poetic metre), and as an expert in techniques of ancient astrology, here the astrological material on the lots of Fortune and Daimon, he builds the case that Nechepso and Petosiris implicitly include the Lot of Daimon along with the Lot of Fortune in determining length of life. This is argued by evidence in the texts of Vettius Valens, Ptolemy and the anonymous commentator on Ptolemy. A particularly important text in this analysis, and the fulcrum of his investigation, is a passage from Valens, 9,2,7 (G4, p. 1162), which is reproduced here:

The Greek text:

ὄγκ ἀσκόπως δὲ ὁ Πετόσιρις περὶ συμπαθείας Ἡλίου καὶ Σελήνης λέγει ἐν τοῖς Ὅροις· ‘εἴτε τὴν [sc. διάστασιν] ἀπὸ Ἡλίου ἐπὶ Σελήνην καὶ τὰ ἴσα ἀπὸ ὠροσκόπου εἴτε ἀπὸ Σελήνης ἐπὶ τὸν Ἥλιον καὶ τὰ ἴσα ἀπὸ ὠροσκόπου, κατὰ τὸ αὐτὸ ἐμπεπωκότα εὐρήσεις, ὁρᾶται τε ἔνθεν ὁ διακρατῶν τοῦ ζητουμένου, πρὸς ὃν τὰ ὅλα τετύχηκε καὶ συμβήσεται’.

Heilen’s German translation¹:

Und es hat seinen guten Grund, wenn Petosiris in seinen Definitionen über die kosmische Verbindung von Sonne und Mond (mit jeder irdischen Nativität) sagt: ‘Ganz gleich, ob (du die Entfernung) von der Sonne zum Mond (nimmst) und den gleichen Betrag vom Aszendenten (abträgst) oder (die Entfernung) vom Mond zur Sonne und den gleichen Betrag vom Aszendenten (abträgst) du wirst feststellen, dass er (der Betrag) auf dieselbe (ekliptikale Länge) fällt, und von dort sieht man den Herrscher über das Gesuchte (sc. die Lebenszeit), denjenigen, dem entsprechend das Ganze als Produkt des Zufalls entstanden ist und (in der Zukunft) vonstatten gehen wird.’

One can see the opacity of this passage in whatever language it is being read. To elucidate it, Heilen uses the texts surrounding Val., 9.2,7 (and other passages in Valens as well) to provide the supporting evidence that it refers not only to the Lot of Fortune in its day and night formula, but to both lots of Fortune and Daimon in their day formulae. A summary of this presentation, with selected references, will demonstrate how he supports his proposal.

First, the material on the Lot of Fortune and its calculation is summarised on pp. 1166-67: 1) the components used to find it are the longitudes of the Sun, the Moon and the Ascendant; 2) the calculation is different for diurnal and nocturnal births; 3) the day formula takes the arc from the Sun to the Moon, and the night formula from the Moon to the Sun; 4) this arc was then projected from the Ascendant; 5) Nechepso, especially, used the terms *empalin* and *anapalin* to define this calculation “mysteriously”; 6) apparently *empalin* was used for diurnal births, and *anapalin* for nocturnal births; 7) other astrologers used alternative methods of calculation.

The subsequent analysis explores these statements. For our purposes here, some of Heilen’s background information on the terms *empalin* and *anapalin* are helpful (p. 1167). He explains that the use of *empalin* and *anapalin*, both of which can mean both backward

¹ Note that Heilen’s German translation has updated his English translation in HEILEN 2011: 57.

spatially (*wieder zurück*, back again; *rückwärts*, backwards), iteratively (*von neuem*, anew; *wiederum*, again) or relationally (*umgekehrt*, reversed), have led to misinterpretations about how to calculate a lot, both in antiquity and now. Heilen's view is that here the iterative sense is correct, so that the formula for any lot with diurnal and nocturnal iterations will project the interval between the planets (in the Lot of Fortune's case, from Sun to Moon [diurnal] or from Moon to Sun [nocturnal]) in the same direction from the Ascendant, that is, in the order of the zodiac, or anticlockwise. The correctness of this position is borne out by the historical evidence on lots, detailed on pp. 1168-1171¹. But Ptolemy (and his commentator, in G6 and G7) interpreted, incorrectly, that one should reverse the order for a nocturnal lot, in effect making the position of the lot either by day or night exactly the same. (It should be noted that this view makes him an outlier among astrological writers from antiquity.)

The crucial part of the analysis of texts related to Val., 9.2,7 (G4) begins on p. 1171. These texts help to elucidate the difficult language of the passage. At first glance G4 seems to support Ptolemy's position, but Heilen finds it "verwunderlich" (p. 1172), if the distance between the luminaries is meant to be marked off in opposite directions, why this is not conveyed by Petosiris, who in fact uses the exact same language for each operation ("and the same [amount] from the Ascendant") for projecting the different distances (from Sun to Moon and from Moon to Sun). Indeed. At this point Heilen makes his radical proposal, to be backed up with circumstantial evidence: that Petosiris is speaking here not only about the Lot of Fortune, but about the Lot of Daimon as well, both in their daytime formulas. Three things hamper such an investigation: the opacity of the text, the fact that the fragments are only transmitted through later authors, and that G4 appears only in a single manuscript whose quality requires numerous emendations.

Here is where context becomes critical in understanding the meaning of the text. Chapter of 2 of Valens' Book 9, fortunately, provides that context. This chapter explicitly deals with both the lots of Fortune and Daimon, as the title states: "On the Lots of Fortune and Daimon in the Topic concerning the Effective and Ineffective Times and Length of Life." Thus all the information it conveys should be considered with that in mind. The "smoking gun" in my opinion is Val., 9.2,5-6 (pp. 1174-1175), which specifically mentions the "two lots" in connection with finding the length of life: "Regarding lengths of life *the two lots are combined...*" (my italics) ("πρὸς δὲ τοὺς τῆς ζωῆς χρόνους συγκρινόμενοι οἱ δύο κληροί..."), with subsequent text suggesting that the position of the Lot of Fortune describes the material amount of time to be lived, while the Lot of Daimon shows the "fate", the *moira*². Heilen then lays out the specifics of how the length

¹ I am happy that my own research into lot doctrine aided Heilen's substantiation of this interpretation.

² These are my words, not Heilen's, here, but we seem to be thinking along the same lines (see also his comments on p. 1176). As I looked at the text and Heilen's translation during the writing of this review, I saw the apposition of the words 'μοῖραν' and 'βιωσίμους χρόνους' in the phrase '... καὶ τὴν μοῖραν προδηλώσουσι καὶ τοὺς βιωσίμους χρόνους ἐκ τοῦ διαστήματος...' (the antecedent plural subject for the verb προδηλώσουσι is "the two lots") as applying to the Lot of Daimon and Lot of Fortune respectively. I had understood *moira* as the "degree" of the "planetary marker" in the

of life would be determined from the (half) arcs produced by the two lots, which amount to 90 degrees, a reasonable outer limit for a lifespan (p. 1176). He then explores and plausibly justifies the grammatical liberties needed to support this explanation (p. 1177). The section ends with the example of the Hadrian's birthchart and more plausible analysis for his proposal.

I hope that this rather long discussion has shown how rich, original and thorough Heilen's analysis here is. I want also to stress, again, that similar work is carried out in many other places in the book.

A brief note on further investigations. A couple of topics mentioned in Heilen's commentary also caught my attention. One concerns the glyph or symbol for the Lot of Fortune, which is discussed on p. 586 and later on p. 1159. I would like to make a couple of comments on this, as a preliminary to further investigation (at p. 586 Heilen cautions, wisely, that more investigation is needed, and I agree). He mentions a possible example of an ancient use of the glyph \oplus , more commonly written today as \otimes , for the Lot of Fortune, citing Donata Baccani's suggestion that it comes from the Egyptian hieroglyph for time¹. (On p. 1159 he describes this symbol as the conventional one used in manuscripts.) Yet the symbol appears only once, to my knowledge, in the context of any extant documentary Greek horoscope, namely that mentioned by Baccani (her #15, photo on p. 160), where a line in the middle of the papyrus separating two nativities on the same fragment is bounded on each end by \oplus . But this seems to me to be just a decorative demarcation and not a hieroglyph at all; the references to the Lot of Fortune in the text of these charts are written out in full and do not use a symbol. Furthermore, which hieroglyph depicting 'time' does Baccani mean? She cites Bouché-Leclercq, 1899: 288 n. 1. Heilen cites the same passage on p. 1159, but Bouché-Leclercq was not an Egyptologist, and his claim that this is a symbol of the "roue" de la Fortune ou le symbole hiéroglyphique du Temps" should not be considered authoritative. The most usual determinative for Egyptian words having to do with time is the hieroglyph representing the sun (\odot)². So the claim that the symbol for the Lot of Fortune is based on an Egyptian hieroglyph for time should be made with caution.

Another topic is the order of "planetary" lots associated with Paulus in his *Introduction*, and a similar order for documentary charts containing the four lots of Fortune, Daimon, Eros and Necessity (p. 1158 and n. 2929). The topic of lot order is taken up by me in a forthcoming article³. Its purpose is to explore how the transmission of the order of certain lots, the ones mentioned above and the "planetary" lots in Paulus and Olympiodorus, shows two lot traditions, historically consecutive, that are combined, in fact, in Paulus and Olympiodorus, and

previous phrase. My previous translation of this part of the passage (GREENBAUM 2016: 332) might now be amended to "...they plainly show both the fate (*moira*) [Lot of Daimon] and the amount of time to be lived [Lot of Fortune] from the distance (each has from the Ascendant)." The daimon has long cultural associations with fate in Greece: cf. Plato, *Rp* X, the Myth of Er.

1 BACCANI 1992: 158 and n. 1. However, see below for the origin of her claim in BOUCHÉ-LECLERCQ.

2 GARDINER 1927 (1969): 85, N5 in the Sign List; see also, e.g., ERMAN AND GRAPOW 1926-1953: words for 'Zeit' at II: 219 (*nw*); II: 457 (*rk*); IV: 57-58 (*sw*).

3 This will appear in a *Festschrift for Charles Burnett*.

that the orders used in the medieval tradition (e.g. in authors such as Abū Ma'shar) may follow one or another earlier tradition¹. These are just two examples of the investigative harvest waiting to be plucked from the branches of Heilen's fruit-laden tree.

In summation, I cannot recommend this book highly enough. Though dense, it will richly repay anyone who delves into it, whether for personal interest or scholarly ambition. It is an original, thorough and detailed examination into many topics critical to the understanding of ancient astrology. It contains a valuable update on the original documentary and literary horoscopes from 410 BCE to 1374 CE. Its commentary on the topics brought up in the testimony and fragments of Antigonus is a breathtaking achievement in the world of scholarship generally, let alone in the history of astrology.

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¹ The two systems, but not the transmission of their order, were previously discussed in GREENBAUM 2016: 360-378 and GREENBAUM AND JONES 2017: Part III, Astrological commentary, 'The Planetary Lots in Context', <http://dlib.nyu.edu/awdl/isaw/isaw-papers/12/#p210>

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DORIAN GIESELER GREENBAUM, *The Daimon in Hellenistic Astrology. Origins and Influence. Ancient Magic and Divination*, vol. 11, Leiden-Boston, Brill, 2016, XXIV+574 pp. [ISBN: 978-90-04-306020-2 (hardback) & 978-90-04-30621-9 (e-book); ISSN: 1566-7952].

This monograph is the revised version of a doctoral thesis directed by Charles Burnett at the Warburg Institute (2009). It is part of a recent, important research trend that aims at providing thorough analyses of single technical terms or tenets of the complex Hellenistic astrological doctrine. As is well known, Auguste Bouché-Leclercq made the first attempt at systematically reviewing that broad field in his influential monograph *L'astrologie grecque* (1899)¹. However, he wrote at a time when very few Greek astrological texts had received critical editions and the majority of the relevant manuscripts had not even been catalogued. Therefore he was well aware of the provisional nature of his enterprise². In retrospect, his meritorious work is now partly obsolete and in many respects insufficient. An up-to-date

¹ A. BOUCHÉ-LECLERCQ, *L'astrologie grecque*, Paris 1899 (repr. Brussels 1963, Aalen 1979, Cambridge 2014).

² See his letter of 25 September 1898 to Franz Cumont, edited and commented on by C. BONNET, *La correspondance scientifique de Franz Cumont conservée à l'Academia Belgica de Rome*, Brussels – Rome 1997 (Institut Historique Belge de Rome. Études de philologie, d'archéologie et d'histoire anciennes 35): 125.