

The Alexandrian Summaries of Galen's On Critical Days: Editions and Translations of the Two Versions of the Jawāmi', with an Introduction and Notes, by Gerrit Bos and Y. Tzvi Langermann (Islamic Philosophy, Theology and Science, Studies and Texts, 92) (Leiden & Boston: Brill, 2015), 128 pp., ISBN: 978-90-04-28221-6, €90.00 / \$125.00 (hb)

The vehicle of Galen's enormous impact on Medieval Muslim, Christian, and Jewish physicians was not only his books, which were translated from Greek into Arabic, Hebrew, Latin, and Persian, but also the so-called "Alexandrian Summaries" of his works produced in Late Antiquity. They overlap for the most part with the sixteen Galen's treatises which were selected for the curriculum of medical studies in pre-Islamic Alexandria and in the early centuries of Islam. They do not merely shorten the originals, but show a critical attitude towards Galen's doctrine and sometime revise it.¹ Galen's writings were thus transformed by deliberate intervention on the part of unnamed medical writers and sometime it was this revised Galen to enter into the medieval medical learning.

In this important contribution to the scholarly research G. Bos and Y. Tzvi Langermann present the first edition and translation of the Arabic and Hebrew (from a lost Arabic text) versions of the summaries to *On Critical Days* and focus on the points where they diverge critically from Galen.² According to Galen fevers have critical turning points in their developments towards a crisis, which will determine the fate of the patient. These critical days occur at regular intervals. Galen looks for a cause of this regularity not only in the

¹ They are different from Maimonides' *Epitomes* of the sixteen Galenic treatises of medical curriculum which follow literally Galen's originals: cf. Maimonides, *Medical Aphorisms, Treatises 1-5, A Parallel Arabic-English Edition*, edited, translated and annotated by G. Bos (Provo: Brigham Young University, 2004).

² Cf. the previous work by Y. Tzvi Langermann, "The Astral Connections of Critical Days: Some Late Antique Sources Preserved in Hebrew and Arabic," in *Astromedicine, Astrology, and Medicine, East and West*, eds., A. Akasoy, C. Burnett, and R. Yoeli-Tlalim (Firenze: Sismel. Edizioni del Galluzzo, 2008), 99-118.

field of medicine, but also in that of astrology, astronomy, and arithmology.

A Preface, pp. vii-ix, places the text in its context. It is followed by the first chapter, “The ‘Summaries’ and Other Recensions of Galen”, pp. 1-10, where the authors present a critical review of studies on the *Summaria Alexandrinorum* – in particular Emilie Savage-Smith (2002) and Peter Pormann (2004).³ The authors enlarge their analysis not only to the “Alexandrian Summaries,” but also to other epitomes of Galen’s works such as those ascribed to Yaḥyá al-Naḥwī (John the Grammarian) and the recently discovered summary of the *Elements According to Hippocrates* attributed to Ḥunayn ibn Ishāq.⁴ All these texts were written with the same aim of the “Summaries” in mind: first, to make Galen’s teachings more accessible for the students. To this aim Galen’s materials are organized in a more succinct form. And second, they were written to up-to date Galen’s doctrine by correcting it with the medical developments occurred between Galen’s life and the time of composition of these abridgments half-millennium later. Thus in the “Summaries” Galen’s text is paraphrased, the information is organized differently, there is some information not from Galen, the space devoted to a given issue differs from the original.

In the second chapter, pp. 11-27, the authors present a review of the Arabic “Summary” and of the Hebrew “Summary” both with comments on their divergences from Galen’s *On Critical Days*. The two “Summaries” are concise and seem to pay more attention to regimen and to the treatment of the patients than Galen’s original work.

The authors give some examples of these attitudes: in the “Arabic Summary” paragraph [1] presents a classification of critical days into

³ E. Savage-Smith, “Galen’s lost ophthalmology and the “Summaria Alexandrinorum,” in *The Unknown Galen*, ed. V. Nutton (London: Institute of Classical Studies, School of Classical Studies of the University of London, 2002), 121-138, doi:10.1111/j.2041-5370.2002.tb02285.x; Peter E. Pormann, “The Alexandrian Summary (*Jawāmi*) of Galen’s *On the Sects for Beginners*: Commentary or Abridgement,” *Bulletin of the Institute of Classical Studies* 47 (2004), 11-33, doi:10.1111/j.2041-5370.2004.tb02307.x.

⁴ G. Bos and Y. Tzvi Langermann, “An Epitome of Galen’s *On the Elements* Ascribed to Ḥunayn ibn Ishāq,” *Arabic Sciences and Philosophy* 25, no. 1 (2015), 33-78, doi:10.1017/S0957423914000095.

six types which one cannot find in Galen. Paragraphs [10]-[12] distinguish in a very concise way good and bad critical days and those days on which a crisis does not occur. Paragraphs [15] and [16] arrange the critical days in order of frequency and not according to the swiftness of the illness' resolution as in Galen's original work. Paragraph [21] presents the three moments of the crisis and their use in determining the critical day. The instructions of the summary are a simplification of Galen's long treatment. Paragraph [23] correlates the critical days to stellar cycles. A marginal note of the MS Princeton University Library, Garrett 1G (*olim* Garrett 1075), observes that this kind of correlation is mentioned by Galen in book II and book III, but not in book I. Paragraph [24] which discusses the exit from the disease has no correspondent text in Galen's original work. Paragraph [25] summarizes a long discussion in Galen and prescribes three requirements for prognostication: the study of Hippocrates' *Prognosis*, practical experience of the physician, and understanding of the pulse. Paragraphs [26]-[28] list the signs indicating recovery and those indicating danger. These three paragraphs have no parallels in Galen who refers to the two categories of signs without any further specification. The text of the "Arabic Summary" details Galen's general statement. At paragraph [35] the summary of the second book starts. We do not find the long introductory discussion with which Galen opens the second book. Paragraph [37] faces the problem that critical days are thought to occur in tetrads: the first crisis not occurs before day four, but the second often occurs after three days and not four. It does not mean that tetrads are to abandon. Instead two tetrads overlap and their sum is seven and not eight. Then the second tetrad and the third are counted separately, the third and the fourth are consecutive, the fourth and the fifth also overlap, the fifth terminates on the seventeenth day. Seven, eleven, fourteen, seventeen, and twenty are all critical days. Nothing in Galen's original corresponds to this passage even if the authors suggest that this calculation is designed to fit a remark by Galen (Kühn's edition, p. 867.13-14) that day 17 is stronger than 18 and 20 than 21, and another remark (Kühn's edition, p. 870.8-11) where Galen quotes Hippocrates' *Prognosis* according to which "periods end on day four, seven, eleven, fourteen, seventeen, and twenty. At paragraph [62] book III starts: it is devoted by Galen to the etiology of the critical days. It is strongly reorganized in the "Arabic Summary" as well demonstrated in a previous study of one of the authors: Langermann (2008).

The Hebrew version (from a lost Arabic) presents many differences with Galen's original text and with the "Arabic Summary" in terms of organization and content. It is shorter and without repetitions. The structure in three books is reorganized in smaller sections each one with its own title. Concerning the contents, this version is much more practical and it avoids intricate theoretical issues. It is interesting to notice that in paragraph [1] we find the etymology of the term "crisis," which derives "from Greek and Syriac." This mention to Syriac seems to give a useful suggestion to the *vexata quaestio* of the authorship of the "Summaries:" it seems to indicate that they were written originally in Arabic by Syriac-speaking Christians.

In the third chapter, pp. 28-64, the authors present the Arabic versions of the "Alexandrian Summaries" of Galen's *On Critical Days*. The Arabic version allegedly attributed to Ḥunayn ibn Ishāq is survived in two manuscripts: the above-mentioned manuscript of Princeton and the MS Tehran, Majlis 6037 (without foliation). These manuscripts present two different redactions of the Arabic "Summary" of Galen's *On Critical Days*, which employ different technical vocabularies – see the valuable comparative examples at p. 30. For this reason, G. Bos and Y. Tzvi Langermann decided to present first the Arabic text of Princeton MS, then that of Tehran MS, and finally, in chapter four (pp. 65-86), a clear and richly annotated English translation. They translated for the most part the Princeton version, which seems more correct, and they recorded the variants of Tehran MS (siglum T) in the notes to the translation. It would have been useful and clearer to have at least the Arabic of Princeton MS and the English translation of it in facing pages. Throughout the notes to the text the "Arabic Summary" is constantly keyed to page and line numbers in Kühn's edition of Galen's Greek text and to page in Glenn Cooper's edition of Ḥunayn's Arabic translation of Galen's work: see Langermann's sharp review of Cooper's edition in *Aestimatio* 9 (2012), 220-240.

In the fifth and sixth chapters, pp. 87-121, there is the edition and English translation of the "Hebrew Summary." It was completed in 1322 by Shimshon ben Shlomo, an unknown author. It is survived in six manuscripts (pp. 87-88). The basic MSS used for this edition are MS Paris, Bibliothèque Nationale, *béb*, 117 till the paragraph 24 and from then MS St. Petersburg, RNL, *Heb.I*, 332, while the variants of the

other MSS are noted in the apparatus. The authors devoted a paragraph to Shimshon ben Shlomo's vocabulary which is familiar with the consolidated scientific terminology of early fourteenth century, but presents some unique choices in particular in the translation of the Pythagorean theories: see pp. 89-91 for some interesting examples. Unfortunately, the fact that the original Arabic text on which Shimshon ben Shlomo works is lost limits the possibility to inquire this topic. Also the English translation of the Hebrew text is richly annotated and keyed to page and line numbers in Kühn's edition and to page in Glenn Cooper's edition. The notes are very informative and they are of great help for the reader to constantly underline the differences with Galen's original treatise and to clarify the particular choices of vocabulary.

What follows is a selected bibliography and an Arabic-English Glossary and Index derived from the Princeton MS. In virtue of the different technical vocabularies employed in the "Arabic Summaries" it would be desirable an Arabic Glossary and Index also for the Tehran MS. An Hebrew Glossary and Index and an Index of Subjects close this useful volume which masterly shed light not only on Galen's tradition, but more in general on the history of science.

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