THE TWELFTH-CENTURY MANUSCRIPT OF CONSTANTINE THE AFRICAN'S THEORICA PANTEGNI¹



By Outi Merisalo

A twelfth-century manuscript now at the National Library of Finland, is an early witness of the epoch-making Latin-language medical compendium entitled Pantegni, of which the prolific translator Constantine the African of Monte Cassino (d. c. 1098/9) identified himself as the coadunator ex multorum libris (compiler from books by many authors). This article explores the material characteristics, scripts and history of the Helsinki manuscript, which contains a rare and early version of the Theorica part of Constantine's manual.

The twelfth-century manuscript now at the National Library of Finland, E.ö.II.14, is an early witness of the epoch-making Latin-language medical compendium entitled *Pantegni*, of which the prolific translator Constantine the African (monk at Monte Cassino from the end of the 1070s; died at the latest in 1098/9) identified himself as the *coadunator ex multorum libris* (compiler from books by many authors). In fact, Constantine translated the section on theoretical medicine (*Theorica*), the first first books and part of the ninth book of the section on practical medicine (*Practica*) of the *Kitāb kāmil as-sinā'a*, authored by the tenth-century Persian scholar Alī ibn al-'Abbās al-Maǧūsī, known in the Latin tradition as Haly Abbas. Constantine omitted the

¹ Part of the research for this article was financed by the Academy of Finland and University of Jyväskylä project *Lamemoli* (no. 307135, 2017-2022). I wish to express my gratitude to Anja Inkeri Lehtinen, who very kindly put at my disposal her unpublished catalogue entry of this ms. as well as her articles Lehtinen 1997, 35-36 and Lehtinen 1994, 273-278; Marie-Thèrèse Gousset, and Giovanna Murano, who kindly broke their heads with me over the localization of the Helsinki MS; and the eminent team of a meeting entitled *Excavating Medicine in a Digital Age: Paleography and the Medical Book in the Twelfth-Century Renaissance*, organized by Monica Green and Eliza Glaze and funded by the NHS at Durham, N.C. (30 September – 3 October 2010). For Constantine, see now Kwakkel & Newton 2019 and the review by Merisalo 2022. On the Helsinki manuscript and the tradition of the *Theorica Pantegni*, see Kaltio 2020 and Kaltio 2022. For a digitized copy of the manuscript, with a transcription, see https://www.doria.fi/handle/10024/69831, 18 August 2022.

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name of the original author and gave the work a Hellenizing title (*Pantegni* ~ *Pasa tekhne*) underlining the ultimately Greek origins of the contents at the expense of the Arabic-language ones of the text. The importance of the *Pantegni* for the history of Western medicine may hardly be overestimated: this compendium, together with other translations of works of Galenic medicine transmitted by Arabic-language authors, completely revolutionized the theory and practice of medicine in the West in the eleventh-twelfth centuries.

The manuscript may be dated, mainly on the basis of the scripts and codicology, to the third quarter of the twelfth century. It forms a single codicological unit, consisting in its present form of 26 parchment gatherings, all but two of which are quaternions, one quinion (gathering XIX) and one (gathering VIII) a quaternion with a double leaf added, altogether 210 folios with a modern numbering in pencil. The codicology shows that there are quires lacking at the beginning of the volume: the first folios of the actual gatherings I-III bear the signatures c, d and e, that of IV shows the top of an f, and those of gatherings VI-XXI the letters h-z, whereas gathering XXII has the sign for (et) and gatherings XXIII-XXIV, the Roman numbers xxv-xxvi. The last two quires (XXV-XXVI) do not bear any signatures, but considering the severe trimming that the manuscript has been subjected to, it is probable that the signatures of these quires, just as that of gathering V, have disappeared.

The quires were ruled in plummet on ff. 1-187v, with single left margins, then ff. 188-210v with either framing or simple/double left margins, mostly with single right margins. For the marginal additions, e.g. on f. 52 and 62v, there is independent marginal ruling. The leaf between f. 58 and 59 (see below p. 166) was also ruled in plummet, but with a greater unit of ruling.

The *Prima particula* of the *Theorica* would take up approximately 16 folios, i.e. two quaternions, in the present manuscript.² The preserved text, which starts with the *Secunda particula*, thus corroborates the codicological findings. In case the volume only contained the *Theorica*, it has lost at least one further gathering, since the text abruptly ends in the middle of a sentence of the *Decima particula* ("et hec eruginosa aqua") at the end of quire XXVI. Chapters XI-XII would fit into one quaternion. Since we do not have any

² E.g. in London, British Library, Harley 1676, from the first half of the thirteenth century, the *prima particula* takes up ff. 2v-12, the *secunda* 12-23, which correspond to ff. 1-16v in our manuscript, the *tertia* ff. 23-36v, corresponding to ff. 17-37v in our manuscript, etc.

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indication of the original contents of the volume, the losses might be even more considerable.³

The volume may be divided into three sections on the basis of the decoration. It should be noted that changes in neither textual nor rubricating hands coincide with these sections (see below pp. 165-166).

- 1) The ff. 1-32v, i.e. quires c to e, have simple initials alternately in bright red and blue, most often graced by dots attached to the inner or outer surface of the letters. The rubrics are in the same red. They are announced in the margin in the textual hand and ink.
- 2) On ff. 33-192, instead of the alternating bright red and blue initials as well as the rubrics, we have orange initials, every second of which basically seems to bear strokes painted in silver-coloured ink.
- 3) On ff. 193-201v the initials and rubrics are somewhat less orange than in section 2, but not as red as in section 1. Furthermore, there is no alternation between orange/red and blue, and no large initials right at the end of the volume, ff. 203-210v.

It was Paul Lehmann, while examining the ms. in 1937, who discovered that ff. 196-197 contained writing that had been washed off. He also identified the lower text of these leaves as Ovid, Met. 12.225-266. According to Anja Inkeri Lehtinen, a series of further leaves would also be palimpsests.⁴ According to both Lehmann and Lehtinen, the Ovid text dates from the beginning of the twelfth century.⁵

The textual script is a Pre-Gothica characterised by considerable Doppelbrechung from the latter half of the twelfth century, more precisely third quarter, as both Lehmann and Lehtinen pointed out.⁶ Two textual hands may be distinguished (for samples, see the digitized manuscript, cf. n.1):

1) ff. 1-193: **H1** has e caudata, uncial d, and strong Doppelbrechung but weak lateral compression. The hand has rounded r after o, not after other rounded letters, and most often et is a double-hunchback variant of the Tironic sign. Minuscule b, d and l have forked and clubbed ascenders, and minuscule g is upright, normally with an open lower loop. This hand also wrote the guide rubrics in black ink placed in the margins, of which the last one is on f. 192;

³ As already stated, Constantine translated the *Theorica* followed by most of the first two books of *Practica*, together with a portion of bk. IX. This arrangement is only preserved in a handful of twelfth-century manuscripts, see Jordan 1994, 291. The Theorica also circulated separately from early on, Jordan 1994, 293.

⁴ Among these leaves, f. 58rv has certainly been washed, whereas the traces on f. 66r may simply be a reflection of writing on the previous leaf. Re-examination of the volume with an UV lamp is necessary to confirm these findings.

⁵ Lehmann 1938, 155-172 (description on 163-165).

⁶ Lehmann 1938, 160; Lehtinen, personal information.

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- 2) ff. 193-210v: **H2** has basically the same morphology as H1 but it is elongated and with greater lateral compression, though still not fully Gothic. The e *caudata* is almost completely absent, which might point to a generation shift: H2 could be a younger scribe taking over from an older one. This hand also writes the marginal additions on f. 1-193 which contain passages present in the other groups of manuscripts but not in the Paris manuscript.⁷ This hand also seems to write the rubrics on f. 193v-201v;
- 3) ff. 1-193: **H3**, a laterally even less compressed hand than H1, writes the rubrics. It has e caudata and an oblique Tironic sign for et.
- 4) between ff. 58 and 59: **H4** writes the text of a leaf of evidently different origin, showing the epidemic scheme of Hippocrates, which is referred to in the text on f. 58v and which is often placed in the text in other manuscripts of Pantegni. Interestingly, the same sort of orange as in the volume proper characterises this leaf as well. The parchment is much finer than in the volume proper, and the ruling-unit is greater (cf. above p. 164). On the basis of the script, the leaf might have been written somewhat earlier than the rest of the volume, i.e. towards the middle of the eleventh century. The lower part of the leaf has been cut off, taking most of a drawing representing no doubt the eagle of St John. What remains of the leaf has been integrated into the gathering by means of a stub between ff. 64 and 65.

There are but few marginal hands apart from H2 on ff. 1-193, but they occur in the whole volume, though sporadically:

- 5) all of the volume: **H5** is a fifteenth-century, obviously German hybrida (note the stroke on u as on f. 63v), which sets up marginal headings through picking out and repeating words from the text: f. 66 Apium (with the German stroke on u!), also f. 147 Epilempsa // est, f. 188 Sompnus f. 190 Interrogatio f. 192v Causa f. 200v Exitus-maris f. 204v Significaciones;
- 6) all of the volume: **H6** is a very fluent fifteenth-century Gothic hybrida, e.g. f. 67v Ypocras, ff. 76, 96. This hand writes annotations of a certain length. It reminds e.g. of the marginal hands present in mid-fifteenth-century medical working manuscripts, such as the Palatini Latini that maybe once belonged to Konrad Schelling (d. 1513) who studied at Padua and made a brilliant career as physician to the court of the Electors Palatine. ¹⁰ H6 is quite obviously well versed in medical literature, probably a medical doctor himself.

According to Outi Kaltio, the Helsinki manuscript represents a text form of its own, related, it would seem, only to the ms. Paris, Bibliothèque

⁷ See Kaltio 2020, 306-307.

⁸ I thank Outi Kaltio for this piece of information. ⁹ I thank MT Gousset for suggesting this date (May 2009).

¹⁰ E.g. Pal. Lat. 1217, 1251, 1295 and 1298. For an analysis of these marginalia, see Merisalo 2006.

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nationale de France, lat. 6886, with considerable lacunae compared to the rest of the tradition. While Élisabeth Pellegrin has localized the Paris manuscript to twelfth-century Northern Italy, the Helsinki manuscript is certainly Transalpine. Anja Inkeri Lehtinen and Paul Lehmann proposed a "North-German origin". The script, especially the particular form of g and the double-hunchback Tironic sign for et in both H1, H2 and H3, the orange initials on ff. 33-193 and even later in the volume, find similarities in manuscripts of the region of Ardennes in North-Eastern France, e.g. in manuscripts now at the Municipal Library of Charleville-Mézières; 12 this late a use of orange is not unknown in the manuscripts of the monastery of Saint-Trond near Liège, either. The dots of the initials on ff. 1-32v also occur in manuscripts of Saint-Trond. I would thus propose a localization in the old Austrasia, the heartland of the old Empire of Charlemagne where Romance and Germanic meet. As yet I have not come across any of the hands present in this manuscript.

The institution that had this manuscript made might be a Benedictine monastery or another ecclesiastical institution. The penetration of Constantine's works in the Empire as early as 1100 is shown by e.g. Hildesheim, Dombibliothek 748, which was donated to the Cathedral library by Bruno, Bishop of Hildesheim (r. 1153-1161).¹⁵

In the early nineteenth century the volume was bound in red leather in Russia, considering that the guard leaves are blue paper with the watermark $MOK\Phi$. There is no ex-libris, but the records of the National Library of Finland show that the manuscript was donated to the library on 19 June 1832 by Emperor Nicholas I as part of the c. 2800-volume lot of books from the library of Joseph von Rehmann (1779-1831), M.D. and Actual State Councillor. Son to the first physician of the prince of Fürstenberg, Joseph Xaver Rehmann (author of works on rabies and venereal diseases), Joseph

¹¹ Lehmann 1938 and Lehtinen (personal information).

¹² E.g. Charleville-Mézières, Médiathèque Voyelles 1 and 246 B.1 ff. 3, 36.

¹³ I thank MT Gousset for pointing out these similarities (e-mail 28 May 2009), Giovanna Murano for locating orange initials in Eastern French manuscripts (e-mail 3 June 2009) and the Bibliothèque Marie Delcourt of the University of Liège for giving me the permission to photograph manuscripts of Saint-Trond in March-April 2009.

¹⁴ E.g. Université de Liège, Bibliothèque, Salle Marie Delcourt, MS 306.

¹⁵ Giermann, Härtel & Arnold 1993, 81 (description 81-82); see also Jordan 1994, 291-292 and n. 18.

¹⁶ National Library of Finland, Ba.1.1. Rehmann 1832: Catalogue des livres // de feu Monsieur le Conseiller d'État actuel // Dr. de Rehmann // Arrangé par ordre alphabétique des auteurs & divisé par Sciences // 1832, no. 516. See Havu & Knapas 1991, 114. I have the pleasure of thanking Ms. Sirkka Havu, librarian emerita of the National Library of Finland, who discovered the document, for pointing it out to me (May-June 2009). For this donation and Rehmann's library, see also Fabian 2003.

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Rehmann was appointed professor at the medico-surgical Josephsakademie in Vienna in 1807. He later made, a brilliant Russian career as physician to Emperor Nicholas I and ended up as head of the Russian civil health care system. He had participated at the Golovkin Embassy to China in 1805-6 and subsequently published several works on Oriental medicine, e.g. *Zwey chinesische Abhandlungen über die Geburtshülfe* (St. Petersburg 1810) and *Beschreibung einer Thibetanischen Handapotheke* (St. Petersburg 1811). His mainly medical library of almost 3000 volumes was purchased by Nicholas I in 1832 and the above-mentioned *c*. 2800 volumes went to Helsinki to refurbish the University Library almost completely destroyed in the 1827 Turku fire.

Conclusion

This remarkable early fragmentary manuscript of Constantine the African's *Theorica Pantegni* may be dated to the latter half of the twelfth century and localized to the Holy Roman Empire, with some probability to the North-Western areas between modern-day Belgium, Germany and France. It lacks two quires containing the *Prima particula* at the beginning and at least one quaternion at the end. The text has been written by two hands, H1 and H2, the relationship of which might be that of an older scribe, maybe the master, to a younger one. H2 is also responsible for the important marginal annotations to the text on ff. 1-193. These annotations contain variants present in a specific group of manuscripts.

H3 is the rubricating hand, whereas H4 writes the text on a leaf of evidently different origin containing the Hippocratic scheme of diseases. The marginal annotations by H5 and H6 show that the manuscript was diligently read in Germanic lands in the fifteenth century. It is only natural that it should have belonged to the remarkable library of the learned Imperial physician Joseph von Rehmann. Through the generosity of Nicholas I the volume found its way to the National Library of Finland in 1832.

¹⁷ Massold & Ordubadi 2007 (2013) (in particular the paper by H. Duchhardt, Mainz).

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