A HITHERTO UNKNOWN GREEK TRANSLATION OF AL-MAJŪSĪ'S KĀMIL ṢINĀ ʿA AL-ṬIBBIYYA

DISCOVERED IN

MS Paris, Bibliothèque Nationale de France, Suppl. Gr. 638: A Preliminary Study*

THIBAULT MIGUET
UNIVERSITÉ PARIS-EST CRÉTEIL

Abstract

The main objective of the current paper is to offer a preliminary study of a hitherto unknown Byzantine translation of al-Majūsī's $\mathit{Kitāb}$ $\mathit{al-malak\bar{i}}$ preserved in a single manuscript: MS Paris, Bibliothèque nationale de France, supplément grec 638 (fourteenth century). After a brief introduction, the Paris manuscript is presented and described, and its content – a Greek translation of the first part of al-Majūsī's $\mathit{Kitāb}$ $\mathit{al-malak\bar{i}}$ – identified. The study then focuses on John Dioikêtês of Constantinople, responsible for the Greek text, showing that it is no less than the translator of the Arabic work as well as the copyist of the manuscript. The last part formulates an hypothesis as to where the manuscript could have been produced, and gives some details on its subsequent story. An Appendix compares Greek text samples of the Paris manuscript with Arabic text samples of the $\mathit{Kitāb}$ $\mathit{al-malak\bar{i}}$ (based on two editions and a manuscript), showing that the Greek text is a translation of the Arabic.

Key Words

Al-Majūsī, *Kāmil ṣinā ʿa al-ṭibbiyya*, *Kitāb al-malakī*, Byzantine medicine, Arabic medicine, Arabic-to-Greek translations, Minas Minoidis.



^{*} I am grateful to Marie Cronier and Brigitte Mondrain for their useful comments, and to Dúnlaith Bird for helping me improve the English version of the paper. I also thank the two anonymous peer-reviewers for their remarks.

I. Introduction

The role of Arabic translations, from Bagdad in particular, in the transmission of antique Greek medical knowledge has long been emphasized. However, the reversed scheme, from Arabic to Greek, is far less studied. Fortunately, it is the object of recent and still on-going research (as the present cluster of articles shows) that falls into the scope of a more general study of translations from Arabic to Greek. This field offers multiple points of interest: because it is less studied, it allows us to bring to light new research perspectives on the history of medieval medicine in the Mediterranean. It also demonstrates the diversity of Arabic-to-Greek translators' production: the Byzantines, especially in the Palaeologan era (1261–1453) – a paradoxical period of political decline and scientific Renaissance – demonstrated an acute curiosity with regard to Arabic medical knowledge. Among other examples, the case of the Greek version of the Provisions of the Traveller (Ἐφόδια τοῦ ἀποδημοῦντος) by Ibn al-Jazzār is interesting: in that period, not only were the majority of preserved manuscripts copied, but a revised version was also made, probably in the milieu of physicians and scholars in the first half of the fourteenth-century in Constantinople.² Finally, through a meticulous analysis of books containing these translations, it is possible to cast new light on how this Arabic knowledge was read and understood by Greek medieval scholars.

As a consequence, it is of major importance to carefully reconstruct this Arabic-to-Greek transmission phenomenon: therefore, scholars must endeavour to

See DIMITRI GUTAS, « Arabic into Byzantine Greek: Introducing a Survey of the Translations » in Andreas Speer, Philipp Steinkrüger (eds.), *Knotenpunkt Byzanz. Wissensformen und kulturelle Wechselbeziehungen*, De Gruyter, Berlin-New York 2016 (Miscellanea Mediævalia, 36), p. 246–262 as well as a list prepared and enriched regularly by Anthony Kaldellis (Anthony Kaldellis, « Catalogue of Translations into Byzantine Greek from Texts in Any Other Languages, 300–1453 AD » , accessed August 2021). As far as medicine is concerned, a conference held at Reims University in 2018 and organized by Marie Cronier, Alessia Guardasole and Antoine Pietrobelli (« De Bagdad à Constantinople: le transfert des savoirs médicaux [XI°-XV° s.] », in course of publication), concentrates specifically on this topic.

See the PhD thesis I defended in November 2019 in Paris (Thibault Miguet, « Recherches sur l'histoire du texte grec du *Viatique du voyageur* d'Ibn al-Ğazzār », Ph.D. Diss., École pratique des Hautes Études, 2019) of which I am now preparing the publication; also a paper from a conference on translation issues in Late Byzantium that deals specifically with the most significant revised version of the text (Thibault Miguet, « La traduction grecque du *Viatique du voyageur* [*Zād almusāfir*] d'Ibn al-Ğazzār et l'une de ses révisions à l'époque paléologue » in Panagiotis Athanasopoulos [ed.], *Translation Activity in Late Byzantine World. Contexts, Authors and Texts*, De Gruyter, Berlin–New York [Byzantinisches Archiv, Series Philosophica, 4], to be published in 2022). The first results of this research, with an updated presentation of the text and especially the Greek version, was published in 2017: Thibault Miguet, « Premiers jalons pour une étude complète de l'histoire du texte grec du *Viatique du voyageur* (Ἑφόδια τοῦ ἀποδημοῦντος) d'Ibn al-Ğazzār », *Revue d'histoire des textes*, 12 (2017), p. 59–105.

identify new Greek medical texts that are, in fact, translations from the Arabic, in order to obtain a more faithful picture of this production. A return to the manuscripts themselves appears to be the only solution to make real progress. In the medical field, they have been relatively little analysed, even though they contain unexpected treasures that only a thorough inquiry could bring forth: some are complex miscellany volumes, often – understandably – insufficiently described in catalogues; other contain anonymous texts, the origin of which can only be found through an analysis of their sources. It is therefore necessary to combine knowledge of Arabic, knowledge of Greek and Arabic medical literature, and expertise in the field of manuscripts in order to obtain tangible results.

I would like to give, in this paper, an example of these results, demonstrating that there still remain, hidden in manuscripts, noteworthy texts which, in certain cases, enrich remarkably our understanding of transfers of knowledge between Arabic and Greek cultures.

I have recently discovered a Greek manuscript containing a Byzantine translation from the Palaeologan era of books VI–X of the first part of 'Alī ibn al-Abbās al-Majūsī's Kāmil ṣinā 'a al-ṭibbiyya (known also as Kitāb al-malakī) (tenth century), one of the most famous medieval Arabic medical encyclopedias. This mutilated unicum is the autograph book of a trilingual scholar from Constantinople, active in the first half of the fourteenth century, whose identity remains for the moment full of mystery. This preliminary work aims to present this discovery and lay the groundwork for a larger study that I am currently preparing.

II. MS Paris, Bibliothèque nationale de France, supplément grec 638: A Medical Manuscript of Exceptional Value

II.1. Presentation

MS Paris, Bibliothèque nationale de France, supplément grec 638³ belongs to the part of the Supplément grec collection that has not yet been described in a modern catalogue, unlike the first and last parts (Supplément grec 1–150 and 901–1371).⁴ It has not been digitalized nor microfilmed, which is one of the reasons why it has remained unknown to this day. According to Hermann Diels's catalogue of medical Greek manuscripts, this manuscript, thought to be from the fifteenth century, is the only one to bear the work of a little known (to say the least) author, here given in its Latin form: *Ioannes Diœcetas Constantinopolitanus*. Only books VI–X of his work,

³ Henceforth, « MS Paris suppl. gr. 638 ».

CHARLES ASTRUC, MARIE-LOUISE CONCASTY, Bibliothèque nationale. Catalogue des manuscrits grecs, vol. III: le Supplément grec, numéros 901-1371, Bibliothèque nationale de France, Paris 1960; CHARLES ASTRUC, MARIE-LOUISE CONCASTY, CÉCILE BELLON, CHRISTIAN FÖRSTEL et al., Catalogue des manuscrits grecs. Supplément grec, numéros 1 à 150, Bibliothèque nationale de France, Paris 2003.

cautiously named in Diels, between square brackets, [Τέχνη ἰατρική?], are present in the book; in the catalogue's supplement can be read a title, τῆς τελείας τέχνης τῆς ἰατρικῆς βιβλία, found by Diels's collaborator Max Treu (1842–1915). Neither Alain Touwaide's *Census* nor his new edition of Diels's catalogue offer complementary information on the work.

This *Ioannes* (PLP 8442)⁸ is otherwise unknown. The few references made in further prosopographical repertoires come from Diels's catalogue⁹ which draws partly on Henri Omont's *Inventaire*, whose description is very brief:¹⁰

638. Joannis Diœcetae Constantinop. de medicina libri VI.–X., cum notis arabicis. XV s. Parch. et pap. 154 fol. P.

One learns however – and this is of particular interest – that the book is accompanied by « Arabic notes » (cum notis arabicis), that it is made both of paper and parchment (Parch. et pap.), and finally that it is of reasonable thickness (154 folios) and small dimensions (P). In the absence of a new catalogue of the Supplément grec collection, this description is the most recent at our disposal.

II.2. MSS Paris, Bibliothèque nationale de France, supplément grec 1121 and 1122's descriptions

The Bibliothèque nationale holds, however, a hand-written catalogue by librarians and scholars Emmanuel Miller (1812–1886) and Carle Wescher (1832–1904), in two

⁵ HERMANN DIELS, Die Handschriften der antiken Ärzte. Griechische Abteilung, vol. II: Die übrigen griechischen Ärzte ausser Hippokrates und Galenos, Verlag der königlichen Akademie der Wissenschaften, Berlin 1906, p. 53.

⁶ HERMANN DIELS, Bericht über den Stand des interakademischen Corpus medicorum antiquorum und erster Nachtrag zu den in den Abhandlungen 1905 und 1906 veröffentlichten Katalogen: Die Handschriften der antiken Ärzte, I. und II. Teil, Verlag der königlichen Akademie der Wissenschaften, Berlin 1908, p. 54: « So lautet der Titel nach Treu ».

ALAIN TOUWAIDE, A Census of Greek Medical Manuscripts. From Byzantium to the Renaissance, Routledge, London-New York 2016, ad indicem; Id., Greek Medical Manuscripts. Diels' Catalogue, vol. I: Diels' Catalogue with Indices, De Gruyter, Berlin-New York 2021 (Medical Traditions, 2/1), p. 267 and 400; Id., Greek Medical Manuscripts. Diels' Catalogue, vol. IV: Ceteri Medici De Gruyter, Berlin-New York 2021 (Medical Traditions, 2/4), p. 140; Id., Greek Medical Manuscripts. Diels' Catalogue, vol. V: The Manuscripts and Their Texts, De Gruyter, Berlin-New York 2021 (Medical Traditions, 2/5), p. 298.

ERICH TRAPP (ed.), Prosopographisches Lexikon der Palaiologenzeit, 12 vol., 2 vol. Addenda et Corrigenda, Verlag der österreichischen Akademie der Wissenschaften, Wien 1976–1995, ad indicem [henceforth, PLP].

For instance in Pauly-Wissowa Encyclopedia (Georg Wissowa, Wilhelm Kroll, Paulys Real-Encyclopädie der classischen Altertumswissenschaft: Neue Bearbeitung, vol. IX/2: Imperium-Iugum, J. B. Metzlersche Verlagsbuchhandlung, Stuttgart 1916, col. 1800). The work's title, περὶ τελείας τέχνης τῆς ἰατρικῆς, certainly comes from Diels's supplement.

HENRI OMONT, Inventaire sommaire des manuscrits grecs de la Bibliothèque nationale, vol. III: Ancien fonds grec, Belles lettres, Coislin-Supplément, Paris et départements, Alphonse Picard, Paris 1888, p. 288.

volumes: MSS Paris, Bibliothèque nationale de France, supplément grec 1121 and 1122. MS suppl. gr. 1121 contains the description of suppl. gr. 1-655 and MS suppl. gr. 1122, datable by an « Avis au lecteur » of 1869 (fol. 1v), that of suppl. gr. 607, 609-913: our manuscript is therefore described twice. Here is a transcription of the description in MS suppl. gr. 1121, in Latin (fol. 246r):

DCXXXVIII

Codex partim membranaceus, partim chartaceus, in octavo, a Mina | Minoïde ex Oriente allatus, quo continentur:

Joannis Constantinopolitani, cognomine Δ ιοικητοῦ, libri de Medicina | VI, VII, VIII, IX, X. Initium libri sexti ac finis decimi deside|rantur.

Constat hic codex fasciculis undecim numeratis, a numero $\kappa\eta'$ ad | numerum $\lambda\eta'$. Sunt folia 154 vel paginae 308.

Accedunt marginibus notulae aliquot arabice scriptae.

Scriptura codicis videtur ad saeculum decimum quartum referenda.

MS suppl. gr. 1122's description, written in the same hand, gives more or less the same information, this time in French (fol. 27r):

Suppl. gr. n° 638

M. 496

Manuscrit sur vélin et sur papier.

Petit format.

Écriture du XIVe siècle.

Ce ms. renferme une partie de l'ouvrage de <u>Jean Διοικητής | de Constantinople</u> sur la Médecine.

Il contient:

le livre VI (moins le début)

le livre VII

le livre VIII

le livre IX

le livre X (la fin manque)

Il se compose de onze cahiers numérotés depuis $\kappa\eta'$ jusqu'à $\lambda\eta'$, | formant 154 feuillets ou 308 pages.

Il porte en marge un grand nombre de mots arabes.

Below are written in the same hand, with a pencil, the words: « non relié » and, below again, « D ».

These two descriptions teach us more about the book: MS Paris suppl. gr. 638 constitutes one part of an originally complete manuscript, since it contains only quires 28–38. Books VI and X are incomplete, mutilated at the beginning (book VI) and the end (book X). Moreover, the indication of the number of quires and the total number of folios allows us to determine the type of quires we are dealing with: supposing that the quires belong to the same type (and they do, as we shall

see), if eleven quires correspond to 154 folios, then each quire is composed of 14 folios: these are septenions. Secondly, one can presume that the original volume was very thick: if quires lost in the beginning were also septenions, then they should have contained 378 folios. Therefore the volume, without taking into account lost quires at the end (the number of which is unknown), should have comprised at least 532 folios. Finally, these descriptions interestingly propose a different dating than Omont's: the fourteenth century, and not the fifteenth (dating accepted by Omont and, after him, Diels). This is not surprising: dating discrepancies are frequently observed, especially between the fourteenth and the fifteenth century, and it is not uncommon that a manuscript thought to be from the fifteenth century should be in fact correctly dated to the fourteenth. I will show below that this is the case here.

II.3. Minas Minoidis's description

A fourth and last description of MS Paris suppl. gr. 638 can be read on the recent guard-leaves of the manuscript itself. Written in violet ink, it is in Greek and French, and is by the hand of Minas Minoidis, 11 who was mentioned in MS suppl. gr. 1121's description (a Mina Minoïde ex Oriente allatus). Here is a transcription:

```
Τοῦ Σοφωτάτου ἰατροῦ Ἰωάννου | Διοικητοῦ Κωνσταντινου|πόλεως l'ouvrage parait être volumineux. ce frag|ment que j'ai découvert commence par | le 28eme cahier. l'auteur l'avait ecrit à l'instart (sic) de l'ouvrage d'Aëtius ὁ τόμος οὖτος ἄρχεται ἐκ τοῦ ιγ΄ ου κεφ. τοῦ | \varsigma΄ λόγου, καὶ λήγει εἰς τὸ λ\varsigma΄.| ὁ \zeta΄ ος λόγος περιέχει κεφ. ιη΄| ό η΄ Ἰωάννου Διοικητοῦ etc. περιέχων | κεφ. κβ΄ ό θ΄ τοῦ α΄ τμήματος τῆς τελείας | τέχνης τῆς ἰατρικῆς περιέχων | κεφ. μα΄ ὁ ι΄ περιέχει κεφ. ιγ΄ ἐλλειπὴς | περὶ τὸ τέλος:-| ἄδηλον δὲ εἰς πόσα διηρεῖτο τμή|ματα:- Μ. Μγnas
```

The author's identity is no clearer, but the number of chapters in each book is given: 36 in book VI (the manuscript starts at chapter 13), 18 in book VII, 22 in book VIII, 41 in book IX, 13^{12} in book X. Before going into the details of the content, let us begin with a brief codicological description of the manuscript.

The name is spelled in French « Minoïde Mynas », but I follow here the spelling adopted in an English-written contribution by a specialist, Zisis Melissakis (ZISIS MELISSAKIS, « 'Monsieur le Ministre, je fais un catalogue de la bibliothèque de chaque couvent': Minas Minoidis and the First Effort to Produce Systematic Catalogues of the Libraries of Mount Athos », in André Binggeli, Matthieu Cassin, Marina Detoraki [eds.], Bibliothèques grecques dans l'Empire ottoman, Brepols, Turnhout 2020 [Bibliologia, 54], p. 399–410). On this character (with bibliography), see below.

¹² There are actually 12 chapters in book X.

II.4. Codicological analysis

MS Paris suppl. gr. 638 is today bound in a Gardien 1873 red binding with, on the back, the words Tractatus | De | medicina. The mention « non relié » in MS suppl. gr. 1122's description is therefore older than 1873. The book is of small dimensions (220 × 150 mm, written surface 180 × 115 mm) and is formed of a unique codicological unit.

The volume is indeed composed of parchment and paper: each of the 11 quires is constituted by a bifolium of parchment enveloping six bifolia of paper. This process, used in order to protect the quires, is not at all common, as we shall see. The quires are septenions, a quire-type very rare in Greek manuscripts. They are all complete, a fact which indicates that the parchment at the beginning and the end has well fulfilled its assigned role. They were not originally numbered; only numbered by a later hand on the recto of the first folio and the verso of the last folio of each quire, in the middle of the lower margin (thus on parchment). A second quire numbering is visible, from another hand, starting with β and ending with β , partially erased, next to the first numbering.

The parchment is very thin and of bad quality; the paper is quite thick and stiff. It shows thin wire-lines, running at a right angle to the writing line (in-quarto folding). Two watermarks are visible: *Aigle*, very similar to Mošin-Traljić 34 (a. 1323) and *Lettre A* of a very peculiar type, very similar to Mošin-Traljić 5094 (a. 1325 [1315–1320]). ¹⁴ The watermarks lead us to a dating in the first half of the fourteenth century, corresponding to Miller and Wescher's dating.

The manuscript was copied by a single scribe whose small, scholarly, fast and sharp writing is very well mastered and presents some likeness to that of Maximos Planoudês (c. 1255–c.1305, RGK I 259bis; II 357). The *mise-en-page* is quite dense (30 lines per page) but the margins leave some space for potential notes. There is no line break, except for new chapter beginnings or some important divisions within chapters; in most cases, the structuring of ideas within chapters is made by little blanks in the writing line by the scribe, corresponding to major articulations of the argumentation.

Jean Irigoin underlines the rareness of this type of quire, and says that he encountered it only in mixed quires (parchment and paper) (Jean Irigoin, « Typologie et description codicologique des manuscrits de papier », in Dieter Harlfinger, Giancarlo Prato [eds.], *Paleografia e codicologia greca.* Atti del II Colloquio internazionale [Berlino-Wolfenbüttel, 17–21 ottobre 1983], 2 vol., Edizioni dell'Orso, Alessandria 1991 [Biblioteca di Scrittura e Civiltà, 3], vol. 1, p. 275–303, here p. 283).

VLADIMIR A. MOŠIN, SEID M. TRALJIĆ, *Filigranes des XIII^e et XIV^e siècles*, 2 vol., Académie yougoslave des sciences et des Beaux-Arts, Zagreb 1957, *ad indicem*.

ERNST GAMILLSCHEG, DIETER HARLFINGER, Repertorium der griechischen Kopisten, 3 vol., Verlag der österreichischen Akademie der Wissenschaften, Wien 1981 (vol. I), 1989 (vol. II), 1997 (vol. III) (henceforth, RGK).

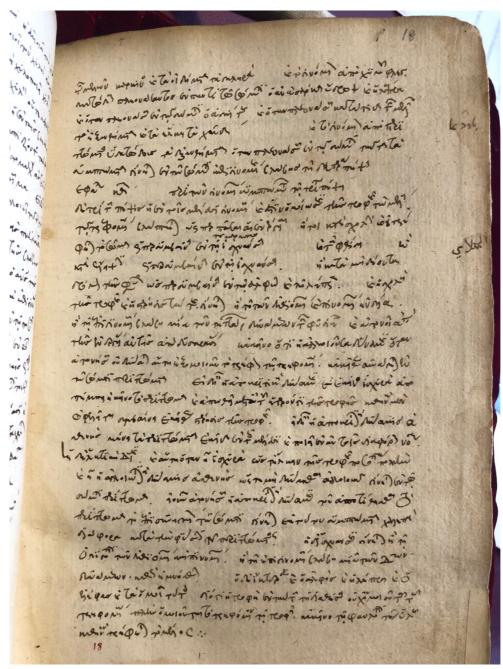


Fig. 1: MS Paris, Bibliothèque nationale de France, supplément grec 638, fol. 18r (Copyright BnF)

III. A Greek Translation of Al-Majūsī's 'Kāmil ṣinā 'a al-ṭibbiyya' (as Known as 'Kitāb al-malakī') (10th cent.)

The work in the manuscript is not at all easy to identify since the manuscript, mutilated in the beginning, does not have a title. Moreover, it does not seem to be preserved in any known Greek manuscript. It is a perfectly organized medical treatise and, obviously, of a very high level. The content is mostly theoretical: it is not a practical medical handbook describing drugs and their posology, but more of an encyclopedia allowing one to identify illnesses and their causes. Each book is preceded by its title and an index of chapters. Book VII teaches the reader how to recognize the general signs of illnesses (περὶ τῆς διαγνώσεως τῶν καθόλου σημείων τῶν νόσων), book VIII describes illnesses that manifest through sensation (περὶ τῶν σημείων τῶν ἐπιφαινομένων τῆ αἰσθήσει νόσων καὶ τῶν αἰτιῶν αὐτῶν), book IX the signs of affections which affect internal organs (περὶ τῶν σημειώσεων τῶν παθῶν τῶν ἔνδον μελῶν), book X does not have a title but focuses on prognosis and crises.

Thanks to the title, the reader learns that books VII to IX belong to the first part (μέρος [books VII–VIII] / τμῆμα [book IX]) of the treatise, book VII's title specifying that it is the « theory » (λόγος ἔβδομος τοῦ πρώτου μέρους ἤτοι τῆς θεωρητικῆς). Thus the treatise is very firmly divided into parts (μέρος / τμῆμα), probably two (theory and practice), books (λόγος) and chapters (κεφάλαιον). Its overall title is then given (in the genitive): the « perfect book of medical art » (τοῦ τελείου βιβλίου τῆς ἰατρικῆς τέχνης), a very uncommon title (not to say unknown) amongst Greek physicians.

This title is in fact the precise translation of *Kitāb kāmil ṣināʿa al-ṭibbiyya*, (« Perfect book of medical art »), an encyclopedia best known as *Kitāb al-malakī* (« Royal book ») by ʿAlī b. al-ʿAbbās al-Majūsī (tenth century). The *Kitāb al-malakī* has the same structure as the Greek text in the manuscript: two parts (theory and practice), each one containing ten books which offer a variable number of chapters. The number of chapters for books VII–X is the same as in the Greek text in the manuscript, with the same topic. The comparison I made between the Greek and the Arabic text on several text samples confirms that the Greek is a translation from the Arabic (see Appendix).

Kitāb al-malakī is undoubtedly one of the jewels of Arabic medical literature. Written by the Persian physician ʿAlī b. al-ʿAbbās al-Majūsī (tenth century), it constitutes the clearest summary of Galenism as it was received by the Arabs. ¹⁶

For an overview on al-Majūsī, see Fuat Sezgin, Geschichte der arabischen Schrifttums, vol. 3: Medizin, Pharmazie, Zoologie, Tierheilkunde bis ca. 430 H., Brill, Leiden 1970, p. 320–322. On his life and milieu, see Françoise Micheau, « 'Alī Ibn al-'Abbās al-Maǧūsī et son milieu », in Charles Burnett, Danielle

The treatise has been very popular: 128 Arabic copies are preserved to this day, according to the most recent list made by Gérard Troupeau. ¹⁷ The vast majority of copies do not comprise the complete treatise, but often either only the first or the second part in its entirety, or sections of one or the other part.

The Kitāb al-malakī furthermore circulated in numerous translations, including Hebrew and Judeo-Arabic. ¹⁸ However, its fortune in the West is due to the translation into Latin made by the famous Constantine the African (eleventh century), under the title Pantegni, which is considered as the first encyclopedic medical text in Latin. ¹⁹ While the first part (Theorica Pantegni) corresponds more or less to the theoretical part of the Kitāb al-malakī, the second (Pratica Pantegni) is in fact a patchwork of translations of other Arabic medical texts, some pre-Salernitan, embedded in occasional chapters of the original work. Stephen of Pisa / Antioch (twelfth century) is responsible for a later Latin translation of the Kitāb al-malakī, with a less widespread circulation, under the title Regalis dispositio. ²⁰ This translation is faithful to the Arabic original.

The Greek translation contained in MS Paris suppl. gr. 638 completes this rich textual transmission and helps us to better understand the role of Greek versions in the transmission of Greek medical knowledge in the Middle Ages. This translation is a supplementary piece of evidence that the Palaeologan era plays a prominent role in the study and transmission of scientific texts, Arabic ones in particular.

JACQUART (eds.), Constantine the African and ʿAlī Ibn al-ʿAbbās al-Maǧūsī. The Pantegni and Related Texts, Brill, Leiden-New York-Köln 1994 (Studies in Ancient Medicine, 10), p. 1–15. For a concise and clear presentation of his works and doctrine, see Danielle Jacquart, Françoise Micheau, La médecine arabe et l'Occident médiéval, Maisonneuve et Larose, Paris 1996, p. 69–74.

GÉRARD TROUPEAU, « Manuscripts of the Kāmil şinā 'a », in Burnett, Jacquart, Constantine the African, p. 303-315.

For an overview of these translations, see Ron Barkai, « The Judeo-Arabic and Hebrew Versions of the *Kitāb Kāmil aṣ-ṣinā ʿa* », in Burnett, Jacquart, *Constantine the African*, p. 57–70.

For an overview of the Pantegni, see JACQUART, MICHEAU, La médecine arabe, p. 103-106; the major study on it remains the volume edited by Charles Burnett and Danielle Jacquart (BURNETT, JACQUART, Constantine the African).

On Stephen of Pisa, see Charles Burnett, « Antioch as a Link between Arabic and Latin Culture in the Twelfth and Thirteenth Centuries », in Baudouin van den Abeele, Isabelle Draelants, Anne Tihon (eds.), Occident et Proche-Orient: contacts scientifiques au temps des Croisades. Actes du colloque de Louvain-la-Neuve, 24 et 25 mars 1997, Brepols, Turnhout 2000 (Reminisciences, 5), p. 1–78 (repr. with corrections in Charles Burnett, Arabic into Latin in the Middle Ages: The Translators and their Intellectual and Social Context, Routledge, Farnham 2009 [Variorum Collected Studies Series, 939], Article IV). The text of the Regalis dispositio still lacks a critical edition. The prefaces to the two parts have been edited by Charles Burnett (« Antioch as a link », Appendix I.A, p. 20–40); the rest can be conveniently read in the 1523 Lyon edition (HALY FILIUS ABBAS, Liber totius medicine necessaria continens quem sapientissimus Haly filius Abbas discipulus Abimeher Moysi filii Seiar edidit: regique inscripsit unde et Regalis dispositionis nomen assumpsit..., Lugduni, 1523).

IV. The Mysterious John of Constantinople, dioikêtês and Trilingual Translator of the Book

Who is the translator? It is the same *Ioannes Diœcetas Constantinopolitanus* we encountered as author of the book in Diels's catalogue. He gives his name in the titles of books VII, VIII and IX, here according to that of book VII (fol. 23r), the most developed:

Λόγος ἔβδομος τοῦ πρώτου μέρους ἤτοι τῆς θεωρητικῆς τοῦ τελείου βιβλίου τῆς ἰατρικῆς | τέχνης τοῦ ἐγνωσμένου διοικητοῦ. Ἐκδοσις Ἰωάννου Διοικητοῦ Κωνσταντινουπολίτου τριγλώσσου υἰοῦ Διοικητοῦ Μιχαήλ. Περὶ τῆς διαγνώσεως τῶν καθόλου σημείων τῶν νόσων καὶ εἰσὶ κεφάλαια δεκαὀκτώ.

Book VII of the first part i.e. theory of the perfect book of the medical art by he who is known as διοικητής. Edition / treatise by John, διοικητής, from Constantinople, trilingual, son of Michael διοικητής. On the recognition of general signs of illnesses, and there are 18 chapters.

Something strikes us immediately: John Διοικητής does not present himself as translator, but rather as author of the treatise. Yet the comparison of the chapters unquestionably shows that the Greek text is a translation of the Arabic, without modification. The word ἔκδοσις is employed: it means an « edition », but also a « publication », a « treatise », an « account », e.g., it is the meaning it has in the title of an adaptation from around 1435 by Michael Chrysokokkês of Immanuel Bonfils of Tarascon's (fourteenth century) Hexapterygon (treatise of Jewish astronomy). Interestingly, this is also a treatise translated (or at least adapted) from another language: Μιχαὴλ νοταρίου τῆς μεγαλῆς ἐκκλησίας τοῦ Χρυσοκόκκη, ἔκδοσις γεγονυῖα εἰς τὸ ἰουδαϊκὸν έξαπτέρυγον κατὰ τὸ ς λμγ΄ ἔτος ἀπὸ τῆς ἀρχῆς τοῦ παντός. 21 In the title of book IX, σύνταξις (composition) is used, whereas in the titles of books VIII and X, only the genitive is given. Perhaps one should not pay too much attention to the words chosen here: these variations can also be attributed to variants in the Arabic exemplar. For instance, in MS Paris, Bibliothèque nationale de France, arabe 2871 (a. 1261, containing only the treatise's first part), ta 'līf (root 'LF, « form », « unite », « join ») is mostly used, but, for book I, one reads taṣnīf (root SNF, « arrange, organize », possibly what the translator was reading for book IX): these are all taf'īl forms of verbs, and thus can easily vary by scribal choice with only slighlty different meanings.

John names himself διοικητής. It corresponds to a specific office in Byzantium. Originally, it was borne only by a fiscal official, but was replaced in 1109 by that of

_

See Anne Tihon, « Astronomie juive à Byzance », *Byzantion*, 87 (2017), p. 323–347, here p. 324 (transcription of MS Hagion Oros, Monê Batopediou, 188, fol. 44v).

praktor (πρακτώρ). ²² It is still mentioned in the lists of pseudo-Kodinos's De Officiis (fourteenth century), the main source for the knowledge of hierarchy and ceremonial rules in the middle of the fourteenth century, still under the form μέγας διοικητής. However this office « doesn't have any function » and appears to be honorific. ²³ A survey in the Prosopographisches Lexikon der Palaiologenzeit shows that the only John who bears this title is John Doukas Balsamon (PLP 91427), megas dioikêtês of Thessalonica in 1355, known from a unique act of the monastery of Docheiariou. ²⁴ He is known neither as translator from the Arabic nor as engaging in any scientific or medical activity whatsoever. John διοικητής's father, Michael (Μιχαήλ), himself διοικητής, is not known from other sources.

However there is some evidence that διοικητής could also have become a family name, as is the case with other offices, e.g. Oikonomos or Grammatikos, offices which became widespread family names in Byzantium. In fact, it is possible to identify another probable member of this Dioikêtês family, Manouêl (Μανουήλ)²⁵. This Manouêl is mentioned in two Athos acts dated 1342: one praktikon (January 1342)²⁶ and one chrysobull (November 1342, issued by John V Palaiologos)²⁷. Both acts grant a series of possessions, the praktikon to John Margaritês (value: 55 hyperpyra) and the chrysobull to George Margaritês (value: 50 hyperpyra). The Margaritês were supporters of John V Palaiologos in the civil war between John V Palaiologos (and his mother, Anna, the patriarch John Kalekas and John Apokaupos) and John Cantacuzênos, who proclaimed himself co-emperor. It is therefore no wonder that these possessions were taken away from supporters of John Cantacuzênos, amongst whom was Manouêl the Dioikêtes, oikeios of John Cantacuzênos. The praktikon speaks of a land that belonged to « Sir Manuel the dioikêtês » (κυροῦ Μανουὴλ τοῦ διοικητοῦ),28 whereas in the chrysobull by John V, the land belonged to the « unfaithful Manuel the dioikêtês » (τοῦ ἀπίστου Μανουὴλ

²² Alexander P. Kazhdan, « Dioiketes », *The Oxford Dictionary of Byzantium*, vol. I, Oxford University Press, New York–Oxford 1991, p. 627–628.

²³ « Ὁ μέγας διοικητής οὐδεμίαν ὑπηρεσίαν ἔχει » (Pseudo-Codinus, Traité des Offices, ed. Jean Verpeaux, Éditions du CNRS, Paris 1966 [Le Monde byzantin, 1], p. 185, lines 15–16.

See Nicolas Oikonomides, Actes de Docheiariou, P. Lethielleux, Paris 1984 (Archives de l'Athos, 13), p. 191–193 (act n°29).

For all this prosopographical excursus, I am very much indebted to Raúl Estangüi Gómez (University Paris 1 Panthéon Sorbonne), whom I thank very warmly, for telling me about these documents.

Edition in Paul Lemerle, « Un praktikon inédit des archives de Karakala (janvier 1342) et la situation de la Macédoine orientale au moment de l'usurpation de Cantacuzène », Χαριστήριον εἰς Ἀναστάσιον Κ. Ὀρλάνδον, vol. I, Ἡ έν Αθήναις Αρχαιολογική Εταιρεία, Athens 1965, p. 278–298 (repr. in Paul Lemerle, Le monde de Byzance: histoire et institutions, Routledge, London 1978 [Collected Studies Series, 86], n° XVIII).

Edition in VASSILIKI KRAVARI, « Nouveaux documents du monastère de Philothéou », *Travaux et mémoires*, 10 (1987), p. 261–356, here p. 291–298 (act n° 2).

LEMERLE, « Un praktikon inédit… », p. 285, line 40 in the edition.

τοῦ διοικητοῦ). The editors of the acts (along with the PLP: PLP 16684) thought that Manouêl had the office of dioikêtês, but since this office didn't exist anymore at this period (megas dioikêtês was used, and it was honorific) and that no other patronym is given in the acts, one can reasonably presume that dioikêtês is in fact his family name. Manouêl was indeed a supporter of John Cantacuzênos and was appointed with the charge of governor (κεφαλή) of Thessalia in 1359³0. Given the rarity of this patronym, it is probable that this Manouêl belongs to the same family as John or his father Michael. Complementary prosopographical research could allow us to know more about these historical characters.

V. MS Paris Suppl. Gr. 638, John Dioikêtês's Autograph Manuscript

There is more: MS Paris suppl. gr. 638 is the translator's autograph manuscript, as confirmed by several pieces of evidence.

First of all, the numerous marginal notes. The book is indeed completed, as has been seen in the descriptions, by « Arabic notes ». A close examination shows that these are notes in Arabic, and not notes in languages written in the Arabic alphabet (Turkish or Persian). They are in their vast majority isolated nouns or group of nouns, for instance, fol. 55v: $(judar\bar{\imath}/jadar\bar{\imath}, smallpox)$, $(judh\bar{a}m, leprosy)$. Whole sentences are rarely found (e.g. fol. 92v). Arabic notes in medical Greek manuscripts at this period are fairly rare. But most importantly, two facts make them key elements of the puzzle: first, they are written in the main scribe's hand, who was without doubt, as we shall see, a native Greek speaker from Constantinople, and perfectly coeval to the writing of the manuscript;

secondly, these notes correspond to blanks in the Greek text, showing that the work is in progress: the copyist, who is also the translator, has the Arabic text in front of him and translates. From time to time, he struggles with a word that he cannot read, translate, or translate as he wishes. Consequently he leaves a blank in the Greek text, and writes the Arabic word in the opposite margin, perhaps in anticipation of a future revision of the work.

See Kravari, « Nouveaux documents... », p. 296, who relies on a chrysobull issued by emperor Symeon in 1359 (edition in Aleksandar Solovjev, Vladimir Aleksejevič Mošin, *Grčke povelje Srpskih vladara. Diplomata Graeca regum et imperatorum Serviae*, Routledge, London 1974, p. 212–229, in particular p. 224 [act n° 31]).

²⁹ Kravari, « Nouveaux documents... », p. 297, lines 11–12 in the edition. The name Μανουήλ, originally at the end of the line, has disappeared because of a mutilation, but its restitution is made by Kravari thanks to the praktikon edited by Lemerle.

Marie Cronier knows about around ten Dioscorides manuscripts with Arabic notes, from all periods, but the case of Dioscorides is in itself rather specific due to its vast and multilingual transmission.

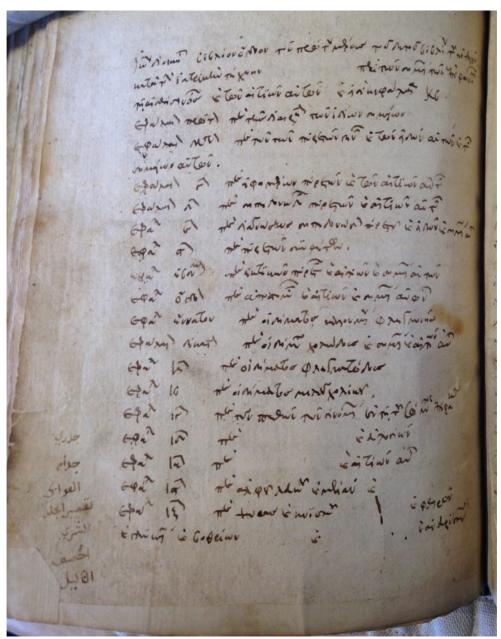


Fig. 2 : MS Paris, Bibliothèque nationale de France, supplément grec 638, f. 55v (Copyright BnF)

Another important element escaped those who made the descriptions of the manuscript: the presence, on four folios in the book, of Latin medical notes, written in a proficient writing which proves again to be the scribe's writing. Therefore he knew and could write three languages: Greek, Arabic and Latin, which is quite exceptional in medical literature and Greek medical manuscripts. It should also be linked to the adjective $\tau\rho\gamma\lambda\omega\sigma\sigma\sigma\nu$ used by John Dioikêtês to describe himself in the title of book VII: it seems obvious that it also qualifies the copyist of the manuscript, therefore they are one and the same person and the manuscript is an autograph.

The last argument is codicological: the manuscript is obviously of personal use. There is no decoration and the *mise-en-page* is very dense, with numerous marginal notes in Arabic, Greek and Latin. The Arabic words, in particular, transcribed such as they were read by the translator (diacritical signs are not systematically noted) are here only for the translator himself, and would not have been of any use for the random reader. The quire type, very rare, along with the use of a bad quality parchment to protect the quires, leads me to consider the manuscript as a workbook, made by and for its author.

At which stage of the work are we? It is clearly not the draft of the translation's first version, but a clean copy of the draft. For instance, the chapter initials, both in the indexes and in the text, have been omitted by the copyist, in anticipation of a future rubrication, probably in vermilion ink. The numerous Arabic words in the margins testify to the persistent difficulties of the translator, despite his high level of proficiency in Arabic.

It is not possible at the moment to determine the possible Arabic exemplar(s) that were used by our translator. My punctual collations of a couple of digitalized manuscripts did not allow me to find an answer. To do so, a survey of the Arabic manuscript tradition, lacking today, would be necessary.³³ The most recent (2018) edition by Khālid Ḥarbī is based on three manuscripts, but the reasons for choosing these three in particular as well as the edition principles are not explained.³⁴

³² I would like to express my gratitude to Jérémy Delmulle, Dominique Poirel (Institut de recherche et d'histoire des textes, Paris), and Iolanda Ventura (Alma Mater University of Bologna), for their help in the deciphering of the notes and comments on the writing.

A preliminary work based on manuscripts preserved in Paris has been made by Gérard Troupeau, « Les manuscrits du Kāmil ṣinā ʿa à la Bibliothèque nationale de Paris », in Burnett, Jacquart, Constantine the African, p. 48–56. He chose three manuscripts of different origins (one Syrian, one Iraqi and one Spanish) and compared the lists of chapters for the first five books of the first part of the treatise, as well as the chapters' first lines. His conclusion is that the text is completely identical in the three manuscripts.

AL-MAJŪSĪ, Kāmil şinā a al-ţibbiyya, 6 vol., ed. Khālid ḤARBĪ, Dār al-wafā li-dunyā al-ţibā a wa-al-nashr, Al-Iskandariyya 2018, vol. 1, p. 29 et 42. The manuscripts are: Cairo, National Library of Egypt, ţibb 199; Dublin, Chester Beatty Library, 3996; El-Escorial, Real Biblioteca, 815.

VI. Origin and Subsequent Story of the Manuscript

We know that the translator and copyist was from Constantinople.³⁵ This does not imply that he was necessarily active there, nor that the manuscript was produced there. Its codicological structure (mixed septenions, parchment and paper) is most rare. A quantitative investigation of mixed quires in manuscripts in several languages (Arabic, Greek, Latin, Hebrew) was made about thirty years ago by a group of scholars who specialized in the codicology of western and eastern manuscripts: its first results conclude that it is not possible, in the case of Greek manuscripts, to link this codicological habit to a specific region, even though it seems primarily Western (it is found in Arabic manuscripts of Spanish origin, and it was well developed in Hebrew and Latin manuscripts).³⁶ This corroborates Jean Irigoin's conclusions, according to which mixed quires were used only in Southern Italy and Sicily, as well as in Venice-ruled regions (Ionian Islands, Morea, Crete).³⁷

In any case, the very rare quire-type (septenions), combined with this mixed composition, seems to exclude Constantinople as the place of production. Had this been the case, one could barely understand why the copyist-translator specifies that he is from Constantinople. Moreover, one can spot catchwords at the end of the quires, in the right lower corner of the verso: it is clearly a Western codicological habit, and is to be found almost exclusively in Renaissance Greek manuscripts, under the influence, precisely, of Western habits. Before the Renaissance, it is very scarcely used in Greek manuscripts: one can think of manuscripts copied by the scribe Ioannikios (RGK II 283; III 341) and his collaborators, as well as that of Maximos Planoudês³⁸.

³⁵ The adjective Κωνσταντινουπολίτης in my opinion means that he indeed comes from Constantinople. The Greek community used to clearly mention their place of origin, through adjectives (Άρμόνιος ὁ Άθηναῖος [see Maria Papanicolaou, « Άρμόνιος ὁ Άθηναῖος. Bibliofilo e copista, maestro di greco e diplomatico», Bollettino della Badia Greca di Grottaferrata, 52 [1998], p. 283–301], Κύριλλος Ναυπάκτιος [RGK I 222; II 310]) or expressions such as ἐκ Κωνσταντινουπόλεως (copyist George Basilikos, see Morgane Cariou, « La production manuscrite de Georges Basilikos», in Marie Cronier, Brigitte Mondrain [eds.], Le livre manuscrit grec: écritures, matériaux, histoire. Actes du IXe Colloque international de Paléographie grecque, Paris, 10-15 septembre 2018, Association des amis du centre d'histoire et de civilisation de Byzance, Paris 2021 [Travaux et mémoires 24/1], p. 483–519), especially when in exile after the Ottoman conquest of Constantinople and Greece.

³⁶ See Francesco Bianchi et al., « Une recherche sur les manuscrits à cahiers mixtes », *Scriptorium*, 48/2 (1994), p. 259–286, especially the conclusive part p. 281–282.

JEAN IRIGOIN, «Typologie et description codicologique des manuscrits de papier », in Dieter Harlfinger, Giancarlo Prato (eds.), *Paleografia e codicologia greca. Atti del II Colloquio internazionale (Berlino-Wolfenbüttel, 17-21 ottobre 1983*), 2 vol., Edizioni dell'Orso, Alessandria 1991 (Biblioteca di Scrittura e Civiltà, 3), vol. I, p. 275–303, here p. 289–290.

³⁸ See Brigitte Mondrain, « Les signatures des cahiers dans les manuscrits grecs », in Philippe Hoffmann (ed.), Recherches de codicologie comparée. La composition du codex au Moyen Âge, en Orient et en Occident, Presses de l'École normale supérieure, Paris 1998, p. 21–48, here p. 40–41.

Thus, I am inclined to locate the creation of this manuscript in a contact zone (probably peripheral) between communities (Greek, Arabic and Latin) in the Mediterranean basin, predominantly Latin: could it be Crete? The Morea? If Minas Minoidis had found the manuscript in continental Greece – and there is some evidence for that, as we shall see – one might consider this last region, but we do not know if Arabic manuscripts were in circulation there. Cyprus (and to a certain extent Rhodes) is also a possibility, given the connections between Arabic, Latin and Greek communities on the island, as well as the flourishing medical school of nearby Damascus in the thirteenth and fourteenth centuries.³⁹

What do we know of the subsequent story of the manuscript? A cautious examination of the book shows that it has Greek notes from at least two other later hands, which is an element of interest. Moreover, the manuscript has, on fol. 22v and 23r, two marks of ownership of a certain John Palaiologos (Ἰωάννης ὁ Παλαιόλογος), perhaps from the fifteenth century according to the writing, entirely different from that of the main copyist, despite their identical names 40. Such a family name arouses in many respects curiosity, though I have not yet been able to identify it with a historical figure: there are many Ἰωάννης ὁ Παλαιόλογος and it would demand very cautious work on prosopography, combined with an analysis of the writing, to obtain firm results.

The next chronological milestone is Minas Minoidis (1788 or 1798–1859), a flamboyant character, Greek professor, adventurer and scholar who carried out, on behalf of the French Government, three missions in the Near East from 1840 to 1855 to acquire manuscripts.⁴¹ The archives and correspondance of Minas should

On this question, see the recent contribution by Marie Cronier on a Greek medical manuscript of the Austrian National Library of Vienna (Wien, Österreichische Nationalbibliothek, med. gr. 21, fourteenth century), probably produced in Cyprus or, but less probably, Rhodes: Marie Cronier, « Le copiste du Vindob. med. gr. 21 (XIVe s.), un traducteur de l'arabe au grec », in Marie Cronier, Brigitte Mondrain (eds.), Le livre manuscrit grec: écritures, matériaux, histoire. Actes du IXe Colloque international de Paléographie grecque, Paris, 10-15 septembre 2018, Association des amis du centre d'histoire et de civilisation de Byzance, Paris 2021 (Travaux et mémoires 24/1), p. 279-304. However, the Vienna manuscript and our Paris manuscript are quite different from a codicological point of view.

Note on fol. 22v: τὸ παρὸν χαρτίον ἔναι ἐμοῦ ἰωάννου τοῦ | παλαιολόγου +; note on fol. 23r, same hand: ἰατροσόφιν καλὸ ἐμοῦ.

On Minas Minoidis, see the study by Henri Omont: Henri Omont, « Minoïde Mynas et ses missions en Orient (1840–1855) », Mémoires de l'Institut national de France, 40 (1916), p. 337–421. More recently, see also Danielle Gourevitch, « Minoïde Mynas, un 'drôle de pistolet': érudition, escroquerie et histoire politique autour de l'indépendance de la Grèce, à propos de la 'Gymnastique' de Philostrate », in Véronique Boudon-Millot, Antonio Garzya, Jacques Jouanna, Amneris Roselli (eds.), Ecdotica e ricezione dei testi medici greci. Atti del V Convegno Internazionale, Napoli 1–2 ottobre 2004, M. D'Auria, Napoli 2006 (Collectanea, 24), p. 481–503 and Zisis Melissakis, « 'Monsieur le Ministre, je fais un catalogue de la bibliothèque de chaque couvent': Minas

be thoroughly examined in the hope to find a clue as to where he could have found the manuscript: research into the material published by Omont does not allow one to advance further; one learns only that the manuscript appears in an inventory, drawn up by Minas, of books he had temporarily left at « MM. Abbott frères à Salonique » on 15 August 1842. 42 An investigation into the origin of the other manuscripts in this inventory could help to determine one or several possible places. It is well known that Minas spent a lot of time in the Mount Athos monasteries, whence he took a great number of manuscripts, including medical ones (in particular from the rich monastery of Lavra), but there is no evidence that our manuscript comes from there.

The rest of the Romanesque story of manuscripts acquired by Minas is well known: 43 Minas sent two shipments to France, the first one of eleven manuscripts on 18 November 1842, the other of forty-five manuscripts on 5 August 1844. 44 Most of his findings remained at his residence in Paris, for reasons that have not yet been clarified. It was only after his death, especially during the inheritance process on 5 May 1860, that the manuscripts he had kept were classified in an inventory by an official receiver. They should have been sold by 14 May but the day before, the ministry of public instruction seized the eighty volumes that had been described in the inventory; they were deposited in the Bibliothèque Mazarine on 16 May before joining, almost four years later, on 12 February 1864, the collections of the Bibliothèque nationale de France. Despite all that, around thirty manuscripts still remained untraceable, kept in the house of the son of one of Minas's creditors. They were found in 1898 and were once and for all put in the Bibliothèque nationale. Our manuscript belongs to the selection which was at Minas's residence, then seized by the ministry: it was already in the collections of the Bibliothèque nationale in 1869, in the catalogue made by Emmanuel Miller and Carle Wescher. Most importantly, it is found in the abridged copy by Charles Daremberg (1817-1872, historian of medicine and then librarian at the Bibliothèque Mazarine) of a now lost catalogue by Minas himself, that roughly

Minoidis and the First Effort to Produce Systematic Catalogues of the Libraries of Mount Athos », in André Binggeli, Matthieu Cassin, Marina Detoraki (eds.), *Bibliothèques grecques dans l'Empire ottoman*, Brepols, Turnhout 2020 (Bibliologia, 54), p. 399–410.

⁴² OMONT, « Minoïde Mynas », p. 399 (Appendix III, 1). Our manuscript bears the number XXXIV, and is described as from the tenth century. The same number is found on fol. 1r of the manuscript, in the upper margin.

See Omont, « Minoïde Mynas », in particular p. 349–352.

These manuscripts are described by Minas in the official report addressed to the ministry of public instruction: our manuscript is not there, it consequently belongs neither to the first nor the second shipping.

corresponds to the manuscripts written in the official inventory that should have been sold.⁴⁵

VII. Conclusion

MS Paris suppl. gr. 638 is a testimony of exceptional value of a translation undertaken somewhere in a peripheral region of the Mediterranean in the first half of the fourteenth century by a trilingual scholar from Constantinople. It is a new example of Arabic medical material translated into Greek, and the material in question is nothing less than one of the most famous and remarkable Arabic medieval encyclopedias. Many questions remain unresolved. Did John Dioikêtês translate the totality of this enormous work? Or only the first, theoretical part, which offered him clear, innovative data from which he could benefit the most? Is there any relation between this Greek translation and the two Latin translations (one by Constantine the African, the other by Stephen of Pisa)?

In any case, the investigation hereby proposed is merely a beginning: the translation methodology will be scrutinized, and compared to other translations from the Arabic; the Latin notes and their content will also be cautiously analyzed, as well as the other Greek marginal notes. Finally, a diplomatic edition of the Greek translation will be offered, in the hope that it will stimulate the studies of scholars in the field of Arabic medicine, on al-Majūsī and the manuscript tradition of the work, which are sorely lacking in current research.

335

_

See Omont, « Minoïde Mynas », p. 399 (Appendix V), p. 411–417. This copy by Daremberg is today the MS Paris, Bibliothèque nationale de France, suppl. gr. 728, digitalized on Gallica: https://gallica.bnf.fr/ark:/12148/btv1b8585608f/f1. Our manuscript, which bears the number 26, is described on fol. 32r. The description is quite interesting, since it delivers pieces of information lacking in the other notices (or different from them): the manuscript is thought to be from the eleventh century; the title of book VII is given in its entirety; John Palaiologos's possession mark of fol. 22v is quoted (albeit erroneously τόδε βιβλίον ἕναι Ἰωάννου τοῦ Παλαιολόγου).

Appendix

Text samples of each of the preserved books, in Greek and Arabic

The Arabic text of the *Kitāb al-malakī* comes from the recent edition by Khālid Ḥarbī (= Ḥarbī), published in Alexandria in 2018; ⁴⁶ it is the most recent text at our disposal. I collated this edition with that of Būlāq (= Būlāq) [1887], with which there are only a few discrepancies. ⁴⁷ Finally, I collated both editions with MS Paris, Bibliothèque nationale de France, ar. 2871 (a. 1261 = MS 2871), ⁴⁸ which Gérard Troupeau at the time considered to be a very good manuscript, on the basis of the text samples he worked on. ⁴⁹ In some cases, the Greek text is closer to the manuscript than the Arabic editions; in these instances, the manuscript's variant in footnote is in **bold**. For the Greek text, the spelling of the manuscript has been retained (especially the accents on the verb ϵ īval), but I have added subscribed iotas where necessary; for the Arabic, I have respected the spelling of the edition.

Book VI, chapter 36 (end)

• Greek: Paris suppl. gr. 638, fol. 22v

Καὶ ἡμεῖς τεμοῦμεν τὸν λόγον ἡμῶν τὸν περὶ τούτου κατὰ τὸν παρόντα τόπον, καὶ ληψόμεθα ἐν τοῖς ἐπομένοις καὶ ἐστὶν ἀνάμνησις τῶν σημείων καὶ τῶν δηλώσεων τῶν σημαινόντων τὰ πάθη καὶ τὰς νόσους, τοῦ γίνεσθαι τὸν λόγον ἡμῶν περὶ τῶν ἀπὸ τῆς φύσεως ἐξερχομένων τέλειον καὶ ἀληθέστερον. Καὶ δοξαζέσθω θεὸς μήτηρ τε αὐτοῦ ἡ πανεύδοξα θεότοκος τι μάσθω καὶ ὑμνήσθω διὰ παντός.

Arabic: Ḥarbī, vol. 2, p. 356 = Būlāq, vol. 1, p. YoY (= 252) = MS 2871, fol. 109v, 111r (fol. 110 is misplaced)

⁴⁶ AL-Majūsī, Kāmil şinā ʿa al-ṭibbiyya, 6 vol., ed. Khālid Ḥarbī, Dār al-wafā ʾ li-dunyā al-ṭibā ʿa wa-al-nashr, Al-Iskandariyya 2018.

⁴⁷ AL-MAJŪSĪ, Kāmil ṣinā ʿa al-ṭibbiyya, 2 vol., Būlāq 1877.

The manuscript is available on Gallica: https://gallica.bnf.fr/ark:/12148/btv1b11002062z/, accessed August 2021. The foliotation, modern and Western, has been given as it would have been for a Western manuscript which is read from left to right. As a consequence, the folio numbers are systematically placed in the upper margin or the right-hand folio, when the reader has the volume open before him, whereas they should be on the left folio. Thus, below, fol. 20v = folium on which one finds the number 20.

GÉRARD TROUPEAU, « Les manuscrits du Kāmil ṣinā ʿa à la Bibliothèque nationale de Paris », in BURNETT, JACQUART, Constantine the African, p. 48–56, here p. 55: « En cas d'une édition critique du Kāmil aṣ-ṣinā ʿa, je crois qu'il faudrait prendre en considération certains manuscrits anciens de la collection parisienne, en particulier le très bon manuscrit de la première partie, le MS 2871 ».

ونحن نقطع كلامنا في 50 هذا الموضع ونأخذ فيما يتلوه و هو ذكر الدلائل والعلامات التي تدل 51 على سائر العلل والأمر اض ليكون كلامنا في الأمور الخارجة عن الأمر الطبيعي تاما واضحا والله المسؤل على 52 معونتنا على تمام ما نقصد إليه إنه على ما يشاء قدير و هو حسبى و نعم الوكيل 53 .

Book VII (beginning)

Greek: Paris suppl. gr. 638, fol. 23v

[Δ]εδηλώκαμεν τὴν ἐφ' ἑκάστην τῶν συμπτωμάτων καὶ τῶν αἰτιῶν διάθεσιν τῶν ποιουσῶν αὐτά, καὶ εἰσὶν αἱ νόσοι καὶ ἔστι τὸ κεφάλαιον ὃ δὴ καλοῦμεν ἐπιστήμην τῶν τῶν συμπτωμάτων αἰτίων. Καὶ ἡμεῖς δηλώσομεν ἐν τῷδε τῷ τόπῳ ἑκάστην τῶν νόσων καὶ τῶν συμπτωμάτων τῶν ἑπομένων αὐταῖς, καὶ εἰσὶν τὰ σημεῖα καθ'ὰ δηλοῦται τὰ καθ' αὐτὰ καὶ ὀνομάζεται ἐκεῖνο ἐπιστήμη τῶν σημείων. Καὶ φημὶ ὅτι τὸ γένος τῶν σημείων τριχῶς.

• Arabic: Ḥarbī, vol. 2, p. 361 = Būlāq, vol. 1, p. ΥοΥ-ΥοΥ (= 252-253) = MS 2871, fol. 111v

قد بيّنا الحال في كل واحد من الأعراض والأسباب الفاعلة لها وهي الأمراض وهو الباب الذي سميناه علم أسباب الأعراض، ونحن نبين في هذا الموضع كل واحد من العلل والأمراض 54بالأعراض التابعة لها وهي الدلائل التي يستدل بها عليها ويسمى 55ذلك علم الدلائل فنقول إن أجناس الدلائل ثلاثة56.

Book VII, chapter 13

• Greek: Paris suppl. gr. 638, fol. 48r.

[Κ]εφάλαιον ιγ΄. περὶ τῆς ποιότητος τῶν τοῦ οὕρου σημείων καὶ διαιρέσεως αὐτοῦ καὶ περὶ τῆς τάξεως τοῦ οὕρου καὶ τοῦ σημαινομένου καθ' αὐτό.

[Ό]τι τὰ σημεῖα τὰ λαμβανόμενα ἀπὸ τοῦ οὕρου γίνεται ἀπὸ τῆς ὑδατότητος τῆς διακεχυμένης τῷ κλοκείῳ καὶ ἀπὸ τοῦ διακεκριμένου καὶ ὑφιζάνοντος ἐν⁵⁷ αὐτῷ. Ἡ δὲ ὑδατότης διχῶς: εἰς χρῶμα καὶ εἰς σύστασιν. Καὶ κατὰ μὲν τὸ χρῶμα διασημαίνεται ἡ τῶν χυμῶν διάθεσις καὶ ἡ πέψις καὶ ἡ ἀπουσία τῆς πέψεως. Τὸ δὲ χρῶμα διαιρεῖται ἑπταχῶς: λευκόν⁵⁸, ξανθόν, ἀχρόν, πυρὸν καὶ ἐστὶ χρῶμα πυρός, ἐρυθρὸν διαυγὲς καὶ ἐστὶ χρῶμα τριχῶν κρόκου, ἐρυθρὸν ζοφῶδες καὶ ἐστὶ χρῶμα αἵματος, μέλαν.

add. MS 2871 ذلك من ⁵⁰

MS 2871 يدل ⁵¹

om. MS 2871 على ⁵²

 $^{^{53}}$ و هو حسبي ونعم الوكيل $om.~{
m MS}~2871$

MS 2871 الأمراض والعلل ⁵⁴

MS 2871 نسمي ⁵⁵

MS 2871 ثلثة مقام

⁵⁷ ἐν s.l.

⁵⁸ λεπτόν *a.c.*

• Arabic: Ḥarbī, vol. 2, p. 457 = Būlāq, vol. 1, p. YAY (= 282) = MS 2871, fol. 122r.

الباب الثالث عشر في كيفية الاستدلال من 99 البول و تقسيمه 60 في صفة ألوانه 16 وما يدل عليه إن الاستدلال المأخوذ من البول يكون من المائية المسكوبة في القارورة ومن الشئ الذي يتميز ويرسب فيها. أما المائية فتنقسم قسمين أحدهما اللون والثاني القوا، أما اللون فيستدل منه على حال الأخلاط ونضجها و عدمها للنضج 69 واللون ينقسم إلى ستة 69 أقسام، وهي الأبيض والأصفر الأترجي 69 والناري وهو لون النار والأحمر الناصع وهو لون شعر الزعفران والأحمر القاني وهو لون الدم والأسود.

Book VIII, chapter 20, a few lines after the beginning

• Greek: Paris suppl. gr. 638, fol. 76r-v.

Καὶ ἡμεῖς δηλώσομεν πρῶτον τοῦ γινώσκειν ποῖα τὰ δάκνοντα, καὶ πρῶτον ὁ λυσσῶν κύων. Καὶ λέγω ὅτι τὸ φάρμακον τοῦ λυσσῶντος κυνὸς ξηρὸν καὶ ἡ πλείστη τούτου βλάβη γίνεται τῷ ἐγκεφάλῳ. Καὶ οὕτω γίνεται ἐκ τούτου ὁ σπασμὸς καὶ ὁ φόβος τοῦ ὕδατος. Καὶ ὁ λυσσῶν, ὅταν δάκῃ τὸν ἄνθρωπον, συμβαίνει αὐτῷ συμπτώματα φαῦλα. Καὶ ὅταν οὐκ ἐπισπεύσει ὁ δηχθεὶς τὴν θεραπεῖαν, θνήσκει. Καὶ χρὴ πρῶτον τοῦ γινώσκειν τὰ σημεῖα τούτου τοῦ κυνὸς τοῦ παραφυλάσσεσθαι τοῦτον καὶ γινώσκειν ὡς ἡ δῆξις αὐτοῦ δῆξις λυσσῶντος καὶ θεραπεύειν καθ' ὁ δεῖ τοῦ θεραπεύειν αὐτό. Καὶ τὰ σημεῖα αὐτοῦ ὅτι γίνεται ὡς μαινόμενος καὶ κωλύεται ἀπὸ τροφῆς καὶ πότου καὶ βιάζεται τῆ δίψα καὶ οὐ πλησιάζει τῷ ὕδατι καὶ φεύγει αὐτὸ καὶ ἀνοίγει τὸ στόμα αὐτοῦ καὶ ἐκφέρει τὴν γλῶσσαν αὐτοῦ καὶ ἐξεῖσι τοῦ στόματος τούτου ἀφρὸς ὅμοιος ἀφρῷ ἐξερχομένῳ ἀπὸ τῶν καμήλων στομάτων ὅταν ὁρμῶσιν.

Arabic: Ḥarbī, vol. 3, p. 99-100 (= chap. 19) = Būlāq, vol. 1, p. ٣١٦ (= 316, chap. 20) = MS 2871, fol. 168r-v (chap. 20).

ونحن نبين أو لا أعلام ما كان منها يعض، وأول ذلك الكلب الكلب فأقول إن سم الكلب الكلب يابس مجفف 65 وأكثر مضرته 66 بالدماغ ولذلك صار يحدث عنه التشنج والفزع من الماء. والكلب الكلب متى عض إنسانا 67 عرضت له أعراض رديئة فمتى لم يتدارك المعضوض بعلاجه هلك. فينبغي لذلك أن تعرف أو لا علامات الكلب الكلب 68 ليتوقى منه ويحذر ليعلم 69 أن نهشته 70 نهشة كلب كلب فيعالج بما ينبغي أن يعالج به، و علامته أن يصير كالمجنون ويمتنع من الأكل والشرب

```
59 في Būlāq ب MS 2871

60 و add. MS 2871

61 و add. MS 2871

62 النصبح MS 2871

63 النصبح MS 2871

64 والأترجي MS 2871

64 والأترجي MS 2871

65 يابسا ومجففا MS 2871

66 تكون MS 2871

67 الأنسان MS 2871

68 وينبغي أولا أن تعرف علامات هذا الكلب MS 2871

69 منه ويعلم MS 2871
```

MS 2871 نهشه ⁷⁰

ويشتد عطشه ويلتهب ولا يقرب الماء ويهرب منه ويفتح فمه ويخرج لسانه ويخرج حمن> فيه 71زبد شبيه بالزبد الذي يخرج من أفواه الجمال إذا هاجت.

Book IX, chapter 35

• Greek: Paris suppl. gr. 638, fol. 128v.

[Κ]εφάλαιον λε΄ περὶ τῶν παθῶν τῶν γινομένων ἐν τῇ κύστει.

[Τ]ὰ δὲ πάθη τὰ γινόμενα ἐν τῆ κύστει εἰσὶν ὁ γεννώμενος ἐν αὐτῆ λίθος καὶ τὸ ἀπόστημα καὶ ή πληγὴ καὶ ή στραγγουρία καὶ ή δυσουρία καὶ ή ἀκούσιος ἔκκρισις. Ὁ δὲ λίθος γεννᾶται άπὸ τῶν αἰτιῶν ὧν ἐπιμνήσθημεν ἐν τοῖς νεφροῖς, καὶ ἐστὶν ὁ γυμὸς ὁ παχὺς ὁ γλίσχρος καὶ ή θερμότης τοῦ σώματος τῆς κύστεως καὶ ή στενότης τοῦ τραχήλου αὐτῆς. Καὶ πλεῖστον γίνεται τοῦτο τὸ πάθος ἐν τοῖς παισὶ τῇ ὑγρότητι τῆς κράσεως αὐτῶν καὶ τῇ ἀταξίᾳ αὐτῶν καὶ τῇ δυνάμει τῆς ὀρέξεως αὐτῶν τῆς τροφῆς, ὡς ἐμνήσθημεν πολλάκις, καὶ τῷ πλήθει τῆς χρήσεως τῶν τροφῶν τῶν γεννωσῶν τὰ περιττώματα τὰ παχέα.

• Arabic: Harbī, vol. 3, p. 331 (ch. 34) = Būlāq, vol. 1, p. Th. (p. 380, ch. 35) = MS 2871, fol. 152r (ch. 35).

الباب الرابع 72 والثلثون في العلل الحادثة في المثانة وأسبابها وعلاماتها 73 .

فأما العلل الحادثة في المثانة فهي الحصى المتولد فيها والورم والقرحة وتقطير البول وأسره وخروجه من غير إرادة. أما الحصاة⁷⁴ فتولدها عن الأسباب التي ذكر ناها في الكلي وهي الخلط الغليظ اللزج وحرارة جرم المثانة وضيق رقبتها. وأكثر ما تحدث هذه العلة في الصبيان لرطبة مزاجهم وشرههم وقوّة شهوتهم للأغذية كما ذكرنا أنفا وكثرة ما يستعملون⁷⁵ من⁷⁶ الأغذية المولدة للفضول الغليظة.

Book X, chapter 1

• Greek: Paris suppl. gr. 638, fol. 140r.

[Κ]εφάλαιον α΄ περὶ τῶν σημείων τῶν ἀγγελλόντων τὸ γεννησόμενον καὶ διαιρέσεως αὐτῶν.

[Φ]ημὶ ὡς ἡ ἀφέλεια τῆς τῶν σημείων ἐπιστήμης τῶν γενησομένων οὐχ ἥττων τῆς ώφελείας τῆς ἐπιστήμης τῶν ἐνεστώτων σημείων πλὴν ἔγει μείζονα τὴν ἀφέλειαν καὶ εὐτυχέστερα τὰ σφάλματα. Κἀκεῖνο ὡς τὰ σημεῖα τὰ ἀπαγγέλλοντα τὴν δυνησομένην νόσον ταῦτα γίνεται ἐν τοῖς ὑγιέσι σώμασι. Καὶ τὰ μὲν ἀγγέλλει σωτηρίαν τῆς νόσου, τὰ δὲ ἀγγέλλει

⁷² الخامس Būlāq + MS 2871

MS 2871 ويسيل من فمه 71

 $^{^{73}}$ في العلل ... علاماتها deest in MS 2871

MS 2871 الحصى

MS 2871 يستعملونه ⁷⁵

Būlāq في ⁷⁶

Thibault Miguet

φαυλότητα τῆς νόσου καὶ σφάλμα 77, τὰ δ' ἀγγέλλει ἀπώλειαν. Καὶ ταῦτα τὰ τρία εὐρίσκεται έν τοῖς νοσοῦσι⁷⁸ σώμασι.

• Arabic: Ḥarbī, vol. 3, p. 373 = Būlāq, vol. 1, p. ٣٩٤ (= 394) = MS 2871, fol. 170v.

الباب الأول في ذكر صفة جملة الكلام على الدلائل المنذرة وتقسيمها وأسبابها وعلاماتها⁷⁹ اعلم أرشدك الله تعالى إن الدلائل المنذرة الدالة80 على ما هو كائن ليست هي بدون 18المنفعة بعلم العلامات الدالة على ما هو خاص بل هي تكون [أعظم⁸²] نفعا وأجل خطرا، وتلك المنذرة⁸³ منها ما ينذر لمرض⁸⁴ سيحدث وهذا يكون في أبدان الأصحاء ومنها ما قد ينذر 85 بالسلامة من المرض، ومنها ما ينذر برداءة المرض والخطر فيه، ومنها ما ينذر بالهلاك وهذه الثلاثة86 توجد في أبدان المرضى.

⁷⁷ σφάλμα s.l., ἀπαθίαν in ras.

⁷⁸ νοσοῦσι s.l., ὑγιέσι in ras.

MS 2871 الباب الأوّل في الدلائل المنذرة بما هو كائن وتقسيمه 79

MS 2871 أقول إن المنفعة بعلم العلامات الدالة 80

MS 2871 ما هو كائن ليس بدون 81

 ⁴² MS 2871 بل هو أعظم بدون المنفعة 82 MS 2871 وذلك أن العلامات المنذرة 83 Būlāq + MS 2871

MS 2871 بمرض ⁸⁴

MS 2871 ينشر ⁸⁵

MS 2871 ثلثة ⁸⁶

Bibliography

Manuscripts

Cairo, National Library of Egypt, tibb 199
Dublin, Chester Beatty Library, 3996
Escorial, Real Biblioteca del Monasterio de San Lorenzo, 815
Hagion Oros, Monê Batopediou, 188
Paris, Bibliothèque nationale de France, arabe 2871
Paris, Bibliothèque nationale de France, supplément grec 638
Paris, Bibliothèque nationale de France, supplément grec 728
Paris, Bibliothèque nationale de France, supplément grec 1121
Paris, Bibliothèque nationale de France, supplément grec 1122

Primary sources

Al-Majūsī, Kāmil ṣinā ʿa al-ṭibbiyya, 2 vol., Būlāq 1877.

— Kāmil ṣināʿa al-ṭibbiyya, 6 vol., ed. Khālid Ḥarbī, Dār al-wafāʾ li-dunyā al-ṭibāʿa wa-al-nashr, Alexandria 2018.

Haly Filius Abbas, Liber totius medicine necessaria continens quem sapientissimus Haly filius Abbas discipulus Abimeher Moysi filii Seiar edidit: regique inscripsit unde et Regalis dispositionis nomen assumpsit..., Lugduni, 1523.

Oikonomides, Nicolas, *Actes de Docheiariou*, P. Lethielleux, Paris 1984 (Archives de l'Athos, 13).

Pseudo-Codinus, *Traité des Offices*, ed. Jean Verpeaux, Éditions du CNRS, Paris 1966 (Le Monde byzantin, 1).

Solovjev, Aleksandar, Vladimir A. Mošin, *Grčke povelje Srpskih vladara. Diplomata Graeca regum et imperatorum Serviae*, Routledge, London 1974.

Secondary sources

Astruc, Charles, Marie-Louise Concasty, *Bibliothèque nationale. Catalogue des manuscrits grecs*, vol. 3: *le Supplément grec*, *numéros 901–1371*, *Bibliothèque nationale de France*, Paris 1960.

Astruc, Charles, Marie-Louise Concasty, Cécile Bellon, Christian Förstel et al., Catalogue des manuscrits grecs. Supplément grec, numéros 1 à 150, Bibliothèque nationale de France, Paris 2003.

Barkai, Ron, « The Judeo-Arabic and Hebrew Versions of the *Kitāb Kāmil aṣ-ṣinā ʿa »*, in Charles Burnett, Danielle Jacquart (eds.), *Constantine the African and ʿAlī Ibn al-ʿAbbās al-Maǧūsī. The Pantegni and Related Texts*, Brill, Leiden-New York-Köln 1994 (Studies in Ancient Medicine, 10), p. 57–70.

Bianchi, Francesco et al., « Une recherche sur les manuscrits à cahiers mixtes », *Scriptorium*, 48/2 (1994), p. 259–286.

Burnett, Charles, Danielle Jacquart (eds.), Constantine the African and 'Alī Ibn al-'Abbās al-Maǧūsī. The Pantegni and Related Texts, Brill, Leiden-New York-Köln 1994 (Studies in Ancient Medicine, 10).

Burnett, Charles, « Antioch as a Link between Arabic and Latin Culture in the Twelfth and Thirteenth Centuries », in Baudouin van den Abeele, Isabelle Draelants, Anne Tihon (eds.), Occident et Proche-Orient: contacts scientifiques au temps des Croisades. Actes du colloque de Louvain-la-Neuve, 24 et 25 mars 1997, Brepols, Turnhout 2000 (Reminisciences, 5), p. 1–78 (repr. with corrections in Charles Burnett, Arabic into Latin in the Middle Ages: The Translators and their Intellectual and Social Context, Routledge, Farnham 2009 [Variorum Collected Studies Series, 939], Article IV).

Cariou, Morgane « La production manuscrite de Georges Basilikos », in Marie Cronier, Brigitte Mondrain (eds.), *Le livre manuscrit grec: écritures, matériaux, histoire. Actes du IX^e Colloque international de Paléographie grecque, Paris, 10-15 septembre 2018*, Association des amis du centre d'histoire et de civilisation de Byzance, Paris 2021 (Travaux et mémoires 24/1), p. 483-519.

Cronier, Marie, « Le copiste du *Vindob. med. gr.* 21 (XIV^e s.), un traducteur de l arabe au grec », in Marie Cronier, Brigitte Mondrain (eds.), *Le livre manuscrit grec: écritures, matériaux, histoire. Actes du IX^e Colloque international de Paléographie grecque, Paris, 10-15 septembre 2018, Association des amis du centre d'histoire et de civilisation de Byzance, Paris 2021 (Travaux et mémoires 24/1), p. 279-304.*

Diels, Hermann, Die Handschriften der antiken Ärzte. Griechische Abteilung, vol. 2: Die übrigen griechischen Ärzte ausser Hippokrates und Galenos, Verlag der königlichen Akademie der Wissenschaften, Berlin 1906.

— Bericht über den Stand des interakademischen Corpus medicorum antiquorum und erster Nachtrag zu den in den Abhandlungen 1905 und 1906 veröffentlichten Katalogen: Die Handschriften der antiken Ärzte, I. und II. Teil, Verlag der königlichen Akademie der Wissenschaften, Berlin 1908.

Gamillscheg, Ernst, Dieter Harlfinger, Repertorium der griechischen Kopisten, 3 vol., Verlag der österreichischen Akademie der Wissenschaften, Wien 1981 (vol. I), 1989 (vol. II), 1997 (vol. III).

Gourevitch, Danielle, « Minoïde Mynas, un 'drôle de pistolet': érudition, escroquerie et histoire politique autour de l'indépendance de la Grèce, à propos de la 'Gymnastique' de Philostrate », in Véronique Boudon-Millot, Antonio Garzya, Jacques Jouanna, Amneris Roselli (eds.), Ecdotica e ricezione dei testi medici greci. Atti del V Convegno Internazionale, Napoli 1-2 ottobre 2004, M. D'Auria, Napoli 2006 (Collectanea, 24), p. 481–503.

Gutas, Dimitri, « Arabic into Byzantine Greek: Introducing a Survey of the Translations » in Andreas Speer, Philipp Steinkrüger (eds.), *Knotenpunkt Byzanz. Wissensformen und kulturelle Wechselbeziehungen*, De Gruyter, Berlin–New York 2016 (Miscellanea Mediævalia, 36), p. 246–262.

Jacquart, Danielle, Françoise Micheau, La médecine arabe et l'Occident médiéval, Maisonneuve et Larose, Paris 1996.

Kaldellis, Anthony, « Catalogue of Translations into Byzantine Greek from Texts in Any Other Languages, 300–1453 AD », https://www.academia.edu/44869822/Kaldellis_Catalogue_of_Translations_into_Byzantine_Greek_version_IV_, accessed August 2021.

Kazhdan, Alexander P., « Dioiketes », *The Oxford Dictionary of Byzantium*, vol. I, Oxford University Press, New York–Oxford 1991, p. 627–628.

Kravari, Vassiliki, « Nouveaux documents du monastère de Philothéou », *Travaux et mémoires*, 10 (1987), p. 261–356.

Lemerle, Paul, « Un praktikon inédit des archives de Karakala (janvier 1342) et la situation de la Macédoine orientale au moment de l'usurpation de Cantacuzène », Χαριστήριον εἰς Ἀναστάσιον Κ. Ὀρλάνδον, vol. I, Ἡ έν Αθήναις Αρχαιολογική Εταιρεία, Athens 1965, p. 278–298 (repr. in Paul Lemerle, Le monde de Byzance: histoire et institutions, Routledge, London 1978 [Collected Studies Series, 86], n° XVIII).

Melissakis, Zisis, « 'Monsieur le Ministre, je fais un catalogue de la bibliothèque de chaque couvent': Minas Minoidis and the First Effort to Produce Systematic Catalogues of the Libraries of Mount Athos », in André Binggeli, Matthieu Cassin, Marina Detoraki (eds.), *Bibliothèques grecques dans l'Empire ottoman*, Brepols, Turnhout 2020 (Bibliologia, 54), p. 399–410.

Micheau, Françoise, « ʿAlī Ibn al-ʿAbbās al-Maǧūsī et son milieu », in Charles Burnett, Danielle Jacquart (eds.), *Constantine the African and ʿAlī Ibn al-ʿAbbās al-Maǧūsī. The* Pantegni *and Related Texts*, Brill, Leiden–New York–Köln 1994 (Studies in Ancient Medicine, 10), p. 1–15.

Miguet, Thibault, « Premiers jalons pour une étude complète de l'histoire du texte grec du *Viatique du voyageur* (Ἐφόδια τοῦ ἀποδημοῦντος) d'Ibn al-Ğazzār », *Revue d'histoire des textes*, 12 (2017), p. 59-105.

- « Recherches sur l'histoire du texte grec du *Viatique du voyageur* d'Ibn al-Ğazzār », Ph.D. Diss., École pratique des Hautes Études, 2019.
- « La traduction grecque du *Viatique du voyageur (Zād al-musāfir)* d'Ibn al-Ğazzār et l'une de ses révisions à l'époque paléologue » in Panagiotis Athanasopoulos (ed.), *Translation Activity in Late Byzantine World. Contexts, Authors and Texts*, De Gruyter, Berlin-New York (Byzantinisches Archiv, Series Philosophica, 4), to be published in 2022.

Mondrain, Brigitte, « Les signatures des cahiers dans les manuscrits grecs », in Philippe Hoffmann (ed.), Recherches de codicologie comparée. La composition du codex au Moyen Âge, en Orient et en Occident, Presses de l'École normale supérieure, Paris 1998, p. 21–48.

Mošin, Vladimir A., Seid M. Traljić, *Filigranes des XIII*^e et XIV^e siècles, 2 vol., Académie yougoslave des sciences et des Beaux-Arts, Zagreb 1957.

Omont, Henri, Inventaire sommaire des manuscrits grecs de la Bibliothèque nationale, vol. III: Ancien fonds grec, Belles lettres, Coislin-Supplément, Paris et départements, Alphonse Picard, Paris 1888.

— « Minoïde Mynas et ses missions en Orient (1840–1855) », Mémoires de l'Institut national de France, 40 (1916), p. 337–421.

Papanicolaou, Maria, « Άρμόνιος ὁ Ἀθηναῖος. Bibliofilo e copista, maestro di greco e diplomatico », Bollettino della Badia Greca di Grottaferrata, 52 (1998), p. 283–301.

Sezgin, Fuat, Geschichte der arabischen Schrifttums, vol. 3: Medizin, Pharmazie, Zoologie, Tierheilkunde bis ca. 430 H., Brill, Leiden 1970.

Tihon, Anne, « Astronomie juive à Byzance », Byzantion, 87 (2017), p. 323–347.

Touwaide, Alain, A Census of Greek Medical Manuscripts. From Byzantium to the Renaissance, Routledge, London-New York 2016.

- *Greek Medical Manuscripts. Diels' Catalogue*, 5 vol., De Gruyter, Berlin-New York 2021 (Medical Traditions, 2).

Trapp, Erich (ed.), *Prosopographisches Lexikon der Palaiologenzeit*, 12 vol., 2 vol. Addenda et Corrigenda, Verlag der österreichischen Akademie der Wissenschaften, Wien 1976–1995.

Troupeau, Gérard, « Les manuscrits du Kāmil ṣinā ʿa à la Bibliothèque nationale de Paris » in Charles Burnett, Danielle Jacquart (eds.), Constantine the African and ʿAlī

Ibn al- ʿAbbās al-Maǧūsī. The Pantegni *and Related Texts*, Brill, Leiden–New York–Köln 1994 (Studies in Ancient Medicine, 10), p. 48–56.

— « Manuscripts of the Kāmil ṣinā ʿa », in Charles Burnett, Danielle Jacquart (eds.), Constantine the African and ʿAlī Ibn al-ʿAbbās al-Maǧūsī. The 'Pantegni' and Related Texts, Brill, Leiden–New York–Köln 1994 (Studies in Ancient Medicine, 10), p. 303–315.

Wissowa, Georg, Wilhelm Kroll, Paulys Real-Encyclopädie der classischen Altertumswissenschaft: Neue Bearbeitung, vol. IX/2: Imperium-Iugum, J. B. Metzlersche Verlagsbuchhandlung, Stuttgart 1916.