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Yayınlayanlar:

Konsul Dr. Erwin LUCTUS
Prof.Dr. Afife MAT Doç.Dr. Öztan ÖNCEL
Dr. Bülent ÖZALTAY



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THE PERMANENCE OF CLASSICAL GREEK MEDICINE IN THE OTTOMAN EMPIRE. THE CASE OF DIOSCORIDES' *DE MATERIA MEDICA*

Alain TOUWAIDE (Madrid)

Summary

In this paper, we examine the use, among the Greek-speaking populations of the Ottoman Empire during the Post-Byzantine Period, of the most important treatise of Pharmacology in Antiquity and Byzantium, the *De materia medica* of Dioscorides (1st cent. A.D.). We inventory and describe the manuscripts of the Post-Byzantine period which bear the treatise or contain related works, and we identify their texts. On the basis of the evidence they provide, we try to reconstruct the dynamics of the tradition of the treatise and of its use, so as to bring a contribution to the History of Science in the Ottoman World.

Résumé

L'article porte sur l'usage que les populations hellénophones de l'Empire Ottoman de l'époque postbyzantine eurent du traité de pharmacologie le plus important des mondes antique et byzantin, le *Traité de matière médicale de Dioscoride* (1^{er} siècle de notre ère). L'on y inventorie et décrit les manuscrits d'époque ottomane qui attestent l'ouvrage ou contiennent des travaux portant sur lui, pour en décrire ensuite les textes. A partir des informations ainsi obtenues, l'on tente de retracer la dynamique de la tradition et de l'usage du traité, afin de fournir par là une contribution à l'histoire de la science dans le monde ottoman.

Riassunto

L'articolo analizza l'uso che le popolazioni ellenofone dell'Impero Ottomano del periodo postbizantino fecero del trattato di farmacologia più importante dell'Antichità e di Bisanzio, il *Trattato di materia medica* di Dioscoride (I sec. d. C.). L'articolo presenta l'inventario e la descrizione dei manoscritti del periodo postbizantino contenenti il trattato o opere ad esso relative, e ne identifica i testi. A partire dalle informazioni ricavate in tal modo, ricostruisce la dinamica della tradizione e dell'uso del trattato, contribuendo così alla storia della scienza nel mondo ottomano.

Introduction

In the History of Culture and Science of the Eastern Mediterranean World¹, the 15th cent. A.D. is often considered as a period of rupture: the Classical Heritage, transmitted from Antiquity to Byzantium, was interrupted because of the progressive reduction of the Byzantine Empire and, finally, because of the conquest of Constantinople on 29 May of 1453 by the Janissaries of Sultan Mehmet II (1432-1481 A.D., Sultan: 1444-46 and 1451-81)². In this perspective, it is often affirmed that Greek Culture and Science were transferred to the West, where they contributed to the Renaissance.³ Albeit fundamentally correct, this view of History is, however, highly fragmentary, as the Greek cultural and scientific lore continued to be transmitted among Greek-speaking people within the Ottoman Empire.

In the field of Science, Classical Medicine and Therapeutics seem even to have had a special fortuna among the Greek-speaking populations of the Ottoman Empire: numerous *iatrosophia* were written, indeed, which contain large collections of extracts from classical treatises⁴, while these works were

¹This paper has been prepared in the context of a research programme dealing with the History of Culture of the populations of the Ottoman Empire in the Balkanic area, granted by the Spanish Ministry of Scientific Research (reference: PB 95-013).

I wish to express here my warmest thanks to this institution, as well as to the Director of the research programme, Prof. Pedro Bádenas de la Peña (Consejo Superior de Investigaciones Científicas, Instituto de Filología, Madrid, Spain), who has hosted me in his research unit.

In the text and/or in the notes, the works mentioned repeatedly are given in an abbreviated form (author's name); their full reference appears in the *Bibliography* at the end of the paper. For all the other works, the full reference is given when they are quoted.

For the clarity, we have transcribed in Latin alphabet the Greek quotations such as names of persons and places, titles of works (ancient and modern), current names of libraries, and similar (the transcription is orthographic and not phonetic, being a transliteration).

²In this sense, see, for example and recently, for the sector of Medicine: R. PORTER, *The Greatest Benefit to Mankind. A Medical History of Humanity from Antiquity to the Present*, London, 1997, p. 168-176.

³For a study of this transfer, see, among recent publications: N. G. WILSON, *From Byzantium to Italy. Greek studies in the Italian Renaissance*, London, 1992.

⁴For a definition of the *iatrosophia* as collections of medical extracts constituted for practical purpose and for a first theoretical approach as a literary genre, see: A. TSELIKAS, *TA ELLENIKA GIATROSOPIA: MIA PÉRIFRONEMENE KATEGORIA CHEIROGRAFON*, in: *IATRIKA BUZANTINA CHEIROGRAFA*. Edited by Th. DIAMANTOPOULOS, Athens, 1995, p. 57-69 (see especially p. 58-59). For a first inventory of texts of this type, see: KARAS, *passim*.

also copied, adapted or re-elaborated in several ways.¹

Although it has received some attention in recent publications², this topic is still largely under-researched or, at least, has not been taken into consideration enough and as it would deserve. In this context, we propose here a first approach of the presence in the Ottoman Empire, among the Greek-speaking populations (and, above all, among common Greek-speaking physicians), of a major text of Ancient Medical Science, the *De materia medica* of Dioscorides (1st cent. A.D.)³.

In doing so, we would like not only to bring a contribution to a sector to which Prof. A. Terzioğlu has devoted his research activity, that of the scientific culture (especially Medicine) in the Ottoman Empire⁴, but also to provide the elements for a further comparative study of the place and possible influence, in Medical Science in the Levant and in the West, of Dioscorides'

¹For an inventory of the manuscripts of ancient Greek medical treatises of the Post-Byzantine period (as well as of the Byzantine), see: DIELS (reflects the situation of manuscript cataloguing at the beginning of 20th cent.); for a supplement to this catalogue, see: DIELS, 1908; more recently (and more specifically devoted to the Ottoman period), see: KARAS.

²Apart from the works already quoted by TSELIKAS and KARAS, see: A. EUTUCHIADOU, *EISAGOGE EIS TEN BUZANTINEN THERAPEUTIKEN APO TOU 1453 MECHRI TON MESON TOU 19ou AIONOS*, Athens, 1985, which claims to be the first work to bring to light Greek Medicine and Therapeutics of the period from 1453 to the mid of the 19th cent (see p. 15). Although there is a chapter devoted to Pharmacology (p. 168-176), nothing appears about Dioscorides and the tradition of his treatise during the Post-Byzantine period.

See also (in chronological order of publication and among others): A. STAUROPOULOS, *TA NOSOKOMEIA KAI E NOSELEUTIKE POLITIKE TES ELLENIKES ETHNOTETAS STEN KONSTANTINOUPOLE (1453-1838)*, Athens, 1984; D. Ap. KARAMPEPOPOULOS, *Iatrikes gnôseis tou Rêga Belestinlê sto ergo tou «Fusikês Apanthisma»*, in: *Upereia*, 1 (1990) (= *Praktika A' Sunedriou «Feraî-Belestino-Rêgas»*, Belestino, 1986), p. 457-499; IDEM, *Gnôseis anatomias kai fisiologias tou Thessalou Didaskalou tou Genous Anthimou Gazê (1758-1828)*, Athens, 1993; E. A. VARELLA, *Pharmazeutische Manuskripte auf Berg Athos*, in: *Materialien*, p. 51-55; IEROPAIS.

³On Dioscorides and his work, see: J. M. RIDDLE, *Dioscorides on Pharmacy and Medicine* (= *History of Science Series*, No. 3), Austin, 1985.

For the Greek text of the treatise, see: M. WELLMANN, *Pedanii Dioscuridis Anazarbei, De materia medica libri quinque*, ed. -, Berlin, 1906-1914 (reprint: Berlin, 1958).

For an English translation, which is however a 17th cent. one, see: *The Greek Herbal of Dioscorides*. Illustrated by a Byzantine A. D. 512, Englished by John Goodyer A. D. 1655, Edited and printed A. D. 1933 by R. T. GUNTHER, New York, 1954 (reprint: New York, 1968). For a recent English translation of the Preface (with commentary), see: SCARBOROUGH, & NUTTON.

For the history of the treatise in the Ottoman Empire, some elements can be found in: KOURILAS, *passim* (which need to be checked, however, because of the unreliability of the data presented).

⁴See, for example, the following recent paper: A. TERZIOĞLU, *Ein bisher unbekanntes Rezeptbuch über die Herstellung der Arzneien im Topkapi-Schloss in Istanbul*, in: *Materialien*, p. 39-44.

treatise, which is recognized to have been the most influent pharmacological work until the 17th cent., if not later¹.

Our analysis is divided into three main parts: i) the inventory of the primary sources providing evidence of the tradition of Dioscorides' treatise in Greek-speaking groups in the Ottoman Empire during the Post-Byzantine period; ii) the analytical description of their contents; iii) the exploitation of their information, so as to contribute to the study of the topic of the permanence of Ancient Greek Medicine in the Greek World after the Byzantine epoch. It will focus on the users of Dioscorides' treatise, the practice it generated (if any), and the cultural attitudes this continuity evidences, rather than on textual and philological aspects.

II. Analysis

i) Inventory of the primary sources

From the inventories of Greek medical manuscripts², as well as from the consultation of printed catalogues of Greek manuscripts³, it appears that 13 codices are currently known which contain all or large parts of Dioscorides' work, and which were copied or conserved⁴ on the territory of the Ottoman Empire, among Greek-speaking people during the Post-Byzantine period (i.e. after the conquest of Constantinople [1453] and before the independance of

¹In this sense, see, for example: J. STANNARD, *P. A. Mattioli: Sixteenth Century Commentator on Dioscorides*, in: *Bibliographical Contributions I* (= *University of Kansas Publications*, Library Series, 32) Lawrence, 1969, p. 59-81 (see especially p. 61); and, more recently: SCARBOROUGH, & NUTTON, p. 187.

There is not at disposal, in the current state of bibliography, a history of the fortuna of the work in Western Science; however, one may consult the abundant material gathered by RIDDLE, which provides an exhaustive (or nearly) inventory of the primary sources on the question, with their full description.

²See the catalogue of DIELS, 1906, p. 29-30, 34, with the supplement of DIELS, 1908, p. 48; more recently: KARAS, p. 354-370.

³For a recent inventory of printed catalogues of Greek manuscripts, see: J. M. OLIVIER, *Répertoire des bibliothèques et des catalogues de manuscrits grecs de Marcel Richard*. Troisième édition entièrement refondue (= *Corpus Christianorum*), Turnhout, 1995.

⁴Only one among the manuscripts listed here under was copied before the Ottoman period (nr. 5 = Cambridge, University Library, Ee.5.7.). We have included it in our inventory, because it presents clear traces (Arabic notes) of a use which implies the knowledge of Greek.

Greece [1830]). For each item, we give the current location¹, with the main codicological data and the relevant bibliography²:

1. Athens, National Library of Greece, 1479:

composite volume, with 4 manuscripts; the 4th (= f. [57]-[279], numbered as p. 1-549 [number 322 was omitted]) is on paper, 19th cent.³

2. Athens, National Library of Greece, 1480:

collection of unbound quires of paper divided into 2 parts, in the second of which the pages are numbered 1-780 + 6 folios not numbered; dated 1861, Alexandria, autograph (?) of Antônios Pothêtos, physician from Naxos (it contains his paraphrase of Dioscorides' treatise)⁴.

¹We quote the manuscripts by city (in alphabetical order of their current English names), library (Greek names have been translated into English) and shelf-mark (for the shelf-marks, we have checked them personally or with the help of the librarians of the collections in question, whom we wish to thank here warmly for their help).

Of the manuscripts listed here, we have studied personally, on the originals, the codices of Athens, Lesbos and Miliês; for all the others, except those of Athos (Koutloumousiou), Moscow and Zagora, we have analysed them on the microfilm we have obtained from the libraries, to the photographic service of which we are grateful.

²The following three manuscripts have been excluded from our list for the following reason (we quote them in the alphabetical order of their current place of conservation):

1. London, British Library, Add. 8231: according to DIELS, 1906, p. 34, it contains a lexicon which could correspond to what we are looking for. But it seems to be a 17th cent. Western erudite manuscript (on the manuscript, see: *List of Additions made to the Collections in the British Museum in the Year 1831*, London, 1833, p. 5; more recently: M. RICHARD, *Inventaire des manuscrits grecs du British Museum* [= Centre National de la Recherche Scientifique, *Publications de l'Institut de Recherche et d'Histoire des Textes*, III], Paris, 1952, p. 8).
2. Oxford, Bodleian Library, *Is. Casauboni Adversaria* 27: mentioned by DIELS, 1906, p. 34, as containing *nonnula ex D.*, it appears, from our personal examination, to be a separate quire (f. 147 recto - 151 verso) within this manuscript, which, in fact, is a composite one. It is written by a Western hand, although it contains a bilingual lexicon (Arabic - Latin) of the plant names quoted in Dioscorides' *De materia medica*, under the following title (f. 147 recto): *hac charta continentur vocabula Arabica descripta ex cod. regio Dioscoridis manu tou makaritou Hadriani* (on this manuscript, see: H. O. COXE, *Catalogi codicum manuscriptorum Bibliothecae Bodleianae*, t. I, recensionem codicum graecorum continens, Oxford, 1853 [reprint: Oxford, 1969], col. 839-840 [see especially col. 840, sub num. 5]).
3. Wien, National Library of Austria, *suppl. gr.* 105: quoted by KARAS, p. 370, *sub* 15, it is a Western manuscript, written by A. F. Kollar (1723-1783), librarian of the Kaiserliche Bibliothek in Wien (on this manuscript, see: H. HUNGER *Katalog der griechischen Handschriften der Österreichischen Nationalbibliothek, Supplementum graecum* [= *Biblos-Schriften*, 15], Wien, 1957, p. 71).

³On this manuscript, see: SAKKELION, & SAKKELION, p. 264 (does not identify the fact that the codex is a composite one; consequently, the description of the text contained in the manuscript gives only the title of the first manuscript, rightly described as a *iatrosophion* [on this manuscript, see under]); TOUWAIDE, vol. 1, p. 6; vol. 2, p. 356; vol. 3, p. 6.

⁴On this manuscript, see: SAKKELION, & SAKKELION, p. 264; KOURILAS, p. 31.

3. Athens, National Library of Greece, 1862:

paper, mid 19th cent., Alexandria (?), attributed to Antônios Pothêtos, physician from Naxos (it presents the text of his notes from Dioscorides' *De materia medica*)¹.

4. Athos (Mount -), Library of the Monastery Ibêrôn, 4303 (183):

paper, end 18th cent.², written by Daniêl proêgoumenos, from Lesbos³.

5. Athos (Mount -), Library of the Monastery Koutloumousiou, 3312 (239):

paper, dated 24 October 1637, written in Athens, by Nikêfoêros ieromonachos Priggeleus⁴.

6. Bucarest, Library of the Academy of Romania, 401:

paper, 18th cent.⁵.

7. Cambridge, University Library, Ee.5.7.:

paper, Constantinople (?), 15th cent. (?), polychrom illustrations of plants (mainly) and animals, without Greek text (except plant names); according to the title-page, the manuscript remained in the Levant till 1682: ... *Smyrnâ Asiae portabatur, anno MDCLXXXII*⁶.

¹On this manuscript, see: L. POLITE, in collaboration with M. L. POLITE, *Katalogos cheirotografôn tês Ethnikês Bibliothêkês tês Ellados, ar. 1857-2500* (= *Pragmateiai tês Akadêmias Athênôn*, t. 54 [1991]), Athens, 1991, p. 4.

²Not 14th cent. as affirmed by KOURILAS, p. 5.

³On this manuscript, see: LAMPROS, t. II, p. 49; KOURILAS, p. 5.

⁴On this manuscript, see: LAMPROS, t. I, p. 304; KOURILAS, p. 5. On the copist, who is also author of the metaphor of Dioscorides' work contained in the manuscript, see: KOURILAS, p. 5; POLITES, & POLITE, p. 576.

⁵On this manuscript, see: C. LITZICA, *Biblioteca Academiei Române. Catalogul manuscriselor grecesti*, Bucarest, 1909, p. 86.

⁶On this manuscript, see: E. G. BROWNE, *A Hand-list of the Muhammadan manuscripts including all those written in the Arabic character preserved in the Library of the University of Cambridge*, Cambridge, 1900, p. 307, *sub num.* 1385; C. SINGER, *The Herbal in Antiquity*, in: *Journal of Hellenic Studies*, 47 (1927), p. 1-52 (see p. 24, note 58, where the manuscript is erroneously quoted Ee 5).

8¹⁻³. Lesbos, Library of the 1st Lukeio of Mytilene, 33:

composite codex, with 4 manuscripts, all on paper:

1. the 1st (= f. [1]-[44], numbered as p. 1-89 [number 88 was omitted]) is dated 1774.
2. the 2nd is constituted of p. 90-392 (= f. [45]-[149]), 18th cent.
3. the 3rd manuscript corresponds to the current p. 393-424 (= f. [150]-[165]), 18th cent.¹.

9. Mèlies, Public Library, 78:

paper, dated 1774, written by Dêmétrios, son of Filippos, from Mèlies².

10. Moscow, Synodial Library (Patriarchal), 477:

paper, dated 1624, written by Iôsêf ieromonachos from the Peloponnêsos; formerly conserveed on Mount Athos, Library of the Monastery Filotheou³.

11. Zagora, Public Library, 92:

paper, dated 1780, written (?) by Kallinichos Patriarchês of Constantinople⁴.

¹On this manuscript, see: A. I. PAPADOPOULOS-KERAMEUS, *Katalogos tôn en tais Bibliothêkais tês nêsou Lesbou ellênikôn cheirolafôn*, in: *O en Kônstantinoupolei Ellênikos Filologikos Sullogos ...*, IV. Paratêma tou IE' tomou, 1886, p. 143 (off-print: Athens, 1888); DIELS, 1906, p. 34; KOURILAS, p. 31; TOUWAIDE, vol. 1, p. 55-56; vol. 2, p. 356; vol. 3, p. 55-56; KARAS, p. 357-360.

²On this manuscripts, see: A. PAPADOPOULOS-KERAMEUS, *Katalogos tôn ellênikôn kôdikôn tês en Mêleais bibliothêkês*, in: *Epetêris tou Filologikou Sullogou Parnassou*, 5 (1901), p. 20-74 (see p. 35) (offprint: Athens, 1901); DIELS, 1906, p. 30; TOUWAIDE, vol. 1, p. 45-46; vol. 2, p. 356; vol. 3, p. 45-46; KARAS, p. 360-370. On the copist, see: POLITES, & POLITE, p. 420.

³On this manuscript, see: Chr. Fr. de MATTHAEI, *Accurata codicum graecorum manuscriptorum bibliothecarum Mosquensium Sanctissimae Synodi notitia et recensio*, 2 vols., Leipzig, 1805, vol. 1, p. 315; Arch. VLADIMIR, *Sistematiceskoe opisanie rukopisi Moskovskoe sinodal'noi (Patriarsei) Biblioteki*. Cast pervaja: Rukopisi greceskija, Moscow, 1894, p. 710; DIELS, 1906, p. 34; KOURILAS, p. 30, I note 4. On the copist, see: POLITES, & POLITE, p. 498.

⁴On the manuscript, see: DUOBOUNIOTIS, p. 453-454; KOURILAS, p. 6. On the copist, see: KOURILAS, p. 6; POLITES, & POLITE, p. 502 (dated mss from 1746 to 1785).

Three Byzantine codices which remained in the ex-Byzantine territory during the Ottoman Empire and which evidence a scientific activity, have not been taken into consideration, however.

They are not representative, indeed, of the tradition and the activity we would like to trace here, but seem to have been considered as vestigia of the past and were probably conserved as such by Ottoman people. They are the following:

1. New York Pierpont Morgan Library, M 652:

Written in Constantinople, during the 10th cent., this manuscript was acquired in the city by Domenico Sestini in 1781 for the fiorentine marquis Carlo Rinuccini. According to Omont¹, it was owned, during the 16th cent., by Manuel Eugenikos, a Constantinopolitan banker, and, during the 18th cent., by a monk of Constantinople.

It presents traces of use by Post-Byzantine or Ottoman people: the Greek plant names of Dioscorides' text have been transliterated into Arabic alphabet and/or translated into Arabic. The type of the manuscript (luxurious product), its 16th cent. possible owner and the hand of the Arabic writing do not indicate, however, a use of the codex during the Post-Byzantine Period by a common physician².

2. Smyrna, Evangelic School, A 15:

Copied during the 16th cent. (with illustrations), it appeared at the end of the 19th cent. in the collection of Palaia Fôkaia and, further, in that one of the Evangelic School of Smyrna³. It was destroyed in the fire of Smyrna on 1st September 1922.

¹OMONT, f. 96 & 103.

²For a study of the manuscript, see: OMONT, *passim*; F. COLLEYE, *Etude sur Dioscoride*, Louvain, without date (unpublished Degree Thesis); more recently, for a full description of the manuscript and its history: TOUWAIDE, vol. 1, p. 57-68; vol. 3, p. 57-68.

On the mission of Sestini in the Ottoman Empire, see: TONDO L., *Domenico Sestini e il medagliere mediceo* (= *Accademia Toscana di Scienze e Lettere «La Colombaria»*, Studi, XCVI), Florence, 1990, *passim*.

³On this manuscript, see: A. PAPADOPOULOS-KERAMEUS, *Ekthesis peri tôn en tē bibliothékē tēs Palaias Fôkias ellēnikôn cheirografôn*, Smyrne, 1876, p. 18; KOURILAS, p. 31.

From the description in the printed catalogue, it does not appear that it has been used as a practical medical book (unlike the other manuscripts studied here under).

3. Wien, National Library of Austria, *medicus graecus* 1:

Produced in Constantinople, ca. 512 A.D., it remained in the city until the 16th cent.; in 1569 it was bought by the Ambassador of Austria from the son of Hamon, the court physician of Sultan Süleymân the Great (ca. 1494; Sultan: 1520-1566).

It bears traces of a lexical work (translation into Hebrew of Greek plant names), probably resulting from a certain use. But these manuscript notes are attributed to Hamon and evidence the interest for our text in Ottoman court context, and not that of Greek-speaking physicians we try to trace here¹.

Likewise, we have not taken into consideration the *iatrosophia* in the title of which appear the name of Dioscorides or in the text of which appear fragments of Dioscorides' treatise, such as the followings, for example:

1. Athens, Library of the Senate, 68:

paper, 18th cent.².

2. Athens, National Library of Greece, 1479:

composite volume, with 4 manuscripts, the first of which is a *iatrosophion* (= ff. 1-36, with 2 ff. not numbered, [37] and [38]): paper, 19th cent.³.

¹On this manuscript, its history and the notes by Hamon, see, among others: H. GERSTINGER, *Dioscurides. Codex Vindobonensis med. gr. 1 der Österreichischen Nationalbibliothek. Kommentarband zu der Faksimileausgabe* (= *Codices selecti phototypice impressi*, vol. XII*), Graz, 1970, *passim*.

²On this manuscript, see: DIELS, 1906, p. 49; Sp. P. LAMPROS, *Katalogos tôn kôdiskôn tôn en Athênais bibliothêkôn plên tês Ethnikês. A'. Kôdikes tês bibliothêkês tês Boulês*, in: *Neos Ellênomnêmôn*, 3 (1906), p. 471-473 (reprint in: J. DECLERCK, J. NORET, C. DE VOCHT, *Catalogi manuscriptorum qui, in periodico «Neos Ellênomnêmôn» olim publici iuris facti, adhuc usui sunt*, t. 1 [= *Corpus Christianorum, Series Graeca*], Leuven-Bruxelles, 1981).

³On this manuscript, see: SAKKELION, & SAKKELION, p. 264.

3. Athos (Mount -), Library of the Monastery Koutloumousiou, 3321 (248):

paper, 17th cent., collection of texts by Nikolaos Ieropais (autograph [?])¹.

We have not included the manuscripts of this kind in our analysis due to several reasons: they are not fully inventoried and the ones which are catalogued would not necessarily give an exact idea of the literary genre to which they pertain; when they are catalogued, the full titles of the texts they contain are not always reported, so that many codices which contain Dioscorides' text could escape attention; finally, the title does not correspond necessarily to the contents of the manuscripts².

ii) Contents of the manuscripts.

The manuscripts listed can be classified into 3 main groups, divided, each one, into sub-groups: 1. Dioscorides' text in its original language; 2. modern Greek adaptations of the treatise; 3. lexical material.

1. Dioscorides' text

The manuscripts of this group reproduce the full text or part of the text of Dioscorides' treatise.

¹On this manuscript, see: LAMPROS, t. I, p. 305; DIELS, 1906, p. 34; KARAS, p. 106, *sub num.* 2.

On its possible copist, see: KOURILAS, p. 48, & note 3; POLITES, & POLITE, p. 581; KARAS, p. 97-115; IEROPAI, p. 18-19, especially note 14.

²We must notice that, in the context of the research programme alluded to in note 1, we are currently preparing an inventory of the extant *iatrosophia* known, so as to constitute a microfilm library, to analyse the full text of these codices and to identify exactly their contents. This will enable us to define rightly the literary genre they constitute, and to determine, among others, their contribution to a topic as such.

The manuscripts of the first sub-group present the text in the version considered to be the original, i.e. the one divided into 5 *books*¹; all but one contain also all or part of the two toxicological treatises erroneously ascribed to Dioscorides (= the so-called books 6 & 7)². These manuscripts are the following, with their contents³:

Lesbos 33² (books 1-5 + 6) (fragments) (18th cent.);
 Lesbos 33³ (book 7) (fragments) (18th cent.);
 Mèlies 78 (books 1-7) (1774);
 Athens 1479 (books 1-5) (19th cent.).

Their main characteristic is that their source is not another manuscript, as it is normally the case in a manuscript tradition, but an earlier printed form of the text, i.e. a critical edition printed in the West⁴.

The second sub-group, represented by the only ms. Lesbos 33¹ (dated 1774), contains a fragment (letter *α*) of the alphabetical version of Dioscorides' treatise. As yet, we have not determined whether this text is a copy of the alphabetic recension attested in the Late Byzantine Empire or an original work, given that, on one hand, the copies of this form of the text were few and seem to be limited to the Cretan scriptorium of Michaël Apostolēs⁵, and, on the other hand, there was no printed version of it.

¹On this concept of *books* (which results, in fact, from a division of the work into five volumes), see: A. TOUWAIDE, *La thérapeutique médicamenteuse de Dioscoride à Galien: du «pharma-cocentrisme» au «médicocentrisme»*, in: *Galen on Pharmacology. Philosophy, History and Medicine. Proceedings of the Vth International Galen Colloquium, Lille, 16-18 March 1995*. Edited by A. DEBRU (= *Studies in Ancient Medicine*, 16), Leiden, New York, Köln, 1997, p. 256-282 (see especially p. 261-163).

²On these treatises, see: TOUWAIDE, for the inventory of the manuscripts, their full description and the tradition of the text, as well as for a new critical edition (the previous one is by K. SPRENGEL, Leipzig, 1830), with French translation and full Greek index (the edition of this still unpublished PhD Thesis should come out in the *Corpus Medicorum Graecorum*).

For a German translation (based on the Greek text of Sprengel's edition), see: J. BERENDES, *I. Des Pedanios Dioskurides Schrift über die Gifte und Gegengifte. II. Des Pedanios Dioskurides Schrift über die giftigen Tiere und den tollen Hund*, in: *Apotheker-Zeitung*, 20 (1905), p. 908-911, 918, 926-928, 933-935, 945-946, 952-954. For a recent reproduction of the 16th cent. Spanish translation by A. de Laguna, see: A. GAMONEDA, *Corrupción y fábula del Libro Sexto de Pedacio Dioscórides y Andrés de Laguna, acerca de los venenos mortíferos y de las fieras que arrojan sí'ponzoña* (= *La Biblioteca Sumergida*), Madrid, 1995.

On the authenticity of these two treatises, see: A. TOUWAIDE, *L'authenticité et l'origine des deux traités de toxicologie attribués à Dioscoride. I. Historique de la question. II. Apport de l'histoire du texte grec*, in: *Janus*, 80 (1983), p. 1-53; IDEM, *Les deux traités de toxicologie attribués à Dioscoride. Tradition manuscrite, établissement du texte et critique d'authenticité*, in: *Tradizione e ecdotica dei testi medici tardoantichi e bizantini. Atti del Convegno Internazionale, Anacapri 29-31 ottobre 1990*. A cura di A. GARZYA (= *Collectanea*, 5), Napoli, 1992, p. 291-339.

³From here onwards, the data are listed according to the chronological order of the manuscripts in which they appear.

⁴On this point, see: TOUWAIDE, vol. 2, p. 356, vol. 3, p. 356.

⁵On this recension, we prepare a study to be published in a near future.

2. Modern Greek adaptations of the treatise

All the codices of this group present what is called a *metaphrase*, i.e. the transformation of a text from a linguistical state of a determined language to another one of the same language; in our case: a re-elaboration of Dioscorides' treatise from Classical Greek into Post-Byzantine Greek. Here too, the 2 sub-groups are determined by the recension of Dioscorides' text which was adapted: that one in 5 *books* (with, possibly, *books* 6 & 7), or the alphabetic one.

In the first sub-group, we have the three manuscripts which follow:

- Moscow 477 (dated 1624): metaphrase by Iôsêf ieromonachos Peloponnêsios, perhaps from Mount Athos, Filotheou Monastery;
- Athos Ibêrôn 4303 (183) (18th cent.): metaphrase by Maximos ieromonachos Peloponnêsios¹;
- Zagora 92 (dated 1780): metaphrase of Kallinikos Patriarchês of Constantinople.

It must be noted that the metaphrase of the third manuscript was originally written in 1708 by Michaël Kontopidês from Naxos (dated ms.: 1675)² and furtherly revised by Kallinikos Patriarchês (dated mss: 1746-1785)³; in the current state of inventory of Post-Byzantine manuscripts, this first version does not seem to be conserved. On the contrary, it appears, from the explicit declaration of Kallinikos, that he has worked with the help of a Latin illustrated version of Dioscorides' treatise⁴. It could be a Western printed volume, namely an edition of the Commentaries by P. A. Mattioli, in one of its multiple editions⁵.

¹On the manuscripts copied by him and dated, see: POLITES, & POLITE, p. 544 (dated ms.: 1784).

²On this author and copist, see: POLITES, & POLITE, p. 561 (dated ms.: 1675 [*iatrosophion*]).

³On this point, see the note by Kallinikos Patriarchês in the manuscript itself, f. 265 (reproduced in: DUOBOUNIOTIS, p. 154).

⁴See IDEM, *ibidem*.

⁵On this work of Mattioli and its editions, see: RIDDLE, p. 92-97 (with the bibliography).

With the exception of this revision by Kallinikos, it is not known (at this stage of the research) on which source these metaphrases were written: a Western printed edition or a manuscript version of the text.

The second sub-group, with the alphabetical version of Dioscorides' *De materia medica* (+ books 6 and 7), contains only one manuscript: Athens 1480 (Alexandria, dated 1861). This metaphrase was written by Antónios Pothêtos, physician of Naxos, likewise the notes contained in manuscript Athens 1862 (Alexandria [?], mid 19th cent.). They are alphabetically ordered and constitute a sort of metaphrase of part of Dioscorides' text; for this reason, they can be added to the previous manuscript.

3. Lexical material

Several manuscripts contain lexica of the plant names of *De materia medica*.

In the first group, three manuscripts present a lexicon in alphabetical order of the Greek names of plants analysed in the treatise:

- Athos Koutlounousiou 3312 (239) (1637, with the metaphrase written by Nikêforos Priggileus from Athens);
- Athos Ibêrôn 4303 (183) (18th cent., contains the metaphrase by Maximos ieromonachos Peloponnêsios);
- Zagora 92 (dated 1780 which bears the text of the metaphrase of Michaël Kontopidês from Naxos [1708], improved by Kallinikos Patriarchês).

The second group is constituted of multilingual lexica of the plant names contained in Dioscorides' treatise, in a way typical of Pharmacology in the Byzantine Empire, above all from the Late Empire onwards¹. Usually, these lexica present the following data for all or parts of Dioscorides' plant

¹On this topic, see: J. STANNARD, *Byzantine Botanical Lexicography*, in: *Episteme*, 5 (1971), p. 168-187.

Inventories of some lexica in: KOURILAS, p. 46-51 (typology of lexica, without reference to no manuscripts); M. H. THOMSON, *Catalogue des manuscrits grecs de Paris contenant des traités anonymes de botanique*, in: *Revue des Études Grecques*, 46 (1933), p. 334-348 (treatises of botany, among which there are lexica, in the Greek manuscripts of Paris, Bibliothèque Nationale).

Edition and/or study of some lexica: A. DELATTE, *Anecdota Atheniensia et alia*, t. II: Textes relatifs à l'histoire des sciences (= *Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liège*, fascicule LXXXVIII), Liège, Paris, 1939, *passim*; M. H. THOMSON, *Textes inédits relatifs aux plantes* (= *Nouvelle collection de textes et documents*), Paris, 1955, *passim* (with the additions of: J. Th. KAKRIDIS, *Poikila Ellênika*, in: *Hellenica*, 16 [1958-59], p. 219-222); and, more recently: A. BRAVO GARCÍA, *Varia lexicographica graeca manuscripta III: lexica botanica*, in: *EMERITA*, 47 (1979), p. 346-355.

names: the names mentioned in Dioscorides' original text (i.e. in Classical Greek); their Post-Byzantine equivalent(s); their Turkish, Latin and/or Arabic translation(s) (see here under for the languages used in the lexica attested in our manuscripts). It must be stressed that, in all the lexica contained in the codices studied here, the terms of non-Greek languages are written in Greek alphabet, constituting what is called a *transliteration*.

The codices of this group can be sub-divided into two sub-groups, depending on whether they accompany or not Dioscorides' text (full or in part, original version or paraphrase).

In the first sub-group, the following manuscripts contain the text of Dioscorides and lexica (of which we specify the languages):

- Mélieux 78 (dated 1774, with the Greek text of Dioscorides, + books 6 & 7): Classical Greek, Post-Byzantine Greek, Turkish, Latin (lists only a short part of Dioscorides' lexicon of plant names);
- Zagora 92 (dated 1780, bears the re-elaboration of Michaël Kontopidēs' paraphrase by Kallinikos Patriarchēs, as well as an index of the Greek plant names of Dioscorides' treatise): Classical Greek, Post-Byzantine Greek, Latin, Turkish, and Arabic;
- Athos Ibērôn 4303 (183) (18th cent., contains the paraphrase by Maximos ieromonachos Peloponnēsios, with a separate Greek index): Classical Greek, Post-Byzantine Greek, Turkish.

In the second sub-group (with the only manuscript Bucarest 401 [18th cent.]), the lexicon is an independent work; it gives the synonyms in the following languages: Classical Greek, Post-Byzantine Greek, Turkish.

The third type of lexical work is attested by a unique manuscript: Cambridge Ee.5.7. The Greek plant names written beside the illustrations of plants were translated into Arabic (written in Arabic alphabet), with some additional notes (from few lines to half a page and more, at the end of the manuscript).

iii) Ancient Greek Medicine among Greek-speaking populations in the Ottoman Empire

From the codicological analysis of the manuscripts, and the textual description of their contents, we may now study the presence of Dioscorides' text among Greek-speaking peoples in the Ottoman Empire.

Before any consideration, however, we must question on the representativity of the material listed here above; i.e. on its value as a source of the historical phenomenon we try to describe. Quantitative data will shed light on this point: we have at disposal 13 manuscripts dating from 1624 to 1861 and, thus, covering ca. 250 years. This number can be compared with that of the manuscripts of Dioscorides' text produced in the Byzantine Empire and in the West (mainly from the middle of the 15th cent. onwards, excluding, however, the collations of erudites and later works); i.e., for the Byzantine Empire: ca. 60/70 manuscripts from ca. 512 to the 15th cent., with 1 manuscript of ca. 512 A.D., 2 of the 7th cent.[?], 2 of the 9th, 2 of the 10th, 2 of the 11th, and the rest for the period 1261-1453; for the West ca. 40/50 codices from 1453 ca. to the middle of the 16th cent. ca. This suggests that the number of manuscripts of the Post-Byzantine Period, however high it could seem, is probably quite low, further to the loss and the destruction of books due to politico-military events. The image they provide is thus to be considered as highly fragmentary and allows only to outline some tendencies of the phenomenon we are studying.

The date or epoch of production of the manuscripts appears significant, however: 2 codices are dated 1624 (Moscow 477) and 1637 (Athous Koutloumousiou 3312 [239]), and 3 were copied during the 19th cent. (Athens 1479, 1480 [this one dated 1861], and 1862), while the great majority (no less than 8 manuscripts) goes back to the 18th cent. (Bucarest 401, Lesbos 33² & 33³ [all 3 18th cent.], Lesbos 33/1 & Mèlies 78 [both dated 1774], Zagora 92 [dated 1780], and Athos Ibêrôn 4303 [239] [end 18th cent.]).

If we consider the 19th cent. production as probably exceptional, the activity we trace is concentrated on the 18th cent. Nevertheless, we have to take into consideration that the 17th cent. activity was at least a little more important than what is evidenced by the extant manuscripts: the paraphrase of manuscript Zagora 92 is, in fact, the improved version of the text originally written by Michaël Kontopidês from Naxos (dated ms.: 1675; date of the paraphrase: 1708).

As for the place of copy of the manuscripts in our possession, it is explicitly known in only three cases:

Athens (Athos Koutlounousiou 3312 [239] [dated 1637]);
 Mêlies (Mêlies 78 [dated 1774]);
 Alexandria (Athens 1480 [dated 1861]).

For three other manuscripts, their place of copy can be hypothetised :

Mount Athos, Monastery of Filotheou (Moscow 477 [dated 1624],
 metaphrase of the treatise): the manuscript was brought from the
 library of the Monastery and was perhaps copied there;
 Constantinople (Zagora 92, dated 1780): it contains the metaphrase by
 Kallinikos Patriarchês of the city and is contemporary of the
 activity of the Patriarch; it was perhaps written by him;
 Alexandria (Athens 1862, mid 19th cent.): it is attributed to the author
 of the text it contains, Michaël Pothêtos, author and writer of the
 codex Athens 1480.

For another manuscript, its place of purchase evidences part of its
 history: codex Cambridge Ee.5.7., which could have been written in
 Constantinople in the 15th cent., was acquired, indeed, in Smurnê in 1682; it
 was probably transferred from one city to another within the Greek-speaking
 community.

These locations are probably not significant in our perspective, since
 they reflect the importance of the central city of the Greek world (Athens), of
 Greek-speaking communities of the Levant (Smurnê and Alexandria), of the
 centre of higher spirituality of the Greek Orthodox World (Mount Athos) and
 the activity developed during the 18th cent. in the mountain village of Mêlies,
 and known from other sources.

The identity of the copists of the texts contained in our manuscripts
 (who, in certain cases, are also the authors of the texts they reproduced) seems
 to be more significant.

Four manuscripts bear the name of their copist, while three other may
 probably attributed to the author of the text they contain:

Nikêforos ieromonachos Priggileus, from Athens (Athos
 Koutlounousiou 3312 [239] [dated 1636], which contains the
 metaphrase of the *De materia medica*);

- Iôsêf, ieromonachos Peloponnêsios (Moscow 477 [dated 1684]);
- Dêmetrios, son of Filippos, from Mêlies (ms. Mêlies 78 [dated 1774]); he is perhaps to be linked with Daniêl Dêmetriou Filippidês (manuscripts dated from the 18th/19th cent.)¹ whose library was left to the Public School of Mêlies;
- Kallinikos Patriarchês of Constantinople (Zagora 92 [dated 1780], with the revision by the Patriarch of the metaphrase of Michaêl Kontopidês);
- Daniêl proêgoumenos from Lesbos (18th cent.) (Athos, Ibêrôn, 4303 [183], with the metaphrase of Maximos ieromonachos Peloponnêsios);
- Antônios Pothêtos, physician from Naxos, active in Alexandria (Athens 1580 [dated 1861], containing an alphabetical metaphrase of Dioscorides' treatise, and probably also Athens 1862 [mid 19th cent.]; with his notes from Dioscorides' text, in alphabetical order).

We note the importance of religious copists and/or authors, stressed by the presence, in this list, of a Patriarch.

This presence is marked also among the authors whom we have not still taken into consideration:

- Michaêl Kontopidês, from Naxos (dated ms.: 1675), who wrote not only in 1708 the metaphrase of Dioscorides' treatise (furtherly improved by Kallinikos Patriarchês), but also a multilingual lexicon of its plant names (Post-Byzantine Greek, Latin, Turkish, and Arabic);
- Maximos ieromonachos Peloponnêsios, (copist of a ms. dated 1784)²: he is the author of a metaphrase of our text and of a Greek-Turkish lexicon of plant names (Athos Ibêrôn 4303 [183] [end 18th cent.]).

Of interest also, are people who required these works, motivations and addressees of the works.

As for the first, we know only one by name: Dêmêtrios from Tournabos (Tyrnavo), in the district of Larissa; he commissioned Nikêforos ieromonachos Priggileus from Athens to write a metaphrase of Dioscorides' treatise (= Athos Koutloumousiou 3312 [239]).

¹See: POLITES, & POLITE, p. 410.

²See: POLITES, & POLITE, p. 544.

This request, addressed to a religious man, is possibly not casual and can contribute to explain the origins of several actors of the history we are reconstructing: they were literated people; as such, they probably had a good, if not a deep understanding of Classical Greek, gained from the lecture on the original of the canonical texts of the Orthodox Church, as well as a perfect knowledge of current Greek.

The motivations and addressees of some works allow us to deepen this perspective. In a multilingual lexicon (Athos Ibêrôn 4303 [183] [18th cent.], Classical Greek, Post-Byzantine, Turkish), it is stated that this work aimed to facilitate the search for plants, without further specification; but, in another text, that is the metaphrase commissioned by Dêmêtrios from Tournabos to Nikêforos ieromonachos Priggileus (Athos Koutloumousiou 3312 [239] [dated 1637]), it is explicitly stated that it will be usefull either to the author of the request and to the common physicians, qualified as *empiric*, i.e. probably not educated. From this declaration, we understand that, in doing so, the Church contributed not only to the education of non-literated people, but also to the care of ill people, accordingly to its vocation.

This brings to light an important element of the permanence of Dioscorides' *De materia medica* in the Ottoman Empire among Greek-speaking populations: it was used as a practical treatise by common physicians, without doubt in daily therapeutical treatment of patients and in strict contact with druggists and people whose plant lexicon (to say the least) was largely modified further to the contact with Turkish people and language.

III Conclusions

Some significant facts seem to emerge from this analysis, albeit limited (because of the paucity of the sources); they can summed up as follows:

1. the knowledge of Dioscorides' *Materia medica* (+ books 6 and 7) did not cease among the Greek-speaking populations within the Ottoman Empire after the political change which followed the conquest of Constantinople;

2. the interest in the treatise could have been spread among Greek-speaking groups, even though they were not necessarily in contact between them: Athens, Alexandria, Constantinople, Mēlies at least; probably also Mount Athos, and Smurnê;

3. as far as we can judge, the use of Dioscorides and Pseudo-Dioscorides' work could have progressively developed from the 17th cent. onwards, to reach its highest achievement during the following century. Afterwards, it decreased almost immediately: after the independence of Greece (1830), German scientists taught Pharmacology (i.e. Western science), at least at the University of Athens¹;

4. characteristically enough, the Greek text of Dioscorides has been reproduced in the Ottoman Empire in manuscript, and not in printed form²;

5. as far as they have been identified, the sources used by the Greek-speaking scholars of the Levant to know Dioscorides' treatise were Western printed editions and commentaries. It seems, thus, that there was a rupture between the Byzantine and Post-Byzantine traditions of the text;

6. the presence of manuscripts of the Byzantine Period (the *codex Vindobonensis*, and those of New York and Smurnê) is not significant: these manuscripts did not give rise to an use by common physicians; on the contrary, the Cambridge manuscript has been consulted and annotated;

7. in this Post-Byzantine tradition, no illustrations appear (with the exception of the Cambridge manuscript, which is Byzantine however, but which did not give rise to new copies). The fact must not necessarily be attributed to a lack of interest or of ability in Greek-speaking populations of the Ottoman Empire, but may be due to the dependance of Post-Byzantine works on Western printed editions, in which the illustrations did not appear before 1554 (Latin edition of the commentary by Pietro Andrea Mattioli);

¹On this question, see, for example, the publication of the first Greek pharmacopoeia (1837), translated, in large part, from the Bavarian one (1822) (see: S. PHILIANOS, & H. SKALTSIA, *Etude comparative de la première édition de la Pharmacopée hellénique (1837, 1868) et de la Pharmacopée bavaroise*, in: *Materialen*, p. 239-243).

²On Greek printing during the Post-Byzantine Period, see: L. VRANOSSIS, *L'hellénisme postbyzantin et l'Europe. Manuscrits, livres, imprimeries*, Athens, 1981, *passim*; with a second publication in: *XVI. Internationaler Byzantinistenkongress*. Wien, 4.-9. Oktober 1981. Akten, II. Teil, 1. Teilband, Chronik, Diskussionbeiträge und Ergänzungen zu den Hauptreferaten (= *Jahrbuch der Österreichischen Byzantinistik*, 32/1 [1982], p. 393-480).

8. the nature of the Post-Byzantine tradition was fundamentally different from that of the Byzantine one: it was dominated by the phenomenon of the metaphrase and by the constitution of multilingual lexica, instead of being devoted to the reproduction of the text. The adaptation of the text to the actual state of Greek language prevailed, thus, over the respect of its original version;

9. in this context, we have to stress the presence of alphabetic versions of the text. It doesn't seem that they reproduced the alphabetic recension attested in the Byzantine Empire and they evidence, thus, a work of re-elaboration of the data of Dioscorides' treatise;

10. the writing of metaphrases, and the constitution of possible new alphabetical versions and lexica aimed, without doubt, to allow a practical use of Dioscorides' pharmacology in current medical practice by common physicians, or, at least, they imply a will to do so;

11. the linguistic up date of the text met an important problem: the change of the lexicon of plant names from Antiquity to the Post-Byzantine Period, due to the contacts and the inter-relations between populations within the Ottoman Empire (above all Greek-speaking and Turkish, but also Arabic), and, consequently, between their own traditional therapeutical lore¹. Multilingual lexica were written with the purpose to put in correspondance two or more lexica: the Ancient Greek and the current ones of

¹On the traditional Turkish therapeutical lore, see the following recent series of articles: E. SEZIK, M. TABATA, E. YESILADA, G. HONDA, K. GOTO and Y. IKESHIRO, *Traditional medicine in Turkey I. Folk medicine in Northeast Anatolia*, in: *Journal of Ethnopharmacology*, 35 (1991), p. 191-196; E. SEZIK, M. ZOR and E. YESILADA, *Traditional medicine in Turkey II. Folk medicine in Kastamonu Province*, in: *International Journal of Pharmacognosy*, 30 (1992), p. 233-239; M. TABATA, E. SEZIK, G. HONDA, E. YESILADA, K. GOTO and Y. IKESHIRO, *Traditional medicine in Turkey III. Folk medicine in east Anatolia, Van and Bitlis Provinces*, in: *International Journal of Pharmacognosy*, 32 (1994), p. 3-12; E. YESILADA, G. HONDA, E. SEZIK, M. TABATA, K. GOTO and Y. IKESHIRO, *Traditional medicine in Turkey IV. Folk medicine in the Mediterranean subdivision*, in: *Journal of Ethnopharmacology*, 39 (1993), p. 31-38; E. YESILADA, G. HONDA, E. SEZIK, M. TABATA, T. FUJITA, T. TANAKA, Y. TAKEDA, Y. TAKAISHI, *Traditional medicine in Turkey V. Folk medicine in the inner Taurus Mountains*, in: *Journal of Ethnopharmacology*, 46 (1995), p. 133-152; G. HONDA, E. YESILADA, M. TABATA, E. SEZIK, T. FUJITA, Y. TAKEDA, Y. TAKAISHI, T. TANAKA, *Traditional medicine in Turkey VI. Folk medicine in West Anatolia: Afyon, Kütahya, Denizli, Mugla, Aydin provinces*, in: *Journal of Ethnopharmacology*, 53 (1996), p. 75-87.

the Ottoman Empire, Byzantine and Post-Byzantine Greek, Turkish, and even Arabic¹;

12. a leading role could have been played by the Greek Church, at least until the end of the 18th cent., in this processus of recuperation and up-dating of a classical work, although it is of scientific nature;

13. this fact has probably to be attributed to the high level of culture of the representatives of the Church, although it could also be considered as a consequence of the charitable inspiration of Christianity²; the work on Dioscorides' treatise contributed indeed to the care of health;

14. it is probably not without significance that the latest actor known by name was a physician of the 19th cent. active in Alexandria. It evidences new tendencies: a possible transfer of the interest in Dioscorides' work from the religious context to that of physicians; and the continuity of the tradition of Dioscorides' text at the fringe of the newly founded Greek Kingdom, contrarily to what happened in its centre (see above, point 3);

15. the interest in Dioscorides' work among the Greek-speaking populations of the Ottoman Empire, on the one hand, and in the West, on the other, diverged deeply during the same period (1453-1830 ca.): while among Greek-speaking people of the Levant it dealt with the recuperation, the adaptation and the practical use of the text, in the West, it led, in a century and a half, to the development of a new body of data which made obsolete the text of Dioscorides³.

¹For the Greek plant names lexicon, see: Th. von HELDREICH, *Lexiko tôn dêmodôn onomatôn tôn futôn tês Ellados*, Athens, 1909 (reprint: Athens, s.d. [1980 ?]); for the Arabic one (among others): A. ISSA, *Dictionnaire des noms des plantes en Latin, Français, Anglais et Arabe*, s.l.n.d. (reprint: Beirut, s. d.); for the Turkish and Arabic (among others): A.K. BEDEVIAN, *Illustrated Polyglottic Dictionary of Plant Names in Latin, Arabic, Armenian, English, Fench, German, Italian and Turkish Languages ...*, Cairo, 1936.

²The literature on this point is important; we shall quote here only some important and/or recent works as (in chronological order of publication): D. J. CONSTANTELOS, *Byzantine Philanthropy and Social Welfare*, New Brunswick, 1968; R. VOLK, *Gesundheitswesen und Wohltätigkeit im Spiegel der Byzantinischen Kloster-typika* (= *Miscellanea Byzantina Monacensia*, Heft 28), München, 1983; A. EFTUCHIADOÛ, *E ASKESIS TES BUZANTINES IATRIKES EPISTEMES KAI KOINONIKAI EFARMOGAI AUTES KATA SCHETIKAS DIATAXEIS*, Athens, 1983; T. S. MILLER, *The Birth of the Hospital in the Byzantine Empire* (= *Bulletin of the History of Medicine, Supplements*, New Series, no. 10), Baltimore, London, 1985; J.-C. LARCHET, *Théologie de la maladie* (= *Théologies*), Paris, 1991; D. W. AMUNDSEN, *Medicine, Society, and Faith in the Ancient and Medieval Worlds*, Baltimore, London, 1995.

³On this question, see the classical work by A. ARBER, *Herbals: Their Origin and Evolution. A Chapter in the History of Botany, 1470-1670*, Cambridge, 1912 (revised edition, with an Introduction and Notes by W. T. STEARN: Cambridge, 1986). More recently, see, for the exact role of Dioscorides' treatise during the Renaissance: J. STANNARD, *The Graeco-Roman Background of the Renaissance Herbal*, in: *Organon*, 4 (1967), p. 141-145; and the following work, which has renewed substantially the question: K. REEDS, *Botany in Medieval and Renaissance Universities* (= *Harvard Dissertations in the History of Science*), New York, London, 1991.

Albeit limited, these first conclusions open, however, a new way for the analysis of the History of Therapeutics and, more generally, of Medicine among the populations of the Ottoman Empire, as they contribute to reveal the dynamics of a phenomenon which has been studied stratigraphically till now. To be fully demonstrative, they will need, in the future, to be confronted with the data resulting from the analysis of the tradition of other medical texts, classical like those of Hippocrates, Galen, Oreibasios, and Paulos of Egina, for example, or of later epoch, like the numerous *iatrosophia* of the Byzantine and Post-Byzantine worlds.

Such an examination will probably lead to identify a complex and possibly changeable net of interrelations among people of the Ottoman Empire¹, to the reconstruction of which Prof. A. Terzioğlu has already brought an important contribution.

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for the other works, see loco opportuno in the notes)

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¹In this sense, see the suggestive and seminal article by R. MURPHEY, *Ottoman Medicine and Transculturalism from the Sixteenth through the Eighteenth Century*, in: *Bulletin of the History of Medicine*, 66 (1992), p. 376-403.

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