

SCRIPTA CLASSICA ISRAELICA

YEARBOOK OF THE ISRAEL SOCIETY
FOR THE PROMOTION OF CLASSICAL STUDIES

VOLUME XLIII

2024

ISSN 0334-4509 (PRINT)

2731-2933 (ONLINE)

The appearance of this volume has been made possible by the support of

Bar-Ilan University
Ben-Gurion University of the Negev
The Hebrew University of Jerusalem
The Open University
Tel Aviv University
University of Haifa

PUBLISHED BY
THE ISRAEL SOCIETY FOR THE PROMOTION OF CLASSICAL STUDIES
<http://www.israel-classics.org>

Manuscripts in the form of e-mail attachments should be sent to the e-mail address rachelze@tauex.tau.ac.il. For reviews, contact yulia@bgu.ac.il. Please visit our website for submission guidelines. All submissions are refereed by outside readers.

Books for review should be sent to the Book Review Editor at the following address: Book Review Editor, Prof. Yulia Ustinova, Department of General History, Ben-Gurion University of the Negev, P.O.B. 653 Beer Sheva 8410501, Israel.

Price \$50

© 2024 The Israel Society for the Promotion of Classical Studies
All Rights Reserved

Camera-ready copy produced by the editorial staff of *Scripta Classica Israelica*
Printed in Israel by Magnes Press, Jerusalem

SCRIPTA CLASSICA ISRAELICA

YEARBOOK OF THE ISRAEL SOCIETY
FOR THE
PROMOTION OF CLASSICAL STUDIES

Editor-in-Chief: RACHEL ZELNICK-ABRAMOVITZ

Editorial Board:
ORY AMITAY
ALEXANDER YAKOBSON
YULIA USTINOVA

Editorial Assistant: Hila Brokman

INTERNATIONAL ADVISORY BOARD
OF *SCRIPTA CLASSICA ISRAELICA*

François de Callatay, Brussels and Paris	Benjamin Isaac, Tel Aviv
Hubert Cancik, Tübingen	Ranon Katzoff, Ramat Gan
Averil Cameron, Oxford	David Konstan, New York
Hannah M. Cotton, Jerusalem	Jaap Mansfeld, Utrecht
Ephraim David, Haifa	Doron Mendels, Jerusalem
Werner Eck, Köln	Maren Niehoff, Jerusalem
Denis Feeney, Princeton	John North, London
Margalit Finkelberg, Tel Aviv	Hannah Rosén, Jerusalem
John Glucker, Tel Aviv	Brent Shaw, Princeton
Erich Gruen, Berkeley	Greg Woolf, UCLA

THE ISRAEL SOCIETY FOR THE PROMOTION
OF CLASSICAL STUDIES

OFFICERS 2023–2024

President:	Jonathan Price
Secretary:	Stephanie Binder
Treasurer:	Shimon Epstein

COMMITTEE MEMBERS

Moshe Blidstein
Stephanie Binder
Andrea Rotstein
Iris Sulimani
Yulia Ustinova

HONORARY MEMBERS OF THE SOCIETY

Hannah Cotton
Joseph Geiger
Ranon Katzoff
Ra'anana Meridor

CONTENTS

	PAGE
SABRINA INOWLOCKI, What Caesarea Has to Do with Alexandria? The Christian Library between Myth and Reality	1
NIKOS KOKKINOS, ‘Strabo on The Herodian Dynasty’: An Unpublished Paper by Ronald Syme, Transcribed, Annotated, and Reviewed	21
WERNER ECK, Zeugnisse für militärische Einheiten im Negev zwischen dem späten 1. und dem 3. Jh. n.Chr.—Vorarbeit für CIIP VI.	43
YULIA USTINOVA, Medical Fraternity: Initiations in the Hippocratic Corpus	55
JEAN-FABRICE NARDELLI, La version païenne du Frigidus : Eunape, ses épigones et Alan Cameron (The Last Pagans of Rome, pp. 110–111)	87
PETER B. MARTIN, Undescribed Appearances in Classical Greek Politics	151
JANEK KUCHARSKI, Punishment and Authority in the Athenian Forensic Discourse	179
LUIGI TABORELLI, Il Lykion e la conservazione della sua identità: da Dioscoride a Maimonide e alle soglie dell’età contemporanea	199
DANIEL VAINSTUB AND PETER FABIAN, Bar-Kokhban Seals from Ḥorbat Yatir	211
CLAUDE EILERS, The So-called “Decree of Delos”, Again (Jos. <i>AJ</i> 14. 231–32).....	231
DIMITRIOS PAPANIKOLAOU, OMONYA on Late Antique Wedding Objects	237
BOOK REVIEWS	
Nicolette A. Pavlides, <i>The Hero Cults of Sparta. Local Religion in a Greek City</i> (by Erica Angliker)	241
Matt Waters, <i>King of the World: The Life of Cyrus the Great</i> (by Domenico Agostini) ..	243
Bryan C. Reece, <i>Aristotle on Happiness, Virtue, and Wisdom</i> (by Orna Harari)	245
Bartolo Natoli, Angela Pitts, Judith P. Hallett. <i>Ancient Women Writers of Greece and Rome</i> (by Ruth Scodel)	248
David Wharton (ed.), <i>A Cultural History of Color in Antiquity</i> (by Adeline Grand-Clément)	250
Erica Angliker and Iliaria Bultrighini (eds.), <i>New Approaches to the Materiality of Text in the Ancient Mediterranean. From Monuments and Buildings to Small Portable Objects</i> (by Cristina Carusi)	253
James Gersbach, <i>The War Cry in the Graeco-Roman World</i> (by Sebastián Uribe Rodríguez)	256
Attilio Mastrocinque, <i>The Mithraic Prophecy</i> (by Luther H. Martin)	258
John A. North (ed.), <i>The Religious History of the Roman Empire: The Republican Centuries</i> (by Maik Patzelt)	260
Samuele Rocca, <i>In the Shadow of the Caesars: Jewish Life in Roman Italy</i> (by Haggai Olshanetsky)	263
Louise Blanke and Jennifer Cromwell (eds.), <i>Monastic Economies in Late Antique Egypt and Palestine</i> (by Paweł Filipczak)	265
OBITUARIES: RA’ANANA MERIDOR (BY HANNAH COTTON)	271
HOWARD JACOBSON (BY JOSEPH GEIGER)	277
DISSERTATIONS IN PROGRESS	279
PROCEEDINGS: THE ISRAEL SOCIETY FOR THE PROMOTION OF CLASSICAL STUDIES	285

Medical Fraternity: Initiations in the Hippocratic Corpus¹

Yulia Ustinova

Abstract: By the end of the fifth century, Hippocratic physicians were organised in a family-like association, which acted according to formal statutes, recorded in the Oath, the Law, and other deontological texts. The Hippocratics were required to adhere to strict norms of ritual and moral purity, allowing the members of the association to regard themselves as holy men, pure and pious. Medical transmission included written texts, practical instruction, and oral tradition, presumably of esoteric knowledge prohibited to the uninitiated. A Hippocratic physician probably had to undergo rites of passage on two occasions. The first initiation was performed when he began his studies as a boy or adolescent; the second followed after years of apprenticeship and formally signified his becoming a physician. The combination of a two-stage initiation into esoteric wisdom, quasi-familial ties between the master and his disciples, and the emphasis on healing as a lofty vocation was characteristic of the associations of philosophers and healers in Magna Graecia. It is possible that the Hippocratics adopted some of their practices, particularly the elements of initiation rituals, and combined them with the norms and ceremonies of the Asclepiad clans of Cos and Cnidus.

Keywords: Ancient Greek medicine, Hippocratic Corpus, ancient physicians, Hippocratics, clan, initiations, knowledge transmission, association, Pythagoreans, Eleatics.

INTRODUCTION²

In ancient Greece, everyone who claimed to be able to heal, was called *iatros*, as Aristotle testifies: ‘Physician (*iatros*) means both the ordinary practitioner and the master of the art, and thirdly, a man who has studied medicine as part of his education.’³ Apparently, regular

¹ This subject was first presented at the conference in honour of Rachel Zelnick-Abramovitz at Tel-Aviv University. I am grateful to the organisers and participants of the conference and the anonymous reviewers of this article for their valuable insights and comments, and to Carolyn Gross-Baruch for polishing my English style. The research was supported by the Israel Science Foundation (Grant No. 367/21).

² The dates in this paper are BCE, unless indicated otherwise.

³ *ιατρὸς δ’ ὃ τε δημιουργὸς καὶ ὁ ἀρχιτεκτονικὸς καὶ τρίτος ὁ παιδευμένος περὶ τὴν τέχνην*, Arist. *Pol.* 1282a3, translation H. Rackham, slightly modified. Barker (1946), 125 offers a translation containing a detailed interpretation: ‘The term ‘doctor’ is used in three different senses. It is applied to the ordinary practitioner; it is applied to the specialist who directs the course of treatment; and it is also applied to the man who has some general knowledge of the art of medicine.’ Philips Simpson (1997), 97 translates *ἀρχιτεκτονικός* as ‘consultant’ and interprets the term as meaning ‘someone with the quality of a ruling craftsman.’ In his opinion, the one ‘educated in art’ indicates someone not practicing his art

practitioners were mere craftsmen, and educated doctors were intellectuals who could talk of medicine from the philosophical or scientific viewpoint, but who were Aristotle's master physicians and how were they distinguished?

The term *ēdelphismenos iētros*, literally 'physician who has been made a brother', is found in an obscure Hippocratic text, the *Precepts*.⁴ This expression appears to be an established term denoting 'genuine' or 'respectable' doctor and seems to imply a formal act of joining a medical fraternity. The *Oath*'s description of the disciple-master relationship as akin to familial obligations is well-known. This text, dated to the late fifth–early fourth century,⁵ and arguably the most famous in the Hippocratic Corpus,⁶ depicts the community of physicians as closed and elitist. Other texts, most notably the *Law*, refer to the enormous efforts required in order to be admitted into the mysteries of medical science, and secret knowledge, reserved to the initiated, is mentioned in several Hippocratic treatises, discussed below. The *Oath* is usually regarded as obligating the Hippocratic community, at least during the Classical period.⁷ The implications of the rules

at the present time. Cordes (1994), 174 understands this term as 'wissenschaftlich bzw. theoretisch gebildeten Mediziner.'

For the division of Greek medicine into science and craft, see Temkin (1977, originally published in 1953). For the status of physicians see Cohn-Haft (1956), 18–21; Pleket (1995); Edelstein (1967b); Nutton (1995a); Harris (2016). Intellectuals who read and wrote tracts on medicine, but did not practice medicine for a fee, could be viewed differently: Jones-Lewis (2016), 389.

⁴ *Praec.* 5, translation Jones (1924), 46. The date of the *Precepts* is uncertain: from mid-fourth century, with some later modifications (Sigerist (1961), 287; Gourevitch (1984), 266; Marasco (1999), 163–164; Jouanna (1999), 405; Craik (2015), 233) to the first or second centuries CE (Ecca (2016), 23–25; Leven (2018), 161; Potter (2022), 1, 301). In the opinion of Littré (1961), 9, 247, the text of the *Precepts* is the most complicated in the Hippocratic Corpus.

⁵ Jones (1924) 41; Deichgräber (1971), 118 (originally published in 1933); Lichtenthaler (1984); Craik (2015), 149; Jouanna (2018), xxxvi, xlii; Nutton (2004), 337; Witt (2014), 105; Flashar (2016), 45; second half of the fourth century: Edelstein (1967a), 55; Sigerist (1961), 301; Gourevitch (1984), 258; the late fourth century: Lane Fox (2020), 82; an unspecified Hellenistic or a later date: Ducatillon (2001), 20–61; von Staden (2007), 465; Leven (2018), 177.

It is suggested that in the late fifth century the Athenians linked the *Oath* with the Hippocratic community, since Aristophanes alluded to its first lines on the Attic scene in the *Women at the Thesmophoria* 272–274, performed in 411: answering to a suggestion to swear 'by the community of Hippocrates' (τῆν Ἱπποκράτους ζυνοικίαν), a comic hero swears 'by all the gods together' (Jones (1924), 40; Craik (2015), 148). However, Hippocrates is a common name, therefore it cannot be ruled out that this Hippocrates was an unidentified wealthy Athenian, or the Athenian general mentioned in *Clouds* 1001 (von Staden (2007), 427; Sommerstein (2013), 174–175; Jouanna (1999), 7).

⁶ Flashar (2016), 36–49; Nutton (1996).

⁷ For detailed argumentation of this view, see Jouanna (2018) xxv–xxxvi, esp. xxxi; Leith (2007), 40 argues that the *Oath* was sworn 'in the original circumstances of its composition,' and later learnt by heart or regarded as an important set of ethical norms. The congruity of the *Oath* with the rest of the Corpus is noteworthy: Lichtenthaler (1984); Craik (2015), 148.

Two commentators on the *Aphorisms*, Stephanus of Athens and Pseudo-Oribasius, recommend that beginning medical students start by studying the *Oath* (Leith (2007), 38). Most conspicuously, a second-century CE Athenian honorific inscription referring to activities

outlined in the *Oath*, the *Law*, and other deontological texts⁸ are highly significant for the history of medicine in Classical Greece.

The main aim of this paper is to explore the procedure of entering the ranks of ‘master physicians’ or ‘respectable doctors,’ and to investigate the nature, function, and consequences of the rigid process of admission into the Hippocratic community during the Classical period. I begin with an examination of the evidence on the organisation of the Asclepiads into a clan-like association. In the following section, references to the physician’s induction into his art are juxtaposed with evidence on mystery rites, suggesting that several Hippocratic texts allude to the physician’s training as an initiation.⁹ I will then argue that in the course of the fifth and fourth centuries, the traditional clan-like organisation of physicians modified its methods of admission of new members, and this transformation probably followed the model of philosophical schools of Magna Graecia. The final section discusses social and cognitive reasons determining the advantages of a secretive medical fraternity in Greek healthcare of the Classical age.

BETWEEN A CLAN-LIKE PROFESSIONAL ASSOCIATION AND AN UNCONVENTIONAL BROTHERHOOD

The important role of traditional practices and beliefs in the practices of Greek physicians has been studied extensively.¹⁰ Hippocratic doctors obviously not only acted within the social norm prescribing piety, but also expressed in writing their belief in divine power over the environment and human life.¹¹ Hippocratic medicine preserved many traditional healing methods, particularly the emphasis on cleansing as the basis for its therapeutic approach.¹² Although different authors wrote the texts of the Hippocratic Corpus over a time span of several hundred years, these authors and the practitioners following their

(*erga*) of a morally blameless physician, mentions the prohibition to look at or touch patients, contrary to the statute and oath (παρῆξ καὶ θεσμῶ καὶ ὄρκ[ov], *SEG* 28. 225; Samama (2003), 128–130, No. 22). This demonstrates that the *Oath* (perhaps along with the *Law*, here called *thesma*) was well-known and considered binding (Samama (2003), 74).

Presumably, not all the doctors regarded as Hippocratics followed the *Oath*, or even swore it (Lane Fox (2020), 83), but those who swore could hardly be a tiny minority, contrary to the opinion of Kudlien (1970a), 7 and Nutton (1995b), 29; (1996), 46. Nutton (1995b), 29 also assumed that given the contradiction between the norms required by the *Oath* and the attested practices of some physicians, the *Oath* ‘may not have been generally sworn until the sixteenth century at the earliest.’ However, later he accepted that the *Oath* ‘was widely seen as a summation of ethical practice’ (Nutton (2004), 68).

⁸ On this group of texts see Cordes (1994); von Staden (2007); Leven (2018).

⁹ The terms ‘initiations’ and ‘mystery rites’ are ‘inadequate but convenient’ (Vesperini (2021) 30). For a critical approach to the common use of this term see Dodd and Faraone (2003).

¹⁰ Joly (1966); von Staden (2003); van der Eijk (2004); Gorrini (2005); Laskaris (2002); Jouanna (2012), 97–118; Rodríguez Alfageme (2014).

¹¹ Cf. Jouanna (2012), 97–118; van der Eijk, P. J. (2005, originally published in 1990) on the ‘compatibility’ of Hippocratic medicine and traditional religion.

¹² Hoessly (2001); von Staden (1992); Ustinova (2023).

doctrines are loosely defined as Hippocratic physicians or the Hippocratics.¹³ In antiquity, Hippocrates and the members of his ‘choir of doctors’ originating from Cos were considered descendants of Asclepius, and in the fourth century, Theopompus supported this view.¹⁴ The term ‘Asclepiad’ first appeared in Theognis, perhaps as an honorific appellation, signifying the elated status of the Asclepiads.¹⁵ Inside the fifth- and fourth-century Hippocratic circles, this term was probably synonymous with ‘Hippocratic physician.’¹⁶

According to a fourth-century inscription, the Asclepiads of Cos and Cnidus traced their origin to Asclepius ‘in the male line,’ piously worshipped Apollo at Delphi, and enjoyed special privileges there from the sixth century at the latest.¹⁷ In this respect, the Asclepiads adhered to the model of aristocratic clans in Ionia, particularly in Attica, who claimed to have descended from an alleged common mythical ancestor, but in actual fact, were united by a joint cult, assemblies, customs, and above all, mutual support.¹⁸ The connection of the Asclepiads with the two major healing centres, underscored in the Delphic inscription, is also reminiscent of the traditional local attachments of most Attic *genē*.¹⁹ Before and after Hippocrates, the Asclepiads had no recognised leader, and were supposedly loyal to the aristocratic principle of gentilic parity.²⁰

However, the bonds between the Hippocratic physicians appear to have been much stronger than connections within clans. In the *Oath*, a Hippocratic physician swore that he would regard his teacher as equal to his parents, live in partnership with him, and consider

¹³ On the connection between Hippocratic texts and Hippocratic physicians, particularly in the cultural context of the fifth and fourth centuries, when the bulk of the Corpus was assembled, see Jouanna (1999), 42–55; Nutton (2004), 53–71; Craik (2015), xx–xxiv.

¹⁴ Pl. *Phdr.* 270C; *Prt.* 311B; Theopomp. *FGrHist* 115 fr. 103: τῶν ἐν Κῶι καὶ Κνίδῳι ἰατρῶν, ὡς Ἀσκληπιάδαι (the healers from Cos and Cnidus, and why they were Asclepiads); Galen adhered to this tradition: Nutton (2004), 69–70. Jouanna (1999), 51 distinguishes between born Asclepiads and the Hippocratic physicians who did not belong to the clan.

¹⁵ *Elegiae* 432–434; van Groningen (1966), 173, Cordes (1994), 24–25.

¹⁶ Plato’s usage varies: in the *Republic* (405D) ‘the ingenious Asclepiads’ seems to mean just ‘doctors’ (Waterfield (1993), 397), but in the *Symposium* (186CE) the doctor Euryximachus says that Asclepius is his ancestor, ‘as the poets tell us, and I believe them.’ Is this an echo of a polemic uttered by a doctor, himself an Asclepiad, against his skeptical contemporaries? One of the factors influencing the diversity in the use of the term ‘Asclepiad’ may be the difference in ‘degrees of credulity’ in the accuracy of kinship myths among different individuals (Patterson (2010), 4, 22–27).

¹⁷ Κατὰ ἀνδρο[γέν]ειαν, Rougemont (1977), No. 12, see also 11; Bousquet (1956); *Oratio Thessali* 6; Langholf (1990), 233–235; Jouanna (1999), 33–35, 51; Samama (2003), 20–21; Lane Fox (2020), 67. Hippocrates’ descent from Asclepius and Heracles: Pherec. Ath. *FGrHist* 3 fr. 59; Jouanna (1999), 12–16.

¹⁸ *EM*, Suid., Harp., s.v. *gennētai*, Parker (1996), 56–66.

¹⁹ Sherwin-White (1978), 259.

²⁰ Sherwin-White (1978), 259; the aristocratic origin and worldview of the Asclepiads: Kudlien (1970a), 3–5; Sherwin-White (1978), 257–258; Witt (2014).

The anonymity of Hippocratic treatises, which looks quite odd in comparison to the common indication of authorship by Classical scientific writers, may have ensued from a similar reason. Or did it develop from the ancient tradition of joint authorship, which is attested to in the school of Cnidus (Hp. *Acut.* 1–3; Jouanna (1999), 49)?

the teacher's male family members as his own brothers.²¹ While declaring his willingness 'to share his livelihood' with the teacher, the disciple was not required to renounce his property altogether and only promised to relieve the teacher's financial distress, if needed. In any case, the commitment of the Hippocratic disciple to his teacher, to be sworn to and secured in a written agreement (*sungraphē*),²² is unprecedented. Presumably, those born as Asclepiads swore to practical obligations slightly different from those presented in the extant text of the *Oath*, referring to pupils from outside the clan, but to the same set of ethical norms.²³

The filial attitude of a medical student to his mentor is probably rooted in an Archaic and even pre-Archaic tradition, best exemplified by the mythological image of the wise centaur Cheiron and his wards, Asclepius, Jason, and Achilles, all destined to excel in healing.²⁴ Cheiron, 'the one whose hand heals,' was the archetypal tutor and master of initiations, and a healer par excellence.²⁵ Asclepius' medical credentials are well-known; Jason, whose name is cognate to *iatros*, was also a healer;²⁶ and Achilles, although never described as *iatros*, is praised more than once for his medical skills.²⁷ The three resided with Cheiron for a long time, revered him as their second father, treated his family as their own, and learned from him the art of healing, along with a laudable code of conduct.²⁸ Cheiron and his charges seem to embody an ideal teacher-student relationship, as stipulated in the *Oath*.

To complete the picture, a dynasty of physicians, regarded as descendants of Cheiron, lived at the foot of Mt Pelion, where the centaur's sacred cave was located, and handed down their craft exclusively from father to son, but apparently did not serve as Cheiron's priests. They also abided by ethical norms regarded as sacred. Most notably, they considered it 'impious' (*ouch hosion*) to receive a fee for the treatment they provided.²⁹

²¹ *Jusj.* 1b: ἡγήσασθαι μὲν τὸν διδάξαντά με τὴν τέχνην ταύτην ἴσα γενέτησιν ἑμοῖσι, καὶ βίου κοινώσασθαι, καὶ χρεῶν χρηρίζοντι μετάδοσιν ποιήσασθαι, καὶ γένος τὸ ἐξ οὐτέου ἀδελφοῖς ἴσον ἐπικρινέειν ἄρρεσι.

²² *Jusj.* 1a. The term: von Staden (2007), 437; the abiding legal force of this oath: Jouanna (2018), xxxi–xxxvi.

²³ Jouanna (1999), 129; Jouanna (2018), xxx; Flashar (2016), 40, 186.

²⁴ Nicholson and Selden (2019), 180–189.

²⁵ Hom. *Il.* 4. 218–219; 9. 829–832; Pi. *P.* 3. 1–7; Roux (1949), 155–157; Cordes (1994), 25–31; Cheiron's name: Robbins (1975); Chantraine (1983–84), 2, 1252; Cheiron's cult: Plut. *Quest. conv.* 647A; Jeanmaire (1949); Dawson (1949); Picard (1951); Turcan (1966); Gisler-Huwiler (1986); Aston (2011), 91–94; Ustinova (2005).

²⁶ Pi. *P.* 4. 102–119; Mackie (2001); Ustinova (2005); Andrieu (2014); his name was given to him by Cheiron: Pi. *P.* 4. 119; Mackie (2001), 2. Jason is depicted laying his hands on Phineus' blind eyes and returning his sight on a sixth-century Corynthian crater: Gantz (1993), 1, 355; Ustinova (2005), 509.

²⁷ Hom. *Il.* 11. 830–832; Pi. *N.* 3. 53–57; he is depicted bandaging Patroclus' wounds on the cylix by Sosias (Beazley (1963), No. 21.1, 1620).

²⁸ Nicholson and Selden (2019), 185.

²⁹ Ταύτην δὲ τὴν δύναμιν ἐν τῶν πολιτῶν οἶδε γένος· ὃ δὴ λέγεται Χείρωνος ἀπόγονον εἶναι· παραδίδωσι δὲ καὶ δείκνυσι πατὴρ υἱῷ, καὶ οὕτως ἡ δύναμις φυλάσσεται, ὡς οὐδεὶς ἄλλος οἶδε τῶν πολιτῶν· οὐχ ὅσιον δὲ τοῦς ἐπισταμένους τὰ φάρμακα μισθοῦ τοῖς κάμνουσι βοηθεῖν, ἀλλὰ προῖκα, Pfister (1951), fr. 2. 12 (And one clan among the citizens has the following power: they are considered descendants of Cheiron. They transmit it and show forth

Thus, the Asclepiad model of a clan of physicians, who traced their origin to a healing deity, transmitted their craft through the family line, and were required to conform to strict rules, was not unique. Supposedly, this model operated on a far larger scale within the Hippocratic community, as compared to its application in Thessaly.

Returning to the Asclepiads and the remarkable phrase *ēdelphismenos iētros* mentioned in the *Precepts*, a search in the *TLG* demonstrates that the word *ēdelphismenos* was employed only in the Hippocratic Corpus and by Galen.³⁰ In all these texts, this term means ‘similar’ or ‘related’, the only exception found in the cited passage in the *Precepts*, where it is used to define a physician who skillfully and kindly treats even dubious patients,³¹ – in a word, an exemplary doctor. Thus, the word *ēdelphismenos* could not be used in this passage in its standard sense, and must have had a different meaning. Given the clan-like organisation of the Asclepiads and their emphasis on moral integrity, it is probable that the expression ‘physician who has been made a brother’ implies loyalty to medical ethics. Other requirements to the *ēdelphismenoi iētroi* were likely to ensue from the professional standards set in the *Oath* and the *Law*, and will be discussed in the next section.

The use of fictive ‘sibling language’ as a metaphor to express a sense of fraternal solidarity began in pagan voluntary associations and professional guilds in the Greek East only later, in the first century CE.³² This development coincided with its adoption by

from father to son, and in this way, this power is preserved [with them], and with no one else among the citizens. And it is impious for those who know the remedies to treat the sick for a fee, but [this is done] free of charge).

The text was formerly ascribed to Dicaearchus of Messene (*FGrHist* 2 F60), and was attributed to Heraclides Creticus, a geographer who lived in the third century, by Pfister (1951), 17–19; the date: 44–48.

³⁰ The verb ἀδελφίζειν is also rare in Classical Greek; it appears in Isocrates (19.30) and means ‘to call/regard someone one’s brother,’ as the lexicographers explain (Suid., Harpocr., EM, s.v. *adelphizein*).

³¹ *Praec.* 5, with the comments by Jones (1923), 318–319.

The reading of the passage under discussion is controversial. Littré (1961), 9, 258–259 and Jones (1923), 1, 318–319, read Τίς γὰρ... ἡδελφισμένος ἡτρὸς ἡτρῆειν πεισθεῖ ἄτεραμνῆ (‘quel médecin digne de son nom se laisserait aller à exercer son art avec dureté’, ‘who that is a brotherly physician practises with such hardness of heart...’). Ecce (2016), 116–117 and Potter (2022), 1, 309–309 read ἡδελφισμένως ἡτρῆει πῖσθει καὶ ἀτεραμνῆ (‘wer würde... auf brüderliche Weise mit Zuverlässigkeit...behandeln’; ‘would be practising medicine in a brotherly manner with credit and integrity’). In her discussion of the manuscript versions of this passage and the problems of its interpretation, Ecce (2016), 197–199 indicates that ἡδελφισμένως of the earlier manuscript was corrected to ἡδελφισμένος, with a glossa by the copyist. She emphasises that it is difficult to exclude either reading. Erotianus defines ἡδελφισμένα as ὁμοιωμένα (Nachmanson (1918), fr. 43. 14). Thus, both interpretations of the words ἡδελφισμένος/ως, either in an ethical sense or as an indication of the connection to the Hippocratic fraternity, diverge from the common usage of the term in medical texts, indicating similarity.

³² Whether those who were initiated together at Eleusis actually regarded themselves as brothers, as Burkert (1987), 45 suggests, is controversial: there is no evidence on collective activities or connections between Eleusinian initiates after their initiation, see Patera (2019), 676–677.

Christian communities and within Judaism.³³ Although the *Precepts* contain some Hellenistic and Roman interpolations, the bulk of the treatise is congruent with the *Oath* and the *Law*, and the treatise was considered Hippocratic by Erotianus.³⁴ It is tempting to regard *ēdelphismenos iētros* in the *Precepts* as the earliest example of ‘sibling language’ in a quasi-familial association. Even if this term was added at a later stage, it reflected the author’s assessment of the Hippocratic community as a brotherhood.

The stipulations of the *Oath* protected the family-like structure of the Asclepiad community,³⁵ and the essential role of the family was preserved till the late fourth century when the political and social shifts and the emergence of new research centres introduced significant changes in the activities of the Hippocratic school.³⁶

THE LAW OF THE PROFESSION

While the *Oath* insists on quasi-familial bonds between the master and his disciple, it does not explicitly address the physician’s relationship with his colleagues. The *Law*, which was written down at approximately the same time as the *Oath*, in the late fifth–early fourth century, and belongs to the same group of deontological texts,³⁷ reveals intriguing aspects of the physician’s professional life.

In this text, the author takes for granted that having learned his art (*technē*), the physician will constantly travel from city to city.³⁸ Wherever he goes, he will have to deal with the lack of respect for his trade, since Hippocratic doctors and charlatans were all treated in the same manner,³⁹ and in the eyes of a vast majority of the Greeks, physicians were no less weird and suspicious than magicians.⁴⁰

³³ Harland (2005). On the mutual support of the members of voluntary associations, on a much more modest scale than among the Hippocratics, see Gabrielsen and Paganini (2023), 12, 15.

³⁴ Nachmanson (1918), fr. 7 (*Praec.*); Craik (2015), 231–233; Ecce (2016), 27.

³⁵ Deichgräber (1971), 103; Jouanna (1999), 47–48; Lane Fox (2020), 82.

³⁶ Sherwin-White (1978), 262–263, in contrast to the views of Kudlien (1970a), 7; Smith (1990), 9–17; Jones-Lewis (2016), 389 and Nutton (2004), 70, who date the opening of the medical profession to the outsiders to the fifth century. In the opinion of Jouanna (1999), 46–48, the *Oath* was needed as a result of a ‘revolution,’ emphasised by Galen, who in *Anatomical Procedures* (2.1) points out that ‘at a certain date’ the Asclepiads began imparting their art to students who were not their kinsmen; however, Jouanna is indecisive about the date of this revolution.

³⁷ von Staden (2007), 426; Craik (2015), 152, 155; Craik (2014), 25; Jouanna (2018), xiii, xix, 165.

³⁸ *Lex* 4: ἀνὰ τὰς πόλιας φοιτεῦντας.

³⁹ *Lex* 1. This resentment is shared by other Hippocratics, for instance, the roughly contemporary authors of the *On the Sacred Disease* (*Morb. sacr.* 2) and *On the Art* (*De arte* 1). See also note 3 above.

⁴⁰ Graf (1995), 40. See Nutton (1985), 30–33; Hoessly (2001), 88 for the broad spectrum of the term *iatros* in Homer and elsewhere. In exceptional cases, a woman could claim to be *iatros*, as the mid-fourth-century grave stele of Phanostrate, midwife and doctor (μαῖα καὶ ἱατρὸς Φανοστράτη), demonstrates: *IG* II² 6873; Totelin (2020).

According to the *Law*, the deplorable status of the physician is a result of the lack of legislation regulating the activities of different medical practitioners ‘in the cities.’⁴¹ This statement appears at the beginning of the work entitled *Nomos*, and thus indicates that the title refers not to polis laws but rather to a set of norms within the medical fraternity, which enacted them as a private organisation, following the well-known practice of recording the statutes of associations.⁴² However, explicit ritual regulations appear only in the last paragraph of the text; its bulk dwells on the nature and method of medical learning. In this way, the author contrasts the negligence of legislative authorities in matters of healthcare throughout the Greek world with the responsible approach of the educated medical community. The main message of the *Law* is that the selection and education of future physicians guarantee high-quality medical treatment, ensured not by ‘the cities,’ but by the Hippocratic fraternity. Aristotle’s statement that ‘a physician should be inspected by physicians’⁴³ echoes perhaps his acquaintance with such real-life practice.

The interpretation of the *Law* as a normative document of the Hippocratic community is endorsed by the passage in the *Oath*, limiting the ranks of a physician’s apprentices to his own sons, his teacher’s sons, and ‘pupils under contract and oath according to the law of the physicians (*nomos iētrikos*).’⁴⁴ These are formal terms, designating the signed

⁴¹ This statement, echoed by Pliny (*Nat.* 29. 18), is inaccurate (Jouanna (1999), 78–80). Xenophon’s Socrates alludes to the requirement that candidates for the position of public physician (*dēmosieuōn iatros*) prove their credentials (*Mem.* 4. 2. 5; Pl. *Grg.* 455B, 456B, 514DE; Cohn-Haft (1956), 57). The status of public physician could express an endorsement of the doctor’s medical qualifications (Cohn-Haft (1956), 56–67), but public physicians were few, especially before the Hellenistic period (Cohn-Haft (1956), 76–85 lists 66 attested cases, mostly Hellenistic or later; cf. Samama (2003), 47–51). A fifth-century inscription from Teos (‘Teian Curses’) contains a law which forbids the use of *pharmaka dēlētēria*, ‘harmful drugs’, and stipulates execution of the practitioner and their entire family as a punishment (Ogden (2002), 275, No. 278; Motte (2000), 270–271; Collins (2008), 134). This law is not unique: Theophrastus says that possession of henbane, a lethal drug, was punished with death (Thphr. *HP* 9. 16. 47). Thus, physicians and traditional healers could be prosecuted, but there is no doubt that the Greek states failed to create a system of medical, and indeed any kind of professional licensing (Cohn-Haft (1956), 25; Dean-Jones (2003), 106–107).

⁴² For sacred regulations issued by private associations see Harris (2015); Gabrielsen and Paganini (2023), 9–17. The associations’ regulations were often referred to as *nomoi*, as the list of terms in Gabrielsen and Paganini (2023), 24–38 demonstrates.

⁴³ ὡςπερ οὖν ἰατρὸν δεῖ διδόναι τὰς εὐθύνας ἐν ἰατροῖς, *Ar. Pol.* 1282a1. In this passage, the body of physicians is contrasted to civic bodies that allow judgment by the (uneducated) majority (Lane (2013), 265). Citing the physicians as a positive example of proper procedure of inspection and judgement would be worthless unless Aristotle, the son of a doctor, was confident that such a practice existed among his father’s colleagues. However, judgment by one’s peers obviously did not have any legal standing in the state (above, note 41). Needless to add, mere practitioners would hardly count in Aristotle’s eyes (cf. note 3 above, on the passage immediately following this one).

⁴⁴ *Jusj.* 1c: μαθηταῖσι συγγεγραμμένοις τε καὶ ὠρκισμένοις νόμῳ ἰητρικῷ. The language of 1b–c is rich in ‘linguistic peculiarities,’ which makes Jones wonder whether it is not ‘liturgical’ (Jones (1924), 43); cf. ‘heavy religious tone’ (Nutton (2004), 68).

The expression *nomos iatrikos* occurs in fourth-century texts (e.g. Ps.-Pl. *Min.* 316E), but is rare (von Staden (2007), 442).

agreement between the master and his disciple, and the equally official ‘law’ adopted by the associated physicians.⁴⁵

The *Law* appears to contain a part of this *nomos* that could be shared with the general public. The other, probably greater, part could not be published, as stated at the end of the text: ‘Things that are holy are revealed to holy men. They are prohibited to profane, until they have been initiated into the mysteries of knowledge.’⁴⁶ The language of mystery rites cannot be more obvious.⁴⁷ The verb *telesthēnai*, ‘to be initiated’, would suffice, but it is reinforced by the term *orgia*, ‘mysteries,’ or ‘secret rites,’⁴⁸ and the sharp contrast between the initiated and the profane. The term *ou themis* belongs to the vocabulary of the sacred laws of sanctuaries and is used in statements that prohibit access to certain places or rites for people who are not ritually entitled to do so.⁴⁹ The word *bebēlos*, indicating a non-purified person or a place open to all, is a *hapax* in the Hippocratic Corpus.⁵⁰ The combination of these terms implies that real medical knowledge was only revealed to those who had formally undergone secret rites, and intended exclusively for future physicians.

The secrets of the brotherhood were perhaps behind the least intelligible of all Hippocratic works, the *Decorum*. It consists of broken sentences rendered in corrupted Greek, and is dated to the fourth or the third century, but could have been written several centuries later.⁵¹ The text as a whole gives the impression that it was never intended for publication, and W.H.S. Jones suggested that it could be a list of points for a presentation to be given in a medical fraternity; the text is intentionally obscure, in order to prevent the possibility that an uninitiated would grasp its meaning.⁵² The most incomprehensible sentence of the *Decorum*, ‘In fact many, dominated by the two statements (or words – *logoi*), never used the two things (or acts – *prēgmata*) together in the demonstration,’⁵³

⁴⁵ This term in the Oath is understood as referring to the Hippocratic Law: Jouanna (1999), 22–23; 166–168; Ducatillon (2001), 44–45.

⁴⁶ *Lex* 5: Τὰ δὲ ἱερά ἐόντα πρήγματα ἱεροῖσιν ἀνθρώποισι δείκνυται· βεβήλοισι δὲ, οὐ θέμις, πρὶν ἢ τελεσθῶσιν ὄργιοισιν ἐπιστήμης.

⁴⁷ Reflecting on this passage, W.H.S. Jones observes that it is ‘very probable that some physicians at least joined together in secret societies, with a ritual and liturgy’ (Jones (1923), 2, 258, 272–276; Jones 1924, 45); this opinion is accepted by Phillips (1973), 117; Lloyd (2003), 52; Craik (2015), 154; Craik (2014), 33, Flashar (2016), 186 (‘Hinweis auf die Mysterien’) and dismissed by Cohn-Haft (1956), 16. Witt (2014), 120 regards the Asclepiads as an aristocratic ‘esoteric circle.’ J. Jouanna interprets the concluding passage of the *Law* as an ‘expression métaphorique du culte de la science’ (Jouanna (2012), 157, 292).

⁴⁸ For both terms, see Schuddeboom (2009). ‘Mystery initiations’ is a common rendering of τελετή (rite of fulfilment). In Archaic and Classical literature τελετή may mean mystery rites or a ritual act in general; in the Hellenistic literature the latter meaning prevails (Schuddeboom (2009), 37, 99, 224). The word ὄργια can denominate rites or objects associated with mystery rites (Jaccottet (2005), 223). Significantly, Erotianus understands Hippocratic ὄργια precisely in this sense, as μυστήρια (Nachmanson (1918), fr. 68. 13).

⁴⁹ Harris (2015), 57.

⁵⁰ On βεβήλος see Jouanna (2018), 291.

⁵¹ Craik (2015), 59; Jouanna (1999), 380 dates it to the first or the second century CE.

⁵² Jones (1923), 2, 269–273.

⁵³ Καὶ γὰρ ἐν ἀμφοτέροισι τοῖσι λόγοισι πολλοὶ κρατηθέντες οὐδαμῆ συναμφοτέροισιν ἐχρήσαντο τοῖσι πρήγμασιν ἐς δεῖξιν, *Decent.* 4.

mentions unexplained *logoi* and *prēgmata*. This sentence probably alludes to ritual sayings and actions, familiar only to the initiated members of the society, especially since the following passage on medical *sophia* refers to secret *orgia*, similar to those mentioned in the *Law*.⁵⁴

Direct and indirect allusions to mystery rites in Hippocratic treatises do not make only ‘rhetorical use of mystery metaphor,’⁵⁵ as W. Burkert’s described the allegorical interpretations of secrets of nature or enigmatic texts, employed by many ancient authors. The references to secrets that should not be disclosed to the uninitiated are consistent, appear in several treatises, are accompanied by other terms from the vocabulary of mystery rites, and suggest real-life behaviour rather than an intellectual endeavour.⁵⁶ A considerable part of the Hippocratic knowledge was a secret, to be discussed only with those formally admitted to the brotherhood – presumably the *ēdelphismenoi iētroi* of the *Precepts*.⁵⁷

In the Hippocratic community, the distinction between the secret-sharers and the outsiders was articulated by the requirement for exceptional purity. In the *Law*, people who have been initiated into the mysteries of healing are called *hieroi anthrōpoi*, ‘holy men.’ This expression immediately evokes a phrase in the *Oath*: ‘I will guard both my life and my art pure (*hagnōs*) and pious (*hosiōs*).’⁵⁸ It is noteworthy that *hosios* semantically approaches *dikaios*, ‘just’, and thus refers also to the highest moral qualities a physician swears to uphold.⁵⁹ Furthermore, in the *Oath*, the patients’ personal information, that the physician swore not to disclose, is referred to as *arrheta*, ‘unutterable’ secrets, and this term is part of the vocabulary associated with mystery rites, indicating matters that should

⁵⁴ Jones (1923), 2, 274; Craik (2015), 59.

⁵⁵ Burkert (1987), 80.

⁵⁶ In addition to explicit requirements of secrecy in the *Oath* and the *Law*, and the obscurity of the *Precepts* and the *Decorum*, noted by Jones (1924), 45, the reference to body parts ‘known to those whom that concerns’ (*De arte* 10: ἄς ἴσασιν, οἷσι τουτέων ἐμέλησεν) and ‘those with sufficient knowledge of the art’ (*De arte* 9: τοῖσι τὰύτην τὴν τέχνην ἰκανῶς εἰδόσι), in the late-fifth-century *On the Art* may hint at arcane knowledge concealed from laymen (Craik (2015), 38; for the date of this tract see Cordes (1994), 101; Jouanna (1999), 378.

⁵⁷ Jones (1924), 45–46 compares the Hippocratic fraternity to the Masons.

⁵⁸ *Jusj.* 4: Ἄγνῶς δὲ καὶ ὁσίως διατηρήσω βίον τὸν ἐμὸν καὶ τέχνην τὴν ἐμήν. For a commentary see von Staden (1996b), 417–434. Bremmer (2002) argues that this reading is late, since the version of the *Oath* preserved in the earliest papyrus copies (dated to the third century CE, Schubert (2005), 16, 79; Leith (2007), 39; Flashar (2016), 45) contained the words ὁσίως καὶ εὐσεβῶς (‘in a pious and reverent manner’). However, it is still unclear whether εὐσεβῶς appeared in all the earlier versions of the *Oath*, or only in a few of them. For the issue under consideration here, it is sufficient that both readings imply the same message, of a strongly emphasised adherence to a lifestyle defined as ‘holy.’

On the terms *hieros*, *hagnos*, and *hosios* see Rudhardt (1992), 21–41; Parker (1983), 147–151, 328–331.

⁵⁹ Rudhardt (1992), 32. Ritual connotations of the *Oath*: Jouanna (2018), xxv–xxxix; 10–13.

not be disclosed to the uninitiated.⁶⁰ Thus, the professional and personal behaviour of the Asclepiads was depicted in cultic terms.⁶¹

The extraordinary insistence on personal responsibility ('I will guard my life and my art') underscores the ethical dimension in this clause.⁶² Given the nature of the physician's profession and lifestyle, it is difficult to imagine him able to entirely avoid being polluted by death, birth, and sexual intercourse. H. von Staden links this requirement with the lines inscribed over the entrance to the temple of Asclepius at Epidaurus: 'Pure (*hagnos*) must be the person who goes inside this fragrant temple, and purity (*hagneia*) is to think holy (*hosia*) thoughts.'⁶³ Thus, Hippocratic 'holiness' probably emphasised pious conduct and personal responsibility toward gods and humans.⁶⁴

The terms *hieros*, *hagnos*, and *hosios*, describing purity and holiness, signify the dichotomy between the sacred and the profane. While in the *Oath* and the *Law*, moral and mental purity advance to the foreground,⁶⁵ ritual and formal requirements were also considered essential. The domain of medical art was sacred and forbidden to the profane, to whom only superficial trivialities were accessible. In order to approach 'things that are holy' and join the 'holy people,' one had to pass initiation into medical science. There can be little doubt that this ritual was modeled on Greek mystery rites. The secret was kept loyally, and the novices were taught the art of silence, as required by the *Oath* and the *Law*.⁶⁶

The rest of the two-page *Law* is devoted to the study of medicine. The author underscores the importance of natural abilities (*phusis*), diligence, time, and beginning to study early (*paidomathia*). Medical studies are compared to the growth of plants, and this analogy provides perhaps the key to the problem of the timing of medical initiations.⁶⁷

The *Law* does not spell out at what stage of his education a future physician undergoes his initiation. Most probably, he did that as an adolescent, in order to be exposed to the secrets of the art of medicine. Given the family-like concept of the Hippocratic

⁶⁰ Burkert (1983), 252; Ustinova (2018), 116; Leven (2018), 176. Furthermore, the verb used in the same phrase and defining the action prohibited to a good physician, ἐκλαλείσθαι, 'to blabber,' is often used in references to cultic transgression (Ducattillon (2001), 565; von Staden (2007), 451).

⁶¹ Cf. Simmel (1906), 482–483 on the importance of rituals in secret societies.

⁶² von Staden (1996b), 419; von Staden (1996a), 172–195.

⁶³ Clem. Al. *Strom.* 5.1.13.3; Porph. *Abst.* 2. 19. 5, translation H. von Staden: ἀγνὸν χρῆ νηοῦ θυώδεος ἐντὸς ἰόντα/ ἔμμεναι ἀγνεῖη δ' ἐστὶ φρονεῖν ὅσια. This couplet is cited by Theophrastus in his lost treatise *On Piety*, and therefore was inscribed in the fourth century at the latest. See von Staden (1996b), 429; von Staden (1996a), 186; Chaniotis and Mylonopoulos (2005), 436; Jouanna (2018), 31. Bremmer (2002) questions this consensus.

Cf. the sacred law from Mytilene, requiring the visitors to 'approach the temenos pure and thinking pious thoughts' (ἀγνὸν πρὸς τέμενος στείχειν/ ὅσια φρονέοντα; *IG 12 Suppl.* 23).

⁶⁴ von Staden (1996b), 427–428; von Staden (1996a), 179–181; Nutton (2004), 68; Leven (2018), 174.

⁶⁵ von Staden (1996b), 428–434; Jouanna (2018), 29–32. On 'purity of mind' see Moulinier (1952), 168–176.

⁶⁶ Cf. Simmel (1906), 474–475 on the techniques of learning 'the duty of reticence' in secret societies.

⁶⁷ For a different interpretation of this metaphor see Jouanna (2012), 162.

community, it is likely that the aspiring physician who was not born into the Asclepiad clan, was ritually admitted into his master's household. This first step was necessary to allow the novice access to secret knowledge. It was then followed by years of apprenticeship and presumably observance of strict purity rules, culminating in the acceptance of the new doctor as a colleague.

Thus, just as growing a plant begins with seeding, requires much work and diligence to allow the fruit to ripen, and ends in the harvest, the education of the future physician is to be marked by two defining events, at the beginning and at the end of his studies. It appears that there could have been two sets of initiation rites, one for new students and the other for new doctors. This arrangement resembles the practice of Greek mystery rites, which could vary in duration, might include children's initiations, and in some cases consisted of several stages.⁶⁸

According to the *Oath*, medical instruction was regarded as the 'transmission' (*metadosis*) of knowledge divided into '[written] precepts, [oral] discourse (*akroasis*), and all other learning.'⁶⁹ 'Written precepts' supposedly designate texts, similar to the tracts later assembled into the *Corpus*.⁷⁰ The 'other learning' could comprise the numerous practical skills necessary in medical practice.⁷¹ Given the insistence of the *Law* on the secret knowledge, forbidden to the profane, it is tempting to regard *akroasis* as oral instruction, including the tenets not to be disclosed to the uninitiated, but mainly necessary to teach the practical aspects of the physician's craft.⁷² The division of medical education into written and oral components with the written part accessible to all and the oral part concealed from non-members, may reflect the duality of ancient medicine. It was both an intellectual pursuit engaging philosophers and educated laymen in general, and a craft to be perpetuated by practical training.⁷³

The coexistence of extensive writing and reading with the requirement of personal apprenticeship, based on the oral transmission of knowledge between a master and a

⁶⁸ Long preparation and multiple stages of initiations: Scarpi (2002), 1, 160–168; Ustinova (2018), 126–129; on two-stage initiations into the Eleusinian and Samothracian mysteries, see Lehmann (1969), 2, 14–15; Burkert (1983), 268, 275; Cole (1984), 26–36; Clinton (2003), 50; Dimitrova (2008), 78; Bremmer (2014), 11–16; children's initiations: Cole (1993), 288–290; Ustinova (2018), 195.

⁶⁹ *Jusj.* 1b: Παραγγελίης τε καὶ ἀκροήσιος καὶ τῆς λοιπῆς ἀπάσης μαθήσιος μετάδοσιν.

⁷⁰ Galen alleged that Hippocrates started writing down some doctrines of his predecessors, because before him, these teachings were transmitted only orally (Nutton (2004), 61).

⁷¹ Aristotle (*EN* 1181b) was convinced that medical treatises were useful only to experienced physicians (Kudlien (1970a), 6). On the inadequacy of written texts as a basis for medical practices, see Dean-Jones (2003), 110–111.

⁷² The term is rare and occurs only in two deontological texts, the *Oath* and the *Precepts* (von Staden (2007), 440). In Hellenistic Histrina and Perge, physicians gave public lectures called *akroaseis* (Samama (2003), 197–198; 439–442, Nos. 98, 341, both honorary decrees are second-century), and oratorical skills were indeed helpful to physicians (Edelstein (1967b), 100–104; Jouanna (2012), 39–53). However, a reference to the attendance of such lectures by the physician's pupils would sound odd, and thus in the *Oath* this term is probably used to denote oral instruction. It is noteworthy that in Aristotle's school, *akroasis* was intended for advanced students and not for the general public (Ducatillon (2001), 43).

⁷³ Temkin (1977), 137–153; Cohn-Haft (1956), 15.

disciple, was not unique to the Hippocratics.⁷⁴ The diffusion of written texts was difficult to control, and therefore secret doctrines were best passed on orally. In any case, the division of medical *metadosis* into three categories was important enough to be explicitly stated in the *Oath*.

Every art could have its secrets, and they were often transmitted from father to his son or apprentice,⁷⁵ but none resembled the formal rules maintained by the Hippocratics. Furthermore, the emphasis on the special purity of the members, the requirement of formal initiations and the perception of adherence to a profession as a commitment equal to participation in mystery rites are unique to the Hippocratic community. Most significantly, these obligations of the Asclepiads are attested to explicitly or implicitly in several texts of the Corpus and in the later tradition, and therefore, cannot be dismissed as characteristic of a very small esoteric group.⁷⁶ However, the social circumstances reflected in the *Oath* and the *Law* did not last, and during the Hellenistic period, the education and activities of physicians were organised in a different manner. The practical stipulations of the *Oath* became obsolete, and only its ethical gist was considered binding.

In summary, in the fifth and fourth centuries, the Hippocratic community regarded itself as a fraternity, fostering familial bonds between physicians and their mentors. Certain aspects of medical knowledge were concealed from the public and probably transmitted orally; other parts were documented in writing. The physicians maintained that their lifestyle was pure and differed from the life of regular people, and admittance to the fraternity of professional physicians was probably marked as an initiation rite.

THE ITALIAN BACKGROUND

As we have already seen, clan-based organisations of physicians existed in the Greek world, and the Asclepiads were not unique in this respect. However, beginning in the fifth century, they had to cope with a new challenge, the growing need for trained physicians.⁷⁷ The number of their biological sons did not meet the demand, and the Asclepiads had to seek an alternative solution. The Italiote philosophical associations were exclusive enough to allow the perpetuation of secrecy, but their members were unrelated by blood. I propose

⁷⁴ Even if esoteric teachings, intended for the selected few, were not an all-around alternative philosophic system, the very existence of Plato's oral teachings, different from the ideas put forward in his written work (Arist. *Ph.* 209b15, cf. *Metaph.* 1. 6, 987a–988a), is difficult to doubt: Robin (1935), 17, 32, 330; Rosen (1968), xv–xxvi; Sayre (1988); Rowe (2003), 23–24, 196–200; Kahn (2001), 58–62; Ustinova (2018), 323–324. For a survey of this approach see Richard (1986), 29–35; Ferber (2007), 82–84.

⁷⁵ Jones (1924), 56; Kudlien (1970a), 5; Deichgräber (1971), 101–102; Sigerist (1961), 85; Harris (2020), 33, 55; Jouanna (1999), 43–46. In other crafts, sons often continued their fathers' trades, but there were no rigid regulations; for comparison with other *technitai* see Craik (2014), 33–34; Harris (2020). In the Babylonian medical tradition, families of scholars were an important channel of transmission of medical knowledge, and accepted outside students, and in Egypt, the Papyrus Ebers mentions a secret therapeutic method that could only be disclosed by a father to his son (Geller (2004), 14), but no obligating rules similar to those adopted by the Asclepiads are attested to.

⁷⁶ See note 7 above.

⁷⁷ Jouanna (1999), 47–48, see also note 36 above.

that some features of these associations were adopted by the Asclepiads who had to adjust their family-like community to the changing conditions.

The *Oath* and the *Law* contain allusions to the cultural context which gave rise to the ideas of a medical fraternity, keeping its knowledge in secret and regarding admittance as an initiation rite. Decades ago, L. Edelstein associated some elements of this cultural context, particularly as reflected in the *Oath*, with the Pythagoreans,⁷⁸ drawing attention to Magna Graecia and its impact on the Hippocratic school.

It should be noted that the Italiote medical tradition became famous before the Hippocratics. Galen praised physicians from Italy.⁷⁹ The famous Democedes of Croton, the son of a doctor, was active in the sixth century, and Herodotus regarded him the most skillful physician of his time.⁸⁰ Sombrotides, the son of Mandrocles, a sixth-century physician from Megara Hyblaea, was successful enough to be honoured with an expensive *kouros* as his funerary monument, and might also have belonged to a family of physicians.⁸¹ It is quite possible that the Hippocratics were aware of the ideas and activities of their illustrious colleagues in Magna Graecia.

We will first review Edelstein's ideas, and then look at the evidence on the Pythagoreans and another South Italian philosophic school, the Eleatics, from the perspective of the *Law*. Finally, Empedocles' approach to healing will support the conclusions regarding the role of cultic ideas and practices in the transmission of medical knowledge in Magna Graecia.

The Pythagoreans

Pythagoras and his following practised healing, but technical aspects of therapy and surgery did not attract their attention.⁸² The Pythagoreans put an emphasis on lifestyle and based their ideas on a complex set of ethical and religious ideas concerning the proper diet, regime of purifications, and rules of behaviour.⁸³ Pythagoras' gift of chasing away pestilences, and treating sick souls by using charms, magic and *mousikē* was well-known.⁸⁴ The medical doctrines advocated by the Pythagoreans were part of their broad vision of the cosmos and society, and consisted of concrete rules ensuing from their doctrines.⁸⁵

⁷⁸ Edelstein (1967a, originally published in 1943).

⁷⁹ Gal. *De methodo medendi* 1. 1 (X. 5 Kühn); Primavesi (2009), 29–30.

⁸⁰ Hdt. 3. 131; Griffith (1987); Lane Fox (2020), 51–56.

⁸¹ *SEG* 14. 599; Pugliese Carratelli (1996), 676 No. 75; Samama (2003), 547, No. 511. The doctor's name, deriving from σῶς ('safe' or 'sound') indicates that his craft could be handed down within the family (Pugliese Carratelli (1996), 197), since such names were particularly common among doctors (Samama (2003), 17).

⁸² For Pythagoras as healer see Lévy (1927), 42; de Vogel (1966), 232–244; Burkert (1972), 293; Kingsley (1995), 327–331, 342; Thorn (1995), 213–214.

⁸³ Porph. *VP* 21, 42–45; Iambl. *VP* 68–70, 85; D.L. 8. 18–19; Kouloumentas (2016).

⁸⁴ Porph. *VP* 33; Iambl. *VP* 64, 163. For the use of music for magical purposes by Pythagoreans, see Boyancé (1937), 100–131; Dodds (1973), 154; Detienne (1963), 47–48; Hermann (2004), 105.

⁸⁵ Kouloumentas (2016), 249. To what extent Pythagorean dietetics influenced Hippocratic views on the regimen, is debatable: Bartoš (2015).

The Pythagorean lifestyle was extremely peculiar, and its similarity to the stipulations of the *Oath* requires explanation. In the Greek world, the perception of the teacher as a father, and community members as brothers, as described in the *Oath*, is known only among the Pythagorean community.⁸⁶ Some other clauses of the *Oath* reveal additional connections with the Pythagorean circles, most notably forswearing the use of poison, and shunning surgery and abortions. All these actions were acceptable in ancient Greece, with the Pythagoreans being the only exception.⁸⁷ In particular, other Hippocratic texts refer to medical advice on abortion.⁸⁸ While the section concerning ‘purity and holiness’ of the physician’s life and work⁸⁹ was much too strict for a mere professional, it is somewhat paralleled by the uncompromising Pythagorean ethical code.

Sharing one’s income with their teacher is reminiscent of the attitude toward property within the Pythagorean association. The earliest report on the Pythagorean rule for common property dates back to the fourth century, and despite the obscure details, this practice probably originated in the time of the great master.⁹⁰ In addition, Pythagoras’ own house was known as ‘the house of mysteries,’⁹¹ and similar to participants in mystery cults, the Pythagorean brotherhood shared common secrets not to be disclosed to the uninitiated, and required elaborate initiations.⁹²

Edelstein’s observations on the Pythagorean affinities to the *Oath* are accepted nowadays by several historians of ancient medicine.⁹³ It is to be emphasised that common features do not imply identity, and in my opinion, the *Oath* is not a ‘Pythagorean document,’ but shows some Pythagorean influence.⁹⁴ It is noteworthy that Croton, the seat

⁸⁶ D.S. 10. 11; Edelstein (1967a), 43–46.

⁸⁷ Edelstein (1967a), 9–20; Nutton (2004), 68. On the attitude to abortion and assisted suicide in the Classical world see Carrick (2001), 84–85; Totelin (2020); Kapparis (2002), esp. 66–76, 170–194 in connection to the *Oath*. In some circumstances taking one’s life was respected or even praised, hence the distinction between honorable and cowardly suicide (Garrison (1991); Yoshitake (1994), 145). The statistics of suicides in Greece are arbitrary (van Hooff (1990), 236–237), but taking one’s life seems to have been rare.

⁸⁸ Jouanna (1999), 27 observes that an abortifacient (ἐκβόλιον), mentioned twice in *On the Nature of Woman* and nine times in *On Diseases of Women*, was recommended in cases when the fetus was dead or abnormal. However, in *On the Nature of the Child* (13) the physician advises on abortion for a healthy girl (King (1998), 136).

⁸⁹ *Jusj.* 4: Ἀγνῶς δὲ καὶ ὀσίως διατηρήσω βίον τὸν ἐμὸν καὶ τέχνην τὴν ἐμήν.

⁹⁰ Timae. *FGrHist* 566 fr. 13; Iamb. *VP* 72; D.S. 10. 3. 5; Riedweg (2005), 101–102; Edelstein (1967a), 45.

⁹¹ Iamb. *VP* 143, cf. Timae. *FGrHist* 566 fr.131.

⁹² Burkert (1972), 179; Riedweg (2005), 98–104; Morrison (1956), 149–152; Bremmer (1995), 65–70; Casadesús (2016), 2. Simmel (1906), 474, discussing the difficulty of learning the techniques for keeping secrets, cites the example of the Pythagoreans.

⁹³ Sigerist (1961), 94–99, esp. 99 (‘since Edelstein’s epoch-making study there cannot be any doubt that the so-called Hippocratic Oath was a Pythagorean document’); Phillips (1973), 116; Gourevitch (1984), 258; Carrick (2001), 84–100, esp. 88 (‘conditioned by Pythagorean influences’); Ducatillon (2001), 60–61 (Pythagorean, or rather Neopythagorean, influence); Craik (2015), 149.

⁹⁴ Lichtenthaler 1984 opposes Edelstein’s approach and underscores the common tradition shared by the *Oath* and other Hippocratic works; however, he consents that the *Oath* shows some Pythagorean impact; see also Kapparis (2002), 66. Those arguing that the *Oath* was not

of the Pythagorean covenant, was also home to some important physicians, most significantly Alcmaeon, a philosopher close to the Pythagoreans and a renowned medical thinker, famous for his empirical investigations in physiology.⁹⁵ His ideas on the role of the brain, for example, apparently influenced the Hippocratics, as did some other notions.⁹⁶ As mentioned above, Croton was the native city of the great Democedes, praised by Herodotus.

We can only guess how Pythagorean ideas reached the Hippocratic circles, and how the text of the *Oath* evolved before it was recorded. It is, however, significant that the Pythagoreans and the Asclepiads were the only two Greek societies showing a profound interest in medicine, that displayed similarities in their approach to community organisation, such as property-sharing, mystery-like admission into their ranks, secrecy, and purity norms.

The Eleatics

The author of the *Law* contrasts knowledge and opinion: ‘These are two things, knowledge (*epistēmē*) and opinion (*doxa*), the former causing knowing, and the latter ignorance.’⁹⁷ Immediately after this statement, he abruptly stops his discourse on medical practice and pronounces: ‘Things that are holy are revealed to holy men.’ Clearly, in his eyes, the judgment of charlatans and laymen was merely an opinion, and the knowledge of the Hippocratics was real and holy. This contrast brings to mind Parmenides’ worldview, namely the distinction between truthful divine knowledge, based on mystical reality (*alētheia*, ‘truth’) and revealed to the chosen few, and misleading human opinion, based on perception and appearance (*ta dokounta* or *doxa*, ‘things that seem’ or ‘opinion’).⁹⁸

Parmenides founded a philosophical association that flourished from the sixth century BCE till the first century CE in the Greek colony Elea in South Italy, and was involved in medical activities. The association owned a large building with a subterranean chamber, cryptoporticus, which yielded herms with inscriptions referring to heads of the school as

influenced by the Pythagoreans since on certain issues it does not conform to the Pythagorean teaching (von Staden (1996b), 409; Miles (2005), 29–30; Kudlien (1970b); Leven (2018), 172–174; Lane Fox (2020), 81), overlook the possibility of impact rather than full-scale adoption of ideas.

⁹⁵ D.L. 8. 83; Kudlien (1970a), 4–5; Longrigg (1993), 47–62 (hesitant regarding the extent of Alcmaeon’s Pythagorean connections); Lane Fox (2020), 57–62; Holton (2022), 74, 106–107.

⁹⁶ Flashar (2016), 19; other notions: Kudlien (1970a), 4–5; Sigerist (1961), 103–104; Longrigg (1993), 48; Jouanna (1999), 262.

⁹⁷ *Lex* 4: Δύο γὰρ, ἐπιστήμη τε καὶ δόξα, ὧν τὸ μὲν ἐπίστασθαι ποιέει, τὸ δὲ ἀγνοεῖν.

⁹⁸ *DK* 28. B1 31–32, B8. 51, B19. 1; White (2005), 67–74; Mourelatos (2008), 194–197.

iatroi, healers or physicians, and *phōlarchoi*, ‘lords of the den.’⁹⁹ The herm of Parmenides himself states that it portrays ‘Parmenides son of Pyres *Ouliadēs phusikos*.’¹⁰⁰

The title *phusikos* on the herm of Parmenides the Ouliad should not be taken to mean that he was merely an inquirer into nature, which was the neutral standard sense of the word.¹⁰¹ In Italy in particular, the word *phusikos* implies healing and magical activities.¹⁰² The word *phōleos* means ‘den’, ‘lair’, or ‘hole,’ usually underground;¹⁰³ *phōleuein* is ‘to live or hide in a cave or a hole, to hibernate.’¹⁰⁴ Strabo uses the word *phōleos* to describe the *iatromanteion* at Acharaca, near Tralles in Asia Minor, where the priests and some chosen patients received instructions on their healing.¹⁰⁵ A notable Elean dedication to Apollo appears to have been offered by ‘Ouliad the healer-prophet.’¹⁰⁶ The pholarchs in Elea probably used their cryptoporticus as a place of recurrent ritual withdrawal in order to attain revelatory visions on healing, among other matters.¹⁰⁷

The name of all those who headed the association, Oulis, is meaningful. Apollo Oulios is an Ionian healing deity worshipped in Miletus, on Delos and elsewhere.¹⁰⁸ One of the statues discovered in the Elean complex has been identified as a representation of Apollo Oulios.¹⁰⁹ The cult of this god must have been imported to Elea from Italy by the first settlers. Oulis is a theophoric name recorded in several cities, and this name may have been adopted by every head of the Eleatics upon taking office.¹¹⁰ *Ouliadēs* in respect to Apollo Oulios means a follower of vocation and worshipper, similar to *Asclepiadēs* in respect to Asclepius, and the Ouliads were probably regarded as a clan, like the

⁹⁹ Publication of the complex: Fabbri and Trotta (1989); inscriptions: Vecchio (2003), Nos. 22–24. The term *phōlarchos*, as well as the pholarch’s functions, are discussed in a number of works: Pugliese Carratelli (1970); Pugliese Carratelli (1963); Pugliese Carratelli (1990); Nutton (1970); Musitelli (1980); Kingsley (1995), 225; Ustinova (2004); Ustinova (2009), 191–199.

¹⁰⁰ Vecchio (2003), No. 21; cf. *SEG* 38. 1020; *SEG* 39. 1078; Masson (1988), 176, figs. 1–3; Fabbri and Trotta (1989), 69–75.

¹⁰¹ Nutton (1970), 218; Flint et al. (1999), 100; Pugliese Carratelli (1986), 109.

¹⁰² Ustinova (2009), 195–196. *Phusikoi* as physicians: Nutton (1970), 218; *phusikoi* and magic see Mauss (1972), 143, cf. Flint et al. (1999), 100.

¹⁰³ Musitelli (1980). Pugliese Carratelli (1970), 245; Ustinova (2004), 29.

¹⁰⁴ Ustinova (2004); Ustinova (2009), 191–199.

¹⁰⁵ Strabo 14. 1. 44; Ustinova (2009), 86–87.

¹⁰⁶ Οὐλις [—] ἱατρομ[αντ—] Ἀπολλῶ[—], Vecchio (2003), No. 20, cf. *SEG* 53. 114; Ebner (1970), 262; Pugliese Carratelli (1970), 247; Fabbri and Trotta (1989), 69.

¹⁰⁷ Ustinova (2009), 197–199. For other interpretations of the function of *phōleos* in Elea: Pugliese Carratelli (1970), 245. Musitelli (1980), 253–254; McKay (2000), 11; Kingsley (1999).

¹⁰⁸ Str. 14. 1. 6; Suid. s.v. *Oulios*; Macr. 1. 17. 21. Cf. Oppermann (1942); Benedum (1971); Masson (1988).

¹⁰⁹ Schneider (1998).

¹¹⁰ Benedum and Michler (1971), 299 regard the Ouliads as a *genos*. In their opinion, the name Ouliades was hereditary in this *genos* of Eleatic philosophers, traditionally worshippers of Apollo Oulios, to which Parmenides belonged.

Asclepiads.¹¹¹ The founder of the Eleatic school Parmenides *Ouliadēs* adopted his disciple Zeno, perhaps emphasizing the gentile nature of the association.¹¹²

It is noteworthy that like the Hippocratics, the Ouliads traveled throughout the Mediterranean, for instance, a fifth-century tombstone from Olbia on the Black Sea coast belongs to [O]ulios son of [Th]eodotos from Elea.¹¹³ This Eleaen Oulios may have been one of the Ouliads and a practicing healer.

Initiation ceremonies were probably required for admission into the Eleatic association. In Parmenides' *proem*, the philosopher's journey is depicted as a drive of the initiate to the world of the beyond, where the goddess discloses to him the ultimate truth. This journey is undertaken by a youth, *kouros*, of an age that was, traditionally, the time for the most significant transition rites in the life of a Greek man.¹¹⁴ The element of initiation into mystery rites is evident in the unveiling of the hidden ultimate truth to the *kouros*.

However, before meeting the goddess, the *kouros* had already been 'the man who knows' and had travelled the road which 'lies far from the paths of men,'¹¹⁵ implying that he possessed secret knowledge concealed from ordinary mortals.¹¹⁶ The *proem* appears to suggest two stages of initiations, the earlier stage endowing the select few with the ability to take the mystical road to the goddess, and the advanced stage comprising the ultimate revelation. Parmenides seems to refer to the *kouros*' apprenticeship preceding the life-changing mystical experience.¹¹⁷ It is probable, therefore, that in the Eleatic association and the Hippocratic fraternity, the initiations consisted of two sets of transition rites, at the beginning and the end of the lengthy studies.

Although the head of the Eleatics was called *iatros*, and they performed the cult of Apollo Oulios, it was primarily a philosophical association.¹¹⁸ The medical art of the healer-prophet, or revealer of healing remedies, practiced by the Ouliads, was different from that of most Asclepiads, but no less respectable.¹¹⁹ Inscriptions of the Ouliads, discovered in the Elea complex, reveal some essential facets of this school, such as their devotion to the cult of the ancestor healing god, their activities as healers, and their understanding of scientific and philosophical knowledge as a way to attain mastery over

¹¹¹ Pugliese Carratelli (1970), 246; Masson (1988), 180; Burkert (2004), 55.

¹¹² D.L. 9. 25.

¹¹³ Vinogradov (2000).

¹¹⁴ Verdenius (1948), 119; Burkert (1969), 14; Kingsley (1999), 71–74; Morgan (2000), 74; Palmer (2009), 57–58. See, however, Tarán (1965), 16; Cordero (2004), 24 for different interpretations of the word *kouros*.

¹¹⁵ DK 28 B1. 27; Verdenius (1948), 120; Burkert (1969), 5; Kingsley (1999), 62, 71–75.

According to Tarán (1965), 30, the wording of the *proem* suggests that the journey was undertaken by the author on multiple occasions; cf. Couloubaritsis (1986), 92; Coxon (1986), 161.

¹¹⁶ Coxon (1986), 15–16 suggests that this qualification assumes the *kouros*' adherence to an association resembling the Pythagorean community. On mystery cults and Parmenides, see Kingsley (1999), 71–74; Seaford (2004), 262–265; Palmer (2009), 58; Casadesús (2016), 3.

¹¹⁷ Ustinova (2009), 205–206.

¹¹⁸ Nutton (1970); Pugliese Carratelli (1970), 246; Benedum (1971), 929–935; Rawson (1985), 30–31; Morel (2000), 43–44.

¹¹⁹ Nutton (1970), 217–218; A. Eu. 62, *Supp.* 263.

natural forces. The Ouliads of Elea and the Asclepiads of Cos differed in their scientific and philosophic views, but shared an interest in natural philosophy and healing, an organisational pattern of a cultic association worshipping a healer god, and the age-old tradition of handing down professional knowledge, especially secret knowledge of magic and healing, within quasi-gentilic structures performing initiations of new members.

Empedocles

The title *iatros* could bestow much honour on its bearers: Empedocles listed healers and prophets among the noblest incarnations a human soul can reach.¹²⁰ He probably regarded himself as a healer, and his biography and poems persuaded Galen, who mentions Empedocles together with Hippocrates as an expert in medicine, and Pliny, who considered him an expert in both medicine and magic.¹²¹ Diogenes Laertius and Suda attribute to him *iatrikoi logoi*, treatises on medicine.¹²² In any case, Empedocles boasted of being able to offer a word of healing prophecy (*baxis*) for every kind of illness.¹²³ Empedocles' belief in his power was so great that in his verses, he proudly claimed to provide defence against old age, change the direction of the winds, and bring the dead back from Hades.¹²⁴ There were even some witnesses who reported having seen this healer-prophet practising sorcery (*goēteuōn*).¹²⁵ In addition, he wrote on cosmology and shared with the Hippocratics the idea that human health was governed by the same natural order as the cosmos.¹²⁶

Empedocles claims that his poems were inspired by the Muse, who required strict self-censorship: some things were not suitable 'for creatures of the day to hear.' The poems were written as an instruction to a disciple, whom Empedocles urged to keep the esoteric teaching 'mute in his breast.'¹²⁷ Ch.H. Kahn assumes that 'the partial nature of the

¹²⁰ DK 31 B146–7; on the high status of Archaic *iatroi* see Dean-Jones (2003), 101.

¹²¹ Gal. *De placitis Hippocratis*, 7; Plin. *Nat.* 29. 1. 3; 30. 2. 9; Sigerist (1961), 104–106; Vegetti (1998); Nutton (2004), 46–47; Primavesi (2009), 30–32. It is against the conventional view, that Empedocles was a philosopher-physician, that the author of *Ancient Medicine* protests (Hp. *VM* 20).

¹²² DK 31 A2; Suda s.v. *Empedocles*; D.L. 8. 77; Vegetti (1998), 291–292.

¹²³ DK 31 B112, D.L. 8. 62; Primavesi (2009), 31; *baxis* means 'oracular saying': Lloyd (2003), 26.

¹²⁴ DK 31 B111, D.L. 8. 59. The fragment caused a vivid ongoing controversy (see Todoua (2005), with bibliography); van Groningen 1956 even considers it unauthentic. For the refutation of the attempts to consider Empedocles' claims not in a literal sense, but rather as allegories, see Burkert (1972), 153–154; Kingsley (1995), 217–232. On the importance of this passage as the core of Empedocles' creed, especially in the light of the Strasbourg papyrus, see Todoua (2005).

Cf. the attack of the Hippocratic author of *On the Sacred Disease* against impious rogues and their claims; Lloyd (1979), 37.

¹²⁵ D.L. 8. 59; Philostr. *VA* 1. 2; Plin. *Nat.* 30. 1. 9; cf. Graf (1997), 33–34; Dickie (2001), 32; Todoua (2005), 58–59. Kingsley (1995), 220; Lloyd (2003), 24–27.

¹²⁶ The Hippocratics as 'cosmological doctors:' Camden (2023); on the impact of Empedocles' ideas on the humoral theory: Sigerist (1961) 108; 322; Primavesi (2009), 34; Camden (2023), 70–71.

¹²⁷ DK 31 B3, 111, Kingsley (2002), 347.

revelation makes one think of a preliminary initiation, which reserves the final disclosure for a later *epopteia*.¹²⁸ Accordingly, Empedocles's poems reflect two stages of initiation, the last one reminiscent of *epopteia*, literally 'beholding,' which is the final stage of mystery rites, and a technical term referring to the second stage at Eleusis and on Samothrace.¹²⁹ The initiation entails strict adherence to Empedocles' ideas of purity, and endows the disciple with the superhuman abilities of the teacher.¹³⁰ Thus, Empedocles' teaching and Greek mystery cults share a number of basic characteristics: secrecy of the central tenets, gradual admission of the initiate to them, the importance of ritual purity, and most significantly, the mystical nature of the doctrine.¹³¹ He also practised healing and was proud of his accomplishments.

After Empedocles, the Sicilian 'choir of doctors' flourished during the fifth century, and produced several brilliant doctors, among them Philistion, who influenced Plato and Diocles of Carystus.¹³² Many tenets of this school, most notably the theory of four elements, were adopted and developed by the Hippocratics.¹³³

THE HIPPOCRATICS, MAGNA GRAECIA, AND MYSTERY RITES

Although healer-philosophers of Magna Graecia put a great emphasis on *iatromanteia*, treatment by music and spells, and other traditional methods that were less popular with their colleagues in the Aegean,¹³⁴ the Hippocratics resembled them in many respects. The Asclepiads of Cos and the Ouliads of Elea seem to have been organised as *genē* focused on cults of divine progenitors, practiced various rituals, and restricted access to the core doctrines exclusively to the initiated. Pythagoras and his disciples insisted on special ritual purity, Empedocles echoed these ideas, and the Hippocratics underscored the purity and sacredness of those who were allowed access to medical wisdom. The Hippocratic community, the Ouliads, and Empedocles probably required two-stage initiation into their circle. Most substantially, in all these schools, including the Hippocratic school, real knowledge belonged to the initiated, and writings, even if abundant, were intended for the profane. Reading and free discourse with experts could serve as a shortcut to an opinion or an illusion of knowledge, but the path to the truth and excellence in the art had to be long and pass through initiations.

One reason for this organisational, ritual, and ideological similarity may have been the perception of the family as the basic unit of society, and the ensuing notion that all the other structures are somehow based on family ties, real or imagined. This resulted in the clan-like structure of the associations of healers and thinkers, modelled on the aristocratic *genē*.¹³⁵ Another factor to consider is the significant role of the family lineage in the transmission of professional knowledge, especially in healing, which requires long

¹²⁸ Kahn (1960), 8.

¹²⁹ Ustinova (2018), 337; above, note 68.

¹³⁰ Kingsley (1995), 360–363; Casadesús (2016), 3.

¹³¹ Kingsley (1995), 367–368; Parker (1995), 499; Ustinova (2009), 215. On philosophical doctrines as mystic revelations see Seaford (2004), 227–229; Ustinova (2018), 339–340.

¹³² Born in Locri, but often referred to as 'Sicilian' (D.L. 8. 8. 86, 89).

¹³³ Sigerist (1961), 108–109; Primavesi (2009).

¹³⁴ On the peculiarities of 'western Greek medical art' see Kudlien (1967), 36.

¹³⁵ Cf. Nutton (1995a), 19 on 'medical education in terms of family units.'

apprenticeship and practical experience. As a result, medical associations of the fifth and fourth centuries preserved and codified archaic family- or clan-like notions and norms of behaviour. In this respect, the West of the Greek world did not differ much from the East.

In contrast, the perception of the transmission of knowledge and its division into truthful or real *versus* superficial or misleading indicates a different rapport. It was in Magna Graecia of the late sixth–fifth century that the notion of ultimate or divine knowledge as a great secret to be disclosed only to the select few, following extensive studies, was articulated in intellectual circles and institutionalised within societies of philosophers-healers, most notably the Pythagoreans and the Eleatics.¹³⁶ In other words, the combination of the mystery tradition with the intellectual quest, including a significant emphasis on healing, took place in South Italy. Some specifically Pythagorean ideas (opposing suicide and abortion) and customs (sharing resources and financially supporting the master), attested to in the *Oath*, hint at the same direction.

In addition, the Italian associations, founded in historical times, could not insist on adherence to gentile principles, even if the Ouliads perpetuated the illusion of common origin. Thus, they had to invent a different way of fostering the common identity, which could serve as a model for the Asclepiads in their attempt to adapt to the changing social environment. It is, therefore, not surprising that some Hippocratics were fascinated by the practices and ideas of their Italian colleagues and appear to have combined them with the traditional concept of the Asclepiads as a *genos*.

The notion that healing, a practical art of vital importance, attained through long learning, was open only to the chosen few and after initiations, worked well because of several social and cognitive reasons. First, secrecy defines the boundary between those who possess the concealed knowledge and those who do not, and creates an aura of special power bestowed by this knowledge; as G. Simmel puts it, ‘secrecy gives the person enshrouded by it an exceptional position.’¹³⁷ Secrecy is instrumental in creating reciprocal confidence, intimacy, and collective identity,¹³⁸ and could reinforce the perception of the Hippocratic community as a quasi-family unit. The belief in the formidable efficacy of the arcane knowledge of the Asclepiads probably had a considerable cognitive impact on the patients and their families, and could be helpful in the competition between doctors and traditional healers.¹³⁹ Secrets impress, and a healer using undisclosed knowledge

¹³⁶ In the fourth century, the opposition of revelation to experiential perception played a prominent role in Plato’s ideas, and it is congenial to the Hellenic and Attic cultic tradition of mystery revelation: Riedweg (1987), *passim*, esp. 22–28; Rowe (1998), 193; Morgan (1990), 86–89; Bussanich (1999); Gómez Iglesias (2016).

¹³⁷ Simmel (1906), 464. See Simmel (1906) on secrecy and secret societies as a universal sociological form; Manderson et al. (2015), 184; Tefft (1980), 37 on secret knowledge and power; Bowden (2015) on secret knowledge in Greek religion; Blakely (2012) on the application of the anthropological perspective regarding secrecy to an analysis of a Greek mystery rite.

¹³⁸ Simmel (1906), 472–475; Manderson et al. (2015), 184.

¹³⁹ Cognitive impact, similar to the placebo effect: Sliwinski and Elkins (2013); competition: Edelstein (1967b), 88–89; Laskaris (2002), 33. For the importance of social context in generating and enhancing positive results of Hippocratic treatment, which was often ineffective or even harmful in terms of modern biomedicine, see Demand (1999); McKeown (2002).

and claiming special purity had a better chance to cure the patient. Thus, possession of concealed knowledge empowered the initiated, both in their own eyes and in the eyes of society, especially the patients and their families.

Second, initiatory rites implied exclusiveness which was advantageous for the Hippocratics in their competition with other medical practitioners, whom they presented as charlatans. In addition, the existence of the medical fraternity provided a convenient network for itinerant physicians.

Third, in the cultural climate of the fifth century, when mystery cults were flourishing everywhere,¹⁴⁰ initiations fitted well into the social and cultural environment in every Greek city. Practices perceived as mystery rites merged easily with the quasi-familial organisation of the Asclepiads also because Greek mysteries were rooted in tribal and gentile cults,¹⁴¹ and the entailing congruency of the procedures resulted in a natural fusion.

Finally, physicians adhering to the Hippocratic tradition could differ not only in their views, as reflected in the written tradition, but also in their careers and education. It is important to recognise the diversity in the training of Hippocratic physicians and their compliance with the stipulations of the *Oath* and the *Law*.

CONCLUSIONS

This analysis suggests that by the end of the fifth century, practising Hippocratic physicians were organised in an association that acted according to formal statutes. In the fourth century, its members probably addressed their colleagues as brothers, *ēdelphismenoi iētroi*. The association was based on the assumed common origin from Asclepius, and a common cult, apparently of the deities mentioned in the opening lines of the *Oath*. The Hippocratics were required to adhere to strict norms of ritual and moral purity, allowing them to regard themselves as *hieroi anthrōpoi*, *hagnoi* and *hosioi*.

The apprenticeship was long, and ideally began in the childhood of the aspiring physician. Medical *metadosis* included the study of written texts, practical expertise, and oral tradition, presumably of esoteric knowledge prohibited to the uninitiated.

It appears that the physician had to undergo rites of passage on two occasions. The first initiation was performed when he started his studies as a boy or adolescent; the second one followed years of apprenticeship and signified his becoming a full-fledged physician. After the first initiation, the novice became a ‘pupil under contract and oath according to the *nomos* of the physicians,’ and could be exposed to secret medical doctrines. The second initiation was a prerequisite to admittance to the association and an official act, after which the member was acknowledged as an *ēdelphismenos iētros*. The second ritual likely included swearing the *Oath*.

The combination of a two-stage initiation into esoteric wisdom, quasi-familial ties between the master and his disciples and the emphasis on healing as a lofty vocation, is characteristic of the associations of philosophers and healers in Magna Graecia, in particular the Pythagoreans, the Eleatics, and the followers of Empedocles. It is possible

¹⁴⁰ Burkert (1987); Scarpi (2002); Bowden (2010); Bremmer (2014).

¹⁴¹ Casadio and Johnston (2009), 6.

that the Hippocratics adopted these concepts from the Italiote associations and combined them with the norms of the Asclepiad clans of Cos and Cnidus.

The emphasis on ritual aspects, such as secrecy and purity, squares well with the long survival of therapeutic approaches common to Hippocratic medicine and traditional healing cults, first and foremost cleansing. The organisation into a brotherhood performing complex initiation rites is essential for understanding the social aspects of healthcare in Classical Greece. Though society at large had no criteria to distinguish competent doctors from frauds, the physicians themselves easily recognised properly initiated colleagues, and could even have had signs of their initiation.¹⁴² This would be the ancient equivalent of the modern-day diploma hanging on the wall.

Ben-Gurion University of the Negev

BIBLIOGRAPHY

- Andrieu, G. (2014). *Jason le guérisseur au service d'Héra*, Paris: L'Harmattan.
- Aston, E. (2011). *Mixanthrôpoi. Animal-Human Hybrid Deities in Greek Religion*, Liège: CIÉRG.
- Barker, E. (1946). *The Politics of Aristotle*, Oxford: Clarendon Press.
- Bartoš, H. (2015). *Philosophy and Dietetics in the Hippocratic On Regimen: A Delicate Balance of Health*, Leiden: Brill.
- Beazley, J.D. (1963). *Attic Red-Figure Vase-Painters*, Oxford: Clarendon Press.
- Benedum, J. (1971). 'Uliades, Ulis', in *RE Suppl.*, 921–931; 931–935.
- Benedum, J. and Michler, M. (1971). 'Parmenides Uliades und die Medizinschule von Elea', *CM* 6.4, 295–306.
- Blakely, S. (2012). 'Toward an Archaeology of Secrecy: Power, Paradox, and the Great Gods of Samothrace', *Archaeological Papers of the American Anthropological Association* 21.1, 49–71.
- Bousquet, J. (1956). 'Inscriptions de Delphes 7. Delphes et les Asclépiades', *BCH* 80, 579–591.
- Bowden, H. (2010). *Mystery Cults of the Ancient World*, Princeton: Princeton University Press.
- Bowden, H. (2015). 'Concealing and Revealing in Ancient Greek Religion and Beyond', in Mortenson, E. and Saxkjær, S.G. (eds.), *Revealing and Concealing in Antiquity: Textual and Archaeological Approaches to Secrecy*, Aarhus: Aarhus University Press, 12–21.
- Boyancé, P. (1937). *Le culte des Muses chez les philosophes grecs*, Paris: de Boccard.
- Bremmer, J. N. (1995). 'Religious Secrets and Secrecy in Classical Greece', in Kippenberg, H.G. and Stroumsa, G.G. (eds.), *Secrecy and Concealment. Studies in the History of Mediterranean and Near Eastern Religions*, Leiden: Brill, 61–78.
- Bremmer, J. N. (2002). 'How Old is the Ideal of Holiness (of Mind) in the Epidaurian Temple Inscription and the Hippocratic Oath?', *ZPE* 141, 106–108.

¹⁴² To preserve the memory of the rite, in many Greek mystery cults the initiated learned cryptic *sumbola* or *sunthēmata* of their distinction; in some cases, they kept material tokens of it: Burkert (1987), 45–47.

- Bremmer, J. N. (2014). *Initiation into the Mysteries of the Ancient World*, Berlin–Boston: De Gruyter.
- Burkert, W. (1969). ‘Das Proömium des Parmenides und die Katabasis des Pythagoras’, *Phronesis* 14, 1–30.
- Burkert, W. (1972). *Lore and Science in Ancient Pythagoreanism*, Cambridge, Mass.: Harvard University Press.
- Burkert, W. (1983). *Homo Necans*, Berkeley–Los Angeles: University of California Press.
- Burkert, W. (1987). *Ancient Mystery Cults*, Cambridge, Mass.: Harvard University Press.
- Burkert, W. (2004). *Babylon, Memphis, Persepolis: Eastern Contexts of Greek Culture*, Cambridge Mass.: Harvard University Press.
- Bussanich, J. (1999). ‘Socrates the Mystic’, in Cleary, J. (ed.), *Traditions of Platonism: Essays Presented to John Dillon*, Alershot–Brookfield: Ashgate, 29–51.
- Camden, D.H. (2023). *The Cosmological Doctors of Classical Greece. First Principles in Early Greek Medicine*, Cambridge: Cambridge University Press.
- Carrick, P.J. (2001). *Medical Ethics in the Ancient World*, Washington DC: Georgetown University Press.
- Casadesús, F. (2016). ‘The Transformation of the Initiation Language of Mystery Religions into Philosophical Terminology’, in Martín-Velasco, M.J. and Gracia Blanco, M.J. (eds.), *Greek Philosophy and Mystery Cults*, Newcastle upon Tyne: Cambridge Scholars, 1–26.
- Casadio, G., and Johnston, P.A. (2009). ‘Introduction’, in Casadio, G. and Johnston, P.A. (eds.), *Mystic Cults in Magna Graecia*, Austin: University of Texas Press, 1–29.
- Chaniotis, A., and Mylonopoulos, I. (2005). ‘Epigraphic Bulletin for Greek Religion 2002’, *Kernos* 18, 425–474.
- Chantraine, P. (1983–84). *Dictionnaire étymologique de la langue grecque*, Paris: Klincksieck.
- Clinton, K. (2003). ‘Stages of Initiation in the Eleusinian and Samothracian Mysteries’, in Cosmopoulos, M.B. (ed.), *Greek Mysteries. The Archaeology and Ritual of Ancient Greek Secret Cults*, London–New York: Routledge, 50–78.
- Cohn-Haft, L. (1956). *The Public Physicians of Ancient Greece*, Northampton Mass: Smith College.
- Cole, S.G. (1984). *Theoi Megaloi. The Cult of the Great Gods at Samothrace*, Leiden: Brill.
- Cole, S.G. (1993). ‘Voices from Beyond the Grave: Dionysus and the Dead’, in Carpenter, T.H. and Faraone, C.A. (eds.), *Masks of Dionysus*, Ithaca: Cornell University Press, 276–295.
- Collins, D. (2008). *Magic in the Ancient Greek World*, Oxford: Blackwell.
- Cordero, N.-L. (2004). *By Being, It Is*, Las Vegas: Parmenides Publishing.
- Cordes, P. (1994). *Iatros. Das Bild des Arztes in der griechischen Literatur von Homer bis Aristoteles*, Stuttgart: Franz Steiner.
- Couloubaritsis, L. (1986). *Mythe et philosophie chez Parménide*, Brussels: Ousia.
- Coxon, A.H. (1986). *The Fragments of Parmenides*, Assen: Van Gorcum.
- Craik, E. (2014). ‘The Hippocratic Law’, in Jouanna, J. and Zink, M. (eds.), *Hippocrate et les hippocratismes: médecine, religion, société. Actes du XIV Colloque International Hippocratique*, Paris: Académie des Inscriptions et des Belles-Lettres, 23–35.
- Craik, E.M. (2015). *The ‘Hippocratic’ Corpus. Content and Context*, London: Routledge.

- Dawson, W.R. (1949). 'Chiron the Centaur', *JHM* 4.4, 267–275.
- de Vogel, C.J. (1966). *Pythagoras and Early Pythagoreanism*, Assen: Van Gorcum.
- Dean-Jones, L. (2003). 'Literacy and the Charlatan in Ancient Greek Medicine', in Yunis, H. (ed.), *Written Texts and the Rise of Literate Culture in Ancient Greece*, Cambridge: Cambridge University Press, 97–121.
- Deichgräber, K. (1971). 'Die ärztliche Standesethik der hippocratischen Eides', in Flashar, H. (ed.), *Antike Medizin*, Darmstadt: Wissenschaftliche Buchgesellschaft, 94–120.
- Demand, N. (1999). 'Did the Greeks Believe in the Efficacy of Hippocratic Treatment – And, If So, Why?', in Garofalo, I., Lami, A., Manetti, D. and Roselli, A. (eds.), *Aspetti della terapia nel Corpus Hippocraticum*, Pisa: Leo S. Olschki Editore, 139–148.
- Detienne, M. (1963). *La notion de daïmôn dans le pythagorisme ancien*, Paris: Les Belles Lettres.
- Dickie, M.W. (2001). *Magic and Magicians in the Greco-Roman World*, London–New York.
- Dimitrova, N.M. (2008). *Theoroi and Initiates in Samothrace, Hesperia Suppl.* 17, Princeton: American School of Classical Studies at Athens.
- Dodd, D.B., and Faraone, C.A. eds. (2003). *Initiation in Ancient Greek Rituals and Narratives*, London–New York: Routledge.
- Dodds, E.R. (1973). *The Greeks and the Irrational*, Berkeley–Los Angeles: University of California Press.
- Ducatillon, J. (2001). 'Le Serment d'Hippocrate, problèmes et interprétations', *BAGB* 1, 34–61.
- Ebner, P. (1970). 'Nuovi iscrizioni de Velia', *PP* 25, 262–267.
- Ecce, G. (2016). *Die hippokratische Schrift Praecepta*, Wiesbaden: Dr. Ludwig Reichert Verlag.
- Edelstein, L. (1967a). 'The Hippocratic Oath: Text, Translation and Interpretation', in Temkin, O. and Temkin, C.L. (eds.), *Ancient Medicine. Selected Papers of Ludwig Edelstein*, Baltimore: Johns Hopkins University Press, 3–64.
- Edelstein, L. (1967b). 'The Hippocratic Physician', in Temkin, O. and Temkin, C.L. (eds.), *Ancient Medicine. Selected Papers of Ludwig Edelstein*, Baltimore: Johns Hopkins University Press, 87–110.
- Fabbri, M., and A. Trotta. (1989). *Una scuola-collegio di età augustea*, Rome: Bretschneider.
- Ferber, R. (2007). *Warum hat Platon die 'ungeschriebene Lehre' nicht geschrieben?* Munich: Beck.
- Flashar, H. (2016). *Hippokrates. Meister der Heilkunst*, Munich: C. H. Beck.
- Flint, V., Gordon, R., Luck, G. and Ogden, D. (1999). *Witchcraft and Magic in Europe: Ancient Greece and Rome*, London: Athlone.
- Gabrielsen, V. and Paganini, M.C.D. (2023). 'Associations' Regulations from the Ancient Greek World and Beyond: An Introduction', in Gabrielsen, V. and Paganini, M.C.D. (eds.), *Private Associations in the Ancient Greek World. Regulations and the Creation of Group Identity*, Cambridge: Cambridge University Press, 1–38.
- Gantz, T. (1993). *Early Greek Myth*, Baltimore: The Johns Hopkins University Press.
- Garrison, E.P. (1991). 'Attitudes Towards Suicide in Ancient Greece', *TAPA* 121, 1–34.

- Geller, M.J. (2004). 'West Meets East: Early Greek and Babylonian Diagnosis', in Horstmanshoff, H.F.J. and Stol, M. (eds.), *Magic and Rationality in Ancient Near Eastern and Graeco-Roman Medicine*, Leiden: Brill, 11–61.
- Gisler-Huwiler, M. (1986). 'Cheiron', in *LIMC* 3.1, 237–248.
- Gómez Iglesias, M.R. (2016). 'The Echoes of Eleusis: Love and Initiation in the Platonic Philosophy', In Martín-Velasco, M.J. and García Blanco, M.J. (eds.), *Greek Philosophy and Mystery Cults*, Newcastle upon Tyne: Cambridge Scholars Publishing, 61–102.
- Gorrini, M.E. (2005). 'The Hippocratic Impact on Healing Cults: The Archaeological Evidence in Attica', in van der Eijk, P.J. (ed.), *Hippocrates in Context*, Leiden: Brill, 135–156.
- Gourevitch, D. (1984). *Le triangle hippocratique dans le monde gréco-romain. Le malade, sa maladie et son médecin*, Paris: École française de Rome.
- Graf, F. (1995). 'Excluding the Charming: The Development of the Greek Concept of Magic', in Meyer, M. and Mirecki, P. (eds.), *Ancient Magic and Ritual Power*, Leiden: Brill, 29–60.
- Graf, F. (1997). *Magic in the Ancient World*, Cambridge, Mass.: Harvard University Press.
- Griffith, A. (1987). 'Democedes of Croton: A Greek Doctor at the Court of Darius', in Sancisi-Weerdenburg, H. and Kuhrt, A. (eds.), *Achaemenid History II: The Greek Sources*, Leiden: Nederlands Instituut voor het Nabije Oosten, 37–51.
- Harland, P.A. (2005). 'Familial Dimensions of Group Identity: 'Brothers' (ΑΔΕΛΦΟΙ) in Associations of the Greek East', *JBL* 124.3, 491–513.
- Harris, E. (2015). 'Toward a Typology of Greek Regulations about Religious Matters', *Kernos* 28, 53–83.
- Harris, E.M. (2020). 'Many Ancient Greek Occupations, but Few Professions', in Stewart, E., Harris, E. and Lewis, D. (eds.), *Skilled Labour and Professionalism in Ancient Greece and Rome*, Cambridge: Cambridge University Press, 29–67.
- Harris, W.V. (2016). 'Popular Medicine in the Classical World', in Harris, W.V. (ed.), *Popular Medicine in Graeco-Roman Antiquity: Explorations*, Leiden: Brill, 1–64.
- Hermann, A. (2004). *To Think Like God. Pythagoras and Parmenides. The Origins of Philosophy*, Las Vegas: Parmenides Press.
- Hoessly, F. (2001). *Katharsis: Reinigung als Heilverfahren. Studien zum Ritual der archaischen und klassischen Zeit sowie zum Corpus Hippocraticum*, Göttingen: Vandenhoeck & Ruprecht.
- Holton, S. (2022). *Sleep and Dreams in Early Greek Thought. Presocratic and Hippocratic Approaches*, London: Routledge.
- Jaccottet, A.-F. (2005). 'Un dieu, plusieurs mystères? Les différents visages des mystères dionysiaques', in Bonnet, C., Rüpke, J. and Scarpi, P. (eds.), *Religions orientales – culti misterici*, Stuttgart: Franz Steiner, 219–230.
- Jeanmaire, H. (1949). 'Chiron', in *Mélanges H. Grégoire (Annuaire de l'Institut de Philologie et d'Histoire Orientales et Slaves 9)* Vol. 1, Bruxelles, Éditions de l'Institut, 255–265.
- Joly, R. (1966). *Le niveau de la science hippocratique. Contribution à la psychologie de l'histoire des sciences*, Paris: Les Belles Lettres.

- Jones-Lewis, M. (2016). 'Physicians and "schools"', in Irby, G.L. (ed.), *A Companion to Science, Technology, and Medicine in Ancient Greece and Rome*, Chichester: Wiley Blackwell, 386–401.
- Jones, W.H.S. (1924). *The Doctor's Oath. An Essay in the History of Medicine*, Cambridge: Cambridge University Press.
- Jones, W.H.S. (1923). *Hippocrates*, Cambridge Mass.: Harvard University Press.
- Jouanna, J. (1999). *Hippocrates*, Baltimore: Johns Hopkins University Press.
- Jouanna, J. (2012). *Greek Medicine from Hippocrates to Galen. Selected Papers*, Leiden: Brill.
- Jouanna, J. (2018). *Hippocrate. Le serment. Les serments chrétiens. La loi*, Paris: Les Belles Lettres.
- Kahn, C.H. (1960). 'Religion and Natural Philosophy in Empedocles' Doctrine of the Soul', *AGPh* 42, 3–35.
- Kahn, C.H. (2001). *Pythagoras and the Pythagoreans. A Brief History*, Indianapolis: Hackett.
- Kapparis, K.A. (2002). *Abortion in the Ancient World*, London: Duckworth Academic.
- King, H. (1998). *Hippocrates' Woman: Reading the Female Body in Ancient Greece*, New York–London.
- Kingsley, P. (1995). *Ancient Philosophy, Mystery, and Magic. Empedocles and Pythagorean Tradition*, Oxford: Oxford University Press.
- Kingsley, P. (1999). *In the Dark Places of Wisdom*, London: Duckworth.
- Kingsley, P. (2002). 'Empedocles for the New Millennium', *AncPhil* 22, 333–413.
- Kouloumentas, S. (2016). 'The Pythagoreans on Medicine: Religion or Science?', in Renger, A.-B. and Stavru, A. (eds.), *Pythagorean Knowledge from the Ancient to the Modern World: Askesis, Religion, Science*, Wiesbaden: Harrassowitz Verlag, 249–261.
- Kudlien, F. (1967). *Der Beginn des medizinischen Denkens bei den Griechen*, Zurich.
- Kudlien, F. (1970a). 'Medical Education in Classical Antiquity', in O'Malley, C.D. (ed.), *The History of Medical Education*, Berkeley–Los Angeles: University of California Press, 3–37.
- Kudlien, F. (1970b). 'Medical Ethics and Popular Ethics in Greece and Rome', *CM* 5, 91–121.
- Lane Fox, R. (2020). *The Invention of Medicine. From Homer to Hippocrates*, New York: Basic Books.
- Lane, M. (2013). 'Claims to Rule: The Case of the Multitude', in Deslauriers, M. and Destreé, P. (eds.), *The Cambridge Companion to Aristotle's Politics*, Cambridge: Cambridge University Press, 247–274.
- Langholf, V. (1990). *Medical Theories in Hippocrates. Early Texts and the 'Epidemics'*, Berlin–New York: De Gruyter.
- Laskaris, J. (2002). *The Art is Long. On the Sacred Disease and the Scientific Tradition*, Leiden: Brill.
- Lehmann, P.W. (1969). *Samothrace. The Hieron*, New York: Pantheon Books.
- Leith, D. (2007). 'The Hippocratic Oath in Antiquity and on Papyrus', in Froscheuer, H. and Römer, C. (eds.), *Zwischen Magie und Wissenschaft. Ärzte und Heilkunst in Paryri aus Ägypten*, Wien: Phoibos Verlag, 43–54.
- Leven, K.-H. (2018). 'Ethics and Deontology', in Pormann, P.E. (ed.), *The Cambridge Companion to Hippocrates*, Cambridge: Cambridge University Press, 152–179.

- Lévy, I. (1927). *La légende de Pythagore: de Grèce à Palestine*, Paris: Champion.
- Lichtenthaeler, C. (1984). *Der Eid des Hippokrates: Ursprung und Bedeutung*, Cologne: Deutscher Ärzte-Verlag.
- Littré, É. (1961). *Oeuvres complètes d'Hippocrate*. Reprint of the 1827–61 ed., Amsterdam: Hakkert.
- Lloyd, G.E.R. (1979). *Magic, Reason, and Experience: Studies in the Origin and Development of Greek Science*, Cambridge: Cambridge University Press.
- Lloyd, G.E.R. (2003). *In the Grip of Disease: Studies in the Greek Imagination*, Oxford: Oxford University Press.
- Longrigg, J. (1993). *Greek Rational Medicine: Philosophy and Medicine from Alcmaeon to the Alexandrians*. London: Routledge.
- Mackie, C.J. (2001). 'The Earliest Jason. What's in a Name?', *GR* 48.1, 1–17.
- Manderson, L., Davis, M., Colwell, C. and Ahlin, T. (2015). 'On Secrecy, Disclosure, the Public, and the Private in Anthropology', *Current Anthropology* 56, 183–190.
- Marasco, G. (1999). 'Terapia e difesa dell'arte medica in alcuni scritti del *Corpus Hippocraticum*', in Garofalo, I., Lami, A., Manetti, D. and Roselli, A. (eds.), *Aspetti della terapia nel Corpus Hippocraticum. Atti del IXe Colloque International Hippocratique*, Firenze: Leo S. Olschki, 163–175.
- Masson, O. (1988). 'Le culte ionien d'Apollon Oulios, d'après des données onomastiques nouvelles', *JS*, 173–181.
- Mauss, M. (1972). *A General Theory of Magic*, London: Routledge and K. Paul.
- McKay, A.G. (2000). 'Apollo the Healer at Elea/Velia (Lucania)', in *Gods in a Landscape. Papers of Section 14 of the 100th Joint Meeting APA/AIA, Washington DC 1998 (Études classiques 9)*, Luxembourg: Publications du Centre universitaire de Luxembourg, 11–21.
- McKeown, N. (2002). 'The Hippocratic Patient: Or an Archaeology of the Greek Medical Mind', in Arnott, R. (ed.), *The Archaeology of Medicine. BAR International Series 1046*, Oxford: Archaeopress, 53–67.
- Miles, S.H. (2005). *The Hippocratic Oath and the Ethics of Medicine*, Oxford: Oxford University Press.
- Morel, J.-P. (2000). 'Observations sur les cultes de Velia,' in Hermary, A. and Tréziny, H. (eds.), *Les cultes des cités phocéennes. (Études massaliètes 6)*, Aix-en-Provence: Edisud, 33–49.
- Morgan, K.A. (2000). *Myth and Philosophy from the Presocratics to Plato*, Cambridge: Cambridge University Press.
- Morgan, M.L. (1990). *Platonic Piety. Philosophy and Ritual in Fourth-Century Athens*, New Haven: Yale University Press.
- Morrison, J.S. (1956). 'Pythagoras of Samos', *CQ* 6, 135–156.
- Motte, A. (2000). 'À propos de la magie chez Platon: l'antithèse sophiste-philosophe vue sous l'angle de la pharmacie et de la sorcellerie', in Moreau, A. and Turpin, J.-C. (eds.), *La Magie*, Montpellier: Université Montpellier, 267–292.
- Moulinier, L. (1952). *Le pur et l'impur dans la pensée des Grecs*, Paris: Klincksieck.
- Mourelatos, A.P.D. (2008). *The Route of Parmenides. Revised and Expanded Edition*, Las Vegas–Zurich–Athens: Parmenides.
- Musitelli, S. (1980). 'Ancora sui PHOLARCHOI di Velia', *PP* 35, 241–255.

- Nachmanson, E. (1918). *Erotiani vocvm Hippocraticarvm collectio cvm fragmentis*, Göteborg: Eranos' förlag.
- Nicholson, N. and Selden, A. R. (2019). *The Rhetoric of Medicine. Lessons on Professionalism from Ancient Greece*, Oxford: Oxford University Press.
- Nutton, V. (1985). 'Murders and Miracles: Lay Attitudes Towards Medicine in Classical Antiquity', in Porter, R. (ed.), *Patients and Practitioners*, Cambridge: Cambridge University Press, 23–53.
- Nutton, V. (1995a). 'The Medical Meeting Place', in van der Eijk, P.J., Horstmanshoff, H.F.J. and Schrijvers, P.H. (eds.), *Ancient Medicine in Its Socio-Cultural Context*, Amsterdam–Atlanta GA: Rodopi, 3–26.
- Nutton, V. (1995b). 'Medicine in the Greek World, 800–50 BC', in Conrad, L.I., Never M., Nutton, V., Porter, R. and Wear, A. (eds.), *The Western Medical Tradition*, Cambridge: Cambridge University Press, 11–38.
- Nutton, V. (1996). 'Hippocratic Morality and Modern Medicine', in Flashar, H. and Jouanna, J., eds., *Médecine et morale dans l'Antiquité*, Geneve: Vandoeuvres, 31–64.
- Nutton, V. (2004). *Ancient Medicine*, London–New York: Routledge.
- Nutton, V. (1970). 'The Medical School of Velia', *PP* 25, 211–225.
- Ogden, D. (2002). *Magic, Witchcraft, and Ghosts in the Greek and Roman Worlds*, Oxford: Oxford University Press.
- Oppermann, H. (1942). 'Oulios', in *RE* 18.2, 1999.
- Palmer, J. (2009). *Parmenides and Presocratic Philosophy*, Oxford: Oxford University Press.
- Parker, R. (1983). *Miasma. Pollution and Purification in Early Greek Religion*, Oxford: Oxford University Press.
- Parker, R. (1995). 'Early Orphism', in Powell, A. (ed.), *The Greek World*, London–New York: Routledge, 483–510.
- Parker, R. (1996). *Athenian Religion. A History*, Oxford: Oxford University Press.
- Patera, I. (2019). 'Individuals in the Eleusinian Mysteries: Choices and Actions', in Fuchs, M. Linkenbach, A., Mulsow, M., Otto, B.-C., Parson, R.B. and Rüpke, J. (eds.), *Religious Individualisation. Historical Dimensions and Comparative Perspectives*, Berlin–Boston: De Gruyter, 669–694.
- Patterson, L. E. (2010). *Kinship Myth in Ancient Greece*, Austin: University of Texas Press.
- Pfister, F. (1951). *Die Reisebilder des Herakleides. Einleitung, Text, Übersetzung und Kommentar mit einer Übersicht über die Geschichte der griechischen Volkskunde*, Wien: In Kommission bei R. M. Rohrer.
- Philips Simpson, P.L. (1997). *The Politics of Aristotle*, Chapel Hill: The University of North Carolina Press.
- Phillips, E.D. (1973). *Greek Medicine*, London: Thames and Hudson.
- Picard, C. (1951). 'Le culte et la légende du centaure Chiron', *REA* 53, 1–25.
- Pleket, H.W. (1995). 'The Social Status of Physicians in the Greco-Roman World', in van der Eijk, P.J., Horstmanshoff, H.F.J. and Schrijvers, P.H. (eds.), *Ancient Medicine in Its Socio-Cultural Context*, Amsterdam–Atlanta GA: Rodopi, 27–34.
- Potter, P. (2022). *Hippocrates*, Cambridge Mass.: Harvard University Press.

- Primavesi, O. (2009). 'Medicine Between Natural Philosophy and Physician's Practice: A Debate Around 400 BC', in Elm, S. and Willich, S.N. (eds.), *Quo Vadis Medical Healing. Past Concepts and New Approaches*, New York: Springer, 29–40.
- Pugliese Carratelli, G. (1970). 'Ancora su PHOLARCHOS', *PP* 25, 243–248.
- Pugliese Carratelli, G. (1990). *Tra Cadmo e Orfeo*, Bologna: Societa editrice il Mulino.
- Pugliese Carratelli, G. (1996). *The Western Greeks. Classical Civilization in the Western Mediterranean*, London: Thames and Hudson.
- Pugliese Carratelli, G. (1963). 'PHOLARCHOS', *PP* 18, 385–386.
- Rawson, E. (1985). *Intellectual Life in the Late Roman Republic*, Baltimore: Johns Hopkins University Press.
- Richard, M-D. (1986). *L'enseignement oral de Platon*, Paris: Cerf.
- Riedweg, C. (1987). *Mysterienterminologie bei Platon, Philon und Klemens von Alexandria*, Berlin–New York: De Gruyter.
- Riedweg, C. (2005). *Pythagoras. His Life, Teaching, and Influence*, Ithaca: Cornell University Press.
- Robbins, E. (1975). 'Jason and Chiron: The Myth of Pindar's Fourth Pythian', *Phoenix* 19, 205–213.
- Robin, L. (1935). *Platon*, Paris: Alcan.
- Rodríguez Alfageme, I. (2014). 'Médecine hippocratique et médecine populaire', in Jouanna, J. and Zink, M. (eds.), *Hippocrate et les hippocratismes: médecine, religion, société*, Paris: De Boccard, 37–58.
- Rosen, S. (1968). *Plato's Symposium*, New Havens: Yale University Press.
- Rougemont, R. (1977). *Corpus des inscriptions de Delphes*, Vol. 1, Paris: De Boccard.
- Roux, R. (1949). *Le problème des Agronautes*, Paris: De Boccard.
- Rowe, C. J. (1998). *Plato: Symposium, Edited with Introduction, Translation and Commentary*, Warminster: Aris & Phillips.
- Rowe, C. J. (2003). *Plato*, London: Bristol Classical Press.
- Rudhardt, J. (1992). *Notions fondamentales de la pensée religieuse et actes constitutifs du culte dans la Grèce classique*, Paris: Picard.
- Samama, É. (2003). *Les médecins dans le monde grec*, Geneve: Librairie Droz.
- Sayre, K. M. (1988). 'Plato's Dialogues in the Light of the *Seventh Letter*', in Griswold, C.L. (ed.), *Platonic Writings/Platonic Readings*, London–New York: Routledge, 93–109.
- Scarpi, P. (2002). *Le religioni dei misteri*, Milan: A. Mondadori.
- Schneider, C. (1998). 'Apollon Ulios in Velia?', *AA*, 306–317.
- Schubert, C. (2005). *Der hippocratische Eid*, Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schuddeboom, F.L. (2009). *Greek Religious Terminology – Telete and Orgia*, Leiden: Brill.
- Seaford, R. (2004). *Money and the Early Greek Mind*, Cambridge: Cambridge University Press.
- Sherwin-White, S.M. (1978). *Ancient Cos*, Goettingen: Vanderhoeck & Roprecht.
- Sigerist, H.E. (1961). *A History of Medicine*. Vol. 2: *Early Greek, Hindu, and Persian Medicine*, Oxford: Oxford University Press.
- Simmel, G. (1906). 'The Sociology of Secrecy and Secret Societies', *American Journal of Sociology* 11.4, 441–498.

- Sliwinski, J. and Elkins, G.R. (2013). 'Enhancing Placebo Effects: Insights from Social Psychology', *American Journal of Clinical Hypnosis* 55.3, 236–248.
- Smith, W. D. (1990). *Hippocrates. Pseudoepigraphic Writings*, Leiden: Brill.
- Sommerstein, A.H. (2013). *Thesmophoriazusae. Edited with an Introduction, Translation and Commentary*, Oxford: Aris & Phillips.
- Tarán, L. (1965). *Parmenides. A Text with Translation, Commentary, and Critical Essays*, Princeton: Princeton University Press.
- Tefft, S.K. (1980). 'Secrecy, Disclosure, and Social Theory', in Tefft, S.K. (ed.), *Secrecy. A Cross-Cultural Perspective*, New York: Human Sciences Press, 35–74.
- Temkin, O. (1977). 'Greek Medicine as Science and Craft', in Temkin, O. (ed.), *The Double Face of Janus and Other Essays in the History of Medicine*, Baltimore: The Johns Hopkins University Press, 137–153.
- Thorn, J.C. (1995). *The Pythagorean Golden Verses*, Leiden: Brill.
- Todoua, M. (2005). 'Empédocle: empêche-vents ou dompteur des mauvais génies? Réflexions autour du fr. 111 Diels-Kranz', *Bull.Budé* 1, 49–81.
- Totelin, L. 2020. 'Do No Harm. Phanostrate's Midwifery Practice', *Technai, An International Journal for Ancient Science and Technology* 11, 129–143.
- Turcan, R. (1966). 'Chiron le mystagogue', in Heurgon, J., Picard, G., and Seston, W. (eds.), *Mékanges J. Carcopino*, Paris: Librairie Hachette, 927–937.
- Ustinova, Y. (2004). 'Truth Lies at the Bottom of a Cave: Apollo Pholeuterios, the Pholarchs of the Eleats, and Subterranean Oracles', *PP* 59, 25–44.
- Ustinova, Y. (2005). 'Jason the Shaman', in Gebauer, J., Grabow, E., Jünger, F. and Metzler, D. (eds.), *Bildergeschichte. Festschrift K. Stähler*, Münster: Bibliopolis, 507–514.
- Ustinova, Y. (2009). *Caves and the Ancient Greek Mind. Descending Underground in the Search for Ultimate Truth*, Oxford: Oxford University Press.
- Ustinova, Y. (2018). *Divine Mania. Alteration of Consciousness in Ancient Greece*, London: Routledge.
- Ustinova, Y. (2023). 'Hands of Gods' at Work: Magic and Hippocratic Catharsis', *Journal of Cognitive Historiography* 8.1–2, 45–68.
- van der Eijk, P.J. (2004). 'Divination, Prognosis and Prophylaxis: The Hippocratic Work 'On Dreams' (*De Victu* 4) and Its Near Eastern Background', in Horstmanshoff, H.E.J. and Stol, M. (eds.), *Magic and Rationality in ancient Near Eastern and Graeco-Roman Medicine*, Leiden: Brill, 187–218.
- van der Eijk, P. J. (2005). 'The 'Theology' of the Hippocratic Treatise *On the Sacred Disease*', in van der Eijk, P.J., *Medicine and Philosophy in Classical Antiquity*, Cambridge: Cambridge University Press, 45–73.
- van Groningen, B.A. (1956). 'Le fragment 111 d'Empédocle', *C&M* 17, 47–61.
- van Groningen, B.A. (1966). *Theognis. Le premier livre*, Amsterdam: N. V. Noord – Hollandsche Uitgevers Maatschappij.
- van Hooff, A.J.L. (1990). *From Autothanasia to Suicide. Self-killing in Classical Antiquity*, London: Routledge.
- Vecchio, L. (2003). *Le iscrizioni greche di Velia*. Denkschriften, 316, Wien: Österreichische Akademie der Wissenschaften.

- Vegetti, M. (1998). 'Empedocle 'medico e sofista' (*Antica Medicina* 20)', in Fischer, K.-D., Nickel, D. and Potter, P. (eds.), *Text and Tradition. Studies in Ancient Medicine and its Transmission*, Leiden: Brill, 289–299.
- Verdenius, W.J. (1948). 'Parmenides' Conception of Light', *Mnemosyne* 2, 116–131.
- Vesperini, P. (2021). 'Philosophie et cultes à mystères: d'une historiographie l'autre', in Massa, F. and Belayche, N. (eds.), *Les Philosophers et les mystères dans l'empire romain*, Liège: Presses Universitaires de Liège, 29–58.
- Vinogradov, J.G. (2000). 'Heilkundige Eleaten in den Schwarzmeergründungen', in Dreher, M. (ed.), *Bürgersinn und staatliche Macht in Antike und Gegenwart. Festschrift W. Schuller*, Konstanz: Universitätsverlag Konstanz, 133–141.
- von Staden, H. (1992). 'Women and Dirt', *Helios*, 7–30.
- von Staden, H. (1996a). 'Character and Competence. Personal and Professional Conduct in Greek Medicine', in Flashar, H. and Jouanna, J. (eds.), *Médecine et morale dans l'Antiquité*, Genève: Vandoeuvres, 157–195.
- von Staden, H. (1996b). "'In a Pure and Holy Way": Personal and Professional Conduct in the Hippocratic Oath?', *JHM* 51.4, 404–437.
- von Staden, H. (2003). 'Galen's Daimon: Reflections on "Irrational" and "Rational"', in Palmieri N. (ed.), *Rationnel et irrationnel dans la médecine ancienne et médiévale*, Saint-Étienne: Publications de l'Université Saint-Étienne, 15–43.
- von Staden, H. (2007). 'The "Oath", the Oaths, and the Hippocratic Corpus', in Boudon-Millot, V., Guardasole, A. and Magdelaine, C. (eds.), *La science médicale antique. Nouveaux regards*, Paris: Beauchesne, 425–466.
- Waterfield, R. (1993). *Plato. Republic*, Oxford: Oxford University Press.
- White, H. (2005). *What Is What-Is? A Study of Parmenides' Poem*, New York: Peter Lang.
- Witt, M. (2014). 'The "Egoistic" Physician – Considerations About the "Dark" Sides of Hippocratic Ethics and Their Possible Aristocratic Background', in Jouanna, J. and Zink, M. (eds.), *Hippocrate et les hippocratismes: médecine, religion, société. Actes du XIV Colloque International Hippocratique*, Paris: Académie des Inscriptions et des Belles-Lettres, 101–122.
- Yoshitake, S. (1994). 'Disgrace, Grief and Other Ills: Heracles' Rejection of Suicide', *JHS* 114, 135–153.