JOANNA KOMOROWSKA (UKSW, WARSZAWA)

THE ANCIENT HIPPOCRATES: GALEN AND THE APOLOGY OF MEDICINE IN THE PROTREPTICUS

SUMMARY: Easy as it is to consider Galen's *Protrepticus* a straightforward exercise in the art of hortative rhetorics, it seems advisable to consider the ramifications and the role played by the philosophical hypotext: given the details of the argument, one may easily be reminded of certain passages of the Platonic *Gorgias*, as well as the importance of the actual imagery exploited in the course of exposition. In doing so, the essay seeks to reevaluate the Galenic work and put it in the wider context of philosophizing discourses of the era.

KEYWORDS: Galen, Protrepticus, ancient medicine, philosophy

There are several interesting features to Galen's *Protrepticus*. While arguably quite compatible with other examples of the genre, it is one of the rare examples of medical adhortation, thus providing us with an insight into a bias intrinsic in very specific type of introduction. Second, owing to its actual construction and strongly rhetorical flavour, it provides an interesting glimpse of Galen's own erudition and knowledge of his intended audience – the authors and examples he chose were, after all, expected to evoke a specific response in the original readers. At the same time, one may view the *Protrepticus* as a valuable testimony to the role played by Classical authors (not to mention

Classical examples) in the imperial education, or, even more interestingly, as a source allowing us a glimpse of the actual practice of quoting: it can be effectively argued that Galen's quotations seem all the more interesting for their silent reliance on the audience appreciation of their original context.¹

Let us, however, start by briefly considering the actual composition of the *Protrepticus*. It opens, significantly enough, with an argument in favor of man's exercise of his intellectual powers – as the only rational being in the sublunary sphere, he is distinguished by this very rationality, and, hence, bound to be at his best when using it. In short, this is the famous argument from the hierarchical arrangement of the living beings, employing the differentia specifica concept for purposes of ethics: effectively, the duty to focus on the intellectual development stems from our very uniqueness in the world.² Capable of discursive thought and of mastering diverse technai because of our being human, we are obliged to fulfil the promise of the inborn and uniquely human talents. The argument is hardly new: it returns time and again in the thought of Classical times, being reworked and systematized in the later philosophical schools. Nevertheless, while one may think of various precedents for the argument itself, its placement in the opening of the treatise seems to look back to the Aristotelian tradition and the opening of the Nicomachean Ethics.3 The precedent would be strikingly appropriate, given the overall importance and influence exercised by Aristotle's works or, in Galen's case, by the Stagirite's consistent

¹ Since the question of genre and the related issues of *imitatio veterum* and *eruditio* were discussed by Szarmach (1990) it seems unnecessary to consider the purely external aesthetics of the *Protrepticus*: instead, I propose to consider the actual role of the erudite excurses and rhetorical ornamentation adorning the short treatise, thus unmasking the careful construction of meaning, the indirect hints and implications intended to convey to the original reader the subtlety and completeness of medicine as the ultimate science.

² The argument emerges quite clearly in the NE 1098a (from these premises it follows that the Good of man is the active exercise of his soul's faculties in conformity with excellence or virtue, or if there be several human excellences or virtues, in conformity with the best and most perfect among them; trans. H. Rackham). See also EE 1245a.

³ Essentially, the issue of a happy (successful) life is the focus of entire Book One of *NE*. On the Aristotelian argument compare the outline in Hutchinson 1995.

interest in biology.⁴ Even more importantly, the imperial era came to recognize the Aristotelian type of exposition as particularly fitting in scientific discourse, a point well taken by Ptolemy (witness the proem of his *Syntaxis*⁵). As a consequence, in mirroring the Aristotelian beginning, Galen may be seen as clearly locating himself and his work within the scientific tradition.

While praising the intellectual achievements of man and the multitude of various arts and capabilities at his disposal, the opening chapter of the *Protrepticus* hints at a profound difference between *technai*: while weaving or wax-shaping emulate the achievements of animals. certain arts can be seen as deriving from higher, divine plane – this is true of archery, music, and, most certainly, medical art, all of these coming under the Apolline protection. Interestingly, the fundamental division of the arts will be reiterated later, in the closing section of the work - however, a significant twist will be introduced to the argument, as Galen shall concentrate on the type of capacity involved in the relevant mastery: for now, however, he is content to indicate a distinction hailing to the original possessor of the art, but also on the issue of subject – it is hardly accidental that immediately after mentioning astronomy, Galen invokes the Pindaric passage concerning human knowledge: the latter is shown to encompass both what lies below the earth's surface and beyond the limits of the sky (i.e. beyond the scope of physical vision and sensory experience). Philosophy, summit of true knowledge, defined as the most divine of all goods, emerges as the ultimate good of a human individual, man alone being capable of participating in a bonum that is shared with the divine. Nevertheless, one notes, philosophy is not something we would usually define as techne: for example, the word is significantly missing from the collection of definitions compiled in the opening chapter of Alcinous' Didascalicus. Interestingly, a possible explanation of Galen's choice may be sought in his wish to elevate the medical lore: after all, medicine is traditionally considered to be

⁴ On Galen's interest in Aristotelian biological writings compare Moraux 1985, see also García-Ballester 1971.

⁵ On the subject see Komorowska 1996; on the importance of the Aristotelian tradition (most importantly, the concept of *diaeresis*) within the framework of imperial literature see Barton 1994: *passim*.

a paradigmatic techne, an art par excellence, a lore equipped with a set array of principles, methods, procedures and, most importantly, aiming at obtaining a single, well defined, objective: health.⁶ While a not-so--slight preference for the theoretical (as in the inquiry into the ultimate cause of being) may be detected in philosophy, it can nevertheless be perceived as the art of good life – by emphasizing the practical aspect of philosophical investigation, its fulfilment of man's promise, and hence. the ability to improve the quality of life, philosophy may be portrayed as similar to other *technai* in providing a palpable, well defined result. By contrast, at first glance, medicine appears to display a purely practical outlook (after all, its result is usually defined as health *tout court*). a fact possibly detracting from its importance. Thus, by mentioning philosophy at the closure of technai-focused passage, by hinting at its practical aspect, and by implying that it is to be considered the highest of all arts available to men. Galen may be seeking to redress the traditional balance, tipping it in favour of his beloved discipline.

Having described intellectual pursuits as the only distinctively human occupation (one notes the brevity of this particular section, located in ch. 1), Galen begins his second argument – this time, he will invoke the resiliency of this particular good. Significantly, he begins by drawing the convincing image of Tyche's cortege: the clamorous, often discontent and doomed crowd, rushing hither and thither as their blind goddess happens to lead them (ch. 2): this image is subsequently (ch. 3) contrasted with the seriousness and dignity characteristic of those following Hermes. Now, there are several interesting features to these juxtaposed images. First, there is a difference of traditional portrayal: a principal contrast is between Tyche, female, blind, holding an oar even when on dry land, ever mobile on her spherical base, and Hermes, male, bright-eyed, firmly located on his cube. This more or less set image is followed by that of respective movement: while Tyche is in constant, but chaotic, rush, ever subject to chance motion, all her followers clamouring vociferously for her favours or, conversely, complaining of

⁶ The paradigmatic character of medicine was duly emphasized by Jaeger (1964: II 22-62 and 279-283). On Socratic (or Platonic) understanding of *techne* as attested in the dialogues compare Smith 1998.

her betrayal, the crowd ever swarming around her, Hermes (one notes that the god steps into the place of protector of arts hitherto associated with his brother, Apollo) walks at steady pace, surrounded by carefully ordered cortege. Clearly, the ultimate origins of this twin image may be sought both in the Prodicean tale of Heracles' choice (for the general idea) and in Plato's *Phaedrus* (for the divine cortege),⁷ but one also notes Galen's evocation of actual image tradition as attested in the visual arts: this mirrors the revaluation of the latter so well-attested in second-century literature: the artists (and certainly the ancient artists) are credited with particular insight into the nature of the divine.⁸

Hardly surprising, the difference of manner transfers from the patron divinity to his/her followers: when the worshippers of Tyche (ch. 4) are themselves capricious and unstable (witness the complaints voiced at every appearing misfortune), those following Hermes (ch. 5) are shown to display noteworthy dignity both in the face of both extreme happiness and disaster. Very much in the rhetorical tradition, actual examples follow fast upon respective images: crowding around Tyche are Lidian king Croesus, his conqueror Cyrus, the doomed Polycrates of Samus, Priam, exiled Dionysius the Younger – all of them are well known to have experienced sudden and decisive change of fortune and status.⁹ Meanwhile, the procession following Hermes is lead by those considered in Galen's time to be paradigmatic sages: Socrates, Homer, Plato

⁷ Szarmach (1990: 207) locates the origins of this contrasting image in the rhetorical tradition alone, invoking several examples of similar construction. He also stresses (quite rightly, though this hardly promotes the idea of Galen's work as a purely rhetorical creation) that in a *protrepticus* any philosopher would of necessity be forced to employ the technical schema and devices defined by rhetorical manual; unfortunately, one may as easily claim that any self-respecting rhetorician would of necessity be forced to be respectably well versed in practical philosophy, with possible inkling of the main principles of theoretical reflection (as manifested by the doxographic collections of the era, cf. Mansfeld, Runia 1997; 204-207).

⁸ The idea appears in Dio's Olympic speech, but for the spread of this particular concept one may also invoke Valens' remarks on Nemesis in his *Anthologiae* II 42. 90-93.

⁹ Incidentally, one also notes that all Galen's examples are drawn from the Geek history – not a single Roman appears, even where context plainly invokes such an occurrence – after all, Marius is often considered as a paradigm of Fortune's changeability.

and, one hardly needs to add, the founder of medicine, Hippocrates (ch. 5 p. 8 K.). Once again, medicine is portrayed as equal to philosophical wisdom, its founder holding a secure place among the princes of human knowledge.

This persuasive image of contrasting divinities gives way to the first focal point of Galen's exposition: the discussion of the anthropinon agathon – in rejecting the claims of wealth and provenance (both family and land are discounted as sources of individual good). Galen invokes the long tradition of distinguishing the true and the indifferent goods. these latter being dependent on an excessive number of external circumstances. One swiftly notes the strongly Homeric flavour of his argument concerning the ambivalence of inherited, hence external, glory (ch. 7) - one is, after all, to surpass the fame of ancestors (countrymen), which tends to favour those of hitherto unknown name or country; by contrast. a failure to equal that former ancestors is a cause of shame – as a result. a claim to illustrious family name and/or famous origin may well prove to be a double-edged benefit: thus, it cannot be considered good in itself. One does well to note the strongly agonistic flavouring of the argument, focused as it is on the acquisition of fame – it certainly sits well with the protreptic character of the work, but also anticipates the further development of Galen's discussion, foreshadowing the importance of sporting or, to be more precise, athletic exercise in the next section of the work.

Indeed, the final, considerable part of the *Protrepticus* (ch. 10sq.) is dominated by a sustained attack on athletics.¹⁰ This is an interesting choice on the author's part: after all, athletics, a practice claiming to care for the human body, its development and power, seems to have a focus very similar to that of medicine (a similarity noted as early as Plato's *Gorgias*¹¹) – it claims to contribute to the human happiness,

¹⁰ Szarmach (1990: 208) notes the excessive, nearly caricatural nature of the Galen's attack. While he tends to explain it by invoking rhetorical rules of debate as established in contemporary manuals (which is undoubtedly right), an additional explanation may probably be sought in the employment of established philosophical paradigm, sanctioned by no lesser figures than Plato and Aristotle.

¹¹ *Gorgias* 452ab. One notes that the dialogue achieved considerable popularity and figured prominently in the intellectual formation of second-century elite (on the issue compare Dodds 1959: 68-69).

but this happiness is understood as welfare of bodily form. 12 Several points can be made at this juncture: first, there is the similarity of focus, resulting in Galen's attempt to portray athletics as a false medicine, second, there is the question of medicine conceived as one of total (theoretical, as well as practical) arts. The two issues interact. allowing Galen to form an argument against athletics based on two specific charges which allude respectively to the misplaced focus and to the intrinsic deceit. Thus, firstly, athletics denigrates human dignity. reducing an individual to the level of emulating beasts rather than gods (a fundamental failure given that similarity to the divine distinguishes humans from other living creatures); this is further emphasized by its failure to elevate the practitioners above the level of animals on the mere level of athletic achievement – after all, no man can run faster than a hare or prove stronger than an elephant. Second, in claiming to improve the body, athletics contributes to its actual destruction, thus proving to be a false *techne*. ¹³ Now, the argument of deception is a well-known element of Platonic dialogues, sophistic (or rhetorics) being systematically charged with making people worse rather than better – it is highly likely that Galen counted on his reader recognizing the underlying pattern of his own exposition and thus, counted on his response being influenced by the respective association. Athletics. he argues, fails on every possible count – in its excessive focus on the body it reinforces the bestial element in human nature, yet because of methods employed, it deceives the body as well. These two principal charges are supplemented by additional points: athletics is shown to be unable (in spite of its promises) to provide bodily beauty, stamina,

¹² One is consequently reminded of the contrast between medicine and gymnastics drawn by Aristotle in *NE* 1096a (*opportunity in war comes under the science of strategy, in disease under that of medicine; and the due amount in diet comes under medicine, in bodily exercise under gymnastics*; trans. H. Rackham); additional complications stem from Galen's peculiar understanding of medicine as lore far exceeding the limits drawn by the Stagirite.

¹³ This is particularly interesting given that in Plato's *Gorgias* gymnastics is awarded some merit as an art of maintaining the body (cfr *Gorgias* 464c *et al.*) – in fact, his argument concerning the falsity of athletics may be seen as an improvement (correction) of that of Plato.

military prowess, or any social advantage – hence, it advances neither communal nor individual good.

Finally, a brief word on some technical peculiarities of Galen's argument (not so much on the rhetorical devices employed, but on the actual strategy motivating the author's respective choices). Ouite often it invokes the commonly known facts and phenomena, relying on the assumption that human beings, endowed as they are with to logistikon for the most part tend to recognize the true value of things: thus, by instinct. humans value trained dogs and expert slaves over their unschooled counterparts, being similarly drawn to health and beauty rather than sickness or ugliness. The preference for intellectual development, indeed, the appreciation for learning is thus portrayed as inborn correlate of our distinctive intellectual ability: as a result, the rejection and disrespect for theoretical arts emerges as mistaken, but also, more importantly, as unnatural. In fact, negligence of arts, implies Galen (echoing the concepts of Plato, Aristotle, and Hellenistic philosophers), involves the rejection of our own humanity, purposeful and wholly mistaken abandonment of the kinship with the divine – in neglecting Hermes, we effectively condemn ourselves to the life of chance, change and instability, life similar to that of the aloga, incapable as those latter are of mastering their responses to the external world, and yet infinitely worse, for it implies rejection of our own potential for betterment. It is even worse should one fall for one of the false arts – here, we encounter the entrapments of regime, stability and rule, but without the reliable benefits characteristic of the true techne: as the practitioner of false arts is misled into accepting false premises, he falls for the pays by being ultimately despoiled of the very benefits he strove to acquire (in case of athletes, health and physical beauty).

Three longer *chreiai* are employed in the exposition, the first being the story of Aristippus in Syracuse (ch. 5; I, 8-9 K.), exemplifying the intransigence of intellectual development (the philosopher recognizes the nature of hitherto unknown land through recognizing the geometrical drawing in the sand and responds by invoking an easily recognizable element of Greek culture – Sophocles). Others include a didactic tale of humans' universal appreciation for the cultivated, namely the story of Diogenes at the banquet (ch. 8; I, 18-19 K.) and, later in the text (ch. 10; I, 26 K.), the tale of Phryne's wit illustrating the triumph

of true virtue over its false imitation (it also illustrates the triumph of nature over its false mirror – cosmetics, a point of particular importance given this latter's affinity to medicine: where medical arts aims at health, cosmetics are intended to provide the appearance of this particular good¹⁴), and the story of Milo's death (ch. 13: I. 34-35 K.). All the *chreiai* are suitably short and very much to the point; while both the stories of Aristippus and Diogenes illustrate the intrinsically civilized appreciation for intellectual arts, the first of them may be taken to indicate the immediate use of arts, while at the same time hinting at the existence of intellectual community (after all, cultured people are shown to recognize one another through references to the same literary code). Meanwhile, the apparently rude behaviour of Diogenes is clearly intended to remind the reader – in a manner much befitting the Cynical discourse – of the unsuitability of man neglecting his own education. Thus, these two seem to have been endowed with a relatively clear purpose and meaning. Meanwhile, the story of Phryne may, at first glance, appear devoid of deeper connection with the actual theme: what it does present, however, is a reference to the distinction between truth and falsehood, hence, by implication, a connection to the fundamental difference between the true and the false arts and sciences (this is made particularly manifest by the direct reference to the art of cosmetics – the latter figures prominently among the adulatory arts in the works of Plato¹⁵). Finally, Milo exemplifies the futility of athletic pursuits and the uselessness of strength when devoid of thought – his death, after all, results from the brutish desire to display superior strength where expertise would win the day. Not being content with longer examples, Galen supplements his exposition (according to the *poikilia* principle) with a number of shorter references: thus, examples of Anacharsis and Themistocles adorn the consideration of *genos* and paternal glory.

¹⁴ Compare *Gorgias* 465b. It is quite noteworthy, for in Plato's dialogue cosmetics is the adulatory equal (evil twin) of gymnastics, as it provides an appearance of what gymnastics can actually achieve. Here, cosmetics masks the (perceived and extremely superficial) defects of nature in a manner similar to that in which athletics seeks to endow a man with pretense of speed, strength, etc. It seems likely that highlighting this particular propensity for the false is Galen's intention in the passage.

¹⁵ Thus e.g. *Gorgias* 463b.

Also, one notes an impressive number of quotations: these range from Hippocrates, Homer (mostly *Ilias*), Euripides (with possible emphasis on the *Antiope*). Pindar, Sappho (a single distiction). Sophocles. to the attested Delphic responses. The antiquity of authorities invoked. one notes, agrees with the tendency for the archaic/Classical attested in the exempla, the preference for the ancient constituting a well-known feature of the imperial literature. 16 Significantly, the quotations (where we have a possibility for appropriate comparison) seem to show particular sensitivity to the original context – indeed, it seems highly likely that the original context was intended to influence the reader's response. The possibility is particularly real in the case of a single quotation from the *Odvssey*: in the middle of the attack on athletics. Galen invokes Odysseus' acerbic response to the taunting challenges of Euryalus in 8. 169-173. The scene to which he alludes is highly agonistic, with the hero being challenged to participate in a wrestling match with Alcinous' son, and with his intellect emerging as a weapon to be reckoned with in a verbal confrontation against the uncouth adversary (one also notes that, after the exchange, Odysseus wins the athletic match as well). Hence, Galen's employment of the words is likely aimed at evoking the whole scene with its famous conclusion; as a result, the superiority of wit and education over brute strength is thereby asserted both expressly and implicitly. A similar, though possibly even more complex, set of references may be detected in the case of the slightly modified quotation from the last book of *Ilias* appearing in the very same context:

"Αλλοι μέν ἡα θεοί τε καὶ ἀνέρες ἱπποκορυσται Εὖδον παννύχιοι μαλακῷ δεδμημένοι ὕπνῷ 'Αλλ' οὐκ ἀθλητὰς κακοδαίμονας ὕπνος ἔμαρπεν

(Now all the other gods and men, lords of chariots, slumbered the whole night through, overcome of soft sleep; but not upon the hapless athletes might sleep lay hold...; trans. A. T. Murray with modifications).

Here, Galen interferes with the text itself, yet this interference seems to play upon the original content and meaning: in substituting athletes for the original Hermes, protector of mortals, the Pergamene positively

¹⁶ On this shift in the perception of antiquity compare Boys-Stones 2001: 3-59.

inverts the original sense, hence emphasizing the unnaturalness and futility of the athletic way of life. The substitution is all the more important once we consider that, earlier in the treatise, the divinity is considered to be a patron of arts and sciences, philosophy, poetry and medicine - hence. Hermes' absence from the line may be seen as purposefully intended to provide the reader with an additional insight into the misery of athletai: removed from the community of gods and men, they live unnatural and lamentable existence with no divine patron to watch over them, their lot (at least in this particular respect) more lamentable than that of Priam. Finally, one wishes to note the repeated allusions to the Euripidean Autolycus: the vehement renouncement of athletics put in the mouth of the wily hero is intended to highlight the intrinsically bestial nature of satyrs, the latter being only half human and prone to carnal excesses.¹⁷ While one may suspect that the exact context of this particular discourse might not have been immediately recognizable to Galen's reader, it is to be noted that the passage in question returns repeatedly in ethical and antiquarian writings of second century – it is likely that, like Praxithea's speech from the *Erechtheus*, it came to function as a saying in its own, a fixed element of criticism aimed the athletic pursuits. 18

To summarize: Galen's argument in the *Protrepticus* appears elaborated, strikingly consistent, and to the point. While manifestly building a case for intellectual investigation and theoretical research in general, and while praising philosophy as the most elevated gift bestowed upon humankind, Galen continues to hint at the importance and truth

¹⁷ For the outline of *Autolycus* and other possible attributions of Fr. 282 compare Collard, Cropp 2008: 278-281.

¹⁸ Significantly, Diogenes Laertius invokes a line of the same speech when discussing Solon's lack of respect for the athletes (DL I 56). The passage is also invoked by Plutarch in *De genio Socratis* 581f, and Athenaenus X 413c, which may hint at its popularity within the aphoristic and gnomic discourse concerning the transience of athletic pursuits.

The Praxithea speech (Fr 14 Cropp) as employed by Lycurgus in his *Against Leocrates* provides nearly no clue to the context or audience's response to the queen's eagerness to contribute to the town's survival by having her daughter sacrificed. While sacrifices of the type are generally lauded by within the framework of Euripides' plays, Praxithea's resoluteness would, in all likelihood, be perceived as slightly troubling and, in a woman, unnatural.

of medicine, employing a series of discursive techniques intended to anticipate his final assertion of medicine's supremacy. The focus on medicine's natural rival, athletics, the careful introduction of Hippocrates into the select group of Hermes' favourite companions, even his choice of quotations – all of these constitute indirect, vet distinctive. indications of his actual preference. This may be a rhetorical declamation, but, pace Szarmach (1990: 208), it was written by an author almost painfully aware of the contemporary philosophical debates, in fact by the same author who will embark on a perilous quest to locate the hegemonikon in his De placitis. The philosophical undercurrent is detectable in Galen's carefully masked anxiety concerning the position of medicine, in his desire to locate it among theoretical sciences; it is also manifest in his will to exploit the philosophical element of contemporary education: in fact, he constantly interacts with philosophical legacy of the past, weaving it into his exposition and relying on his reader's ability to recognize the otherwise known elements. The frequent appearances of Diogenes, the Gorgias or Protagoras – like duality of the true and the false arts, the educational anecdotes of the type known to us from a large number of philosophical works – all those contribute to the meaning of the *Protrepticus* – and all capably employed in order to evoke a planned response in the reader. It remains in a manner impossible to declare whether the treatise is primarily philosophical or rhetorical: in accordance with postulates of the second sophistic. 19 it is a perfect union of the two, aimed at manifesting the power of man's intellectual abilities. And while the Pergamene may manifest an impressive command of rhetorical techniques, and equally daunting knowledge of practical philosophy, he is first and foremost a true supporter of a very particular branch of medicine, of whom a comprehensive portrait survives in his de optimo medico.20 Thus, there is no real conflict between the rhetorical and the philosophical here – they are both ruthlessly employed to argue for the art most consummate.

¹⁹ On the respective vision of true rhetorical art as being immediately cognate with philosophy compare e.g. Boulanger 1968: 218-270.

²⁰ One may wish to invoke J. Jouanna's insightful contribution to Galen's studies; for the Pergamene, there exists an intellectual, theoretical art of medicine that remains available only to the most talented, most intellectually adept humans (Jouanna 2009).

REFERENCES

- Barton T., 1994, Power and knowledge: astrology, physiognomics, and medicine under the Roman Empire, Ann Arbor.
- Boys-Stones, G. R., 2001, Post-Hellenistic philosophy: a study of its development from the Stoics to Origen, Oxford.
- Boulanger A., 1968, Aelius Aristide et la sophistique dans la provincie d'Asie au IIe siècle de notre ère, Paris.
- Collard C., Cropp M. (ed.), 2008, Euripides: Fragments, Cambridge (Ma).
- Dodds E. R. (ed.), 1959, Plato: Gorgias, Oxford.
- Hutchinson D. S., 1995, 'Ethics', [in:] J. Barnes (ed.), *The Cambridge companion to Aristotle*, Cambridge, pp. 195-232.
- García-Ballester L., 1971, 'La utilización de Platon y Aristoteles en los escritos tardíos de Galeno', *Episteme*, 2, pp. 112-120.
- Jaeger W., 1964, Paideia, 2 vols., tłum. M. Plezia, Warszawa.
- Jouanna J., 2009, 'Does Galen have a medical programme for intellectuals and faculties of the intellect?', [in:] Ch. Gill, T. Whitmarsh, J. Wilkins (eds.) *Galen and the world of knowledge*, Cambridge, pp. 190-205.
- Komorowska J., 1996, 'Changing attitude toward science: astronomy in II AD', [in:] J. Styka (ed.), *Greek and Roman literature and the transformations of civilization in Antiquity. Studies of Greek and Roman literature*, Kraków, pp. 131-137.
- Mansfeld J., Runia D., 1997, *Aetiana: The method and intellectual context of a doxographer*, vol. 1: *The sources*, Leiden.
- Moraux P., 1989, 'Galen and Aristotle's *de partibus animalium*', [in:] A. Gotthelf (ed.), *Aristotle on nature and living things*, Pittsburgh 1985, pp. 327-344.
- Smith A. M., 1998, 'Knowledge and expertise in the early Platonic dialogues', *Archiv für die Geschichte der Philosophie*, 80, pp. 129-161.
- Szarmach M., 1990, 'Galena Zachęta do studiowania sztuk', Meander, 45, pp. 205-208.