issn: 2176-5960







n. 42 maio - agosto de 2023

## PITHANON IN GALEN'S ON DOCTRINES OF HIPPOCRATES AND PLATO (PHP)<sup>1</sup>

Marcus de Aquino Resende<sup>2</sup>

**ABSTRACT:** In *PHP* Galen presents four kinds of premises: scientific; dialectical; rhetorical; and sophistical. According to Galen, the rhetorical premises are classified as based on external witnesses, opinions and are only persuasive ( $\pi \iota \theta \alpha v \delta v$ ). In *PHP* II 5.20 Chrysippus uses *pithanon* to defend the truth that the heart is the seat of thought. Galen criticizes Chrysippus and his followers for using the rhetorical premises to support the doctrine that the heart is the commanding centre of the soul ( $\dot{\eta} \gamma \epsilon \mu \sigma v \delta v$ ). This research addresses the occurrences of *pithanon* in *PHP* and how Galen argues against Chrysippus defending the thesis that *pithanon* cannot produce knowledge.

KEYWORDS: Galen; Premises; PHP; Chrysippus; Hegemonikon; Rhetorical; Persuasive; Pithanon.

Galen<sup>3</sup> writes *On the Doctrines of Hippocrates and Plato* (from now on *PHP*) to critique physicians, Peripatetics, and Chrysippian Stoics about the psychic powers that govern humans and their locations in the human body. He considers his criticism to be justifiable because they have come to the wrong conclusions while selecting premises that are not scientific. According to him, his opponents' conclusions are based on sophistic and persuasive premises<sup>4</sup>.

<sup>2</sup> PhD in philosophy at the Universidade Federal de Sergipe (UFS).

<sup>&</sup>lt;sup>1</sup> This research was presented at the conference Stoic Logic and Perception of Persuasion, in July 2022, at the University of Kent, sponsored by The British Academy (BA), the Mind Association, the British Society for the History of Philosophy (BSHP), the Classical Association (CA) and the Aristotelian Society.

<sup>&</sup>lt;sup>3</sup> Aelius Galenus or Claudius Galenus or Galen of Pergamon (129-216 EC) was a Greek physician, surgeon and philosopher in the Roman Empire.

<sup>&</sup>lt;sup>4</sup> GALEN, *PHP* I, Testimony VI, Refutation of Stoic Errors)

άντικπυς μὲν ψευδῆ τὰ τοιαῦτα, περὶ ῶν ἐν τῶ πρώτῷ βιβλίῷ διῆλθον ἐπὶ πλέον, ὅταν ἤτοι μηδὲν τῶν ἀλόγων ζῷων ἐπιθυμεῖν τις ἤ θυμοῦσθαι φάσκῃ, καθάπερ οἱ ἀπὸ τῆς Στοᾶς, ἢ πάλιν ἐκ καρδίας πεφυκέναι τὰ νεῦρα.

έπεδείξαμεν οὖ ἤδη καὶ διὰ τοῦ πρώτου βιβλίου περὶ τῆς πρὸς ἑαυτὸν ἐναντιολογίας τοῦ Χρυσίππου.

Patently false are premises such as those discussed at some length in the first book, when one says, as the Stoics do, that no irrational animal feels desire, anger, or again, that the nerves grow from the heart. (Lacy's translation)

Already in the first book we showed how Chrysippus contradicted himself. (Lacy's translation)

The focus of Galen's argument in *PHP* lies on the method used to ground knowledge. He points to the method of demonstrative inquiry ( $\dot{\alpha}\pi o\delta\epsilon\iota\kappa\tau\iota\kappa o\varsigma$ ) as the one proper for those who wants to discover the scientific truth about the affective, appetitive, and rational capacities of the human soul. According to him, only scientific premises can be used in order to constitute scientific knowledge.

When Galen directs his critique towards the Stoics who follow Chrysippus - the main target of *PHP* - he is also addressing to those who share the same doctrine that the heart is the commanding centre of the soul ( $\dot{\eta}\gamma\epsilon\mu\sigma\nu\kappa\dot{\sigma}\nu$ ). Chrysippus becomes the main target among the Stoics because he is the proponent of the theory concerning the location of the human soul in the heart<sup>5</sup>. Galen argues that Chrysippus, while presenting his demonstrations, is inconsistent with the tenets of the logic he himself developed. For the Stoics, logic involves epistemology, study of sophisms, among other things, contrary to the approach of the modern understanding of the term. According to the Stoics, the mastering of logic, which they regard as a science and one of the three parts of philosophy, is essential for the wise to be infallible in argument<sup>6</sup>.

In *PHP*, Galen criticises Chrysippus for presenting arguments concerning the physical position of the *hegemonikon* in the human body, accusing him of using persuasive and false premises grounded on ambiguities<sup>7</sup>, in order to prove that the seat of the human soul is located in the heart. According to Galen, Crhysippus fails to present proper medical anatomy knowledge and to supply philosophical or scientific premises to defend his thesis. Consequently, for Galen, Chrysippus arguments do not constitute knowledge because the premises he uses have no scientific basis, nor are empirically grounded. As Tieleman states:

Galen thereby entered the long-standing controversy over the seat of the 'ruling part'  $(\dot{\eta}\gamma\epsilon\mu\sigma\nu\kappa\dot{\sigma}\nu)$  of the soul, or intellect. He was convinced that his experiments decided the issue in favour of Plato's tripartite theory: reason resides in the brain, anger in the heart and desire in the belly (specified by Galen as the liver). This meant defeat (or so he thought) for those who located the main psychic functions in the heart - the Peripatetics, most of the Stoics and a number of physicians. (TIELEMAN, 1996, xiii)

### THE FOUR KINDS OF PREMISES

In order to stablish which kind of premises ( $\lambda \eta \mu \alpha \tau \alpha$ ) must be used in scientific demonstration, Galen presents a fourfold epistemic taxonomy:

<sup>&</sup>lt;sup>5</sup> See *PHP* I Testimonies and Fragments II

<sup>&</sup>lt;sup>6</sup> DINUCCI, 2016, p. 20

<sup>&</sup>lt;sup>7</sup> See PHP I Testimonies and Fragments VI; PHP II 2.4-8;II 2.12;II 5.57-78;II 5.94.

### [T1] GALEN, *PHP* II, 3.11

καὶ σοφιστὰς ἐξελέγξαι καὶ πεῖραν λαβεῖν κυήσεως μειρακίου καὶ μαιεύσασθαι καὶ προσαγαγεῖν ἐπί τινος εὕρεσιν ἀπορῆσαί τε ποιῆσαι,ταυτὶ μὲν ἅπαντα διαλεκτικά τε κάλει, εἰ βούλοιο, καὶ γυμναστικὰ καὶ τοπικά, τῶν γὰρ ὀνομάτων οὐ φροντίζω, διορίζειν δὲ ταῦτα πειρῶ τῶν ἐπιστημονικῶν· ὅσα δ' ἔτι τούτων ἀποκεχώρηκεν ἐξωτέρω καὶ μάλιστα διὰ παραδειγμάτων ἐνδόξων τε καὶ πολιτικῶν ἐπαγωγῶν τέ τινων τοιούτων ἢ μαρτύρων εἰς σύστασιν ἀφικνεῖται, ταῦτ' εἰ βούλοιο πιθανά τε καὶ ῥητορικὰ προ αγορεύειν, οὕ μοι μέλει τῆς κλήσεως, γνωρίζειν δὲ αὐτῶν χρὴ πειρᾶσθαι τὴν φύσιν· ἔτι δὲ μᾶλλον ἀπ οκεχώρηκε τῆς οὐσίας τοῦ ζητουμένου τὰ σοφιστικά.

Some (premises) are used by dialectician for practice, for refuting sophists, for testing a young's man pregnancy, playing the midwife, leading him to some discovery, and raising questions in his mind; all of these, if you wish, you may call dialectical, gymnastic, and topical, for I am not concerned about the names; but try to distinguish them from scientific premises. Others are even more remote than these and are constructed chiefly from generally accepted and every-day examples and from certain inductions of the same sort or from witnesses. These you may call, if you wish, persuasive and rhetorical, for I do not care what name you give them; but you must try to learn their nature. (Lacy's translation slightly modified)

### [T2] GALEN, *PHP* II, 8.2)

ἐκάλουν δὲ τὸ μὲν πρῶτον γένος αὐτῶν ἐπιστημονικόν τε καὶ ἀποδεικτικόν, τὸ δὲ δεύτερον γυμναστικ όν τε καὶ ὡς <ἂν> Ἀριστοτέλης ὀνομάσειε διαλεκτικόν, τὸ δὲ τρίτον πιθανόν τε καὶ ῥητορικόν, τὸ δὲ τ ἑταρτον σοφιστικόν, ἐπεδείκνυόν τε τὰ μὲν ἀπὸ τῶν ὑπαρχόντων τε καὶ συμβαινόντων τῆ καρδία συνι στάμενα κατὰ [μόνον] μὲν αὐτὸ τὸ ζητούμενον πρᾶγμα τῶν ἐπιστημονικῶν εἶναι λημμάτων, τὰ δ' ἄλλα σύμπαντα διαλεκτικά, τὰ δ' ἀπὸ τῶν ἑξωθεν μαρτύρων ῥητορικά, τὰ δ' ὁμωνυμίαις τισὶν ἢ τοῖς τῆς λέξεως σχήμασι πεπανουργημένα σοφιστικά.

From the beginning my object in this book has been to exhibit the four kinds of premises. I called the first kind of them scientific and demonstrative, the second useful for training and, as Aristotle would say, dialectical, the third persuasive and rhetorical, and the fourth sophistical; and I showed that of the premises based on the properties and attributes of the heart, those that are pertinent to the very matter under investigation belong to the class of scientific premises, and all the rest are dialectical, that (premises) taken from external witnesses are rhetorical, and those that are fraudulently exploit certain homonyms or forms of expression are sophistical. (Lacy's translation)

Summing up the evidence presented in T1 and T2, we can assert that Galen distinguishes among four kinds of premises:

(a) Scientific premises (ἐπιστημονική): are demonstrative (ἀποδεικτικά<sup>8</sup>), are based on physical properties (ὑπάρχοντα<sup>9</sup>) and attributes (συμβαίνω<sup>10</sup>). Besides these characteristics, Galen elsewhere inform us that scientific premises are genuine knowledge (ἐπιστήμη<sup>11</sup>) and refer to essence (ὑυσία<sup>12</sup>);

<sup>&</sup>lt;sup>8</sup> See *PHP* II 2.3;II 3.7;II 5.96;II 8.2;II 8.23;III 1.20;VII 1.8;12;17;21;VII 2.17;VIII 1.8;17-18;

<sup>&</sup>lt;sup>9</sup> See *PHP* II 4.3;II 5.46;II 8.2;III 1.4;III 6.2

<sup>&</sup>lt;sup>10</sup> *PHP* II 8.2;III 6.2

<sup>&</sup>lt;sup>11</sup> See PHP II 8.2-3; VII 1.8; II 3.9; II 4.1

<sup>&</sup>lt;sup>12</sup> *PHP* II 3.9;III 6.2;VII 1.23;VIII 1.3

(b) Dialectical premises (διαλεκτική): useful for training (γυμναστική<sup>13</sup>), also derived from properties (ὑπάρχοντα<sup>14</sup>) and attributes (συμβαίνω<sup>15</sup>), not demonstrative (ἀποδεικτικά), but may have scientific validity<sup>16</sup>;

c) Rhetorical premises (ῥετορική): based on external witnesses<sup>17</sup>, on opinions  $(\delta \delta \xi \alpha^{18})$ , they can only be persuasive  $(\pi \iota \theta \alpha v \delta v)^{19}$ ;

(d) Sophistical premises ( $\sigma o \phi_1 \sigma \tau_1 \kappa \eta$ ): ambiguous ( $\dot{\alpha} \mu \phi_1 \beta o \lambda_1 (\alpha^{20})$ ) and fraudulent.

This research proposes to address the rhetorical premise that Galen classifies as *pithanon* (persuasive) and relates it to speculative philosophy, specifically with Chrysippus' defence of his thesis about the *hegemonikon* as seated in the heart. *Pithanon* and related occur in *PHP* at least forty-two times.

Galen was also familiar with the use of *pithanon* by leading Stoic exponents. We are interested here to highlight two Chrysippus' quotes reported by Galen representing Chrysippus understanding of persuasion.

The first quote is in *PHP* II 5.20. Here Chrysippus uses *pithanon* to defend the truth that the heart is the seat of thought, so *pithanon* is persuasive and leads to truth:

**[T3]** Galen *PHP* II 5.20 (=*SFV* II 894)

πιθανὸν δὲ καὶ ἄλλως, εἰς ὃ ἐνσημαίνεται τὰ λεγόμενα, καὶ σημαίνεσθαι ἐκεῖθεν καὶ τὰς φωνὰς ἀπ' ἐκείνου γίγνεσθαι κατὰ τὸν προειρημένον τρόπον.

And it is persuasive besides that utterances should receive their meaning from the place to which they convey meaning and that words should come from there in the manner described. (Lacy's translation with slight modification)

The second quote is in *PHP* III 8.4. In this quote Chrysippus uses the notion of *pithanon* to mean a false idea that the *hegemonikon* is located in the head, so here *pithanon* is persuasive and misleading:

[**T4**] Galen, *PHP* III 8.4 (*=SVF* II 909):

τὸ γὰρ τὴν Ἀθηνᾶν, μῆτιν οὖσαν καὶ οἶον φρόνησιν, ἐκ τῆς κεφαλῆς γενέσθαι τοῦ Διὸς σύμβολόν

<sup>20</sup> *PHP II* 4.4;III 1.4

<sup>&</sup>lt;sup>13</sup> *PHP* II 8.3

<sup>&</sup>lt;sup>14</sup> *PHP* II 8.3;III 1.4

<sup>&</sup>lt;sup>15</sup> See *PHP* II 4.3-4;II 8.3

<sup>&</sup>lt;sup>16</sup> See *PHP* VI 3.2.

<sup>&</sup>lt;sup>17</sup> See *PHP* II 8.2;III 1.4

<sup>18</sup> PHP II 4.4

<sup>&</sup>lt;sup>19</sup> See *PHP* II 3.11;II 8.2. Nonetheless, in other parts of *PHP* Galen extends the persuasive character also to sophistical premises. (See *PHP* II 2.18;III 1.20;III 2.8)

φασιν εἶναι τοῦ ταύτῃ τὸ ἡγεμονικὸν εἶναι· οὐ γὰρ ἄλλως ἂν ἐν τῇ κεφαλῇ γενέσθαι μῆτιν καὶ φρόνησιν, εἰ μὴ τὸ ἡγεμονικὸν ἐν ταύτῃ ἐστί πιθανοῦ μέν τινος ἐχόμενοι, διαμαρτάνοντες δ' ὡς ἐμοὶ φαίνεται καὶ ἀγνοοῦντες τὰ περὶ τούτων ἱστορούμενα, περὶ ὧν οὐ χεῖρόν ἐστιν ἐπὶ πλέον εἰπεῖν τοῖς ἐνεστῶσι ζητήμασι.

I hear that some people speak in support of the view that the governing part of the soul is in the head. For, they say, the birth of Athena, who is wisdom and, as it were, thought, from the head of Zeus signifies that the governing part is there; otherwise, wisdom and thought would not arise in the head, if the ruling part is not in it. Their argument has a certain persuasiveness, but they are mistaken, as it seems to me, and they are unaware of the details of the story. (Lacy's translation with slight modification)

The question we now ask is: how can *pithanon* in Chrysippus, according to Galen's record in *PHP*, mean a persuasive argument that leads to truth or a persuasive argument that leads to error?

Tieleman says we can find a good lead in SVF II 109, a fragment reported by Plutarch (*SR* 1036E (*SVF* II 109) where "Chrysippus discusses the exposition not only of opposite arguments, but also of 'the  $\pi \iota \theta \alpha \nu \dot{\alpha}$  on both sides"<sup>21</sup>:

# [T5] SR 1036E (SVF II 109)

καίτοι αὐτὸς ὅτι τοῦτ' αὐτὸ φοβεῖται, σαφῶς ὑποδείκνυσιν ἐν τῷ τετάρτῳ περὶ Βίων, ταῦτα γράφων· 'οὐχ ὡς ἔτυχε δ' οὐδὲ τοὺς ἐναντίους ὑποδεικτέον λόγους οὐδὲ <τὰ> πρὸς τὰ ἐναντία πιθανὰ ἀλλ' εὐλαβουμένους μὴ καὶ περισπασθέντες ὑπ' αὐτῶν τὰς καταλήψεις ἀφῶσιν, οὕτε τῶν λύσεων ἰκανῶςἂν ἀκοῦσαι δυνάμενοι καταλαμβάνοντές τ' εὐαποσείστως· ἐπεὶ καὶ οἱ κατὰ τὴν συνήθειαν καταλαμβάνοντες καὶ τὰ αἰσθητὰ καὶ τὰ ἄλλα ἐκ τῶν αἰσθήσεων ῥαδίως προΐενται ταῦτα, καὶ ὑπὸ τῶν Μεγαρικῶν ἐρωτημάτων περισπώμενοι καὶ ὑπ' ἄλλων πλειόνων καὶ δυναμικωτέρων ἐρωτημάτων.

The opposite arguments and the persuasiveness on opposite side are to be exhibited not at random but with care lest the hearers be diverted by them and actually lose hold of their apprehensions because they cannot understand the solutions adequately and have their apprehensions insecurely, since the very people who apprehended in accordance with common experience both sensible objects and the other things that depend on the senses easily give these up when diverted by the dialectical questions of the Megarians or by others more numerous and more cogent. (Cherniss' translation with slight modification)

Tieleman also affirms that Sedley has already presented a more accurate understanding of *pithanon* in the early Stoics and in Chrysippus, untying it from the interpretation linked to Carneades' scepticism<sup>22</sup>. The support for this more accurate perspective of *pithanon* is presented in Sextus Empiricus (SEXTUS, *M*. VII 174-5) as follows:

<sup>&</sup>lt;sup>21</sup> "But the fragment of the *On Lives* also alludes to another aspect; Chrysippus seems to imply that in dialectical debate the  $\pi \iota \theta \alpha v \dot{\alpha}$  may also be used for constructive purposes, i.e. they may serve to induce, or strengthen, one's grasp of a true presentation. At any rate, the fact that an argument is 'merely' convincing does not make it altogether unfit for philosophical discussion." TIELEMAN, 1996, p. 265.

<sup>&</sup>lt;sup>22</sup> TIELEMAN, 1996, p. 265

- a) that which is true and appears true; i.e. that is, *pithanon* in the sense of obvious, or convincing;
- b) that which is false but appears true; e.g. in the way in which false arguments can be called convincing;
- c) that which is common both to what is true and to what is false.

# [T6] SEXTUS, M. VII 174-5

τὸ δὲ πιθανὸν ὡς πρὸς τὸ παρὸν λέγεται τριχῶς, καθ' ἕνα μὲν τρόπον τὸ ἀληθές τε ὃν καὶ φαινόμενον ἀληθές, καθ' ἕτερον δὲ τὸ ψευδὲς μὲν καθεστὼς φαινόμενον δὲ ἀληθές, κατὰ δὲ τρίτον τὸ [ἀληθὲς] κοινὸν ἀμφοτέρων. ὅθεν τὸ κριτήριον ἔσται μὲν ἡ φαινομένη ἀληθὴς φαντασία, ῆν καὶ πιθανὴν προσηγόρευον οἱ ἀπὸ τῆς Ἀκαδημίας, ἐμπίπτει δὲ ἔσθ' ὅτε καὶ ψευδής, ὥστε ἀνάγκην ἔχειν καὶ τῆ κοινῆ ποτὲ τοῦ ἀληθοῦς καὶ ψευδοῦς φαντασία χρῆσθαι. οὐ μέντοι διὰ τὴν σπάνιον ταύτης παρέμπτωσιν, λέγω δὲ τῆς μιμουμένης τὸ ἀληθές, ἀπιστητέον ἐστὶ τῆ ὡς <ἐπὶ τὸ πολὺ ἀληθευούσῃ' τῷ γὰρ ὡς ἐπὶ τὸ πολὺ τάς τε κρίσεις καὶ τὰς πράξεις κανονίζεσθαι συμβέβηκεν.

Persuasiveness, in the present instance, is used in three senses – in the first, of that which both is and appears true; in the second, of that which is really false but appears true; in the third, of that which is at once both true and false. Hence the criterion will be the apparently true presentation, which the Academics called "persuasive"; but sometimes the impression it makes is actually false, so that we compelled at times to make use of presentation which is at once true and false. But the rare occurrence of this kind – the kind I mean which imitates the truth – should not make us distrust the kind which "as a general rule" reports truly; for the fact is that both our judgements and our actions are regulated by the standard of "the general rule". (Bury's translation with slight modification)

According to Tieleman<sup>23</sup>, Chrysippus links *pithanon* with cognition (*katalepsis*), which points to another *pithanon* function as something true that has not yet been properly proved, or has not yet been presented through a logical demonstration, but it is presented in order to prepare the ground for the mind to receive its proper logical demonstration later. From this we can ask: Is Tieleman referring to the Chrysippian *pithanon* as some kind of evident truth that leads to a non-evident truth as in the examples: if there is smoke, there is fire; if the woman produces milk, she has given birth?

Tieleman also affirms that, in *PHP* II 5.20 (See [T3]), where Galen quotes Chrysippus about *pithanon* that appears true, which is part of a syllogism about spoken language at *PHP* II 5.18-20, the Chrysipian propositions are true and evident and the syllogism decides the conflict in favour of the heart-based *hegemonikon*. According to Tieleman, this passage shows that the Chrysipian procedure of transforming a non-cognitive presentation (*akataleptos*) into a cognitive one (*kataleptike*) is complete<sup>24</sup>. So Tieleman's theory, grounded

<sup>&</sup>lt;sup>23</sup> TIELEMAN, 1996, p. 267

<sup>&</sup>lt;sup>24</sup> TIELEMAN, 1996, p. 269

on Sextus' quotation mentioned above, is that the methodological procedure used by Chrysippus is a standard Stoic one<sup>25</sup>.

If Chrysippus is referring to a normal Stoic procedure, which cannot be assured even by Tieleman<sup>26</sup>, then what Galen proposes is the replacement of the Stoic dialectical methodological procedure, which Galen reduces to a rhetorical approach, by the scientific method that does not support *pithanon* premises as capable of presenting relevant evidence for reaching the right conclusion. The method proposed by Galen requires logical demonstration to validated the assumptions. Chiaradonna says that "according to Galen's classification, Chrysippus can at most provide persuasive arguments without in any way attaining truth"<sup>27</sup>. Galen categorizes the Chrysippian *pithanon* differently, namely, as a rhetorical procedure that seeks common sense evidence<sup>28</sup>, as for e.g. witnesses testimonies and poets, which have no demonstrative value<sup>29</sup>.

Galen is not far from what we can identify in D.L. 7.47-48<sup>30</sup> (= SFV II 130) where, according to Dinucci/Rudolph, "the Stoic logic is presented as a tool to avoid the persuasiveness of sophisms, and the Stoic sage as the one who can efface this persuasiveness by his expertise in logic"<sup>31</sup>. Therefore, according to them, in this passage the persuasiveness of the sage is not conveying the truth.

When Tieleman mentions Plutarch On Stoic Self-Contradictions 1036e, presented above as T5, he surprisingly does not mention the broader context<sup>32</sup>, where Chrysippus makes

<sup>&</sup>lt;sup>25</sup> "I shall argue that Chrysippus' procedure corresponds to Carneades' theory of three levels of the 'convincing' ( $\pi_1\theta\alpha_1\delta_2$ ), or 'convincing presentation' ( $\pi_1\theta\alpha_2$ )  $\alpha_2$ ), as expounded by Sextus (M. VII 176-189). A comparison between the two texts involved is as justifiable as it is rewarding; there are many striking correspondences not only as to individual concepts, but also as to the basic idea of the method involved. This methodology, therefore, is early Stoic in origin and presumably Chrysippean." (TIELEMAN, 1996, pp 273)

<sup>&</sup>lt;sup>26</sup> Tieleman affirms that "It is impossible to demonstrate that Carneades took the formal division into three levels of probability from Chrysippus; indeed, it is more likely to have been Academic in origin." (TIELEMAN, 1996, p. 286. <sup>27</sup> CHIARADONNA, 2014, p. 75

<sup>&</sup>lt;sup>28</sup> *PHP* II 3.11; II 8.2; III 5.22; V 5.19; IX 7.2

<sup>&</sup>lt;sup>29</sup> *PHP* II 4.18; III 1.20; III 2.8; III 7.1-2; VIII 1.8; IX 9.12; IX 9.13-15;

<sup>&</sup>lt;sup>30</sup> D.L. 7.47 - And irrefutability is strength in argument, so that one is not swept away by it to an opposite opinion. And intellectual seriousness is a disposition which refers presentations to right reason. Knowledge itself, they say, is either a secure grasp or a disposition in the reception of presentations not reversible by argument. And the wise man will not be free of error in argument without the study of dialectic. For truth and falsity are distinguished by it, and persuasive and ambiguous statements are properly discerned by it. And without it, methodical question and answer are impossible. (Translated by Brad Inwood and Lloyd P. Gerson)

D.L. 7.48 – Hasty judgement in assertions has an impact on events, so that those who are not well exercised in handling presentations turn to unruliness and aimlessness. And there is no other way for the wise man to show himself to be sharp, quick witted, and, in general, clever in arguments. For the same person will be able to converse properly and reason things out and also take a position on issues put to him and respond to questions these are characteristics of a man experienced in dialectic. (Translated by Brad Inwood and Lloyd P. Gerson) <sup>31</sup> DINUCCI & RUDOLPH, The persuasiveness of Assertibles and Arguments in Ancient Stoicism.

<sup>&</sup>lt;sup>32</sup> (1035f)Τὸ πρὸς τὰ ἐναντία διαλέγεσθαι καθόλου μέν οὕ φησιν ἀποδοκιμάζειν, χρῆσθαι δὲ οὕτω παραινεῖ, μετ'

εύλαβείας ὥσπερ ἐν τοῖς δικαστηρίοις, μὴ μετὰ συνηγορίας (1036.a.) ἀλλὰ διαλύοντας αὐτῶν τὸ πιθανόν. 'τοῖς

clear that the technique of opposite arguments is only appropriate for training students, and should not be used as the sceptics do, to dissolve the persuasiveness (*pithanon*) of the arguments.

Finally, it is important to highlight three aspects we learned from this research. First, *pithanon* as persuasive leading to truth appears only one time in all Chrysippian known fragments and it is reported by Galen in *PHP* [T3]. Second, Plutarch's [T5] and Sextus' [T6] fragments mentioned by Tieleman are not sufficient evidence to support his thesis that 'the  $\pi \iota \theta \alpha v \dot{\alpha}$  on both sides" is a standard Stoic methodological procedure. At most, they are evidence that the Stoics used it for educational purposes, that is, to prepare their students' souls to learn the truth. Third, according to Galen's premises classification in *PHP*, *pithanon* cannot produce knowledge because it does not attend to the requirements of Galen's scientific method.

μὲν γὰρ ἐποχὴν ἄγουσι περὶ πάντων ἐπιβάλλει' φησί 'τοῦτο ποιεῖν καὶ συνεργόν ἐστι πρὸς ὃ βούλονται· τοῖς δ' ἐπιστήμην ἐνεργαζομένοις καθ' ῆν ὁμολογουμένως βιωσόμεθα, τὰ ἐναντία, στοιχειοῦν καὶ καταστοιχίζειν τοὺς εἰσαγομένους ἀπ' ἀρχῆς μέχρι τέλους· ἐφ' ὦν καιρός ἐστι μνησθῆναι καὶ τῶν ἐναντίων λόγων, διαλύοντας αὐτῶν τὸ πιθανόν, καθάπερ καὶ ἐν τοῖς δικαστηρίοις·' (1037b)'ἔσται δὲ καὶ καταλαμβάνοντάς τι πρὸς τὰ ἐναντία ἐπιχειρεῖν, τὴν ἐνοῦσαν συνηγορίαν ποιουμένους· ποτὲ δ' οὐδέτερον καταλαμβάνοντας εἰς ἑκάτερον τὰ ὄντα λέγειν'. ἐν δὲ τῷ περὶ τῆς τοῦ Λόγου Χρήσεως εἰπών, ὡς οὐ δεῖ τῃ τοῦ λόγου δυνάμει πρὸς τὰ μὴ

κα όντα πεγείν : εν σε τω περι της του πογου περιοτώς επών, ως σο σει τη του πογου συναμεί προς τα μη έπιβάλλοντα χρῆσθαικαθάπερ οὐδ' ὅπλοις, ταῦτ' ἐπείρηκε· 'πρὸς μὲν γὰρ τὴν τῶν ἀληθῶν εὕρεσιν δεῖ χρῆσθαι αὐτῆ καὶ πρὸς τὴν τούτων συγγυμνασίαν, εἰς τἀναντία δ' οὕ, πολλῶν ποιούντων τοῦτο', πολλοὺς [δὲ] λέγων ἴσως τοὺς ἐπέχοντας.

<sup>(1035</sup>f) ...He [Chrysippus] says that he does not absolutely reject arguments to opposite conclusions, but he does advise that this technique be used with caution, as in the law courts – (1036a) not with a sense of advocacy but to dissolve the persuasiveness of these arguments. "it is appropriate," he says, "for those who urge suspension of judgment on all things to do this, and it is helpful for their aim. But for those who work to produce knowledge according to which we may live consistently, the opposite is appropriate, to give instruction in basic principles to beginners, from the starting point to the conclusion. In this context it is appropriate to mention the opposite arguments too, dissolving their persuasiveness just as in the law courts." .... (1037b) Having said in his book *On the Use of Argument* that one must not use the power of argument for inappropriate ends, just as is the case with weapons, he [Chrysippus] said this in addition, "One must use it for the discovery of truths and for coordinated training in them but not for the opposite purposes, although many to this." By "many" he presumably means those who suspend judgement [i.e., skeptics]. (Tanslated by Brad Inwood and Lloyd P. Gerson with slight modification)

#### BIBLIOGRAPHY

ALESSANDRELLI, Michele & RANOCCHIA, Graziano. *Scrittore stoico anonimo opera incerta*. Itália: ILIESI digitale, 2017.

ARISTOTLE. *Categories. On Interpretation. Prior Analytics*. Translated by H. P. Cooke and Hugh Tredennick. London: Harvard University Press, 1983.

ARISTOTLE. On Sophistical refutations on coming-to-be and passing-away and On the cosmos. Tradução de E. S. Forster e D. J. Furley. Londres: St Edmundsbury Press Ltd, 1992.

ARISTOTLE. *Parts of animals; movement of animals; progression of animals*. Translated by A. L. Peck e F. H. A. Marshall. Londres, William Heinemann LTD, 1911.

ARISTOTLE. *Posterior Analytics and Topica*. Tradução de E. S. Forster. Londres: St Edmundsbury Press Ltd, 1997.

ARISTOTLE. *The categories on interpretation Prior Analytics*. Vol. I. Tradução de Harold P. Cooke e Hugh Trendennick. Londres: Harvard University Press e Willian Heinemann LTD, 1983.

ARISTOTLE & PLATO. *Plato Gorgias and Aristotle Rhetoric*. Translation, Glossary, and Introductory Essay by Joe Sachs. Newburyport: Focus Publishing, 2009.

BALTUSSENN, Han. Peripatetic epistemology after Aristotle: theorizing knowledge from Theophrastus to Aristocles. Lexicon Philosophicum, Special Issue, 2018, p. 53.

DILLON, J. (1977), *The Middle Platonists*. A Study of Platonism 80 B.C. to A.D. 220. London; revised repr, 1996.

DINUCCI, Aldo; DUARTE, Valter. *Introdução à lógica proposicional estoica*. São Cristovão, Editora UFS, 2016.

DOW, Jamie. *Passions and Persuasion in Aristotle's Rhetoric*. Oxford: Oxford University Press, 2015.

ELLIOT, Christopher Jon. *Galen, Rome and the second sophistic*. 2005. 243f. Tese de Doutorado – Australian National University, Austrália, 2005.

EMPIRICUS, Sextus. *Against Logicians*. Translated by R. G. Bury. London: Harvard University Press, 1935.

EMPIRICUS, Sextus. *Outlines of pyrrhonism*. Vol. I. Tradução de R.G. Bury. Londres: Harvard University Press, 1976.

ENGBERG-PEDERSEN, T. The Stoic Theory of Oikeiosis. Moral Development and Sorial Interaction in Early Stoic Philosophy. Aarhus, 1990.

FORTENBAUGH, W.W. Aristotle on Emotion. London, 1975.

GALEN. On the natural faculties. Trazudido por Arthur John Brock. Londres, William Heinemann, 1916.

GILL, WHITMARSH & WILKINS (Orgs). *Galen and the world of knowledge*. New York: Cambridge University Press, 2009.

GRAVER, M. Cicero on the Emotions. Tusculan Disputations 3 and 4. Translated and with Commentary by. Chicago / London, 2002.

HANKINSON, R.J.. *Galen on the limitations of knowledge*. IN: Galen and the world of knowledge, 2009, pp. 206-242.

HAYES, Evan & NIMIS, Stephen. *Galen Three Treatises: an intermediate Greek reader: Greek text with running vocabulary and commentary.* Oxford: Faenum Publishing Ltd, 2014. HIERODIAKONOU, K. *Topics in Stoic Philosophy.* Oxford, ed. 1999.

INWOOD, B. The Stoics Reader: Selected Writings and Testimonia, Hackett Classics, 2008.

LACY, Phillip De. *On the doctrines of Hippocrates and Plato*. Tradução de Phillip De Lacy. 3 ed. Berlin: Akademie Verlag, 2005.

LAERTIUS, D. *Lives of Eminent Philosophers*. Vol. I. Translated by R.D. Hicks. London: Harvard University Press, 2000.

LANGHOLF, V. Medical Theories in Hippocrates. Early Texts and the 'Epidemics'

(Untersuchungen zur antiken Literatur und Geschichte 34). Berlin-New York, 1990.

LIDDELL, H; SCOTT, R; JONES, H. Greek-English Lexicon. Oxford: Clarendon, 1940.

LOKKE, Havard. Knowledge and virtue in early Stoicism (Studies in the History of Philosophy of Mind). Springer, 1st ed. 2015.

LONG & SEDLEY. Hellenistic Philosophers, vol I. Cambridge: Cambridge University Press, 1987a.

LONG & SEDLEY. Hellenistic Philosophers, vol II. Cambridge: Cambridge University Press, 1987b.

LONG, A.A. Problems in Stoicism. London, 1971.

LONG, A. A. Soul and body in stoicism. Phronesis, 27, 1982, p.34.

LLOYD, G.E.R. Magic, Reason and Experience. Studies in the Origins and Development of Greek Science . Cambridge, 1979.

MACKENDRICK, P. The Philosophical Books of Cicero. London, 1989.

PEARCY, Lee T. *Galen and Stoic Rhetoric*. Greek, Roman and Byzantine Studies. Austin: University of Texas, 1983, p. 259.

PLATO. *Euthyphro, Apology, Crito, Phaedo, Phaedrus*. Translated by Harold North Fowler. London: Harvard Press University, 1995.

PLATO. *Lysis, Symposium, Gorgias.* Vol. III. Translated by W. R. M. Lamb. London: Harvard Press University, 1991.

PLUTARCH. *Moralia*. Vol XIII, Part II. Translated by Harold Cherniss. London: Harvard University Press, 1993.

POWELL, J.G.F. (ed.) (1995) Cicero the. Philosopher. Oxford, 1995.

REZUS, Adrian. An Ancient Logic: Chrysippus and His Modern Readers I, Paperback . Lap Lambert . 2016.

RIST, J.M. Stoic Philosophy. Cambridge, 1969.

SPRAGUE, Rosamond Kent (org). *The Older Sophists: a complete translation by several hands of the fragments in Die Fragmente der Vorsokratiker edited by Diels-Kranz with a new edition of Antiphon and of Euthydemus*. Indianapolis: Hackett, 2001.

SANDBACH, F.H. The Stoics. London, 1975.

SANDBACH, F.H. Aristotle and the Stoics. Cambridge, 1985.

STADEN, Henrich von. *Staging the past, staging oneself: Galen on Helenistic exegetical traditions.* IN: Galen and the world of knowledge, 2009, pp. 132-156.

TIELEMAN, Teun. Chrysippus' On Affections. Boston: E.J. Brill, 2018.

TIELEMAN, Teun. Galen and Chrysippus on the Soul: argument and refutation in De Placitis, Books II-III. New York: E.J. Brill, 1996.

TIELEMAN, Teun. *Galen and the stoics, or: the art of naming*. IN: Galen and the world of knowledge, 2009, pp. 282-299.

VON ARNIM, H. Stoicorum Veterum Fragmenta vol. 1: Zeno or Zenonis Discipuli. Berlim: De Gruyter, 2005.

VON ARNIM, H. Stoicorum Veterum Fragmenta vol. 2: Chrysippi Fragmenta Logica et Physica. Berlim: De Gruyter, 2005.

VON ARNIM, H. Stoicorum Veterum Fragmenta vol. 3: Chrysippi fragmenta moralia. Fragmenta Successorum Chrysippi. Berlim: De Gruyter, 2005.