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PERIPATETIC EPISTEMOLOGY AFTER ARISTOTLE:  
THEORISING KNOWLEDGE  
FROM THEOPHRASTUS TO ARISTOCLES

**ABSTRACT:** This paper assesses the evidence for Peripatetic epistemology after Aristotle, in particular how the Peripatetics dealt with their Aristotelian heritage. It examines the fragmentary remains of Peripatetic works between the death of Aristotle and the first century BCE. The account attempts to reconstruct some of the views in logical works and those sources which were inspired in part by Aristotle's wide-ranging views on knowledge acquisition and justification. Apart from Theophrastus, the main figures discussed (including some of their interactions with other thinkers) are Strato of Lampsacus, Hieronymus of Rhodes, Aristo of Ceos, Critolaus, Boethus of Sidon and Aristocles of Messene.

**SOMMARIO:** Questo articolo si occupa delle testimonianze relative all'epistemologia peripatetica dopo Aristotele; si tratterà, in particolare, di comprendere in che modo tali testimonianze affrontino l'eredità aristotelica. Il contributo, dunque, esamina i testi frammentari delle opere peripatetiche tra la morte di Aristotele e il I secolo a.C. Si tenta, quindi, di ricostruire alcune delle dottrine contenute nelle opere di argomento logico e di analizzare quegli autori che sono stati in parte ispirati dall'ampia teoria di Aristotele sull'acquisizione e sulla giustificazione della conoscenza. Oltre a Teofrasto, i principali pensatori che sono qui presi in considerazione sono Stratone di Lampsaco, Ieronimo di Rodi, Aristone di Ceo, Critolao, Boeto di Sidone e Aristocle di Messene. Oggetto di indagine sono anche alcuni dei rapporti dottrinari di questi Peripatetici con altri filosofi.

**KEYWORDS:** Epistemology; Peripatetics; Hypothetical Syllogism; Criterion; The Self-evident

### *Introduction*

Peripatetic engagement with epistemology (which, despite its Greek roots, is a modern word) continued after Aristotle, but we are not particularly well informed about these activities due to the fragmentary survival of the relevant materials. Those in the Peripatos continued to debate, read and write on ‘how we know what we know’, and often they followed Aristotle’s lead. In this essay I take ‘epistemology’ to refer broadly to arguments which offer explanations of, and justifications for, knowledge claims. Aristotle aimed to determine where knowledge starts and how it can be tested and shored up with theoretical principles. He is fundamentally empirical in his outlook, starts from perception, and describes how it works (transfer of form and *logoi*) and how reliable the knowledge which one acquires is. The works labelled ‘logical’ in the stricter sense such as the *Prior Analytics* and the *Categories* have a place in my account, but in a less prominent role. How we know what we know is primarily clarified in parts of Aristotle’s works on perception, in his dialectical treatise *Topics*, and in the *Posterior Analytics* (*APo*).

To answer the question what we know about Peripatetic epistemology during the third to first centuries BCE one has to gather the evidence from Theophrastus (*ca.* 371-287 BCE) down to Boethus (*ca.* 50 BCE) and place their efforts in Hellenistic context. The emphasis on how we acquire knowledge of the world, what it consists of, and how reliable it is, became dominant and influential topics of debate in the Hellenistic period. The question the reliability of human knowledge was a result of the debate of Aristotelian doctrines, in particular in the Academy under Arcesilaus, who questioned his epistemological optimism.<sup>1</sup> It forced the students and those who saw themselves as Aristotle’s heirs to respond to these attacks.

My approach will be broadly chronological, with some thematic threads across the four sections. Framing the analysis chronologically will allow us to establish whether there was any development in the school and to examine any shared interests or starkly divergent positions on particular topics. While we have a good number of sources for Theophrastus and Strato (successive heads of the school), evidence becomes sparser in the

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<sup>1</sup> See A. A. Long-D. N. Sedley, *The Hellenistic Philosophers*, vol. I: *Translations of the Principal Sources with Philosophical Commentary*, vol. II: *Greek and Latin Texts with Notes and Bibliography*, Cambridge, Cambridge University Press, 1987, section 68. See too Harald Thorsrud’s article in this volume.

second and first centuries BCE. Fortunately, our task has been made much easier because of the recent editions and analyses of the materials from this period.<sup>2</sup> The fragmentary evidence on physics and metaphysics exhibits links to the Aristotelian corpus. Does it also hold for epistemology? So far there has not been a focused examination of the evidence for epistemology, perhaps because the main areas of philosophy attracting scholarly attention are physics, ethics, and politics.

In the following sections I examine the surviving materials, offering a sketch of Aristotle 'theory' of knowledge where relevant, then the extant sources for Theophrastus and Strato, and I hope to end with some brief comments about the revival of Aristotelian studies in the first c. BCE when the *Categories* became a new object of study at Rome. This is not an attempt to give a comprehensive account, but rather a selective synthesis with the specific purpose of contextualising the ongoing Peripatetic forays into epistemology during the Hellenistic era.

### 1. *Aristotle's Theory of Knowledge*<sup>3</sup>

While it will be useful to start with a brief summary statement of Aristotle's epistemology, we immediately face a problem: Aristotle's did not write one comprehensive treatise containing a 'theory of knowledge'. In addition, those works that can be used to recreate such a theory are quite difficult to interpret and not always easily harmonised. For the modern historian of philosophy this means an account of Aristotle epistemology is a *reconstruction*. As a result, experts will differ on certain details. But in outline the following main claims are generally accepted: Aristotle believes in an empirical approach to how we come to understand the world around us and inherits from Plato the conviction that we need secure knowledge as opposed to (unjustified) opinion. His thoroughgoing empirical views widened the gap between him and his teacher. This view also influenced his position on the relation between (theoretical) philosophy and (medical) science:

those physicians who are cultivated and learned make mention of natural science, and claim to derive their principles from it, while the most accomplished

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<sup>2</sup> In particular the Rutgers University Studies in the Classical Humanities series, volumes VIII (1998) – XX (2017).

<sup>3</sup> This section revisits and expands on H. Baltussen, *The Peripatetics. Aristotle's Heirs 322 BCE-200 CE*, London, Routledge, 2016, Chs. 3 and 6, and Id., *Theophrastus against the Presocratics and Plato. Peripatetic Dialectic in the De sensibus*, Leiden, Brill, 2000, Ch. 2.

investigations into nature generally push their studies so far as to conclude with an account of medical principles (*Parv. Nat.*, 480b 21-30).

To achieve knowledge based on these main assumptions, he constructs a theory of sense perception and the soul, pioneers a system of deductive reasoning (syllogism), and analyses propositions, word meanings, completing this set of basic elements with his so-called ‘categories’, the classes of predication.<sup>4</sup> Together these allow us to (re)construct a ‘theory’ of basic knowledge, but another level is required, that of justification how we know what we know. This last component will remain tentative and is also still contentious, since the evidence for it in his *Topics* and *APo* is difficult to harmonise.

In brief, Aristotle’s theory of knowledge combined deductive reasoning and accepted careful observation as a basis for understanding the world. However, rather than being a complete system, his ‘theory’ was more a set of parameters and principles which were in need of considerable development and refinement. As Dodds put it, Aristotle was that “most inconclusive of systematisers”.<sup>5</sup> His students were also forced to rethink some of his propositions, because the debate on knowledge had moved on and Aristotle’s theory of perception now came under attack from the Hellenistic schools.<sup>6</sup> They approached the question “is knowledge really possible?” afresh and offered objections to the rather optimistic belief of the Peripatetic school that secure knowledge was perfectly possible. The ensuing debate impacted on the perspective the Peripatetics had inherited from Aristotle.<sup>7</sup> All new Hellenistic schools, the Stoics, the Epicureans and the Sceptics, raised important issues in this area, and while the central debate was between Stoics and Sceptics, we know of several points that raised problems for Aristotle’s theory.

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<sup>4</sup> The notion of ‘category’ originated in a legal context; the Greek verb κατηγορεῖν, ‘to accuse’, can be rendered as ‘to claim one thing about another thing’, i.e. ‘attribute a feature’. Later debates arise as to whether these are linguistic or ontological classes.

<sup>5</sup> E. R. Dodds, *Select Passages Illustrating Neoplatonism*, London-New York-Toronto, The Macmillan Co., 1923, p. 10.

<sup>6</sup> T. S. Ganson, “Third-Century Peripatetics on Vision”, in W. W. Fortenbaugh-S. A. White (eds.), *Lycos of Troas and Hieronymus of Rhodes: Text, Translation, and Discussion*, London-New Brunswick, Transaction Publishers, 2004, p. 355-362, has argued that the successors did not follow Aristotle’s doctrine of vision, as they reinstated the idea of emanations from the eye (Theophrastus, Strato and Hieronymus).

<sup>7</sup> H. B. Gottschalk, “Hellenistic Reactions to Peripatetic Epistemology”, in Fortenbaugh-White, *Lycos of Troas and Hieronymus of Rhodes*, p. 375-388.

Aristotle had assumed that access to knowledge was in principle possible for us, because his account of sense perception presented sense organ and object as conveniently attuned to each other (a kind of compatibility principle), so that a grasp of their proper objects, colour by the eye, odours by the sense of smell and so on (e.g. *De sensu* 436b16-20) would lead to a reliable understanding of the external world. The way that the eye worked was analogous to how he envisaged the intellect to work: both sense organ and intellect take on the form of their respective object, which they can because they are potentially identical to it. So, the compatibility principle as applied to the senses, plus the strong parallel between sensing and intellection, yields an optimistic account not merely of our ability to sense the world accurately, but also to understand it. Theophrastus seems to have accepted the main positions, building his own account on the foundation of these principles of compatibility and transparency.<sup>8</sup>

Theophrastus' and Aristotle's optimistic attitude toward both perception and knowledge was critiqued and modified by the Stoics and Epicureans who were also responding to sceptical attacks. The Stoics advocated a theory of perception that involved a much more active perceiver. We naturally have perceptual episodes that are entirely accurate, though there are other episodes that are not. So, while they agreed with a restricted version of the compatibility principle, they also thought that it takes a very special skill to reliably recognise these 'clear and distinct' perceptions.<sup>9</sup> Scientific knowledge (*episteme*) involves the ability to do this consistently without ever making mistakes. They were much more pessimistic than Aristotle about how frequently human beings manage to possess this skill and thus to have scientific knowledge. Three problems in Aristotle's theory of knowledge should be mentioned. Firstly, the role of his work on deduction, *Posterior Analytics*, is still subject to debate. It has been characterised as a method for justifying knowledge, or for clarifying knowledge.<sup>10</sup> In the former version, it could be a method for scientific

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<sup>8</sup> See again H. Baltussen, *Theophrastus against the Presocratics and Plato*, Ch. 2 and Id., "Strato of Lampsacus as a Reader of Plato's *Phaedo*: A Critique of the Soul's Immortality", in M.-A. Gavray et al. (eds.), *Ancient Readings of Plato's Phaedo*, Boston-Leiden, Brill, 2015, p. 37-62.

<sup>9</sup> Long, Sedley, *The Hellenistic Philosophers*, text 40K (= Sext. Emp., *M*, VII, 253 ff).

<sup>10</sup> See now G. Salmieri-D. Bronstein-D. Charles-J. G. Lennox (eds.), "Episteme, Demonstration, and Explanation: A Fresh Look at Aristotle's *Posterior Analytics*" (4 Essays), *Metascience*, 23, 2014, p. 1-35 and D. Bronstein, *Aristotle on Knowledge and*

discovery, in the latter a teaching tool to set out insights already found. Secondly, the particular claim about how one may reach the principles or starting points of a science (*archai*) is found in the *Topics*, generating a debate about its meaning and value. Thirdly, it is not easy to harmonise the core claims in *Topics* with *APo*. I will return to these points where relevant.

Evidence for Peripatetic epistemology *after* Aristotle does not provide a richer or easier harvest. The evidence is limited and fragmentary – a fact to be kept in mind throughout this essay, since it is largely responsible for my caution when it comes to extracting any insights and conclusions from the texts. But the sum total of evidence can give us a good idea in some areas how they dealt with epistemological questions and how they attempted to make contributions of their own, even if over time interest in the topic waned.

### 2.1 *Theophrastus and Strato: Parts and Principles of Knowledge*

The widely accepted view that the students of Aristotle were his *followers* (in the sense of accepting the core teachings) may need some qualification when we find them expanding, refining and adjusting these views. Renewed attention for the fragmentary remains of their writings has in recent decades led to new insights which go against the idea of such a crude view of a unified orthodoxy, revealing how many variations of Aristotelians there are: self-declared followers, eclectic readers and critics.<sup>11</sup> One insightful but counter-intuitive suggestion has been that the interaction with Aristotle's ideas may not always have happened on the basis of his *writings*, but simply based on what they knew and remembered from classes and conversations with the master.<sup>12</sup> This suggestion would hold for those who knew him personally and the immediate next generation (e.g. Theophrastus, Eudemus, Strato), and could explain the limited references to Aristotle's writings.

The extant sources show how the Peripatetic interest in theoretical discussion of knowledge slowly dwindled and that other areas were studied more, in particular rhetoric, ethics and literary pursuits. Most first and

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*Learning: The Posterior Analytics*, Oxford, Oxford University Press, 2016 (with earlier literature).

<sup>11</sup> Cf. Baltussen, *The Peripatetics*.

<sup>12</sup> See R. W. Sharples, *Peripatetic Philosophy 200 BC-AD 200: An Introduction and Collection of Sources in Translation*, Cambridge, Cambridge University Press, 2010, p. 1-2 on Critolaus.

second generation Peripatetics would continue to work on questions concerning nature and our understanding of it, using Aristotle's writings as a springboard, but without considering it as a canon in any strict sense.<sup>13</sup> The theoretical study of knowledge acquisition (perception) in the Peripatos after Aristotle's death continued at a steady pace. This is at least what we must infer from the evidence for his immediate successors, Theophrastus and Strato. Both embraced the empirical basis of the epistemology Aristotle had sketched and focused especially on sense perception (the individual sense organs and their objects). Ganson has, however, pointed out that they rejected Aristotle's rejection of the emanation theory of vision.<sup>14</sup> Several other details point in the direction of such a view: Strato (T27A-31 [cf. Diog. Laert., *VP*, V, 59] Sharples) and Hieronymus (T10 White) seem to have been partial to a view that represents matter as having a corpuscular nature.

Gottschalk has argued that there is some evidence to think that Hellenistic Peripatetics attempted to update their epistemology under the influence of contemporary debates – a plausible suggestion.<sup>15</sup> He points especially to the account of Sextus Empiricus whose sceptical allegiance is responsible for his attempt to review and refute all so-called 'dogmatics' (Platonists, Aristotelians, Stoics, Epicureans). The central discussion of how mental concepts are constructed reveals the Stoic influence in the colouring of the contemporaneous vocabulary and parallels to Aristotle's *Posterior Analytics* and the *Metaphysics* (to a lesser extent). But the opening and closing sections in Sextus, so Gottschalk argues, have a different origin. Sextus' discussion of the so-called criterion of truth – an almost mythical measure for true knowledge – is out of place: one might with some effort extrapolate traces of a reliable measure of truth ('criterion') in Aristotle, but it is not a doctrine of this concept. Theophrastus' notion of 'the self-evident' (τὸ ἐναργές; ἐνάργεια) is different and may go some way towards such a criterion (301A FHS&G). The idea is that self-evidence can assist in gaining an understanding of things. Therefore, we can be sure that the criterion could not possibly be Aristotelian, nor could it really be

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<sup>13</sup> Ibid., Ch. IX.

<sup>14</sup> Ganson, "Third-Century Peripatetics on Vision", p. 355. The emanation theory of smell is found in Theophrastus *De sensu*, 9. See also S. White, "Lyco and Hieronymus on the Good Life", in Fortenbaugh-White, *Lyco of Troas and Hieronymus of Rhodes*, p. 389-409.

<sup>15</sup> Gottschalk, "Hellenistic Reactions to Peripatetic Epistemology", p. 378-80. In this paragraph I use a modified version of a section in Baltussen, *The Peripatetics*, Ch. 6.

Theophrastean.<sup>16</sup> The most likely explanation is that Sextus' claims in this discussion must represent Hellenistic 'modernisations'.

Cicero seems to confirm the terminological shift. Starting from Aristotle's better-known premises in a syllogism, Cicero discussed both Aristotle and Theophrastus in the context of reviewing Stoic logic (*Fin.* IV). In his summative statement he uses the Latin words *caput* ('main point') and *perspicua* ('very clear') which are most likely the equivalents of the Greek terms *arche* ('principle') and *to enarges* ('the self-evident').<sup>17</sup> They refer no doubt to the doctrine that "first premises of demonstrative syllogisms must be undemonstrated, primary and, as such, better known".<sup>18</sup>

Theophrastus, the first scholarch to succeed Aristotle, was very familiar with his mentor's ideas and working practice. They collaborated for decades, and Theophrastus modelled much of his own research on that of Aristotle. For instance, his plant studies used the tree as an exemplar for the whole organisation of the work and to frame the investigation, much like Aristotle had used humans as the exemplar in his animal studies.<sup>19</sup>

Judging by the list of his works, Theophrastus is seen to have written several individual studies connected to perception and knowledge:

*On the senses* in 1 book (Diog. Laert., *VP*, V, 42, *περὶ αἰσθήσεων α'*),

*On vision* in 1 book (V, 49, *περὶ ὄψεως α'*),

*On experience* in 1 book α' (V, 46, *περὶ ἐμπειρίας α'*),

*How many modes of knowing are there?* in 1 book (V, 49, *τινες οἱ τρόποι τοῦ ἐπιστάσθαι α'*).

We could possibly include *On odours* (Diog. Laert., *VP*, V, 44, *περὶ ὀδμῶν α'*), *On affects* (V, 45, *περὶ παθῶν α'*) and perhaps even *On things changing colour(s)* in 1 book (V, 44, *περὶ τῶν τὰς χροῶς μεταβαλλόντων α'*). All these titles suggest that Theophrastus continued to explore many aspects related to knowledge and sense perception. He also looked into issues related to the distortion of mental processes, for instance, when people are deranged

<sup>16</sup> Gottschalk, "Hellenistic Reactions to Peripatetic Epistemology", p. 283-286.

<sup>17</sup> Francesco Verde has pointed out to me that "Cicero's use of the term *perspicuitas* (*et cognati*) is (almost always) peculiar of the philosophical position of Antiochus of Ascalon. Antiochus indeed uses the *perspicuitas* or *enargeia* against the Sceptic Academics who believe that our sense-perception is very feeble (see e.g. Cic., *Lucull.*, 17)".

<sup>18</sup> Gottschalk, "Hellenistic Reactions to Peripatetic Epistemology", p. 385. On *enargeia* see also K. Ierodiakonou, "The Notion of *Enargeia* in Hellenistic Philosophy", in B. Morison-K. Ierodiakonou (eds.), *Episteme, etc.: Essay in Honour of Jonathan Barnes*, Oxford, Oxford University Press, 2012, p. 60-73.

<sup>19</sup> G. Wöhrle, *Theophrasts Methode in seinen botanischen Schriften*, Grüner, Amsterdam, 1985.



(Diog. Laert., *VP*, V, 45, *περὶ παραφροσύνης α'*) or drunk (Diog. Laert., *VP*, V, 44, *περὶ μέθης α'*). Maybe he picked up clues from Aristotle. A nice illustration of the second is found in Aristotle, who in discussing lack of self-control (*ἀκρασία*) inadvertently also informs us that men under the influence are still capable of a flawed mode of knowledge, by uttering “scientific proofs and verses of Empedocles, and those who have just begun to learn can string together words, *but do not yet know*” (*EN*, VII, 3, 1147a 15-18; transl. Barnes). The point seems to be that memorisation of such materials does not entail understanding or even conscious retention. In this particular example due to inebriation (i.e. reproducing the words of Empedocles) is a form of mechanical and ineffectual ‘knowledge’, that is, he already saw that there is a way to retain information without always understanding what it means.<sup>20</sup>

Regarding *How many modes of knowing are there?* (Diog. Laert., *VP*, V, 49) we should perhaps take into account Aristotle’s comments in *Prior Analytics* (*APr*) II, 21, 67b 3-5, where he defines the verb *ἐπίστασθαι* in three ways: “to know is said in three ways, either in a general sense or in a specific sense or by activity, so that it is possible to be mistaken (*ἡπατήσθαι*) in an equal number of ways” (transl. Barnes).

Aristotle’s *Posterior Analytics* II, 19 is often used for clarifying his views on knowledge acquisition, in combination with parts of the *On sense perception*, *On the soul*.<sup>21</sup> In the *APo* II, 19 Aristotle sets out some sound principles: crudely put, we acquire knowledge through the senses, we synthesise the specific sense data into a more coherent image, we retain it in our soul (role of memory), and we reason about its truth value by way of propositions and inference (99b26-100a8). It has been noted by scholars that the passage may well contain a response to Plato’s *Meno*, where he asked the question how we learn, including the famous paradox how it is that we can make a start finding out (about) something we do not know.<sup>22</sup>

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<sup>20</sup> I discuss memory in H. Baltussen, “Memory, Education and Science. Internal and External Memory and the Rise of Ancient Science”, in B. Dignas (ed.), *A Cultural History of Memory* (6 vols., Bloomsbury), vol. 1: *Antiquity* [forthcoming].

<sup>21</sup> In *EN*, VI and *Metaph.*, IV and VI we find further information on how Aristotle articulates the practical use of intellectual virtues (*EN*) and what the underlying foundations are (*Metaph.*). The next three paragraphs reiterate my account in Baltussen, *The Peripatetics*, p. 72-74 with some modifications.

<sup>22</sup> See P. Adamson, “*Posterior Analytics* 2.19: A Dialogue with Plato?”, in V. Harte-M. M. McCabe-W. Sharples-A. Sheppard (eds.), *Aristotle and the Stoics Reading Plato*, London, Institute of Classical Studies, 2010, p. 1-19 (with previous literature).

Aristotle is more explicit in reasoning *about* the foundations logically, which questions one should ask (and which not), and how to establish definitions and demonstrations to arrive at knowledge that is secure. Here he may also follow Plato in assuming there is an important difference between belief (*doxa*) and scientific knowledge (*episteme*).

Aristotle stays rather close to his teacher (*EN*, VI, 1, 1139a 5-15) when he defines *episteme* in a two-pronged definition: in line with the two parts of the rational soul he proposes to distinguish between a “calculating part (*to logistikon*) and the scientific part (*to epistemonikon*), where the calculating part considers things which admit of change (it is discursive), whereas with the scientific part [considers] things which do not admit of change”.<sup>23</sup> But in his *Posterior Analytics* he describes a fully deductive system which seems to aim at justifying knowledge *after it has been acquired*. He clearly offers good reasons why not all knowledge is demonstrable, in particular because one needs to have “pre-existing knowledge in order to gain new knowledge” (*APo*, II, 19, 99b 26-29).<sup>24</sup>

We have an interesting passage which claims to report on Theophrastus’ notion of the ‘criterion of truth’ (*kriterion*), preserved by the sceptic and physician Sextus Empiricus in his summary of the Peripatetic theory of the ‘double criterion’.<sup>25</sup> The general tendency of his report about Theophrastus fits the information we have elsewhere (see below): knowledge comes from the senses and thought, and therefore they maintain that the ‘criterion’ (truth measure for justified knowledge) is also two-fold: “perception for perceptible things, thought for thinkable things” (Sext. Emp., *M*, VII, 218 = part of T301A FHS&G; transl. Fortenbaugh, Huby, Sharples and Gutas). It is, however, uncertain whether Theophrastus used the term *kriterion*, and it would seem unlikely.<sup>26</sup> That said, it is clear that he

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<sup>23</sup> R. Parry, “*Episteme* and *Techne*”, in E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition): <https://plato.stanford.edu/archives/fall2014/entries/episteme-techné/> [08.11.2018].

<sup>24</sup> Adamson, “*Posterior analytics* 2.19: A Dialogue with Plato?”, p. 5, with reference to *APo* I, 1. A recent and more detailed discussion in Bronstein, *Aristotle on Knowledge and Learning*.

<sup>25</sup> J. Barnes, “Peripatetic Epistemology: 100BC-200AD”, in R. W. Sharples-R. R. K. Sorabji (eds.), *Greek and Roman Philosophy, 100 BC-200 AD*, 2 vols., London, Institute of Classical Studies, 2007, II, p. 547-562, esp. p. 550-551; cf. Sharples, *Peripatetic Philosophy*, text 14F.

<sup>26</sup> On the reasons for doubting this, see Gottschalk, “Hellenistic Reactions to Peripatetic Epistemology” and Barnes, “Peripatetic Epistemology”.

joined in the debate on the certainty of knowledge, and offered his own empiricist view.<sup>27</sup> Perhaps we should consider his comment in the short work *On First principles* (formerly *Metaphysics*) where he insists that “knowledge is impossible without some *differentia*” (τὸ ἐπίστασθαι οὐκ ἄνευ διαφορᾶς τινος): could he mean a distinguishing difference as the mark for deciding *that* we know (something)?<sup>28</sup> If so, then this could come close to a criterion, i.e. a basic marker that could decide (*krinein*) on whether we can meaningfully interpret sense data.

The question how damaging the sceptical stance could be for any knowledge claim became a major concern for all philosophers who believed that firm knowledge is possible, the Aristotelians included. Aristotle had already made a concerted effort to refute the sceptical stance in his *Metaphysics*, turning the tables on anyone claiming that secure knowledge is impossible: his ingenious proof of the most secure principle of non-contradiction (*Metaph.*, Γ) implies that saying anything will mean that one has committed to a claim.

Theophrastus’ work in logic contributes some epistemological positions. Together with Eudemus he contributed a number of new ideas to logic. Aristotle had worked on a descriptive system of argumentation, the first second-order language of research. This early form of scientific methodology was a mix of logical principles and rhetorical habits, since forms of presentation and manipulation were combined with rules of consistency and rigor. The syllogism is a form of reasoning defined by Aristotle where two given propositions produce a conclusion in which the middle term explains the connection (cause) between the first and third statement. Aristotle distinguished a number of these figures. Theophrastus expanded on the relation between the second and third figures, and he revised Aristotle’s modal logic,<sup>29</sup> suggesting that in a chain of reasoning the

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<sup>27</sup> To the extent that the criterion has a foundationalist role, we may perhaps relate it to several fragments on principles in physics (FHS&G 142-144), on which see esp. A. Laks, “Le début d’une physique. Ordre, extension et nature des fragments 142-144 A/B de Théophraste”, in J. M. van Ophuijsen-M. van Raalte (eds.), *Theophrastus. Reappraising the Sources*, London-New Brunswick, Transaction Publishers, 1998, p. 143-169.

<sup>28</sup> See F. Verde, “L’empirismo di Teofrasto e la meteorologia epicurea”, *Rivista di Filosofia Neo-Scolastica* [forthcoming], building on L. Repici (ed.), *Teofrasto. Metafisica*, Roma, Carocci, 2013, p. 210 ff.

<sup>29</sup> See J. Barnes, “Theophrastus and Hypothetical Syllogistic”, in W. W. Fortenbaugh (ed.), *Theophrastus of Eresos. On His Life and Work*, New Brunswick-Oxford, Transaction Publishers, 1985, p. 125-141 (a useful analysis of the expansion of syllogistic by

conclusion follows the weaker premise, not the major (a kind of weakest link principle). He also worked on rhetoric and dialectic. For the latter he proposed to adjust the system of dialectical predication, subsuming the four predicables under definition, perhaps to create “a single universal method”, which Aristotle had considered impossible or unhelpful (Alexander of Aphrodisias agreed, T124A-B FHS&G),<sup>30</sup> and he provides us with a definition of the dialectical *τόπος* (not found in Aristotle) as an argumentative strategy or principle “from which we can take the starting-points (of argument) about each matter” (ἐστὶν ἀρχὴ τις ἢ στοιχείον, ἀφ’ οὗ λαμβάνομεν τὰς περὶ ἕκαστον ἀρχάς, T122B FHS&G). This looks very close to the statement Aristotle’s made in *Topics*, A, 2, 101a 35-37, when he discussed the possible functions dialectical training could lead to, in particular the search for *archai* “principles or starting points”, on the basis of *endoxa* (cf. *Top.*, Θ, 14, 163a 36-b 4, b 9-16).<sup>31</sup> He is said to have introduced a doctrine of hypothetical syllogisms (T111A-113D FHS&G), possibly in collaboration with Eudemus, as al-Farabi’s testimony suggests (T111C), while also informing us that Aristotle hardly dealt with hypothetical syllogisms.

While the surviving fragments of Eudemus’ works do not seem to consider the question of ‘knowing how we know’ explicitly, the material allows us to show that he worked on problems related to the *Categories* (T 20B), *Analytics* and to a lesser degree on metaphysics. We cannot overcome the limitations of the evidence in this instance. Texts 16A-\*18 SOD&G<sup>32</sup> illustrate engagement with metaphysical issues, while texts 20-51 discuss in detail a range of questions on propositions, syllogisms, the conversion of propositions, etc. According to Alexander (T25A) Eudemus and Theophrastus tried to offer a simpler proof “that the universal negative is

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Theophrastus), and Id., “Peripatetic Logic: 100BC-200AD”, in Sharples- Sorabji (eds.), *Greek and Roman Philosophy*, p. 531-546. See also S. Bobzien, “Wholly Hypothetical Syllogisms”, *Phronesis*, 45, 2000, p. 87-137.

<sup>30</sup> I use ‘T’ for text instead of fragment in the case of sources from FHS&G. For Theophrastus it is now common practice to speak of ‘sources’ and ‘texts’ rather than fragments.

<sup>31</sup> Discussed in greater detail in Baltussen, *Theophrastus against the Presocratics and Plato*, p. 34-9.

<sup>32</sup> I am grateful for access to the new edition (pre-publication) by Stork, Dorandi and van Ophuijsen, van Berkel and Leunissen, which was first presented and discussed at a conference in Rome September 2015 organised by R. Chiaradonna, T. Dorandi, E. Spinelli, and F. Verde (which I attended). The draft edition in its third version is cited here as SOD&G, where G stands for Dimitri Gutas who has clarified the Arabic materials.

convertible”.<sup>33</sup> According to Apuleius *On Interpr.* 13, Theophrastus “counted five indemonstrables in the valid moods” to the first figure of syllogisms.<sup>34</sup> It is possible that ‘counted’ (*enumerant*) merely means ‘enumerates’ (SOD&G *ad loc.*), in the weaker sense of ‘listing’ rather than proposing a new number. The list of his works (T19 SOD&G) suggests writings on *Analytics* (1a, b), on categories (5), and on verbal expression (T21AB SOD&G). These *testimonia* and texts illustrate an interest in questions of logic and reasoning, but offer very little on epistemological issues *per se*.

## 2.2 Strato of Lampsacus

Strato also had an interest in aspects of the perceptive processes, as his list of works indicates (he wrote on vision, perception and colours: Diog. Laert., *VP*, V, 59). A useful account in Simplicius’ commentary may assist, but whether we are in a position to establish beyond a doubt which materials originate in Theophrastus remains moot. It is clear, however, that the report does draw on Theophrastus in a number of significant places, even as early as *In Aristot. Phys.*, 20, 18-20 Diels:

ἀπὸ τῶν αἰσθήσεων καὶ τῶν αἰσθητῶν τὴν περὶ τῶν φυσικῶν ἀρχῶν ἀλήθειαν ἀνιχνευτέον  
καὶ Θεοφράστῳ πειθομένοις, ὃς περὶ τῶν τούτου | ζητῶν ἐν τῷ πρώτῳ Φυσικῶν τὰδε  
γέγραφεν ...

the truth about physical principles must be pursued on the basis of the senses and sense objects, letting ourselves also be persuaded by Theophrastus who in his investigation [of these things] in his first book of *Physics* wrote the following ... (transl. mine)

Strato took a serious interest in logic as is confirmed by the list of his works in Diog. Laert., *VP*, V, 59-60 and a telling comment by the Stoic

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<sup>33</sup> Alex. Aphr., *In Aristot. APr*, I, 2, 25a 14-16 = Theophr. 90A FHS&G. The move seems confirmed in Themistius’ *Paraphrase of Aristotle APr* on I, 2 [= Eud. T \*25C] and Philoponus, *In Aristot. APr*, I, 2 [= Eud. T 25D SOD&G = Theophr. 90B FHS&G], although it is possible that Philoponus depends on one of the earlier authors. Such attempts at simplifying could be motivated by pedagogical as well as doctrinal reasons.

<sup>34</sup> Eud. T \*26 = Theophr. T92 FHS&G. Cf. P. Huby-D. Gutas, (eds.), *Theophrastus of Eresus. Sources for His Life, Writings, Thought and Influence. Commentary*, vol. 2: *Logic* (Texts 68-136), Leiden, Brill, 2007. More in general, on Eudemus’ logic see L. Repici, “Problems in Eudemus’ Logic” (Paper presented at Rome conference on Eudemus, 2015 [forthcoming]).

Chrysippus (T14 Sharples = Plutarch., *De Stoic. rep.*, 1045F): “In the third book on *Dialectic* Chrysippus says ‘Plato was serious about dialectic, and [so was] Aristotle, and their successors up to Polemo and Strato’” (transl. Sharples).<sup>35</sup> The list of works reveals an interest in dialectic, and he may even have taught it (V, 59 *Introduction to Topics*), as well as in logic *stricto sensu* (V, 60 *On the [logically] Prior and Posterior, On the Prior Genus, On the Essential Attribute, On the More and Less*). His main contribution of note seems to have been his monograph *On Prior and Posterior*, as Simplicius informs us (*In Aristot. Cat.*, 422, 21-423, 33 Kalbfleisch = T15 Sharples) in which he discusses modes of priority in response to Aristotle’s *Metaph.* book 5, a book full of definitions. Strato seems to have offered many illustrative examples and focused on particular problems. He used concepts like ‘time’, ‘order’, ‘potentiality’, ‘in nature’ and ‘in explanation’ as more generic criteria to place the categories in a hierarchy of priority and posteriority (T15, 1-5 Sharples).<sup>36</sup> Some information on his psychology is forthcoming from selective quotations and paraphrases in Damascius (T76-81 Sharples). These are strongly polemical and therefore a contentious source for his positive views.<sup>37</sup> One thing, however, seems clear: his criticism of Plato’s dualism.

### 3. *After Strato*

A gap in the evidence for the late third and the second centuries makes it difficult to assess what kind of interests any of the Peripatetics in this period had. We are even poorly informed about the school and its leadership. The two lists of the scholarchs that survive in two late sources do not concur on the succession for this period. One mentions Hieronymus of Rhodes as head until ca. 275 BCE, then Aristo of Ceos as the fifth head of the school (ca. 250 BCE), but next in the list is Critolaus as possibly the ninth school leader in the second century (in 155 BCE he

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<sup>35</sup> Ironically, our source author, Plutarch, next reveals that Chrysippus accused them of presenting reasoning that was “blind and self-contradictory”. But we cannot take a Stoic’s polemical comments at face value. It seems undisputed, however, that Strato engaged with dialectic. For further analysis see Baltussen, “Strato of Lampsacus as a Reader of Plato’s *Phaedo*”.

<sup>36</sup> In T16 Sharples Alexander rebukes Strato for “wanting to make an innovation” (*kainotomesai* – a loaded term for unnecessary novelty).

<sup>37</sup> See again Baltussen, “Strato of Lampsacus as a Reader of Plato’s *Phaedo*”.

participated in the embassy to Rome). We may briefly review the evidence on perception and epistemology proper for these three individuals.

Hieronimus of Rhodes' theory of vision survives in Plutarch's *Table Talk* I, 8, 626A-B (= T10 White). The passage is incomplete, but allows us to conjecture what his thoughts on the matter were. The theory seems to align with contemporary views and seems close to that of Strato, claiming that "we see by means of the bodies coming from visible objects". It also presumes the presence of pores, claiming that old people close to the source of these bodies are disturbed by their density "when they first depart", because in old people "eyesight contains slow-working pores (*bradyporos*) and lacks elasticity".<sup>38</sup>

Hieronimus is often mentioned in connection with discussions of pain and pleasure. While these were seen as concomitant phenomena to sense perception, they are of interest in that they can also influence the transfer of perceptible data. The process may thus experience distortion. This topic became more important with Epicurus' emphasis on pleasure as a more widely important aspect of human well-being, against Aristotle who only recognised instantaneous pleasures as real (*EN*, X, 4, 1174a 17-24). Pleasure and pain were regarded as belonging both to physiology and psychology. Because they straddle these two domains, the ancient evidence can be found in discussions of either. But it appears that the interaction between Epicurus and some Peripatetics led to an more intense consideration of these notions. At least this is what one is led to infer in one source where they are juxtaposed:<sup>39</sup>

Epicurus [says that] pleasures and pains [relate to] things that are sensed; the Peripatetics, that they [relate to] things that are thought. For the same things do not seem pleasant and painful to everyone, as [the same things do seem] white or black. [= Stob., *Ecl.*, I, 50, 28-29, 476, 23-27;<sup>40</sup> Aët., *Plac.*, IV, 9, 11-12; transl. Sharples].<sup>41</sup>

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<sup>38</sup> I here rephrase Baltussen, *The Peripatetics*, p. 46. My translation is more literal than White's for *bradyporos* ("not very porous") since his translation strikes me as less clear in expressing characteristics of the eye sight that is of advanced age. For the Peripatetic antecedents of Hieronimus' theory see Ganson, "Third-Century Peripatetics on Vision".

<sup>39</sup> Sharples, *Peripatetic Philosophy*, p. 104, text 14J.

<sup>40</sup> C. Wachsmuth (ed.), *Ioannis Stobaei (Stobaeus): Anthologii*, Berlin, Weidmann, 1884, p. 1020 ff.

<sup>41</sup> H. Diels (ed.), *Doxographi Graeci*, Berlin, Reimer, 1879, p. 397-398.

Here we find an expression of the relative value of pleasure and pain, which can be experienced differently by different individuals – unlike, as the passage suggests, black and white, which apparently do appear the same to different individuals. He seems to attribute to colours a more objective status compared to *pathe* like pleasure and pain.

Evidence for Aristo of Ceos seems to offer little that is useful for our purposes.<sup>42</sup> T6 (= Them., *Or.*, XXI) points to the interest in Aristotle’s ‘words’ or ‘arguments’ (λόγους). The editors (SFOD) translate: “both [Lyco and Aristo] *were engaged in studying the theories of Aristotle*”.<sup>43</sup> Aristo’s focus was not on logic or epistemology, and the surviving fragments point to activity in the domain of rhetoric (*Exhortations* and *Erotic dissertations*), as well as biography (the title *Lyco* must be a biography of his predecessor), and on emotions (*On old age, Relieving arrogance*), also the preserve of rhetoric.

Critolaus’ interest in perception and soul hardly survives except in very fragmentary form. According to some sources, he defined the soul’s substance as *aether*.<sup>44</sup> He also participated in the debate about the role of pain (and pleasure). Hieronymus of Rhodes had already declared pain the greatest evil, or rather, its absence the greatest good (Cic., *Tusc.*, II, 15 = T20B White). Elsewhere Cicero offers an argument as to why Hieronymus’ view cannot be accepted (*Fin.*, II, 41 = T20A White): pain may be bad, but its absence is not sufficient to attain a good life; nor does it follow that *not* having pain means that one will experience pleasure. Since the context is part of a critique aimed at Epicurus, the established perception seems to be that Hieronymus’ theory on pleasure is very close to his contemporary. We may contrast this with Critolaus’ view, who also declared pleasure an evil (Gell., *NA*, IX, 5, 6 = T23 Wehrli). A very probable way to think about it is to regard this as another case of terminological cross-contamination in the ongoing discourse of topical issues of the day.<sup>45</sup> Yet there is not much that one can use to establish a theoretical position on knowledge acquisition.

The first century offers a glimpse of the so-called revival of Aristotelianism in the form of exegetical works on the *Categories*. Boethus

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<sup>42</sup> The list of works (fr. 7-8) is interesting in its uniformity: notes, polemic and anecdotes. See W. W. Fortenbaugh-S. A. White (eds.), *Aristo of Ceos: Text, Translation, and Discussion*, London-New Brunswick, Transaction Publishers, 2006.

<sup>43</sup> Note the dual verb form here: *περὶ τοὺς Ἀριστοτέλους λόγους εἰχέτην*. (emphasis my own).

<sup>44</sup> Baltussen, *The Peripatetics*, p. 146.

<sup>45</sup> This paragraph is based on *ibid.*, p. 146-148.



of Sidon is said to have written clarifying notes (a ‘commentary’) on Aristotle’s *Categories*.<sup>46</sup> His work must have been impressive, if we take Simplicius’ verdict seriously (*In Aristot. Cat.*, 1, 17-18; cf. 11, 23): “some commentators also applied deeper thought to the work, as did the admirable Boethus” (transl. Chase). We seem to know most about his “responses to criticisms of the categories, and his elaborations of Andronicus’ interpretation of the treatise, with important additions and revisions”.<sup>47</sup> Boethus is described as an exegete (*Simpl., In Aristot. Cat.*, 29, 30-30, 2; cf. 159, 31-32), and the evidence suggests he may have applied word-by-word study of the text (*ibid.*). His reading of the categories (keeping in mind he mostly articulates defensive moves against criticisms) has a limited connection to a *theory* of knowledge, to the extent that the categories are seen as dealing with simple concepts and sensible things as the objects of knowledge;<sup>48</sup> where justification is concerned we do not seem to have important statements on implications for such a theory. Meta-theoretical observations of such a nature are not extant.

I end with a slightly unusual individual, the Peripatetic Aristocles of Messene. Although dated to the first century CE and therefore just beyond the Hellenistic era in the traditional sense,<sup>49</sup> he can inform us about Peripatetic views formulated against a Hellenistic school, the Cyrenaics. Aristocles is a lone figure about whom we only know by way of reports found in the work of the church father Eusebius (*ca.* 263-340 CE). While little has survived of his ‘history of philosophy’ in 10 books,<sup>50</sup> the polemical parts that are preserved give us no sign that he had unorthodox views. According to the editor of the extant fragments, Chiesara:<sup>51</sup>

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<sup>46</sup> Evidence is in Simplicius. See M. J. Griffin, *Aristotle’s Categories in the Early Roman Empire*, Oxford, Oxford University Press, 2015, Ch. 6.

<sup>47</sup> *Ibid.*, p. 178; the criticisms seem to stem from Lucius and Nicostratus (*ibid.*, p. 180-181). For praise compare also *In Aristot. Cat.* 11, 23.

<sup>48</sup> See the discussion in Griffin, *Aristotle’s Categories in the Early Roman Empire*, p. 187-192.

<sup>49</sup> On the date see Barnes, “Peripatetic Epistemology”, p. 548 who offers (no doubt tongue-in-cheek) a hopelessly vague dating: “after Aenesidemus” who is mentioned and “before Eusebius” who provides us with these passages, i.e. between the first c. BCE and the late third to early fourth c. CE.

<sup>50</sup> See M. L. Chiesara, *Aristocles of Messene. Testimonia and Fragments*, New York, Oxford University Press, 2001.

<sup>51</sup> *Ibid.*, Ch. XXIII.

in none of the fragments does Aristocles accept one Platonic or Stoic dogma or refers to one anti-Aristotelian doctrine, and none of the testimonies supports the opinion that he combined Aristotle's with Plato's or Zeno's principles, that he was a Middle Platonist or an Antiochean. On the contrary, most of his arguments are based on orthodox Aristotelian principles, and there seem [*sic*] to be no reason for doubting his Peripateticism.

Aristocles also discussed questions of sensation and sense impressions. Given their content, they must have featured in an epistemological context.<sup>52</sup> Two fragments allow us to examine his claims and the extent to which he was conforming to Aristotelian doctrine. They offer a positive expression of his views, which align very well with the views we find in Aristotle and Theophrastus. It is worth quoting two longer passages, not only to illustrate this traditional perspective, but also to get an impression of his argumentative style. Aristocles *On philosophy* fr. 8, 5-6 Chiesara [= Eus., *PE*, XIV, 21, 5-6 = 14C Sharples, *Peripatetic Philosophy*, p. 102] presents a broad characterisation of perception, while including pleasure and pain as concurrent phenomena:

In general, sensations and impressions seem to be, as it were, mirrors and images of things; but affections [*pathe*] and pleasures and pains are changes and alterations of us ourselves.<sup>53</sup> In this way when we have sensations and impressions we look to external things, but when we experience pleasure and pain we attend to ourselves alone. For our sensations are produced by things outside us, and what these are like [determines] the impressions, too, that they produce, but affections are of a certain sort on account of us and according to the state we are in. Therefore, the same things sometimes seem pleasant, sometimes unpleasant, and sometimes more so, sometimes less so. (transl. Sharples)

The general approach (affections as changes and alterations) fits Aristotle's position (e.g., *De an.*, II, 5, 416b 31-417a 1).<sup>54</sup> The sensory part of the experience is linked to external prompts, while pleasures and pains are considered internal phenomena, which depend in part on the "state we are in". Their relative nature proves how one cannot be sure of their proper nature.

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<sup>52</sup> Sharples, *Peripatetic Philosophy*, places them in his Chapter 14: "Theory of Knowledge".

<sup>53</sup> It is possible that in the phrase "affections and pleasures and pains", the first 'and' can be read explicative, i.e. "affections *such as* pleasures and pains", given the gradualism at the end of the passage.

<sup>54</sup> One wonders whether the analogy of mirrors is influenced by Plato's *Timaeus*.

In another significant passage Aristocles offers a broader judgment in which he includes the mind ('intellect'):

These things being so, we will find, if we are willing to consider, that the starting-points of knowledge are best laid down by those who employ both senses and intellect. Sensation is like the traps and nets and the other hunting implements of this sort; intellect and reason are like the hounds which track down and chase [the prey]. One must think that better [than the Epicureans<sup>55</sup>] is the philosophising of those who neither make use of the senses at random nor employ affections [such as pleasure and pain] in order to determine the truth. It would indeed be a terrible thing for those who are by nature human beings to entrust themselves to irrational pleasures and pains, letting go of the most divine judge, [namely] intellect. (*On philosophy* fr. 8, 6-7 Chiesara [= Eus., *PE*, XIV, 21, 6-7 = 14E Sharples, *Peripatetic Philosophy*, p. 102, continues 14C cited above; transl. Sharples]).

The playful imagery and the alternative view distinguished from the Epicurean one illustrate his considerable interest in the issues regarding knowledge and the commitment to rational thought in line with Aristotle's ideas.

One particularly intriguing case of polemic against sceptical positions is that undertaken against the thought of one Hellenistic school in his long work entitled *On philosophy*.<sup>56</sup> His scathing attack against the Cyrenaics is both informative about his presuppositions and philosophical concerns. It also informs us indirectly about the Peripatetic positions vis-à-vis the Cyrenaics. A small philosophical movement from Cyrene from the fourth century BCE, the Cyrenaics combined elements of Socratic and sceptical thought. Again Eusebius has preserved some of Aristocles' arguments in short passages. The Cyrenaics focused on *pathe*, 'affections' or 'experiences', the result of undergoing the impact of an external object (but they can also refer to feelings or awareness of something) and considered only these to be 'apprehensible'.<sup>57</sup> Although this implies a (kind of) criterion of infallibility regarding the *pathe* as *internally* perceived experiences ("their contents are directly given to consciousness and are incorrigibly true"),<sup>58</sup> their sceptical attitude towards *external* sensory impressions had major consequences for

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<sup>55</sup> For Aristocles' attacks on the Epicureans, see F. Verde, "I *pathe* di Epicuro tra epistemologia ed etica", *Elenchos*, 39 (2), 2018, p. 205-230, esp. 217-221.

<sup>56</sup> Edition of fragments in Chiesara, *Aristocles of Messene*.

<sup>57</sup> See V. Tsouna, *The Epistemology of the Cyrenaic School*, Cambridge, Cambridge University Press, 1998, Ch. 2 for the subtleties and pitfalls of the vocabulary.

<sup>58</sup> *Ibid.*, p. 53; 'immediately true' because there is no distorting intermediary.

their philosophical theorising, precluding them from developing an elaborate metaphysics and physics.

Aristocles formulated two distinctive points of attack, so far as the evidence allows us to make out.<sup>59</sup> Both aim to ridicule the position by extracting absurdities from the basic premises.<sup>60</sup> The first argument objects to the restricted nature of what can be apprehended: *only pathē*. The passage in Eusebius is worth quoting, because it will allow the reader to comprehend that his report and criticism may not offer a fair assessment of the Cyrenaic thesis:

These philosophers maintained *that they know nothing*, just as if a very deep sleep weighs down on them, unless somebody standing beside them struck them or pricked them. For they say that, when they are being burnt or cut they know that they were affected by something. But *whether what burnt them was fire or what cut them iron, they could not tell*. (Eus., *PE*, XIV, 19, 1; transl. Chiesara).

I have here italicised the two parts which seem to represent a paraphrase of the Cyrenaic claim as to what one can know on the basis of external sensory stimuli. They accept that we can know *that* something burns or cuts us but will not allow that we also know *what* causes these sensations. Aristocles focuses on the fact that they exclude knowing anything about the external object, suggesting that this causes them to *become aware* of an unpleasant feeling.<sup>61</sup> The counter-argument turns on his extending the claim from ‘undergoing’ to ‘sensing that they are undergoing’, pointing out that this must mean they are contradicting the narrow awareness of ‘undergoing something’. In other words, he claims there is more to the experience than feeling something, but also an added awareness of a propositional nature. It is worth quoting the passage:

one could immediately ask those who say such things whether they know this that they experience and perceive anything. For if they do not know, neither could they say that they know only the affection: if on the other hand they know, affections would not be the only things apprehensible. For ‘I am being burnt’ is a statement (*logos*), not an affection (*pathos*). (Eus., *PE*, XIV, 19, 2; transl. Chiesara).

Obviously, a clever move, although one might object that the negative claim about the cause (‘if they do not know’) was merely there to clarify the

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<sup>59</sup> I base my summative account on *ibid.*, p. 62-70.

<sup>60</sup> Again, one is reminded of Aristotle’s attack on sceptical position in *Metaph.*, I, 2-4.

<sup>61</sup> He does not raise the objection that these reactions presuppose an understanding of what ‘burning’ and ‘cutting’ is.

absence of an expected consequence, articulated in conventional language of perception. But the point is of course raising a more fundamental issue: at the meta-level of making claims about experiences Aristocles exploits the inconsistency that may arise, namely, that these should not contradict the claims related to the experiences themselves.<sup>62</sup>

Aristocles raises further points along the same lines: that the apprehension of the *pathe* “involves knowledge which extends beyond the temporal limits of the individual *pathe*”.<sup>63</sup> Aristocles then attempts to extract a further inconsistency from the claim, stipulating that three factors should be involved in the process of perception: the percipient, the awareness of the affected percipient and the knowledge of the external objects:

these three things must necessarily coexist, the affection itself, what causes it, and what undergoes it. He who apprehends an affection must necessarily perceive also what undergoes it. For he will not know that something is warm, without knowing whether it is himself or his neighbour, now or last year, in Athens or in Egypt, someone alive or dead, a man or a stone. (Eus., *PE*, XIV, 19, 3; transl. Chiesara).

He can now infer that (as Aristocles insists) awareness of pain *includes* awareness of the percipient. Further problems implied are to do with the Cyrenaic claims being insufficiently clear about (a) how one can differentiate between pain and pleasure, (b) how it is that we know who is undergoing a sensation, and (c) how we are aware of the sense organs themselves. Tsouna suggests that a proper response would be to point out that “all these elements are built into the concept of apprehending the *pathe*: the richer that conception becomes, the more difficult it will be to prove that we are aware of other things than the *pathe*”.<sup>64</sup>

The second objection focuses more on the affected subject. At Eusebius *PE* XIV, 19, 5-7 further comments list certain absurdities that follow from the basic claim (*reductio ad absurdum*): it is absurd if one does not know *where* one is (in heaven or on earth), whether certain basic knowledge (three is less than four) is true or not, and in general, that they can claim to be doing philosophy at all. Aristocles infers from these and other illogical consequences that “they do not understand what we are talking about at this very moment” (19.7). This extreme position seems to

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<sup>62</sup> For an analysis of Aristocles’ reasoning and how the Cyrenaics might respond, see Tsouna, *The Epistemology of the Cyrenaic School*, p. 63-65.

<sup>63</sup> *Ibid.*, p. 65.

<sup>64</sup> *Ibid.*, p. 67.

cut the Cyrenaics off from the most basic and trivial everyday experiences, including a sense of time and identity.

We need not follow this polemic much further. It is clear that Aristocles came up with some sophisticated objections to the sceptical position on *pathe* and knowledge of the Cyrenaics. It is worth asking why he would do so. Was the position of the Cyrenaics considered viable in the first century CE and a threat to contemporary claims in epistemology? Aristocles' objections are formulated in a way that uses absurd consequences and inconsistency as the main strategy to demonstrate their flawed views, which means he constructs his polemics from within the opponent's position. Yet this strategy does not seem an empty exercise for the sake of argument: he takes issue with a sceptical view and does so in a way which is in line with Aristotelian doctrines. Aristotle himself had battled sceptical tendencies, most famously in his counter-argument against the 'law' of non-contradiction (esp. *Metaph.*, I, 2-3) which he declared not just a logical certainty, but an ontological one.<sup>65</sup> Thus Aristocles' attempt to defend the possibility of knowledge of the world can stand as an example of a traditional stance against sceptical claims regarding knowledge from sensory experiences. To what extent his efforts are related to concerns and debates of his own time would take us beyond the scope of this essay.

### *Conclusion*

This brief review of the Peripatetic ideas on the acquisition and justification of knowledge has shown how difficult it is to extract a coherent and continuous narrative from the evidence. Yet clearly there is continuity in engaging with questions of logical reasoning, knowledge justification and foundational issues for the first two generations after Aristotle. The titles and texts allow us to observe Theophrastus and Strato actively reading and refining the ideas of their teacher. They discussed modes of the syllogisms, added to the hypothetical, and commented on the 'criterion'. Both considered metaphysical problems of knowledge justification by examining the basic principles of the natural world. In broader argumentative context, such as Aristotle's discussion of principles in his dialectical work, such claims can assume the role of foundations at a more abstract level. But we also saw that the *kriterion*

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<sup>65</sup> As Dirk Baltzly has pointed out to me (personal communication April 2017) one is reminded of his dismissive remarks on Parmenides and Melissus.

was post-Aristotelian, and probably post-Theophrastan, since his concept of 'the self-evident' (τὸ ἐναργές, 301A FHS&G) is different from the criterion as used in the other Hellenistic schools.

The next generations turned their attention to other areas and one is hard-pressed to find appropriate evidence regarding epistemology. The focus among the Peripatetics seems to have shifted primarily to rhetoric, biography and more literary pursuits. Epistemology after Aristotle was on the agenda sporadically, it would seem, and seldom a subject of interest to the Aristotelian philosophers in the late Hellenistic era until the 'revival' in the first century, when the technical works on logic and metaphysics resurfaced.

REFERENCES:

- Adamson, Peter, “*Posterior analytics* 2.19: A Dialogue with Plato?”, in Verity Harte-Mary M. McCabe-Robert W. Sharples-Anne Sheppard (eds.), *Aristotle and the Stoics Reading Plato*, London, Institute of Classical Studies, 2010, p. 1-19.
- Baltussen, Han, *Theophrastus against the Presocratics and Plato: Peripatetic Dialectic in the De sensibus*, Leiden, Brill, 2000.
- Baltussen, Han, “Strato of Lampsacus as a Reader of Plato’s *Phaedo*: A Critique of the Soul’s Immortality”, in Marc-Antoine Gavray *et al.* (eds.), *Ancient Readings of Plato’s Phaedo*, Boston-Leiden, Brill, 2015, p. 37-62.
- Baltussen, Han, *The Peripatetics. Aristotle’s Heirs 322 BCE-200 CE*, London, Routledge, 2016.
- Baltussen, Han, “Memory, Education and Science. Internal and External Memory and the Rise of Ancient Science”, in Beate Dignas (ed.), *A Cultural History of Memory* (6 vols., Bloomsbury), vol. 1: *Antiquity* [forthcoming].
- Barnes, Jonathan, “Theophrastus and Hypothetical Syllogistic”, in William W. Fortenbaugh (ed.), *Theophrastus of Eresos. On His Life and Work*, New Brunswick-Oxford, Transaction Publishers, 1985, p. 125-141.
- Barnes, Jonathan, “Peripatetic Logic: 100BC-200AD”, in Robert W. Sharples-Richard R. K. Sorabji (eds.), *Greek and Roman Philosophy, 100 BC-200 AD*, 2 vols., London, Institute of Classical Studies, 2007, II, p. 531-546.
- Barnes, Jonathan, “Peripatetic Epistemology: 100BC-200AD”, in Robert W. Sharples-Richard R. K. Sorabji (eds.), *Greek and Roman Philosophy, 100 BC-200 AD*, 2 vols., London, Institute of Classical Studies, 2007, II, p. 547-562.
- Bobzien, Susanne, “Wholly Hypothetical Syllogisms”, *Phronesis*, 45, 2000, p. 87-137.
- Bronstein, David, *Aristotle on Knowledge and Learning: The Posterior Analytics*, Oxford, Oxford University Press, 2016.
- Chiesara, Maria Lorenza, *Aristocles of Messene. Testimonia and Fragments*, New York, Oxford University Press, 2001.
- Diels, Hermann (ed.), *Doxographi Graeci*, Berlin, Reimer, 1879.
- Dodds, Eric Robertson, *Select Passages Illustrating Neoplatonism*, London-New York-Toronto, The Macmillan Co., 1923.
- Fortenbaugh, William W.-White, Stephen A. (eds.), *Lycos of Troas and Hieronymus of Rhodes: Text, Translation, and Discussion*, London-New Brunswick, Transaction Publishers, 2004.
- Fortenbaugh, William W.-White, Stephen A. (eds.), *Aristo of Ceos: Text, Translation, and Discussion*, London-New Brunswick, Transaction Publishers, 2006.
- Ganson, Todd Stuart, “Third-Century Peripatetics on Vision”, in Fortenbaugh-White, *Lycos of Troas and Hieronymus of Rhodes*, 2004, p. 355-362.
- Gottschalk, Hans B., “Hellenistic Reactions to Peripatetic Epistemology”, in Fortenbaugh-White, *Lycos of Troas and Hieronymus of Rhodes*, p. 375-388.
- Griffin, Michael J., *Aristotle’s Categories in the Early Roman Empire*, Oxford, Oxford University Press, 2015.
- Huby, Pamela-Gutas, Dimitri (eds.), *Theophrastus of Eresus. Sources for His Life, Writings, Thought and Influence. Commentary*, vol. 2: *Logic* (Texts 68-136), Leiden, Brill, 2007.



*Peripatetic Epistemology after Aristotle*

- Ierodiakonou, Katerina, “The Notion of *Enargeia* in Hellenistic Philosophy”, in Ben Morison-Katerina Ierodiakonou (eds.), *Episteme, etc.: Essay in Honour of Jonathan Barnes*, Oxford, Oxford University Press, 2012, p. 60-73.
- Laks, André, “Le début d’une physique. Ordre, extension et nature des fragments 142-144 A/B de Théophraste”, in Johannes M. van Ophuijsen-Marlein van Raalte (eds.), *Theophrastus. Reappraising the Sources*, London-New Brunswick, Transaction Publishers, 1998, p. 143-169.
- Long, Anthony A.-Sedley, David N., *The Hellenistic Philosophers*, vol. I: *Translations of the Principal Sources with Philosophical Commentary*, vol. II: *Greek and Latin Texts with Notes and Bibliography*, Cambridge, Cambridge University Press, 1987.
- Parry, Richard, “*Episteme* and *Techne*”, in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition): <https://plato.stanford.edu/archives/fall2014/entries/episteme-techne/> [08.11.2018].
- Repici, Luciana (ed.), *Teofrasto. Metafisica*, Roma, Carocci, 2013.
- Repici, Luciana, “Problems in Eudemos’ Logic” (Paper presented at Rome conference on Eudemos, 201, organised by R. Chiaradonna, T. Dorandi, E. Spinelli, and F. Verde [forthcoming]).
- Salmieri, Gregory-Bronstein, David-Charles, David-Lennox, James G. (eds.), “*Episteme*, Demonstration, and Explanation: A Fresh Look at Aristotle’s *Posterior Analytics*” (4 Essays), *Metascience*, 23, 2014, p. 1-35.
- Sharples, Robert W., *Peripatetic Philosophy 200 BC-AD 200: An Introduction and Collection of Sources in Translation*, Cambridge, Cambridge University Press, 2010.
- Tsouana, Voula, *The Epistemology of the Cyrenaic School*, Cambridge, Cambridge University Press, 1998.
- Verde, Francesco, “L’empirismo di Teofrasto e la meteorologia epicurea”, *Rivista di Filosofia Neo-Scolastica* [forthcoming].
- Verde, Francesco, “*I pathe* di Epicuro tra epistemologia ed etica”, *Elenchos*, 39 (2), 2018, p. 205-230.
- White, Stephen A., “Lyco and Hieronymus on the Good Life”, in Fortenbaugh-White, *Lyco of Troas and Hieronymus of Rhodes*, p. 389-409.
- Wachsmuth, Curt (ed.), *Ioannis Stobaei (Stobaeus): Anthologii*, Berlin, Weidmann, 1888.
- Wöhrle, Georg, *Theophrasts Methode in seinen botanischen Schriften*, Grüner, Amsterdam, 1985.

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