From Epicurus to Epictetus

Studies in Hellenistic and Roman Philosophy

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Aristotle and the history of Greek scepticism

INTRODUCTION

No one has ever regarded the 'master of them that know' as a sceptic,¹ and the modern history of ancient scepticism has rarely found it necessary to mention his name. He has the honour of being the first philosopher Sextus Empiricus, in the introduction to his Outlines of Pyrrhonism, names as a dogmatikos: 'one who in philosophical investigations believes that he has discovered the truth' (1.3). My purpose in this chapter is not to cast doubt on Aristotle's dogmatic credentials, and I will touch only incidentally on technical details of his theory of knowledge. What interests me is a series of questions that seem to have gone largely unasked. How far is Aristotle aware of the sceptical challenge to knowledge, and how far does he attempt to answer it? How does he assess earlier Greek thinkers who have been regarded as forerunners of the official sceptics? How much, if at all, did his own work influence and anticipate the debates between sceptics and dogmatists that are charted in Cicero's Academica and the writings of Sextus? These questions cannot be fully answered in a single chapter, but I shall argue that they are profitable lines of enquiry, and also that Aristotle deserves more than the occasional footnote in histories of ancient scepticism.

This chapter originated as a contribution to the Machette series of lectures on Aristotle, organized by Jude Dougherty, at the Catholic University of Washington, DC in the Autumn of 1978. For the leisure to work on the topic I am indebted to Princeton University, which elected me a senior fellow of the Council for Humanities in the fall semester of 1978–9, and the Institute for Advanced Study, of which I was privileged to be a member in the second semester of that year. In revising the original text I have been especially helped by comments and criticism from Myles Burnyeat and Gisela Striker. The study was subsequently presented to the Classics and Philosophy departments of Harvard University, to the Oxford Philosophical Society, and to the philosophy departments of the Davis and Riverside campuses of the University of California.

¹ 'Il maestro di color che sanno', Dante, Inferno IV.131.

Aristotle and Greek scepticism

There is of course an apparently excellent reason for his omission from such books. Greek Scepticism (capitalized as a self-conscious philosophical movement) was a post-Aristotelian development. Like most generalizations that familiar assertion begs several questions. The eponymous founders of what we call the two sceptical schools, Pyrrhonism and the New Academy, were active after Aristotle's time. But the genus of ancient scepticism which has Pyrrhonism and the New Academy as its two species is a piece of encyclopaedic tidy-mindedness with no historical authority. Arcesilaus and Carneades did not call themselves sceptics, nor neo-Academics, but Academics, members of the Platonic tradition. The Pyrrhonists distinguished them, as Academics, both from dogmatists and from the sceptics proper, who were themselves the self-styled followers of Pyrrho. The Academics, according to the Pyrrhonists, denied the possibility of discovering the truth, whereas they themselves continued to search for it.²

The Academy seems to have largely, if not completely, ignored Pyrrho. The later Pyrrhonists regarded what we call the sceptical Academics as one among many possible contenders for the description 'sceptic' in the Pyrrhonian sense, none of whom, on examination by Pyrrhonian criteria, is found to justify that title.³ The others who are considered and rejected include Heraclitus, Protagoras, and Democritus. Yet all three of these were regarded by Aristotle, as the first two at least had already been regarded by Plato, as constituting a challenge to knowledge (see below, p. 52). It is quite probable that Pyrrho himself was influenced by Xenophanes and Democritus, and it is certain that the Academic Arcesilaus invited support for his ignorance from Socrates and many pre-Socratic philosophers.⁴ Modern historians of ancient scepticism have to look back to the pre-Aristotelian period, but they should also linger over Aristotle himself before passing on to Pyrrho and the New Academy.⁵

Before turning to details, some comments about my methodology, and on what I hope to establish, are in order. To elucidate the questions of my opening paragraph, I propose to look at Aristotle from two points of view. First, I want to ask how far he and the official sceptics (by whom I shall

² Sextus, PH 1.2-4.

³ Sextus, PH 1.210-41, with 220-35 for the Academy.

⁴ For Pyrrho and Xenophanes, see Chapter 4 of this volume, pp. 86–8; for Democritus, Dal Pra 1975, vol. 1, pp. 47 ff.; for Arcesilaus, Long 1996/2001, 11–16.

⁵ The celebrated scholar of ancient scepticism, Victor Brochard, mentions Aristotle only to dismiss his relevance, see Brochard 1923, 29, together with the useful corrective already offered by De Lacy 1958, esp. 61–4, and 70 f.

chiefly mean Sextus Empiricus) share sufficient common ground to suggest that they could have had a useful argument about the aims and methods of philosophy. Second, I am interested in Aristotle's apparent concern with particular arguments or strategies which became the stock-in-trade of sceptical controversies with dogmatists. There is some overlap between these two points of view, and I have not attempted to keep them quite separate from one another. The Aristotelian texts for the second topic are more restricted than those which can be invoked to discuss the first, and the philosophical and historical inferences which can be drawn from the material do not fully correspond in the two cases. There are a number of striking parallels between Aristotle's concerns, especially in *Metaphysics* Gamma, and issues debated by Stoics and their sceptical opponents. For the sake of clarity I have taken up a definite position on interpreting the significance of these matters. I acknowledge, though, that some people will probably think that Aristotle prefigures later issues less than I do.

The most important point to recognize at this stage of research is the common ground, whatever one makes of it. I do not assume that the Stoics and the sceptics had read all or most of the texts of Aristotle I will mention, probable though I think that this is. Nor should one forget that the development of Greek dialectic brought to light issues concerning proof and truth, autonomously as it were, which may cast doubt on Aristotle's anticipation of scepticism, or on later dogmatists and sceptics learning from him. There was nothing closely like Pyrrhonism or Academic scepticism in Greek philosophy up to the time of Aristotle. Having issued all these caveats, I leave it to my readers to decide what to make of the material.

ARISTOTLE AND SEXTUS EMPIRICUS: COMPARISON AND CONTRAST

It will be helpful if I point the way by comparing and contrasting some of the dialectical aims and methods of Aristotle with those professed by Sextus Empiricus. In the process we should remember that, though Sextus probably wrote in about AD 200, he was using the methodology and material of earlier Pyrrhonists, especially Aenesidemus, who left the Academy and declared allegiance to Pyrrho, probably during the middle years of the first century BC.⁶

⁶ The biography of Aenesidemus is problematical, but what I have stated has the authority of Photius, *Biblioteca* cod 212 (pp. 169b–171a Bekker); cf. Brochard 1923, 244 with n. 3, and Glucker 1978, 116–18.

Aristotle and Greek scepticism

This is what Sextus (*PH* 1.12) tells us concerning the origin of scepticism: 'Strong-minded people, who were troubled on account of the discrepancy (*anōmalia*) in things, and in doubt (*aporountes*) as to which of them they ought rather to give their approval, proceeded to investigate (*zētein*) what is true in things and what is false, with the aim of ceasing to be troubled as a result of deciding (*epikrisis*) these questions.' A little later Sextus repeats this account of the sceptic's philosophical starting point, noting his wish to decide about (*epikrinai*) the truth of mental states (or appearances, *phantasiai*); and then he says (*PH* 1.26): 'He [i.e. the proto-sceptic] fell into disagreement of equal weight (*isosthenē diaphonian*), and being unable to make a decision he suspended judgement: while he was in this state, there followed, as it turned out, absence of trouble (*ataraxia*) in regard to the content of beliefs.'

According to this story the original sceptic was a strong-minded philosopher who wanted to get at the truth, as a way of settling the discrepancies or disagreements which troubled him in his experience of the world. As a result of his investigations he found that he was faced not only with conflicting appearances but also with conflicting appearances of equal weight; his inability to adjudicate between them resulted in his suspending judgement, and this turned out to give him what he had been looking for all along—freedom from disturbance. The crucial notions in this account are: first, disturbance or *aporia* in the face of conflicting appearances; second, philosophical investigation of them; third, attempts to settle the discrepancies by adjudicating between them; fourth, discovering the reason why they cannot be settled, that is, the equal weight of the conflicting appearances; and fifth, suspension of judgement as the cure for the initial disturbance or *aporia*.

How might Aristotle react to this philosophical biography? He could say that Sextus has borrowed his first three stages from his own *Metaphysics*. For Aristotle it is wonder and *aporia* which prompted the first philosophers to raise questions about 'immediate perplexities' and then 'greater ones', as for instance the changes of the moon and the sun (*Metaph.* 1.2, 982b11–17). What Sextus calls a desire to escape from disturbance (*tarassomenoi*) is regarded by Aristotle as a desire to escape from 'ignorance', *agnoia* (928b20). The problem of discrepancy in things, or discrepant appearances, which leads on to Sextus' third stage, is also one that arises early in the *Metaphysics*. In the opening chapter of book 2 (Little Alpha), Aristotle seeks to show why the difficulties that anyone encounters in contributing to the grasp of truth do not exclude the totality of their contributions from achieving something considerable.⁷ He advances a theory of progressive and cumulative knowledge, based on the premiss that no individual can contribute more than a little, but 'we cannot all fail'. Moreover, the difficulties we experience may be due to ourselves and not be 'in the things'.

Then, at the opening of book 3, Aristotle sets out the problems of metaphysics as a series of *aporiai*, 'conflicting views'. Much like Sextus, he asserts that people who desire to be rid of difficulties should study them well: 'for the later provision of resources (*euporia*, the contrary of *aporia*) is a release from the earlier difficulties, and release is impossible when we do not know the knot.... It is impossible to advance.'⁸ He argues that an attempt to study the *aporiai*, to clear the ground, is a necessary preliminary to any philosophical investigation; and he concludes this introduction by saying that one who has heard both sides is necessarily in a better position to decide or judge (*krinai*, 995b2–4).⁹

Note the significance of Aristotle's claim for our comparison and contrast with the sceptic. A Pyrrhonist says that what results from considering and weighing divergent appearances or opinions is the lack of any means of deciding between them; they are found to be of equal weight, and so his philosophical quest stops dead in its tracks. Aristotle, on the other hand, thinks that the survey of discrepant views yields positive results, in that it exposes the problems to be considered and provides possible material for the solution. The Pyrrhonist finds in discrepant views and the absence of a criterion for deciding between them the principal reason for suspending judgement about how things are in reality (externally to us, objectively, and so forth). Aristotle sees discrepant views as a natural consequence of human enquiry: they constitute the *endoxa*, the commonly held opinions on a subject, and their discrepancy is not a reason for despairing of a solution but something which clarifies the philosopher's task and puts him in a better position to decide.

The assumptions which lie behind the opposite outcomes of reviewing *aporiai*—equal strength of the conflicting alternatives for the Pyrrhonist versus the Aristotelian philosopher's better position to decide between

⁷ Cf. EE 1.6, 1216b30-1 for 'each human being's affinity to the truth'.

⁸ 995a28–33. On Aristotle's aporetic method and its positive significance see Le Blond 1939 and Aubenque 1961, 3–19.

⁹ This comment recalls the epistemological utility of dialectic, as stated in *Top.* 1.2, 101a34–6, πρὸς δὲ τὰς κατὰ φιλοσοφίαν ἐπιστήμας, ὅτι δυνάμενοι πρὸς ἀμφότερα διαπορῆσαι ῥậον ἐν ἑκάστοις κατοψόμεθα τἀληθές τε καὶ τὸ ψεῦδος. The notion of *aporia* as equality of opposing arguments was familiar enough to Aristotle for him to cite it as a *topos*, *Top.* 6.6, 145b1–2.

them—I do not wish to examine at this stage. What cannot be denied is that Aristotle presents conflicts of views here in a fashion very similar to that of Sextus: compare, for instance, Aristotle's review of the question whether being and unity are the substances of things or whether some other entity underlies being and unity. 'In either case there is a difficulty', says Aristotle, after detailing both alternatives (1001b1), but he does not conclude from this, as Sextus would do, that the alternative proposals are of equal weight, and therefore the problem of deciding betwen them cannot, just for that reason, be resolved. ¹⁰

ARISTOTLE AND THE FIVE MODES OF AGRIPPA

Further encouragement to the comparison of both philosophers may be found in the fact that Aristotle is aware of most of the material which forms the basis of the Pyrrhonist's 'modes' (*tropoi*) for suspending judgement. Sextus' standard techniques of refutation, especially in the *Outlines of Pyrrhonism*, are the 'five modes' he attributes to 'the later Sceptics', elsewhere identified with Agrippa.¹¹ These are dialectical strategies which are supposed to enable their user to attain, or bring others to attain, suspension of judgement. I have already mentioned the first mode, 'disagreement (*diaphōnia*), which plays an enormous part in Sextus. He describes it as 'irresolvable conflict because of which we are unable to choose or reject something' (*PH* 1.165). It is in order to reveal its force and relevance that he reviews at such length the dogmatic positions on the main problems of philosophy.

The second mode of Agrippa, 'infinite regress' (*eis apeiron*), is used in arguing that what is advanced as a proof needs a further proof, and so *ad infinitum*. Aristotle's awareness of this apparent threat to knowledge needs no lengthy exposition. It forms the basis of his insistence (to which I will return shortly) that the primary premises of a demonstrative proof (*apodeixis*) cannot themselves be proved, and he frequently insists, too, that it is a symptom of inadequate education to demand proofs of everything.¹²

¹⁰ Aristotle does not always maintain that convincing solutions can be found; cf. *Metaph.* 13.9, 1085b36–1086a16, where he uses the Platonists' 'disagreement' (*diaphōnein*, Sextus Empiricus' favorite dialectical device) concerning Forms and numbers as evidence that 'these things, because they are not true, cause their disturbance' (*tarachē*, Sextus' source of the philosophical impulse).

¹¹ *PH* 1.164–9; see Long 1978*c*.

¹² Cf. *Metaph.* 2.2, 994b20; 2.3, 995a12; 4.3, 1005b3; 4.4, 1006a6; 4.6, 1011a8; 4.7, 1012a21; Theophrastus in Proclus, *in Tim.*, vol. 2 p. 120, 9–22 Dichl and Theophrastus, *Metaph.* 9b21–24.

The third mode, 'relativity' (*pros ti*), alludes to the notion that the appearance of something to a percipient is no ground for assenting to that appearance as evidence of some actual state of affairs (*PH* 1.167). In *Metaphysics* Gamma Aristotle deals at length with the thesis that all appearances are true (Protagoras' doctrine), and one of its consequences, which he refutes, is that everything is relative (1011a17).

Sextus' name for the fifth mode of Agrippa is 'circular reasoning' (*diallēlos tropos*, *PH* 1.169), whereby what is needed in order to settle a problem is itself in need of proof from (the settlement of) the problem. Aristotle offers a positive account of 'circular or reciprocal demonstration' in the *Prior analytics* (2.5, 57b18; cf. 2.6, 59a32), but he establishes its inadequacies as a method of 'unconditional proof' in a well-known section of the *Posterior analytics* (see below). There he also seeks to disarm the fourth mode, 'from hypothesis' (*ex hypotheseōs*), described (*PH* 1.168) as 'the recourse of the dogmatists when, driven away to infinity (*eis apeiron*), they begin from something which they do not prove but claim to adopt without demonstration 'by way of concession' (*kata synchōrēsin*).¹³ In fact, three of these five modes are formally handled by Aristotle in his introductory account of demonstrative knowledge in *Posterior analytics* book 1.

In that book's first two chapters Aristotle argues that demonstrative knowledge must be based on syllogisms whose premises are primary and undemonstrated and which are also prior to, causes of, and better known than the conclusion (71b20–33). Then, in chapter 3, he says: 'The necessity of knowing the primary things has made some people think that knowledge does not exist, and others, that it does exist but there are demonstrations of everything.'¹⁴ The first claim, says Aristotle, rests upon an assumption he accepts: knowledge of the posterior must depend on what is prior where prior

In the first Aristotelian passage, and in the second one of Theophrastus, demanding proof of everything is explicitly stated to undermine knowledge, as it is in *APo.* 1.3 (see main text below). If Aristotle has a specific philosopher in view, this is likely to have been Antisthenes (cf. n. 14 below).

¹³ For *ex hypotheseös* cf. also Aristot., *APr.* 1.23, 40b25; *APo.* 1.3, 72b15, 22, 83b39; 2.6, 92a7, 20.

¹⁴ 72b5–7. On Aristotle's first opponents see Cherniss 1944, 65: 'There is no likelihood that such an attitude was restricted to a single group or school; anyone who was inclined to scepticism would be likely to maintain it as shown *by its reappearance in the work of Sextus* [my italics] ... Nevertheless Aristotle frequently refers to it as the basis upon which a certain group refused to admit the law of contradiction (*Metaph.* 4, 1006a5–11, 1011a7–20, 1012a20–34; 11, 1063b7–14), and this refusal he attributes specifically to Antisthenes and his followers (*Metaph.* 5, 1024b3–34, *Top.* 1.11, 104b20–1).' On the second opponents, cf. his remarks *ad loc.* and also Barnes 1975, 106 and Barnes 1976.

means primary, and it also rests on a dilemma which he refutes. The dilemma is this. Either the move from the posterior to the primary is an infinite or a finite series; if it is infinite, the primary truths can never be reached; if it is finite, the primary truths cannot themselves be known because they cannot be demonstrated.

Aristotle's opponents here are characterized as making typically Pyrrhonian use of the two modes, 'infinite regress' and 'from hypothesis'.¹⁵ I mean that they use these strategies in order to argue against a foundation for knowledge. Aristotle's second set of opponents agree with the first group in claiming that all knowledge must proceed 'through demonstration . . . but they say nothing prevents there being demonstration of everything; for the demonstration can be circular and reciprocal' (*ex allēlon*).¹⁶ We need not investigate how such circular proofs might work.¹⁷ The interest of it to us here is that Aristotle plays Sextus' own game by arguing that circular proof is impossible for 'demonstrating unconditionally' (72b25).

As to the first set of opponents, he rejects the premise of their dilemma: 'We say that not all knowledge is demonstrative' (72b18). And so he accepts the second horn of the dilemma; that is, he states that the series from the posterior to the primary truths is finite, and, therefore, the primary truths are not capable of demonstration. But, for Aristotle, that is not a reason for regarding them as unknowable. They are of course, as he argues in the last chapter of *Posterior analytics* book 2, not objects of any proof but truths that we know through induction and *nous*. It is not difficult to pick holes in Aristotle's answer to his first-line opponents here: the epistemological work he assigns to *nous*, however we interpret this, is open to the sceptical rejoinder that *nous* needs a criterion to justify its knowing anything. I pass over that large problem now, but not without this observation.

Although Aristotle and Sextus must obviously disagree about the possibility of undemonstrated knowledge, the route which Aristotle traces from perception of particulars to apprehension of universals has, if only at second or third hand, a sceptical history. Sextus as a sceptic cannot allow that empiricism has any justification as a theory of knowledge, but he does, however non-committally, account for concepts as derivatives of perception.

¹⁵ See e.g. Sextus, *PH* 2.36, 88–90, *M* 8.347.

¹⁶ 72b15–18; ἐξ ἀλλήλων is equivalent in sense to what Sextus calls the διάλληλος τρόπος, Agrippa's fifth mode. The Stoics used διάλληλος λόγος for a form of 'undemonstrated' argument where the conclusion is established 'reciprocally', SVF 2.273.

¹⁷ The topic is well discussed by Barnes 1976.

He uses that account in order to refute Platonic and Democritean 'abolition of perceptions',¹⁸ and it seems likely that he did think of the phenomena which form the objects of our consciousness as originating in an interaction between our sense organs and something unspecifiable in the external world.¹⁹ The details of this account of concept formation can be traced back to the Epicureans and Stoics. To the extent that these agree with Aristotle in regarding perception as the starting point of all concepts, all three dogmatists are relevant to Pyrrhonism.

The point I want to insist on is Aristotle's quite explicit concern, with terms and procedures constantly invoked by Sextus, to avoid the charge that demonstrative knowledge involves an infinite regress or unproved assumptions or circular reasoning. It goes without saying that the opening of Posterior analytics, like Metaphysics Gamma (to which we will come shortly), is of the greatest methodological importance to Aristotle. If we find him there responding to three of the Pyrrhonist's favorite strategies, and familiar elsewhere with the polemical use to which the remaining two modes of Agrippa can be put, it is difficult to resist the conclusion that he was aware of the main tendencies of the sceptical challenge in its later formal development. Aristocles, an Aristotelian of the second century AD, remarked that Aristotle argued against those who, like Pyrrho, maintained (allegedly) that 'we are naturally constituted so as to know nothing'.²⁰ This was not an anachronistic observation, as will become clearer still when we turn now to material used by the Pyrrhonists in their set of 'ten modes', first formalized by Aenesidemus, and Aristotle's apparent familiarity with this kind of material.²¹

ARISTOTLE AND THE TEN MODES OF AENESIDEMUS

The ten modes, like the five we have just considered, are dialectical procedures which the Pyrrhonist uses in order to cast doubt on any proposition as certainly true. However, the modes of Aenesidemus differ from those of Agrippa in consisting not of logical strategies but of a large body of evidence to show that, for instance, humans and animals differ in their sense impressions; humans differ among themselves; the senses differ between one another; people sense things differently according to whether they are awake or

¹⁸ *M* 8.56 ff. ¹⁹ See Long 1978*c*, 36 with n. 18.

²⁰ Ap. Euseb., *PE* 14.18.2 (LS 1F). Aristocles' own refutation of Pyrrhonism makes use of Aristotelian arguments (which will be discussed below); see esp. Euseb., *PE* 14.18.8–9.

²¹ On Aenesidemus and the ten modes see Annas and Barnes 1985.

asleep, healthy or ill, calm or emotional, and so on; sense perception depends on variable external conditions and is relative to those conditions.²²

As far as one can tell, Aenesidemus, the founder (at least practically speaking) of later Pyrrhonism, was the first philosopher who formally classified this material into ten distinct modes of argument which were thereby systematized as such in the sceptic's arsenal. There is no reason to think that Aristotle knew of a similar classification. But it has long been recognized that the material itself, or much of it, is as old as Xenophanes, Heraclitus, Parmenides, and Democritus. It was certainly familiar to Plato who, in preparing for his exposition and refutation of Protagoras (*Tht*. 154a2–8), has Socrates present conflicting appearances in three groups corresponding to the first, second, and fourth modes of Aenesidemus.²³ Aristotle, then, when he defends himself against sceptical usage of such material, is not combating Pyrrhonism as such. But it seems to me highly probable that he provided the dogmatic opponents of the later Academics and the Pyrrhonists with many of their favourite defences.

In *Metaphysics* Gamma 4 Aristotle undertakes to defend the principle of non-contradiction, which he has sought to establish as the 'firmest of all principles' (1005b17 ff.), against anyone who says, as Heraclitus did 'according to some people' (1005b23–5), that it is possible for the same thing to be and not to be, and to believe so (1005b35–1006a2). Aristotle interprets Protagoras' thesis—that whatever appears to each human being is so for each human being—as having the necessary consequence 'that everything is simultaneously true and false' (1007b18–25, cf. 1009a6–9), and he proceeds to say that anyone who denies the principle of non-contradiction, or what comes to the same, who upholds Protagoras' thesis, 'out of genuine puzzlement' (1009a18 ff.), has arrived at this position 'as a result of what they perceive' (1009a22–5). In order to refute the notion that everything that is perceived is true, Aristotle reviews the considerations which have led to this belief. I will concentrate here on those which are common to the ten 'modes' of Aenesidemus.

As we have just seen, the first two of these modes deal with the differences between human and animal perception and the differences between human

²² For the ancient evidence cf. Sextus PH 1.36 ff. and DL 9.79 ff.

²³ 'Would you be prepared to insist that every colour appears to a dog, or any living creature, just the way it appears to you? And what about another man? Is the way something appears to him like the way it appears to you? Or wouldn't you rather say that it doesn't appear the same even to yourself, because you're never in a similar condition to yourself?', trans. McDowell 1973.

beings in respect of perception. Aristotle recognized that these considerations could lead to either Protagorean subjectivism (whatever is perceived is true) or 'Democritean' scepticism (nothing is true or everything is obscure to us).²⁴ As grounds of subjectivism or scepticism he mentions the same thing tasting different to different people, the inappropriateness of judging truth by numerical criteria, the difference between the perceptions of the healthy and the sick, differences between humans and animals, and the same person not always perceiving the same thing to be the same (1009b2–9). The conclusion about obscurity (*adēlon*), which he attributes to Democritus, was the response of the Pyrrhonists to every claim about how things are in themselves.²⁵

A little later (1010b4 ff.) Aristotle covers more material common to the Pyrrhonian modes when he mentions his opponents as puzzled about

whether magnitudes and colours are such as they appear to those at a distance or alternatively to those close by, or whether they are as they appear to the healthy or alternatively to the sick, or whether those things are heavier which appear to the weak or alternatively to the strong, or whether those things are true which appear to those asleep or alternatively to those awake.²⁶

And he agrees with Aenesidemus' third mode that 'it is possible for the same thing to appear honey to the sight but not to the taste ... for the same things do not always appear the same way to everyone, or always to the same person, but they often appear the opposite in respect of the same time' (1011a25-33). Aristotle, then, was fully aware of material that could be used in what has later been called the argument from illusion.²⁷ Characteristically, he gives his opponents a run for their money. Moreover, his awareness of scepticism is not merely seen in his familiarity with material that the later Pyrrhonists used for arriving at suspension of judgement. We can also find him, in *Metaphysics* Gamma, describing a position which is identical to that *formally* adopted by the early Pyrrhonists, and throwing down the gauntlet himself in a manner which hits the official sceptic at one of his most vulnerable points.

²⁴ 1009b11–12, for Democritus. Whether in fact Democritus held such views is controversial, but that does not affect Aristotle's argument here. Arcesilaus (Cicero, *Acad.* 1.44) is said to have regarded Democritus as a predecessor on the strength of his claim (DL 9.72) that 'truth is in an abyss'.

²⁵ Cf. Sextus *PH* 1.13.138, etc. The Stoics (as presented by Antiochus of Ascalon) charged the Academics with making everything *adēla*, Cicero, *Acad.* 2.54, cf. 2.32.

²⁶ For Academic use of such considerations and Stoic answers to them cf. Cicero, *Acad.* 2.52–3, 88–90.

²⁷ See Kenny 1967. He compares its various forms in Plato *Tht.*, Aristotle, Sextus Empiricus, Berkeley, and Ayer.

In the best evidence we have for the position of the historical Pyrrho, Timon of Phlius described it thus:²⁸

Things are equally indistinguishable, unmeasurable, and indeterminable. For this reason neither our perceptions nor our opinions are true or false. Therefore for this reason we should not put our trust in them, but we should be without opinions (*adoxastoi*), inclining neither this way nor that, steadfast, saying concerning each thing that it no more is than is not, or that it both is and is not, or that it neither is nor is not. The result to those who actually adopt this attitude, says Timon, will be first non-assertion (*aphasia*) and then freedom from disturbance (*ataraxia*).

From the world's indiscernibility Pyrrho, according to Timon, inferred that neither perceptions nor opinions are true or false.²⁹ This seems to deny the principle of non-contradiction, since if the opinion p is neither true nor false, and the opinion not-p is neither true nor false, then p and not-p are indistinguishable in respect of truth and falsehood. The denial is confirmed in the next sentence: 'saying concerning each thing that it no more is than is not...'

Now consider Aristotle's characterization of anyone who denies the principle of non-contradiction (*Metaph.* 4.4, 1008a30–5): 'But at the same time it is plain that with such a man there can be no enquiry about anything; for he says nothing. For he says neither that it is thus nor not thus, but that it is both thus and not thus; and again he denies both of these, saying that it neither is thus nor not thus; for otherwise something would be already definite.' Here, in almost identical language, Aristotle assimilates his opponent to the official description of the early Pyrrhonists authorized by Timon.³⁰ The early Pyrrhonist does say nothing, in Aristotle's sense. He combines contradictories in anything he says about things because in this way he runs no risk of saying anything definite.³¹ He rejoices in the fact that you cannot enquire

²⁸ Aristocles ap. Euseb., *PE* 14.18.3–4, which is discussed in all the standard books on Greek scepticism. See also Chapter 4 of this volume, p. 71 n. 4, and LS 1F.

²⁹ The interpretation of the inference is difficult and highly controversial; see Postscript.

³⁰ I say 'early' Pyrrhonists because it is doubtful whether Sextus would accept the description or its grounds (perceptions neither true nor false, etc.). Of course he readily uses the 'no more' (*ou māllon*) formula, though not dogmatically (*PH* 1.191), but his dialectic requires constant use of the principle of non-contradiction: the method of arriving at suspension of judgement by opposing arguments of equal strength only makes sense if one takes it, however informally, that contraries or contradictories cannot be coherently combined. For examples of Sextus' application of the principle, cf. M 1.11, and the excluded middle (Aristotle's further axiom in *Metaph*. 4.7, 1011b23 ff.), M 1.13.

³¹ The parallelism between the two texts is so striking that one might suppose, as Gisela Striker suggested to me, that Timon and other Pyrrhonists picked up the description from Aristotle, paradoxically accepting it as adequate and irreproachable (cf. the reaction to the self-contradiction

with him about anything.³² If Aristotle can present his opponents in the same way, that is further evidence for our attributing to him not merely an awareness of what scepticism involves, in one of its Pyrrhonian manifestations, but also a determination to remove himself from the threats to knowledge that it makes.

If we now return to the later Pyrrhonian modes, *Metaphysics* Gamma can also provide us with the means of seeing how Aristotle would respond to Sextus' efforts to discomfit the dogmatists over their opinions on the criterion of truth.

Sextus seeks to show, at great length, that the arguments against any criterion are equal to those which have been advanced in its favour.³³ One of his favourite techniques is to say that any claim that such and such is the criterion will itself need a further criterion: for instance: 'Who will be the judge that the criterion of the Agent is Man? For if they say that no man is to be the judge, that will be begging the question. But if they say that another animal is the judge, how is that animal adopted for the purpose of judging whether Man is the criterion?' (*PH* 2.35 f.).

At the beginning of *Metaphysics* Gamma, Aristotle represents his opponents, who have based their case on the perceptual puzzles, as 'seeking to know who will judge the healthy person, and in general, who is to judge rightly in each case' (1011a4–6). This is precisely Sextus' challenge. Aristotle tartly replies: 'Such questions are like puzzling over whether we are at this moment asleep or awake, and all such puzzles come to the same thing.³⁴ For these people demand a reason for everything; they seek a starting point, and seek to get it through demonstration' (1011a6–10). Aristotle uses here exactly the same rejoinder that he employed in *APo*. 1.3: you can't demand proof of everything, a justification for every belief. He appreciates that it is fatal to argue with the sceptic on the sceptic's own terms.

argument at Sextus *PH* 1.14 and 206). But the two descriptions may well be independent of each other. In juxtaposing them I am not assuming that Aristotle had some proto-sceptical text in mind (though he already had a model in Plato, *Tht.* 183a, where Socrates' target is 'Heraclitean' flux (εἰ πάντα χινεῖται, πᾶσα ἀπόχρισις, περὶ ὅτου ἄν τις ἀποχρίνηται, ὁμοίως ὀρθὴ εἶναι. οὕτω τ' ἔχειν φάναι χαὶ μὴ οὕτω, εἰ δὲ βούλει, γίγνεσθαι) but, rather, that Aristotle was concerned to argue against a position which, with hindsight, we can usefully compare with early Pyrrhonian self-characterization.

³² I have no opportunity here to explore Academic and Stoic arguments, but notice that, in Antiochus' defence of Stoic epistemology, philosophical enquiry is allegedly ruled out if true and false cannot be distinguished, Cicero, *Acad.* 2.22 and 27.

³³ PH 2.14–79, greatly expanded in M7. 27–446; see Long 1978c.

³⁴ Once again there is a reminiscence of the *Theaetetus*, 158b 5 ff.

Nonetheless, as we shall now see, Aristotle is prepared to argue that it is impossible to live on the basis of denying the principle of non-contradiction; such a denial he regards as, practically speaking, equivalent to complete scepticism about knowledge and reasonable belief.

ARISTOTLE AND THE ARGUMENT 'SCEPTICISM MAKES LIFE IMPOSSIBLE'

The charge that total doubt or a disinclination to believe anything is incompatible with everyday life has frequently been levelled against scepticism. Its most famous exponent is David Hume, who said of the Pyrrhonist:

He must acknowledge, if he will acknowledge anything, that all human life must perish, were his principles universally and steadily to prevail. All discourse, all action would immediately cease ... It is true so fatal an event is very little to be dreaded. Nature is always too strong for principle. And though a Pyrrhonian may throw himself or others into a momentary amazement and confusion by his profound reasonings the first and most trivial event in life will put to flight all his doubts and scruples, and leave him the same, in every point of action and speculation, with the philosophers of every other sect.35

Such an alleged discrepancy between sceptical theory and practice was developed by the Stoics as their strongest weapon against the sceptical Academy. Its fame became sufficient for it to be labelled, as an argument, by the single word *apraxia*, 'inactivity', and compared to a Gorgon, because it *petrified* its opponents.³⁶ It seems to have passed unnoticed that Aristotle, long before the Stoics, argues in Metaphysics Gamma in a manner very close to their charge of *apraxia*, a consequence of scepticism also adduced in antiquity against the Pyrrhonists. The significance of Aristotle's contribution here will become clearer in the light of the post-Aristotelian history of apraxia.

Very briefly, the Stoics maintained that no action is possible unless human beings give their assent to something. In order to act, we need to hold firm beliefs about ourselves and the way the world impinges on us, and we also need to hold firm beliefs about the value or desirability of whatever our actions are aimed at. The Academic sceptics and the Pyrrhonists replied that it was possible to act without holding any such beliefs.

 ³⁵ An Enquiry Concerning Human Understanding, Sect. XII, 128.
³⁶ Plutarch, Adv. Col. 26, 1122A–F (LS 69A) and St. rep. 57, 1057A (LS 53S); Cicero, Acad. 2.24 - 5.

The Academics defended this position by recourse to the Stoic concepts, mental impression (*phantasia*) and impulse (*hormē*). An impression of the naturally suitable combined with the impulse to pursue the object of the impression was sufficient, they argued, to explain purposive action. There was no need to introduce 'assent' to the impression, as the Stoics supposed, and so beliefs need not enter into the psychology of action at all.³⁷ The Pyrrhonists answered the charge by reference to *phainomena*: in acting, one simply follows the appearances which arise naturally and involuntarily, we know not how, and the customs of society.³⁸

So much for the post-Aristotelian history. What concerns us here is not the sceptics' rejoinders to the charge of *apraxia* but the nature of the charge and its Aristotelian antecedents. Just consider this description of Pyrrho in Diogenes Laertius (9.62): 'Pyrrho was consistent with this way of life [i.e. holding that nothing is more this than that], avoiding nothing and taking no precautions, but facing everything as it came, wagons, as it might be, precipices, dogs, and quite generally handing over nothing to the senses. But he was kept safe . . . by his disciples who accompanied him.' Diogenes then says that this story, though certified by Antigonus of Carystus, was denied by Aenesidemus, who said that while Pyrrho's philosophy was based upon suspension of judgement he did not lack foresight in his everyday life.³⁹ Here then we have, first, the popular account of Pyrrho: he was only saved from disaster by his friends, implying that his philosophy did make effective action impossible; and then we get the philosophical defence of Pyrrho by Aenesidemus, reconciling suspension of judgement with ordinary behaviour.

In the light of this background we may now return to *Metaphysics* Gamma. Aristotle's strategy in establishing the principle of non-contradiction involves a distinction between denying the principle in a statement and actually believing the denial.⁴⁰ He wishes to show not merely that it is impossible for p and not-p to be true simultaneously, but also that no one, whatever they may say, can actually as a matter of fact hold such a belief. At 1008b10 ff. he argues that

³⁷ References to the main sources are the passages from Plutarch and Cicero in the previous note. The Academic rejoinder, which probably goes back to Arcesilaus, does not advance a substantive position; it is a reply to an objection and characteristically seeks to put Stoic concepts to polemical use.

³⁸ Cf. Sextus, *PH* 1.21–4. How far the Pyrrhonist does admit to having beliefs of some kind is a controversial question; see *PH* 1.13, and the studies by Frede 1997 and Burnyeat 1997 which are available, along with their further contributions and with Barnes 1982*a*, in Burnyeat and Frede 1997.

³⁹ On Antigonus of Carystus, see Chapters 4 and 5 of this volume, pp. 71-2 and 98-101.

⁴⁰ Cf. 1005b35-1006a2; 1009a16-22.

anyone who should be in the state of 'believing nothing', 'but equally thinks and does not think [such and such], would not differ from a vegetable'. That Aristotle finds this a counterfactual state of affairs becomes plain in the sequel, which is extremely close in thought and language to the description of Pyrrho I have just quoted:⁴¹

So it is completely obvious that no one is like this, including those who state this thesis and anyone else. For why does he walk to Megara and not stay put when he thinks he should walk?⁴² Why does he not first thing in the morning proceed into a well or a gorge [cf. Pyrrho], as it may be, but evidently takes care, as one who does not consider that falling in is something equally good and not good. It is plain then that he believes one thing to be better and the other not better; and if so, he must believe that one thing is a man and the other not a man, and one thing sweet and the other not sweet. For he does not seek after nor believe all things indifferently...so that, as it seems, all men believe some things hold unconditionally (1008b12–26).

Aristotle accordingly argues that, just as it is inevitable for one who denies the principle of non-contradiction to refute himself, 'if he says something' (1006a11 ff.), so such a person refutes himself whenever he does something. This is exactly the force of the *apraxia* argument: action without firm belief or assent is impossible, and therefore the sceptic refutes himself whenever he acts. Aristotle returns to the same point in a context I have already mentioned (1011a3 ff.), where he objects to people who demand a criterion for everything. Even those who are convinced by the arguments that it is impossible to distinguish true from false do not, he says, put such convictions to work in their behaviour (1010b10).

SCEPTICISM AND ARISTOTELIAN EPISTEMOLOGY

Aristotle, if I am right, anticipated and opposed many of the standard strategies which were later adopted by the Pyrrhonists. He has an important place in the history of Greek scepticism. But what this tells us about his own philosophy is as yet by no means clear. Even if Pyrrho himself merely repeated forms of scepticism which were already familiar to Aristotle, his historical

⁴¹ It is also very close to the Epicurean Colotes' attack on the Academic sceptics for making life impossible (ap. Plut., *Adv. Col.* 27, 1122E ff.) which, as Plutarch presents it, draws upon the Stoic insistence on assent and firm belief.

⁴² The mention of Megara may be a joke at the expense of the dialecticians of the so-called Megarian school whose 'founder' was the Socratic Eucleides. For the same general argument cf. *Metaph.* 11.6, 1063a28–35.

significance would still be considerable. Pyrrho was probably too young for Aristotle to know of him, but he must have been a renowned figure by the time that Epicurus and Zeno began to develop their philosophies. Epicurean and Stoic theories of knowledge seem to be quite explicit attempts to rebut scepticism in its early Pyrrhonian form. By denying that things are accessible to any discrimination (*anepikrita*), Pyrrho issued a challenge which made perceptual certainty and criteria of truth the primary problems of philosophy. Epicurus' problematic claim that 'all perceptions (*aisthēseis*) are true' should be interpreted as an uncompromising negation of Pyrrho's paralysing thesis that no perceptions or opinions are true or false (p. 54 above). The primacy of epistemology in Epicureanism and Stoicism acknowledges scepticism to be a very powerful philosophical presence.

Aristotle was not faced with scepticism as a strongly held position of his own day. Scepticism, in his understanding of it, is largely a consequence of conceptual problems going back to the fifth century. If, in the words of Burnyeat, Aristotle does not take his starting point to be the problem of perceptual certainty, one explanation may be the absence of a Pyrrho to issue the challenge.⁴³ But no account of the differences in epistemology between Aristotle and the Hellenistic schools can neglect the fact that Aristotle properly grasped the main issues which promoted Greek scepticism. The difference between him and his dogmatic successors does not consist in their seeing a problem which he has missed, but rather, they differ, to Aristotle's advantage on the whole, in their methodology and philosophical insight.44 Burnyeat rightly calls attention to Aristotle's familiarity with sceptical arguments for 'conclusions which would undermine his enterprise', and his thinking some of them 'worth extended discussion'. But it is potentially misleading to continue: 'He is simply very firm that he is not going to let them structure his inquiries or dictate his choice of starting-points.' I would delete 'simply' and suggest that Aristotle was less detached and magisterial in handling sceptical arguments.

He is, after all, dealing with a large number of named predecessors in *Metaphysics* Gamma. The problem about truth and falsehood, which he thinks that they have, is traced by him to sense perception and conflicting appearances (1009a22 ff.). Admittedly, he is not concerned to distinguish

⁴³ Burnyeat 1981, 136-8.

⁴⁴ Burnyeat 1981 lays stress on a shift from Aristotelian interest in science and explanation to strictly epistemological issues which, he thinks, came to the fore with the Stoics and Hellenistic Sceptics.

sceptical doubt from complete subjectivism or negative dogmatism. He assimilates the denial of the principle of non-contradiction to three equivalent theses: 'the same thing is true and false', 'everything is true', and 'everything is false' (1012a29 ff.). If this confuses 'Protagoras' (the subjectivist) with 'Democritus' (the negative dogmatist), no matter. What interests Aristotle and us is the reasoning and, in his view, the confusions, which have led philosophers to advance positions that assist the sceptic.

The basic reason Aristotle gives for Protagoras' thesis is 'the belief that intelligence is sense perception, and the latter is alteration, whence they say that what appears in sense perception is of necessity true' (1009b12–15). Aristotle attributes this belief to most of the pre-Socratics (including Homer! 'as some say').⁴⁵ Even apart from such attributions, the sheer length and concentration of his attack in *Metaphysics* Gamma is evidence of his concern to establish the objective credentials of 'first philosophy'. Much of his work recalls the *Theaetetus*, and, like Plato, Aristotle denies that sense perception is always free from error (1010b1 ff.). This is far from being his only reason for avoiding the Protagorean thesis and its unpalatable consequences, but it does imply, as the Stoics later maintained, that veridical and non-veridical perceptions can be distinguished.

The reason, I take it, why Aristotle has often been thought to be relatively unconcerned with the problem of perceptual certainty is the little that he says about it in contexts where he discusses *aisthēsis* and induction.⁴⁶ He does not appear to offer a criterion for the truth of perceptual judgements such as the Stoics advanced with their 'cognitive impressions', and he sometimes dodges the issue by the 'Platonic' strategy that there are changeless things which are not objects of perception and, therefore, not liable to Heraclitean or Protagorean difficulties.⁴⁷ But I do not think Aristotle simply takes it for granted, unproblematically, that the senses provide some material for knowledge. When we consider the difficulties of the Stoic criterion in its claim that perception of particulars by means of the cognitive impression is not only true

47 Cf. Metaph. 4.3, 1009a36-8, 1010a32 ff; 11.5, 1062a31 ff.

⁴⁵ 1009b28, preceded by reference to Protagoras, Anaxagoras, Democritus (cf. *An.* 1.2, 404a27–9), Empedocles, Parmenides, and followed by mentions of Heraclitus and Cratylus.

⁴⁶ Cf. Hartman 1978, 199: 'Epistemology, especially epistemological skepticism does not rank among Aristotle's greater concerns; and when he does verge on it, as in *Met*. Γ 5 and *An*. III 3, he does not well clarify his position on what seem to many philosophers to be the essential issues.' Contrast Ross 1923, 163, commenting on *Metaph*. 4.3–8: 'The argument here summarised contains in principle almost all that can or need be said in refutation either of complete scepticism or of sensationalism.'

but incapable of being false, we should not conclude that the absence of such a notion from Aristotle indicates a gap in his methodology which he should have filled. If I have been right to find Aristotle anticipating and seeking to disarm sceptical challenges, it may be that there are other devices, not yet considered, which have a bearing on later debates between sceptics and dogmatists. The points most worth discussing here are perhaps his teleology, his treatment of the *endoxa*, and his conception that the conditions of knowledge vary with its subject-matter.

By way of preface to these one should remember that Aristotle nowhere entertains the possibility of solipsism. But this was never an important issue in ancient philosophy. Neither the Academics nor the Pyrrhonists attacked their opponents for assuming that something existed outside their own consciousness. Both sides took it for granted that the activation of our senses is generally caused by something which exists 'outside'. The debate about appearances was a controversy over the validity of sense perception as evidence for external states of affairs.

Epistemology and sense perception come together in the opening of the Metaphysics: 'All human beings have a natural desire for knowledge' (1, 980a1). Aristotle argues for this assertion by a series of steps. It is grounded initially in the appeal to evidence (sēmeion) of the delight human beings take in their senses. This in turn is justified by the statement that the senses are loved, especially sight, not just for their utility but for their own sake. The proof of this, Aristotle argues, is that we choose to see, above everything else, even when we are not exercising vision in order to act. This, he says, is because sight is the sense which above all others makes us capable of understanding (gnorizein) and reveals many differences (diaphoras).48 Notice that Aristotle does not formally argue for the dubious conclusion, knowledge must be possible because everyone desires it. His inference to the universal desire for knowledge from the pleasure we take in sense perception rests on the assumption that *aisthēsis* is a source of knowledge. Since the conclusion about the universal desire for knowledge, as a generalization, is difficult to deny, a sceptic will have to say that the cognitive value Aristotle attributes to the sense here is misplaced. But he must then explain why human beings do have a desire for knowledge, if he is going to argue with Aristotle.

⁴⁸ Cf. *Top.* 2.7, 113a32 and *De sensu* 1.437a3, which shows that the 'differences' revealed by sight include figure, size, movement, and number. See also Theophr., *Metaph.* 8b10 ff.

Aristotle and Greek scepticism

The suggestion that there is a natural relationship between the senses' discriminating powers and the desire for knowledge was repeated by the Stoics (or by Antiochus of Ascalon's appropriation of Stoicism) when they argued that human beings use their senses in order to actualize their aptitude for knowledge: 'Since the human mind is supremely adapted to knowledge of things and consistency of life, it embraces in particular understanding and perception (*cognitionem et istam katalēpsin*)... which it loves both for its own sake and also for its utility. Therefore it uses the senses ... '⁴⁹ This is in a context where the Academic sceptic is being answered at length. I do not say that this indicates Aristotle's motivation in *Metaph*. 1.1. But the parallels between the two texts are close enough to suggest one of his reasons, right at the beginning of the *Metaphysics*, for linking the cognitive value of *aisthēsis* with the natural human desire for knowledge.⁵⁰

As the Stoics were later to reply to the Academics (Cicero, Acad. 2.19 ff. and 51 f.), so Aristotle's defence of the general accuracy of sense perception rests upon teleological premises about an animal's fundamental needs and by appeal to standard conditions.⁵¹ He says in the *De sensu* (436b18-437a3) that the three distance senses exist 'for the sake of safety', that is, for detecting food and avoiding harm. 'The many differences they announce are the foundations of theoretical and practical knowledge', an amplification of the claim made in Metaph. 1, 980a27. Animal life in general and human life in particular presuppose capacities to discriminate between items in the external environment. Aristotle is not impressed by the fact that people make perceptual mistakes. He, or the Peripatetic author of Metaphysics Book 11, insists that 'the same thing never seems sweet to one set of tasters and the opposite to another set, unless the sense organ and kriterion of such tastes belongs, in one of the two cases, to people who are damaged and injured' (1062b36 ff.). Error typically is due to 'opinions' (doxai) or 'imaginings' (phantasiai) and not to the data given in perception.⁵² Further, it is not when 'we attend closely to the object of perception that we say "this appears to us to be a human being",

⁴⁹ Cicero, *Acad.* 2.31; other passages in this context can be usefully compared with Aristotle, especially 21–3. Following the Stoic Panaetius, Cicero stresses human beings' desire to discover the truth, *Off.* 1.13.

⁵⁰ The opening of the *Metaphysics* would be particularly well known if Jaeger 1955, 68 ff., is right in tracing its origin to a fuller treatment in the *Protrepticus*.

⁵¹ For a good discussion of this point cf. Block 1961.

⁵² Cf. An. 3.3, esp. 428a5-428b9.

but rather when we do not perceive it clearly' (*enargos*).⁵³ Perceptual mistakes are prone to arise if someone is seriously ill or in a highly emotional state (*De insomniis* 460b3 ff.).

Here, then, we find Aristotle answering or giving material to answer sceptical objections to the cognitive value of sense perception, and similar responses have been frequently used since his time. Perhaps of greater significance to the history of later debates in antiquity between dogmatists and sceptics is his treatment of the endoxa (common conceptions) or phainomena. Every student of Aristotle is greatly indebted to G. E. L. Owen's study, 'Tithenai ta phainomena'.54 There Owen proved that phainomena in Aristotle cover the views that have been adopted on a subject as well as empirical observations and that the same ambiguity attends his usage of *epagoge* (induction) and aporiai (problems). Thus Aristotle invokes the views of 'the many or the wise' both as means of establishing the subject-matter of his enquiries and their problems and also as evidence he may himself use in advancing solutions. Quoting Owen (p. 88): "For if the difficulties are resolved and the endoxa are left standing", as Aristotle says in both the Physics and the Ethics, "this in itself is a sufficient proof".'55 And again (p. 90): 'Endoxa also rest on experience, even if they misrepresent it (e.g. Div. 1, 462b14-18). If they did not Aristotle could find no place for them in his epistemology; as it is, an endoxon that is shared by all men is ipso facto beyond challenge.'56

Aristotle's patient accumulation of the views of his predecessors, so different from Plato's published practice, was not motivated by an interest in intellectual history *per se*. It derives rather from considerations, mentioned earlier in this study, concerning the general human desire for knowledge, the difficulty of individual apprehension of the truth, the value of progressive and corporate collection of material, and, I may add here, the trained scientific disposition.⁵⁷ 'We cannot all fail', he says, and it is this general faith in human rationality which justifies many of his aporetic surveys. Thus, in the first book of *Physics* he seeks to establish that the rest of his predecessors have all assumed in some way that the primary principles are opposites; he then adds, 'and with

⁵³ An. 428a12–15. With this cf. the Stoic appeal to the efforts people make to get a clear and striking impression of the perceptible object, Cicero, Acad. 2.19; Sextus, M7.258.

⁵⁴ Owen 1961.

⁵⁵ Citing EN 7.1, 1145b6-7 and Phys. 4.2, 211a7-11.

⁵⁶ Citing EN 10.2, 1172b36-1173a1; cf. 7.13, 1153b27-8, EE 1.6, 1216b26-35.

⁵⁷ Cf. *Metaph*. 2.1, 993b14; *APo*. 2.19, 99b18; *EN* 6.2, 1139b31.

good reason' (188a27), which he justifies by giving his own logical considerations for the claim that opposites do fulfil the role of irreducible principles. It would be over-simple to say that Aristotle is primarily interested in looking for the common denominator in opposing views, as if that were sufficient, by itself, to serve as the basis for positive argument. But he certainly regards it as essential to uncover, where he thinks he can, a common logical structure in discrepant views.⁵⁸

Both the Stoics and the Epicureans used *consensus omnium* as a support for some of their positions. The Stoics especially appealed to 'common concepts' (*koinai ennoiai*), the general views of people, as support for a wide variety of theses. In doing so, they were hardening into a dogmatic procedure a flexible device of great importance to Aristotle's dialectic and methodology. He himself calls the 'demonstrative principles from which everyone demonstrates' (*i.e.* the principles of non-contradiction and excluded middle) *koinai doxai* (*Metaph.* 3.2, 996b26 ff.). Conversely, Sextus Empiricus found it necessary to advance arguments against 'the consensus of the many' as a criterion of truth.⁵⁹

The final point I want to mention, in relation to later Greek scepticism, is one which distances Aristotle importantly from the new dogmatists of the Hellenistic era. Neither in Stoicism nor in Epicureanism do we find the range of distinctions and qualifications Aristotle makes in regard to the objects of knowledge and epistemological procedures themselves. By distinguishing, as he does, between experience (*empeiria*) and expertise (*technē*), understanding of the particular and understanding of the universal, what is nearer to knowledge of the fact and knowledge of the explanation⁶⁰—by these and other distinctions, Aristotle has made the sceptic's task more difficult, or at least more complex, than it was to become in Hellenistic philosophy. The same result follows from his repeated insistence on not asking inappropriate questions, on not seeking justification for everything, and on using the methodology appropriate to the subject-matter. It is sufficient to recall his well-known remarks on the considerable disagreement and uncertainty surrounding ethical concepts and his deducing from these that 'we must be content to give an outline

⁵⁸ For other examples see Le Blond 1939, 260 ff.

⁵⁹ Cf. PH 2.43–5, M 7.327–34.

⁶⁰ All of these are found in the first chapter of *Metaphysics* Alpha, and the last three, in various forms, in many other parts of his work. On the distinction between 'for the most part' and 'necessarily' cf. Barnes 1969, 134–6, who explores its logical and epistemological aspects in a manner which seems to me to complement some of the suggestions given above.

of the truth', and not a mathematical demonstration (EN 1.1, 1094b19 ff.). No doubt for this reason he is particularly anxious in the ethical treatises to proceed in conformity to 'common opinions' and to try to establish them on a well-reasoned critical basis.⁶¹

Aristotle does not try to settle every *aporia*. He recognizes that on some subjects 'contradictory views' can with good reason be held.⁶² For considerations I can barely hint at here, the new dogmatists of the Hellenistic period were not content with exploring the pro and contra arguments in areas of the greatest controversy. It was not enough to understand the nature of the problem and advance a likely solution. The Stoics in particular were convinced that demonstrably certain answers could be given to all the main problems of philosophy. Their ideal wise man is infallible in all his theoretical and practical judgements, and the Stoics thought that such knowledge, if impossible to attain in fact, could and should be justifiable and sought after. It is no accident, then, that the Academic sceptics were continuously battling with the Stoics, nor again that the Stoics stand as the principal targets of Pyrrhonian dialectic.

Aristotle, though he would later be regarded as the model of systematic philosophy, was a more difficult opponent. He could even be characterized by Cicero as having the 'practice of arguing on both sides of every subject' (*Tusc.* 2.9).⁶³ No less distorted is Sextus' attempt to indicate the criterion of truth for Aristotle: perception (*aisthēsis*) for perceptibles, intellect (*nous*) for intelligibles, with *aisthēsis* standing to *nous* as a balance to our weighing things or a ruler to our assessments of straight and crooked (*M.* 7.217–26). This is an attempt, based upon the last chapter of *Posterior analytics* book 2, to fit Aristotle into Sextus' dialectical scheme for considering all the dogmatists' views on the criterion of truth. But it fails to give any indication of what it is like to read Aristotle, either in the treatises where he is seeking to resolve difficulties and establish his own principles or in the Organon itself. Above all it fails to show the impossibility of giving any simple description to Aristotle's philosophy.⁶⁴ He does share with the Stoics a deep-rooted belief in the

⁶¹ Theophrastus faces the plural kinds of knowledge similarly: 'The starting-point and most important thing is the proper method' (*tropos*) *Metaph*. 9a11 f. Like Aristotle he maintains that people who seek a reason (*logos*) for everything destroy reason and, along with it, knowledge: '... they seek it in cases where there is and can be none', ibid. 9b21–4.

⁶² Cf. EE 7.2, 1235b13–18 on friendship and other passages cited by Aubenque 1961, 15.

⁶³ See Chapter 14 of this volume, p. 299.

⁶⁴ Note Ross's admirable comment on the *Metaphysics*: 'It remains for Aristotle throughout a matter of "problems" or "difficulties"... on the whole no dogmatic system but a series of essays at the discovery of truth in a region which he feels to be full of obscurity' (Ross 1923, 155).

Aristotle and Greek scepticism

rationality of the universe and human capacity to understand it; but he also shares with Sextus a determination to survey, and, if need be, to find wanting the views that have been expressed on a subject and to leave some problems unresolved.

In conclusion, I have tried to show in what sense Aristotle does belong to the history of Greek scepticism. He was aware of the need to protect his own enquiries and methodology against a series of threats to knowledge. Some of these are dialectical devices, a remarkable number of which recur in the formalized 'modes' of later Pyrrhonism. Others look back more specifically to fifth-century debates, already thoroughly treated by Plato-especially Heraclitean flux and Protagoras' thesis about the relativity of all appearances. Aristotle, however, did not take the characteristic route of his predecessors in looking for a two-world metaphysics which put phenomena outside the realm of the truly knowable. Like the Stoics and Epicureans he has no reservations, at least in his practice, about the possibility of knowing perceptible objects,65 and he is vulnerable to the modern sceptical criticism that we can never prove beyond all doubt that anything exists outside our consciousness.⁶⁶ But I question whether he would have revised his procedures in any substantial respects if he had read the books of Sextus Empiricus. Many of the dialectical strategies contained there were familiar to Aristotle, who dealt with them in a thoroughly robust style. Thus he left to later philosophers a series of defences against scepticism, some of which they adopted, and a methodology which turns the sceptic's grounds for giving up the quest for knowledge into reasons for maintaining the search and hoping for a solution.

APPENDIX

There is an alternative interpretation of the 'sceptical' material in Aristotle if one supposes, with Grayeff (1974, 82), that the corpus, as edited by Andronicus, reflects 'the teaching, not only of Aristotle, but of two or three generations of Peripatetic philosophers'. Grayeff, whose chief interest lies in the central books of the *Metaphysics*, finds many contexts (e.g. Zeta 10

⁶⁵ Which is not to deny passages in his work that indicate 'a confrontation between the necessity of things knowable and the contingency of nature', so Barnes 1969, 134, whose persuasive account of the educational purpose of the demonstrative syllogism helps to resolve the dilemma.

⁶⁶ 'Modern sceptical criticism', i.e. Descartes onwards, for reasons interestingly argued by Burnyeat 1982*a*.

and 12) which suggest to him Peripatetic arguments prompted by sceptical objections. He sees Metaphysics Little Alpha as an explicitly anti-sceptic address, observing that 'Aristotle would not have been troubled by the Sceptics to the extent that its author is' (p. 68). Like myself, Grayeff notes many Aristotelian texts which have parallels in Sextus Empiricus, but he differs completely from me in taking these to give evidence that their authors were post-Aristotelians who wrote in full awareness of the Pyrrhonists and Academic sceptics. I was not familiar with Grayeff's views when I originally wrote this study. His book seems to me to strengthen the claims I have made concerning Aristotle's anticipations of the official sceptics and his concern to protect his own procedures against sceptical challenges. But Grayeff's case for later Peripatetic references to sceptic (and Stoic and Epicurean) material within the corpus as a whole is not convincing (cf. Kerferd 1976, 212). One would expect much closer terminological similarity to the Hellenistic schools in the supposedly 'late' parts of the corpus, and it is more probable, on many grounds, that the parallels which do exist (outside such spurious works as De mundo) are due to Aristotle's influence on the Hellenistic schools.

POSTSCRIPT

Subsequent research on the topics of this study (anthologized in Irwin 1995, vol. 7) has tended to focus both on the historicity of Aristotle's interest in issues that come to the fore in Greek scepticism, and on his philosophical effectiveness in producing responses to sceptical challenges to knowledge.

Barnes 1986, after briefly supporting my historical proposals, argues at length that Aristotle 'committed himself to something which later thinkers could properly and plausibly describe as "a theory of the criterion" (p. 54). What this involves, he argues, is a concept of perception that ties it teleologically to truth and an animal's survival. No more than I myself does Barnes conclude that this Aristotelian strategy offers a decisive refutation of scepticism. What it suggests to him (and with this I completely agree) is that it provides the material for an argument that is 'Aristotle's ultimate answer to the Sceptic. It is not an answer which, so far as we know, Aristotle ever explicitly gave. But it is an answer constructed, in a straightforward fashion, from propositions which are expressly asserted in the Aristotelian *corpus*. Moreover, these propositions are not casual asides. They are part of the hard centre of Aristotelian philosophy' (pp. 74–5).

Aristotle and Greek scepticism

Anagnostopoulos 1993 discusses much of my study point by point. He describes it as developing 'some of the most powerful arguments in support of the view that Aristotle was familiar with and was in his own work responding to some of the sceptical arguments' (p. 115). However, while granting that I have shown Aristotle's provision of material for constructing anti-sceptical arguments, Anagnostopoulos questions whether, if that were Aristotle's intention (which he is inclined to doubt), such arguments would meet the sceptical challenge. In response, I observe, first, that it was no part of my study's project to prove that Aristotle has a knock-down rejoinder to all sceptical challenges or even to all those advanced in antiquity. Second, as regards Aristotle's intentions, I don't think that Anagnostopoulos has taken the measure of the cumulative effect that the material in my paper reviews. He finds Aristotle showing no awareness of the need to provide a perceptual criterion of truth (pp. 119, 136), but if Barnes 1986 is right, as I think he is, Aristotle does offer an implicit criterion. We have no historical grounds for expecting Aristotle to do more than that, given the Hellenistic origin of that concept in its explicit form.

Around the time I was writing my study, three Italian scholars (Berti 1981*a*, Reale 1981, and Decleva Caizzi 1981, 152–5) drew attention to the apparent coincidences between Aristotle's criticism of those whom he takes to deny the principle of non-contradiction in *Metaphysics* Gamma and Aristocles' presentation of Pyrrho's main argument, according to Timon (see p. 54 above). For responses to one or more of them, see Stopper 1983, 266–8, and especially Bett 2000, 123–31 and 178–82. I agree with Stopper and Bett that it is hazardous to identify Aristotle's opponents specifically with the Megarians, and to hypothesize thereby a proleptic Aristotelian attack on Pyrrho. Bett also argues (pp. 129–30) that, notwithstanding the linguistic similarity I adduce between Aristotle and Aristocles (p. 54 above), the presence of the crucial words 'no more' in Aristocles but not in Aristotle makes 'the resemblance between Pyrrho's indeterminacy thesis and the position attacked by Aristotle not non-existent, but too broad to be historically significant' (p. 131).

A final decision on this issue is difficult because the interpretation of the Aristocles passage is itself very controversial. Bett takes it that the words 'no more' govern all of the alternatives that follow in that text, with Pyrrho's rule to be construed: 'saying concerning each thing that it no more (1) is than (2) is not or (3) both is and is not or (4) neither is nor is not.' If this is correct, we lose the parallel between Aristotle's opponents who say (unqualifiedly)

that the same thing 'is both thus and not thus' and the Aristocles passage, which, in Bett's interpretation, recommends saying that the same thing 'no more . . . both is and is not'. However, I doubt whether the Greek text admits of this construal. In which case, the Aristotelian connection continues to be well worth pondering. For a subtle discussion of the issue, see Hankinson 1995, 62-4, and for my own further thoughts on Pyrrho's position LS vol. 1, pp. 16-18.

I conclude with a couple of ancillary observations. In describing Aristotle's Protagoras as a subjectivist (pp. 53 and 60 above), I did not intend to take a stand on the question whether the historical figure should be so characterized as distinct from being interpreted as a relativist. Recent scholarship has opted for making the historical Protagoras a relativist, but for doubts about this interpretation, see Fine 1998.

When proposing (p. 44 above) that Stoics and sceptics had 'probably' read all or most of the Aristotelian texts I discuss, I had not yet read Sandbach 1985, who argues that this material was probably not in circulation during the third and second centuries BC. If I had had advance warning of Sandbach's monograph, I would have expressed myself more cautiously. However, I do not think that his study undermines all influence of Aristotle's technical books on early Hellenistic philosophy; see my rejoinder to Sandbach in Long 1998*a*, 363–5.