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PROOF AGAINST PROOF:

A READING OF SEXTUS EMPIRICUS' *AGAINST THE LOGICIANS* 8. 463–81

STEFAN SIENKIEWICZ

1. Introduction

THE CLOSING PAGES of Sextus Empiricus' *Against the Logicians* (*M* 8. 463–81) contains a fascinating exchange between the sceptic and the dogmatist. We have just come to the end of Sextus' lengthy disquisition on the nature of dogmatic proof (*ἀπὸδειξις*), against which he has formulated a series of sceptical arguments at *M* 8. 300–462. The last few pages of *Against the Logicians* take these sceptical arguments as their subject matter. Sextus, on behalf of the dogmatist, issues the sceptic with the following dilemma: **are the sceptic's arguments against the existence of proof themselves proofs or not?** If they are not, then we ought not to believe their conclusions. And if they are, then the sceptic ends up refuting himself. Articulating this dogmatic objection (*M* 8. 463–9) and then putting forward the sceptic's response to it (*M* 8. 470–81) is how Sextus brings *Against the Logicians* to a conclusion, and it is the mechanics of this exchange with which this paper is concerned.

This episode has for the most part—and understandably so—attracted the attention of scholars because of the light it sheds on the nature of ancient arguments from self-refutation. The two most detailed studies of the passage over the last few decades—those of Mark McPherran and Luca Castagnoli—take the issue of self-refutation as their focus, offering illuminating, though opposing,

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accounts of what role Sextus gives to the phenomenon in this stretch of text.¹ The issue which divides McPherran and Castagnoli is not, however, my concern in this paper (save incidentally). Instead, I want to explore two background assumptions concerning this final exchange about which there is general *consensus* amongst commentators, McPherran and Castagnoli included.

The first assumption is that in this exchange we have the sceptic deploying his standard argumentative method of equipollence—opposing equally compelling arguments against one another and suspending judgement in light of them.² The second is that the dogmatist’s final argument against the sceptic turns on the thought that the sceptic’s argument against proof ‘tosses itself out’ (ἐαυτὸν ἐκβάλλει).³

These are well-entrenched assumptions—so well entrenched that they are often not explicitly articulated by commentators. In this paper I want to question both of them. On my view neither of these assumptions—as they stand—correctly captures the nuances of Sextus’ argument. Indeed, I go on to argue that if we make these assumptions, the arguments of both the sceptic and the dogmatist end up losing some of their force. If we assume that the

¹ While McPherran takes Sextus to be presenting the sceptic as embracing the self-refuting properties of his own arguments, Castagnoli denies this and argues that the sceptic does not even accept, let alone embrace, the charge of self-refutation and in fact is best construed here as offering an argument against the charge of self-refutation. See M. L. McPherran, ‘Skeptical Homeopathy and Self-Refutation’ [‘Skeptical Homeopathy’], *Phronesis*, 32 (1987), 290–328, L. Castagnoli, ‘Self-Bracketing Pyrrhonism’, *Oxford Studies in Ancient Philosophy*, 18 (2000), 263–328 and id., *Ancient Self-Refutation: The Logic and History of the Self-Refutation Argument from Democritus to Augustine* [Self-Refutation] (Cambridge, 2010), 251–307.

² ‘We have seen that the Pyrrhonists’ program relies on the construction of equipollences; in the present special case, of arguments against proof . . . being opposed by the Dogmatist’s arguments against the PAP [sc. arguments against proof]’ (McPherran, ‘Skeptical Homeopathy’, 307); ‘If the dogmatist . . . grasps the second horn of his own dilemma . . . he . . . will *no more* affirm than deny the existence of proof, obtaining the same result as he would reach by grasping the first horn: equipollence of opposite theses’ (Castagnoli, *Self-Refutation*, 284).

³ ‘To investigate this account in more detail and place the acceptance of self-refutation within the Skeptical therapeutic program for the production of freedom from disturbance (ἀταραξία: e.g. *PH* 1. 8–17; 3. 280), we need to turn to the prime instance of potential pragmatic self-refutation to be found in Sextus, the “proof against proof” (*M* 8. 337–48)’ (McPherran, ‘Skeptical Homeopathy’, 298); ‘PAP does indeed reject itself’ (Castagnoli, *Self-Refutation*, 290). For further references to this strand of orthodoxy in the secondary literature, see n. 39. I do not quote these passages here as they require an understanding of the course of the whole course of Sextus’ argument from *M* 8. 463–81 to be fully intelligible. I discuss the difference between self-refutation and self-elimination below in Section 5.1.

sceptic deploys the standard method of equipollence in his response to the first horn of the dogmatist's dilemma, then the sceptic's argument turns out to be flawed. And if we assume that the dogmatist's charge in the second horn of the dilemma is that the sceptic's argument against proof does away with itself, then that charge can be easily sidestepped by the sceptic.

It is possible, however, to read this closing stretch of text in such a way that the sceptic's response to the first horn is not flawed and the dogmatist's challenge in the second horn is a powerful one which demands a considered response from the sceptic. This is the reading I present in this paper.

2. The Dogmatist's anti-sceptical argument (*M* 8. 463–5)

2.1. *The Dogmatist's aim*

Before we are in a position to appreciate the sceptic's strategy against the dogmatist, it is important to set out the dogmatist's initial objection to the sceptic in greater detail. At *M* 8. 463, having put forward the sceptic's arguments against the existence of proof, Sextus says that he will now look at an 'opposing argument' (*ἀντικείμενον λόγον*) to the arguments he has just considered. Talk of 'opposing arguments' puts us in mind immediately of the sceptic's own argumentative practice—the method of equipollence. Sextus sets this out for us at the opening of the *Outlines of Pyrrhonism*. He writes:

[ΤΙ] ἔστι δὲ ἡ σκεπτικὴ δύναμις ἀντιθετικὴ φαινομένων τε καὶ νοουμένων καθ' οἰονδήποτε τρόπον, ἀφ' ἧς ἐρχόμεθα διὰ τὴν ἐν τοῖς ἀντικειμένοις πράγμασι καὶ λόγοις ἰσοσθένειαν τὸ μὲν πρῶτον εἰς ἐποχὴν, τὸ δὲ μετὰ τοῦτο εἰς ἀταραξίαν. (*PH* 1. 8)⁴

Scepticism is an ability to set out oppositions among things which appear and are thought of in any way at all, an ability which, because of the equipollence in the opposed items and accounts, we come first to suspension of judgement and afterwards to tranquillity.⁵

⁴ For both the *Outlines of Pyrrhonism* (*PH*) and *Against the Logicians* (*M* 8) I have used the Teubner edition of H. Mutschmann and J. Mau (eds.), *Sexti Empirici Opera*, 4 vols. (Leipzig, 1914–61).

⁵ Unless otherwise stated translations are (with minor modifications) based on J. Annas and J. Barnes, *Sextus Empiricus, Outlines of Scepticism* (Cambridge, 2000) and R. Bett, *Sextus Empiricus, Against the Logicians* [*Against Logicians*] (Cambridge, 2005).

Two features of Sextus' characterization of equipollence in [T1] are worth stressing at this stage in light of what is to come.

First, equipollence is a relation that holds between two opposed arguments or 'accounts' (λόγοι), as Sextus calls them. The argument $\langle P, \text{therefore } Q \rangle$ will be equipollent to the argument $\langle P^*, \text{therefore not-}Q \rangle$ if and only if, as Sextus tells us elsewhere, these two arguments are 'equal' to one another, where the relevant sense of 'equality' is:

[T2] τὴν κατὰ πίστιν καὶ ἀπιστίαν ἰσότητα, ὡς μηδένα μηδενὸς προκεῖσθαι τῶν μαχομένων λόγων ὡς πιστότερον. (PH 1. 10)

equality with regard to being convincing or unconvincing: none of the conflicting accounts takes precedence over any other as being the more convincing.

Secondly, [T1] tells us that equipollence is connected to suspension of judgement. Indeed, elsewhere Sextus makes it clear that if I am confronted by the pair of equipollent arguments $\langle P, \text{therefore } Q \rangle$ and $\langle P^*, \text{therefore not-}Q \rangle$, then it is necessary—in some sense—for me to suspend judgement over whether or not Q , which is to say, neither believe Q nor not- Q .⁶

One might think, therefore, that at *M* 8. 463–9 the dogmatist will give the sceptic a taste of his own medicine, constructing an argument that has as its conclusion 'Proof exists' and setting that

⁶ See e.g. *PH* 1. 26, where Sextus is describing how philosophers come to be sceptics: 'For sceptics began to do philosophy in order to decide among appearances and to apprehend which are true and which false, so as to become tranquil; but they came upon equipollent dispute, and being unable to decide this they suspended judgement' (ἀρξάμενος γὰρ φιλοσοφεῖν ὑπὲρ τοῦ τὰς φαντασίας ἐπικρῖναι καὶ καταλαβεῖν, τίνες μὲν εἰσιν ἀληθεῖς τίνες δὲ ψευδεῖς, ὥστε ἀταρακτῆσαι, ἐνέπεσεν εἰς τὴν ἰσοσθενῆ διαφωνίαν, ἣν ἐπικρῖναι μὴ δυνάμενος ἐπέσχευεν). The sense in which it is 'necessary' for someone to suspend judgement in the face of a pair of equipollent arguments—or, as Sextus puts it in the *PH* 1. 26 passage, for someone to be 'unable' to do other than suspend judgement—is a delicate question and one which lies beyond the scope of this paper. For the view that the kind of necessity here is psychological, see M. F. Burnyeat, 'Can the Sceptic Live His Scepticism?', in M. Schofield, M. F. Burnyeat, and J. Barnes (eds.), *Doubt and Dogmatism: Essays in Hellenistic Epistemology* (Oxford, 1980), 20–53 at 40; M. Williams, 'Scepticism without Theory', *Review of Metaphysics*, 41 (1988), 547–88 at 572; and J. Barnes, 'Pyrrhonism, Belief and Causation: Observations on the Scepticism of Sextus Empiricus', *Aufstieg und Niedergang der römischen Welt* 36. 4 (Berlin, 1990), 2608–95 at 2649. For the view that the kind of necessity at play is—in the first instance at least—rational rather than merely psychological, see C. Perin, *The Demands of Reason: An Essay on Pyrrhonian Scepticism* (Oxford, 2010), 33–58 and S. Sienkiewicz, *Five Modes of Scepticism: Sextus Empiricus and the Agrippan Modes [Modes]* (Oxford, 2019), 43–6.

argument in opposition to the sceptic's arguments at *M* 8. 300–462 which have as their conclusion 'Proof does not exist'. But this is not, in fact, how the dogmatist proceeds. And for good reason. After all, the dogmatist does not want to get the sceptic to suspend judgement over whether or not proof exists—that is the very state of mind the *sceptic* wants to bring about in the dogmatist. Rather, the dogmatist wants to bring the sceptic to come to reject the idea that proof does not exist. And the dogmatist tries to do this by showing not only that the sceptic's arguments do not support their conclusions, but also that they have the curious property of *undermining* their own conclusions. The sceptic's own arguments contain the seeds of their own destruction—or so the dogmatist argues.

2.2. The Dogmatist's dilemmatic argument

Sextus sets out the dogmatist's argument as follows:

[T3] οἴονται γὰρ οἱ δογματικοὶ τῶν φιλοσόφων τὸν ἀξιούντα μὴ εἶναι ἀπόδειξιν αὐτὸν ὑφ' αὐτοῦ περιτρέπασθαι, καὶ δι' ὧν ἀναρρεῖ ταύτην, διὰ τούτων αὐτὴν ὀρίζειν. ὅθεν καὶ ἀντικαθιστάμενοι τοῖς σκεπτικοῖς φασίν· 'ὁ λέγων μηδὲν εἶναι ἀπόδειξιν ἤτοι ψιλῆ καὶ ἀναποδείκτω χρώμενος φάσει λέγει μηθὲν ὑπάρχειν ἀπόδειξιν, ἢ λόγῳ τὸ τοιοῦτον ἀποδεικνύς. καὶ εἰ μὲν ψιλῆ φάσει προσχρώμενος, οὐθεὶς αὐτῷ πιστεύσει τῶν τῆν ἀπόδειξιν παραδεχομένων, ψιλῆ φάσει χρωμένῳ, ἀλλὰ διὰ τῆς ἀντικειμένης ἐπισχεθήσεται φάσεως, εἰπόντος τινὸς εἶναι ἀπόδειξιν. εἰ δὲ ἀποδεικνύς τὸ μὴ εἶναι ἀπόδειξιν (τοῦτο γὰρ φασίν), αὐτόθεν ὠμολόγησε τὸ εἶναι ἀπόδειξιν· ὁ γὰρ δεικνύς λόγος τὸ μὴ εἶναι ἀπόδειξιν ἔστιν ἀπόδειξις τοῦ εἶναι ἀπόδειξιν.' (*M* 8. 463–5)

The dogmatic philosophers think that he who maintains that proof does not exist is turned about by himself and determines proof by the very means by which he destroys it.⁷ Hence, setting themselves

⁷ Along with Castagnoli, *Self-Refutation*, 279 n. 85, I have followed the reading printed in Mutschmann (who cites Kochalsky) which excises *λόγοι* after *δογματικοί*. R. G. Bury (trans.), *Sextus Empiricus: Against the Logicians* [*Against Logicians*] (Cambridge, Mass., 1935), 479 adopts Bekker's reading (also cited in Mutschmann's apparatus criticus), which has *λόγον* after *φιλοσόφων* as does Bett, *Against Logicians*, 180, who, in addition, transposes *λόγον* to after *τὸν ἀξιούντα μὴ εἶναι ἀπόδειξιν*. Following the text established by Kochalsky and Mutschmann leaves it open as to what is being described here as undergoing reversal (*περιτροπή*). In the case of the text established by Bekker what undergoes reversal is a *logos*, though I agree with M. F. Burnyeat, 'Protagoras and Self-Refutation in Later Greek Philosophy', *Philosophical Review*, 85 (1976), 44–69 at 49 n. 9, who notes that *logos*—in this context—should be translated as 'statement' rather than 'argument' (*contra* the translations of Bury and Bett) since it is the statement 'Proof does not exist' rather

against the sceptics they say: ‘The person who says that proof does not exist says that proof does not exist either by using a bare and unproved assertion or by proving such a claim by argument. And if it is by using a bare assertion, none of those receiving the proof will trust him, who uses bare assertion, but he will be checked by the opposing assertion, when someone says that proof exists. But if it is by proving that proof does not exist (for they say this), he has straightaway admitted that proof exists; for the argument which proves that proof does not exist is a proof that proof exists.’

The dogmatist is presenting the sceptic with a dilemma. Given that the sceptic claims that proof does not exist, the dogmatist asks for some clarification about the nature of the sceptic’s claim. Is the sceptic merely asserting the claim or does he offer a proof for the claim? If the sceptic says that he is merely asserting the claim, then he will have to admit that the dogmatist’s counter-assertion that proof *does* exist has just as much warrant as his own mere assertion that proof does not exist. If, on the other hand, the sceptic answers that he is offering a proof that proof does not exist, he ends up refuting himself, finding himself in the dialectically awkward position of purporting to produce a proof of the non-existence of proof, thereby inadvertently committing himself to the existence of at least one proof.

The argument is pretty. It turns the tables on the sceptic in two different ways. Its first horn skilfully applies the sceptic’s own Agrippan mode of hypothesis against him,⁸ while the second horn

than the argument which has ‘Proof does not exist’ as its conclusion that, strictly speaking, is the kind of entity that can legitimately be said to undergo reversal. As we shall see, a little further on in the text, Sextus does speak of a *logos*—here with the meaning of ‘argument’—‘tossing itself out’ (ἐαυτὸν ἐκβάλλει, *M* 8. 479) and ‘cancelling itself’ (ἐαυτὸν συμπεριγράφειν, *M* 8. 480), though—and this is part of Burnyeat and Castagnoli’s point—these acts are distinct from the act of self-reversal (nor does Sextus use the language of περιτροπή to describe them).

⁸ The mode of hypothesis, Sextus tells us at *PH* 1. 168, occurs ‘when the dogmatists being thrown back *ad infinitum* begin from something which they do not establish but claim to maintain simply and without proof by virtue of agreement’ (ὅταν εἰς ἄπειρον ἐκβαλλόμενοι οἱ δογματικοὶ ἀπὸ τίνος ἄρξωνται ὃ οὐ κατασκευάζουσιν ἀλλ’ ἀπλῶς καὶ ἀναποδείκτως κατὰ συγχώρησιν λαμβάνειν ἀξιούσιν). To simply maintain that *P* without any proof that *P* (i.e. to hypothesize that *P*) is precisely what the dogmatist is accusing the sceptic of doing in the first horn of his argument with respect to the claim that proof does not exist. And as Sextus tells us at *PH* 1. 173, ‘if someone is convincing when he makes his hypothesis, we will keep hypothesizing the opposite and will be no more unconvincing’ (εἰ μὲν γὰρ ὃ ὑποτιθέμενος πιστός ἐστιν, ἡμεῖς αἰετὸ ἀντικείμενον ὑποτιθέμενοι οὐκ ἐσόμεθα ἀπιστότεροι). For further discussion of the

teases out the (supposedly) self-refuting implications of the sceptic's purported proof of the non-existence of proof. However, there is one obvious weakness in the dogmatist's argument. Why think that the only two alternatives open to the sceptic are either to merely assert that proof does not exist or to prove that proof does not exist? Why could the sceptic not offer an argument for the non-existence of proof which goes beyond merely asserting that proof does not exist but still does not meet the requirements for counting as a demonstrative proof of the non-existence of proof?

The dogmatist's answer to this question emerges in the next part of the text. Sextus writes:

[T4] *καὶ καθόλου ὁ κατὰ τῆς ἀποδείξεως λόγος ἤτοι ἀπόδειξις ἔστιν ἢ οὐκ ἔστιν ἀπόδειξις· καὶ εἰ μὲν οὐκ ἔστιν ἀπόδειξις, ἄπιστός ἐστιν, εἰ δὲ ἔστιν ἀπόδειξις, ἀπόδειξις ἔστιν. (M 8. 465)*

And, in general, the argument against proof is either a proof or not a proof; and if it is not a proof, then it is not persuasive, but if it is a proof, then proof exists.

This effectively closes off the possibility that I just suggested was open to the sceptic. If the sceptic's argument for the non-existence of proof is not a proof, then his argument is unpersuasive (*ἄπιστος*).⁹ Furthermore, [T3] has already closed off the possibility of the sceptic merely asserting that proof does not exist—if he does that, then his assertion will have no more credence than the opposite

mode of hypothesis, see J. Barnes, *The Tails of Scepticism* (Cambridge, 1990), 90–112; B. Morison, 'The Sceptic's Argumentation' ['Argumentation'], in T. Bénatouïl and K. Ierodiakonou (eds.), *Dialectic after Plato and Aristotle* (Cambridge, 2019), 300–14; and Sienkiewicz, *Modes*, 53–76.

⁹ One might object that this assumption of the dogmatist is simply false. Just because an argument fails to be a proof, it does not follow that it is unconvincing. Convincingness might be thought to come in degrees, and some arguments which fail to be proofs might be more or less convincing than other arguments that fail to be proofs. Sextus himself canvasses this possibility when he goes on to elucidate that the sceptic's *own* attitude towards the arguments against proof is that they are convincing but not probative. I discuss this issue below in Section 5.6 in connection with [T14]. However, at this stage of the argument Sextus does not challenge this particular premise of the dogmatist's argument, so I too leave it for the moment unchallenged. The sceptic's method here might, therefore, be thought to be a concessive one—and all the more powerful for that. Even if we grant the dogmatist's assumption, the sceptic still has a response to the first horn of the dogmatist's dilemma, as I go on to set out in Section 3. For other instances of this concessive method in Sextus, see R. J. Hankinson, *The Sceptics [Sceptics]* (London and New York, 1995), 194–6, 256, 272. My thanks to Victor Caston for making me clarify my thoughts about this issue.

assertion. So the sceptic is compelled to offer an argument for his claim that proof does not exist, and he then falls into the dilemma of [T4]. Does the sceptic say of his argument to the effect that proof does not exist that it is a proof or not? If it is not a proof, then the argument will not be persuasive, and if it is a proof, then we are back to charge of self-refutation. It is this dilemma—the dilemma of *M* 8. 465—that occupies Sextus for the remainder of *Against the Logicians*.¹⁰

Before thinking through the sceptic's response to this dilemma, it might be helpful to display the course of the argument outlined so far a little more formally. Let us use 'AFP' to stand for the dogmatist's argument in favour of proof and 'AAP' to stand for the sceptic's argument against proof. In response to the dogmatist's

AFP < p, q, r , therefore proof exists>¹¹

the sceptic constructs his rival argument

AAP < p', q', r' , therefore proof does not exist>.

This is just the sceptic's standard method of equipollence. If, when confronted by this pair of arguments, the dogmatist finds them equally persuasive, then he will be compelled to suspend judgement over the question as to whether proof exists. It is at the stage, with AFP opposed by AAP, that the dogmatist mounts his argument against AAP. This can be expressed in the form of a constructive dilemma, which I shall label D:

¹⁰ There is, in fact, another dilemma which Sextus goes on to set out immediately after the present one at *M* 8. 466–9, which has the following form:

1. If proof exists, then proof exists.
2. If proof does not exist, then proof exists.
3. Either proof exists or proof does not exist.

Therefore,

4. Proof exists.

I set this constructive dilemma to one side because Sextus' focuses his attention not on this dilemma but on the dilemma of *M* 8. 465. For further discussion of the constructive dilemma of *M* 8. 466–9, see Castagnoli, *Self-Refutation*, 281–3.

¹¹ It is an interesting question whether AFP is question-begging or not. If AFP is a proof, then one might worry whether the manner in which the dogmatist goes about establishing the conclusion that proof exists already, and illicitly, presupposes the truth of that conclusion. Sextus could—and elsewhere does—criticize reasoning of this kind by invoking the Agrippan mode of reciprocity (cf. *PH* 1. 169), but this is not an objection to AFP which Sextus considers in this stretch of text, so I set this line of criticism to one side.

- D <1. Either AAP is not a proof or AAP is a proof.
 2. If AAP is not a proof, then its conclusion is not convincing.
 3. If AAP is a proof, then at least one proof exists, i.e. AAP itself.
 Therefore,
 4. Either it is unconvincing that proof does not exist or it is false that proof does not exist.>

That is the dogmatist's counterargument against the sceptic. How does the sceptic respond?

3. The sceptic's response to the first horn of the dogmatist's dilemma (*M* 8. 470–1)

3.1. *The sceptic's strategy*

The sceptic replies to the dogmatist by immediately turning the tables on him and asking him to provide an answer to his own dilemma. As Sextus says:

[T5] εἰ μὲν οὐκ ἐνδέχεται ἀποκρίνασθαι πρὸς τὴν πεῦσιν καθ' ἣν ἐπέζητουν, πότερον ἀπόδειξις ἐστὶν ὁ κατὰ τῆς ἀποδείξεως λόγος ἢ οὐκ ἀπόδειξις, ὀφείλουσι εὐγνωμονεῖν, εἰ μὴ ἔχουσι πρὸς ἄπορον οὕτω πεῦσιν ἀποκρίνασθαι. εἰ δὲ εὐχερές ἐστὶν αὐτοῖς ὁ προστάττουσι τοῖς σκεπτικοῖς, ὡς εὐχερές ὄν ποιείτωσαν ἀποκρινόμενοι, πότερον ἀπόδειξιν εἶναι λέγουσι τὸν κατὰ τῆς ἀποδείξεως λόγον ἢ οὐκ ἀπόδειξιν. (*M* 8. 470–1)

If it is not possible to answer the question in which they [the dogmatists] asked whether the proof against proof is a proof or is not a proof, they ought to be considerate if they are not able to answer such a puzzling question. But if what they are ordering is easy for the sceptics to do, let them do what they take to be easy, and answer whether the argument against proof is a proof or is not a proof.

The thought being expressed in the first part of the passage is that there is a symmetry, of sorts, between the sceptic's position and the dogmatist's, namely that if the dogmatist cannot provide an adequate answer to his own dilemma, then there is no need—dialectically speaking—for the sceptic to provide an answer to

it.¹² The second part of the passage issues a challenge to the dogmatist. If he claims to be able to answer his own dilemma, let him do so. Whatever answer he gives he will ultimately end up embracing the sceptic's conclusion—that he ought to suspend judgement over the question as to whether proof exists.

The sceptic first considers the first limb of the dogmatist's argument, which turns on the supposition that AAP is not a proof. We can set out the dogmatist's reasoning here a little more fully as follows:

- D₁ <1. AAP is not a proof.
 2. If AAP is not a proof, then its conclusion is not convincing.
 3. If the conclusion of AAP is not convincing, then we ought not to accept the conclusion of AAP.
 Therefore,
 4. We ought not to accept that proof does not exist.>

The sceptic's response to this argument is—on my reading—to deny that (4) is the appropriate conclusion for the dogmatist to draw. Essentially, the sceptic's thought is that (4) is under-described. Although it is true that AAP's not being a proof means that we ought not to accept its conclusion (i.e. 'Proof does not exist'), that is only half the story. We *also* ought not to accept the negation of the conclusion (i.e. 'Proof does exist'). The correct conclusion to draw, in these circumstances, is that we ought neither to accept that proof does not exist nor to accept that proof does exist, which is just to suspend judgement over whether or not proof exists.

Construing this part of Sextus' argument in this way requires some explanation, for it is an interpretation which involves amending Sextus' text. First I shall set out the manuscript reading and explain why it requires modification. I shall then examine two different ways in which commentators have attempted to modify the passage to return sense to the text and argue that each of these ways has interpretative shortcomings. I shall then present my third way of construing the text and argue that it avoids the shortcomings that characterize the alternative proposals.

¹² I agree with Castagnoli, *contra* McPherran, that Sextus is here just asking the dogmatist to offer an answer to his own dilemma and not asking the dogmatist to produce a proof that AAP is not sound. See McPherran, 'Skeptical Homeopathy', 300 and Castagnoli, *Self-Refutation*, 283 n. 101.

3.2. *The unamended text*

According to the manuscript reading the sceptic's response to the first horn of the dogmatist's dilemma reads as follows:

[T6] εἰ μὲν γὰρ οὐκ [1] ἐστὶν ἀπόδειξις, οὐκ [2] ἐνέσται ἐξ αὐτοῦ διδάσκειν, ὅτι οὐκ [3] ἐστὶν ἀπόδειξις, οὐδὲ λέγειν, ὅτι οὗτός ἐστιν ὁ λόγος ἀπόδειξις, ὅτι οὐκ [4] ἔσται ἢ ἀπόδειξις. (M 8. 471)

For if it [i.e. AAP] is not [1] a proof, then it is not [2] possible either to teach from it that proof does not [3] exist or to say that, because this argument is a proof, proof does not [4] exist.¹³

Now, though this reading is rejected by all commentators (myself included), the reason for so doing has often not been made explicit. But it is not difficult to grasp. As it stands, the line of thought developed is puzzling in two respects—in terms of the actual content of the passage and in terms of how the passage relates to the wider argumentative context in which it occurs.

Regarding the first point, the passage contains an odd repetition. In the first part of [T6]—in the clause preceding the οὐδέ—the sceptic is claiming that it is not possible to conclude from AAP alone that proof does not exist—presumably because AAP is not a proof and thereby not probative of its conclusion. Then, in the second part of [T6]—in the clause following the οὐδέ—the sceptic redundantly adds that we cannot rely on AAP's being a proof to establish its conclusion that proof does not exist, for, *ex hypothesi*, AAP is not a proof. Both disjuncts amount to saying the same thing.

But even if we set the issue of repetition to one side, the passage is still in tension with its wider argumentative context. For, according to [T6], it is the sceptic who is putting forward an argument for thinking that we ought not to conclude, on the basis of AAP, that proof does not exist. But this is precisely the kind of argument that we would expect the *dogmatist* to be making—indeed, this is precisely the argument the dogmatist *has* made in D₁. Leaving the text of [T6] untouched thereby ends up confusing the dialectic between sceptic and dogmatist—erroneously attributing to the sceptic a dogmatic line of thought.

¹³ I have numbered each 'not' in [T6] and each οὐκ in the corresponding Greek text in square brackets.

Faced with these difficulties it is hardly a surprise modern editors and translators have modified the text by deleting at least one of the final two negations in the passage. Two options have been canvassed—to delete both the third and the fourth οὐκ or to retain the third οὐκ and delete the fourth. Both of these options, in different ways, return sense to Sextus' text. However, as I shall go on to argue, both of these ways of construing the text raise problems of their own. Before setting out my own interpretation, which involves deleting the third οὐκ but retaining the fourth, I shall first lay out the virtues—and limitations—of better-trodden paths.

3.3. *Deleting both the third and the fourth οὐκ*

The first option of deleting both the third and the fourth οὐκ has been the route taken by R. G. Bury and Richard Bett, both of whom follow Heintz.¹⁴ I have reflected the changes these (and subsequent) deletions make to the unamended text of [T6] by italicizing the affected phrases in the translations given below in [T7], [T8], and [T9]. If we delete the third and fourth οὐκ, then the passage reads as follows:

[T7] For if it [i.e. AAP] is not a proof, then it is not possible either *to teach from it that proof exists* or to say that, because this argument is a proof, *proof exists*. (M 8. 471)

Modifying the passage in this way solves the second of the two problems that afflicted the unamended text. The line of thought being attributed to the sceptic is now no longer that we ought not to conclude, on the basis of AAP, that proof does not exist, but rather that we ought not to conclude, on the basis of AAP, that proof *does* exist. So [T7] has at least this in its favour—it does not ascribe to the sceptic a clearly dogmatic line of reasoning. However, the line of reasoning [T7] *does* ascribe to the sceptic raises at least two problems of its own. While the first problem is not insurmountable, the other is more intractable.

First, just as [T6] did, [T7] contains a repetition: the sceptic claims, both in the clause preceding and in the clause following the οὐδέ, that we ought not to conclude, on the basis of AAP, that proof

¹⁴ See W. Heintz, *Studien zu Sextus Empiricus*, ed. R. Harder (Halle, 1932), 203; Bury, *Against Logicians*, 483–5; Bett, *Against Logicians*, 181.

exists.¹⁵ Some commentators have found this repetition grounds enough for rejecting this construal of the text. Castagnoli, for instance, writes, ‘the double expunction [of οὐκ] makes the clause that follows οὐδέ virtually identical in meaning to that which precedes it and the repetition would be odd’ (*Self-Refutation*, 284 n. 102). In light of this Castagnoli retains the third and deletes the fourth οὐκ (an interpretation I go on to discuss in Section 3.4). However, it is worth considering for a moment whether the double deletion of οὐκ in [T7] *does* in fact result in the two clauses of [T7] saying identical things. For there are grounds for thinking that it does not.

It is certainly true that both clauses in [T7] deny that the dogmatist can legitimately conclude that proof exists when faced with the sceptic’s AAP, but it is possible to read each clause as denying this for a different reason. What the sceptic is doing is pointing out that two ways a dogmatist might come to conclude that proof exists when faced with the sceptic’s AAP are fallacious.

The first fallacious way—which the clause preceding the οὐδέ targets—would be for the dogmatist to infer that, because AAP does not prove its conclusion, we therefore ought to conclude that the negation of the conclusion is true, that is, that proof exists. But this would be to commit the fallacy of *argumentum ad ignorantiam*: just because AAP does not prove that *P*, it does not follow that we ought to conclude that not-*P*.¹⁶ As Sextus says, it is not possible to teach (διδάσκειν) from AAP’s not being probative of its conclusion that proof exists.

The second fallacious way—which the clause following the οὐδέ targets—would be for the dogmatist to point to AAP itself and say that it itself is a proof and that therefore proof exists. This would be a non-starter because, *ex hypothesi*, AAP is not a proof. As Sextus says, ‘it is not possible to . . . say that, because this argument [i.e. AAP] is a proof, proof exists’.

So, in fact, it is possible to interpret each clause of [T7] to be saying different things. Each clause denies that AAP’s not being a proof gives the dogmatist licence to conclude that proof exists, but

¹⁵ This is a different repetition from the repetition that occurs in [T6]. What was repeated there was the thought that we ought not to conclude, on the basis of AAP, that proof does *not* exist. But it is a repetition nonetheless.

¹⁶ This is how McPherran construes the sceptic’s counterargument against the dogmatist. See McPherran, ‘Skeptical Homeopathy’, 300.

each clause denies this for a different reason. In the case of the clause which precedes the $\text{o}\ddot{\delta}\delta\acute{\epsilon}$, the dogmatist cannot draw the conclusion, because to do so would involve committing the fallacy of *argumentum ad ignorantiam*. And in the case of the clause which follows the $\text{o}\ddot{\delta}\delta\acute{\epsilon}$, the dogmatist cannot draw the conclusion via an argument from self-refutation because a necessary condition for the self-refutation obtaining has not been met, namely that AAP itself be a proof.

Construed in this way [T7], therefore, avoids both problems which afflicted the unmodified text of [T6], the problem of attributing to the sceptic a dogmatic line of thought and the problem of unnecessary repetition. However, [T7] also raises a difficulty of its own. It too is in tension with the surrounding argumentative context (though for a different reason from that for which [T6] was). The argumentative context leads us to expect that in [T7] the sceptic will respond to the first limb of the dogmatist's argument, namely the argument that concludes that we ought not to accept that proof does not exist on the basis of the sceptic's AAP. However, according to [T7] that is not what the sceptic is doing. According to [T7] the sceptic is offering a response to a dogmatist who is arguing *in favour of the existence of proof*. But it is one thing to argue that proof exists. It is another to argue that we ought not to conclude that proof does not exist when confronted with the sceptic's AAP. And the dogmatist is doing the second of these things, not the first.

Deleting both third and fourth $\text{o}\ddot{\nu}\kappa$, therefore, ends up mischaracterizing the kind of argument the sceptic is responding to at this stage of the dialectic. In light of this, let us examine the second option that has been mooted by commentators with respect to the passage, the option which retains the third but deletes the fourth $\text{o}\ddot{\nu}\kappa$. As will be seen, this interpretation avoids this present difficulty but once again raises problems of its own.

3.4. *Retaining the third and deleting the fourth $\text{o}\ddot{\nu}\kappa$*

The option of retaining the third $\text{o}\ddot{\nu}\kappa$ and deleting the fourth is the path taken by Luca Castagnoli (*Self-Refutation*, 283–4). According to this interpretation the text reads:

[T8] For if it [i.e. AAP] is not a proof, then it is not possible either to teach from it that proof does not exist or to say that, because this argument is a proof, *proof exists*. (M 8. 471)

Construing the text in this way avoids the difficulties that troubled both the unamended text of [T6] and the amended text of [T7] with its double deletion of $\sigma\upsilon\kappa$. Given that the present proposal deletes one but not the other $\sigma\upsilon\kappa$, the problem of there being a repetition between the clause preceding and the clause following the $\sigma\delta\delta\acute{\epsilon}$ disappears. [T8]’s reconstruction of the argument also correctly captures the dialectical set up between sceptic and dogmatist. It neither ascribes the dogmatist’s line of reasoning to the sceptic (as [T6] did) nor mischaracterizes the dogmatist’s argument, erroneously presupposing that it is an argument in favour of the existence of proof (as [T7] did). Rather, on the present construal, what the sceptic is doing is responding to the first limb of the dogmatist’s argument in the following way: the sceptic grants to the dogmatist (in the clause preceding the $\sigma\delta\delta\acute{\epsilon}$) that, given that the AAP is not a proof, we ought not to accept, purely on the basis of AAP alone, its conclusion, that is, that proof does not exist. But equally the sceptic argues (in the clause following the $\sigma\delta\delta\acute{\epsilon}$) that we cannot argue that, since AAP is itself a proof, proof exists—for *ex hypothesi* AAP is not a proof.

Castagnoli’s construal of the text is, therefore, an improvement on the preceding ones. However, it too is not free from fault. This becomes apparent if we ask the following question: how is the line of argument in [T8] supposed to promote *suspension of judgement* on the question of whether or not proof exists, which, after all, is the sceptic’s ultimate goal? One answer (and this is Castagnoli’s) is to argue that [T8] *just is* an instance of the sceptic’s method of equipollence: the thesis ‘Proof exists’ is opposed by the contrary thesis ‘Proof does not exist’, from which suspension of judgement follows. But why think these two theses are equipollent to one another? Castagnoli’s answer is as follows: ‘The two theses (“Proof exists” and “Proof does not exist”) are equipollent because *neither* of them follows from the assumption (“[AAP] is not a proof”)’ (*Self-Refutation*, 284 n. 104). This is an ingenious proposal but there are two difficulties with it.

First, though it is certainly true that neither the thesis ‘Proof exists’ nor the thesis ‘Proof does not exist’ follows from the assumption that AAP is not a proof, it is not clear that Sextus would countenance this as an instance of genuine equipollence. Recall Sextus’ remarks about the method of equipollence back in [T1] and [T2]. There Sextus stressed that two theses are equipollent to one another just in case these two theses are supported by equally good arguments, the joint consideration of which leads to suspension of

judgement. If we bear this in mind, we can see why Sextus might have demurred from the suggestion that the thesis ‘Proof exists’ and the thesis ‘Proof does not exist’ in [T8] were equipollent to one another. Of course, it is true—formally speaking—that the thesis ‘Proof exists’ is on an equal footing with the thesis ‘Proof does not exist’ inasmuch as neither thesis is entailed by the assumption that AAP is not a proof. But it is one thing to say that ‘Proof exists’ is supported by as good an argument as ‘Proof does not exist’. It is another to say that neither ‘Proof exists’ nor ‘Proof does not exist’ is entailed by the assumption that AAP is not a proof. In the former case we have two arguments opposed to one another and in the latter we have an absence of argument. Whether Sextus would be happy to attach the label of ‘equipollence’ to this sort of case is at the very least an open question.

Secondly, even if we set this terminological point aside, the argument, so presented, seems to overgenerate cases of suspended judgement. On the present construal, the thesis ‘Proof exists’ is supposed to stand in an equipollent relation to the thesis ‘Proof does not exist’ by virtue of the fact that neither thesis is entailed by the assumption that AAP is not a proof. By parity of reasoning, then, one might argue that the thesis ‘Sextus Empiricus wrote the *Outlines of Pyrrhonism*’ and the thesis ‘It is not the case that Sextus Empiricus wrote the *Outlines of Pyrrhonism*’ are also equipollent to one another. After all, neither of *these* theses follows from the assumption that AAP is not a proof either. But surely it would be illegitimate to suspend judgement over the question as to whether Sextus authored the *Outlines* on the basis of this piece of reasoning. And if we ought not to suspend judgement over whether or not Sextus penned the *Outlines* on the basis of this kind of argument, then equally we ought not to suspend judgement over whether proof exists on the basis of Castagnoli’s construal of the argument underlying [T8].

3.5. *Deleting the third and retaining the fourth οὐκ*

Given the difficulties that each of the preceding treatments of *M* 8. 471 run into, it is worth asking whether the text can be construed in any other way. And there is a remaining option—the option I favour—which is to delete the third οὐκ and retain the fourth. That gives the following sense:

[T9] For if it [i.e. AAP] is not a proof, then it is not possible either *to teach from it that proof exists* or to say that, because this argument is a proof, proof does not exist. (M 8. 471)

This way of construing the text shares all of the advantages Castagnoli's construal holds over the alternatives. The fact that in [T9] the third *ὄν* is deleted but the fourth retained means that the problem of repetition faced by [T6] and [T7] is dissolved. [T9], like Castagnoli's [T8], also avoids the problem of ascribing the dogmatist's line of reasoning to the sceptic (which afflicted [T6]) and the problem of mischaracterizing the dogmatist's argument as one that is in favour of the existence of proof (which afflicted [T7]).

But the present interpretation also differs from Castagnoli's interpretation. On my interpretation the sceptic is putting together two thoughts in [T9]. In the second part of the passage, following the *ὄνδὲ*, the sceptic argues that if AAP is not a proof, then we ought not to accept that proof does not exist. After all, not being a proof, AAP is not probative of its conclusion. My construal of the clause after the *ὄνδὲ* is, therefore, the same as Castagnoli's construal of the clause preceding the *ὄνδὲ*. Where we differ is over what further thought the sceptic has (in Castagnoli's case in the clause which follows the *ὄνδὲ* and in my case in the clause which precedes the *ὄνδὲ*). According to Castagnoli the further thought the sceptic has is that we cannot point to AAP as an example of a proof and conclude on that basis that proof exists because *ex hypothesi* AAP is not a proof. According to my interpretation the further thought the sceptic has is that just because AAP (not being a proof) does not establish its conclusion that proof does not exist, we ought not to conclude that proof *does* exist.¹⁷

So my interpretation differs from Castagnoli's inasmuch as it ascribes a different pair of thoughts to the sceptic and in terms of how it connects those pair of thoughts to the suspension of judgement. According to Castagnoli's interpretation the two thoughts the sceptic has promote suspension of judgement because they are equipollent to one another. However, as I have argued in Section 3.4, it is not clear whether Sextus would classify this as a case of genuine equipollence, and, furthermore, if we do construe the

¹⁷ To do so would be to commit the fallacy of *argumentum ad ignorantiam*, as outlined above in Section 3.3.

argument in this way, it results in the problem of overgenerating instances of suspended judgement.

On my interpretation, on the other hand, what is going on in the present passage is not an instance of the sceptic's standard method of equipollence. Rather, what Sextus is doing is carefully setting out the limits of what the dogmatist can acceptably conclude about the existence of proof when confronted with an argument against proof which is not demonstrative of its conclusion. It would be wrong, the sceptic urges in the second part of the passage, when faced with AAP, to conclude that proof does not exist—AAP, after all, is not probative of its conclusion. However, it would be equally wrong in those circumstances, the sceptic urges in the first part of the passage, to conclude that proof *does* exist. If we have a bad argument for *P*, and that it is the only argument we are considering, it does not follow that we ought to believe not-*P*. So, putting both of these thoughts together, we ought *pro tem* not to believe that proof does not exist or believe that proof does exist.

To believe neither that proof does not exist nor that proof does exist is, of course, to suspend judgement over whether or not proof exists. So my interpretation of this stretch of the sceptic's argument—just like Castagnoli's—has the sceptic reaching the required conclusion of suspending judgement over whether proof exists. But it is important to note that the kind of suspension of judgement generated by my interpretation of the text is a different form of suspended judgement from the kind of suspended judgement implied by Castagnoli's analysis, and indeed different from the standard form suspension of judgement takes in Sextus' works. To bring out this difference I distinguish between what I term 'One-Sided' and 'Two-Sided' suspension of judgement.

3.6. *One-Sided versus Two-Sided suspension of judgement*

Two-Sided suspension of judgement comes about when one considers arguments both for *P* and for not-*P*, finds both arguments to be equipollent to one another, and thereby comes to believe neither *P* nor not-*P*. I call it 'Two-Sided' because it requires considering *both* sides of the question, both the arguments for *P* and the arguments for not-*P*. One-Sided suspension of judgement, on the other hand, does not issue from considering both sides of the question. It arises when one is confronted by a single argument for *P*, which

one judges to be unconvincing. In that situation—and if that is all one has to go on—one will also come to believe neither P nor not- P .

The distinction between One-Sided and Two-Sided suspension of judgement can be elucidated by appealing to a distinction drawn in contemporary epistemology between two kinds of defeaters that might impugn our reasons for belief, ‘rebutting defeaters’, on the one hand, and ‘undercutting defeaters’, on the other.¹⁸ Consider the argument $\langle P, \text{therefore } Q \rangle$. A rebutting defeater for that argument is a defeater which challenges the truth of Q , for example in the form of a rival argument $\langle P^*, \text{therefore not-}Q \rangle$. An undercutting defeater for the argument $\langle P, \text{therefore } Q \rangle$, on the other hand, is a defeater which undermines the connection between P and Q .¹⁹ For example, if I form the belief that the apple before me is red on the basis of its appearing red to me and then come to realize that it is being bathed in red light, that realization is an undercutting defeater for my belief that the apple is red. Though it is not a reason for denying the conclusion that the apple is red (apples bathed in red light after all can still actually be red), it *is* a reason for denying that my initial reason for believing the apple to be red (namely, the apple’s appearing red to me) is a good enough reason to conclude that the apple is red.²⁰

¹⁸ I take the distinction between rebutting and undercutting defeaters from Morison, ‘Argumentation’, 302–5, who in turn draws the distinction from J. Pollock, ‘Defeasible Reasoning’, *Cognitive Science*, 11 (1987), 481–518 at 483–5.

¹⁹ So Pollock (‘Defeasible Reasoning’, 485): ‘undercutting defeaters [as opposed to rebutting defeaters] attack the connection between the reason and the conclusion rather than attacking the conclusion itself’. Pollock puts the same distinction more formally as follows: ‘ R is a rebutting defeater for P as a *prima facie* reason for Q if and only if R is a defeater and R is a reason for believing not- Q ’ and ‘ R is an undercutting defeater for P as a *prima facie* reason for S to believe Q if and only if R is a defeater and R is a reason for denying that P wouldn’t be true unless Q were true.’

²⁰ One could distinguish yet a third kind of defeater for the argument $\langle P, \text{therefore } Q \rangle$. This third type of defeater would give us reason to believe not- P . This sort of defeater does not give us a reason to believe not- Q (and therefore would not qualify as a rebutting defeater so defined), nor does it undermine the connection between P and Q —it just undermines P (and therefore does not qualify as an undercutting defeater so defined). Perhaps the best way to incorporate this third type of defeater into the existing taxonomy would be to split the category of undercutting defeaters into two and distinguish those undercutting defeaters which undermine the connection between P and Q and those which undermine P . The sceptic deploys this second kind of undercutting defeater in his response to the second horn of the dogmatist’s dilemma which I discuss below in Section 4.2. My thanks to Victor Caston for prompting me to think further about this.

This distinction between rebutting and undercutting defeaters maps onto the distinction between One-Sided and Two-Sided suspension of judgement in the following way. When I come to suspend judgement in the Two-Sided sense over some proposition, I suspend judgement in light of a rebutting defeater. And when I come to suspend judgement in the One-Sided sense over some proposition, I suspend judgement in light of an undercutting defeater.

Now, as mentioned before, it is Two-Sided suspension of judgement which is the standard form suspension of judgement takes in Sextus' writings. This is hardly surprising, given the fact that the sceptic's method of equipollence just is an exercise in coming up with rebutting defeaters to the dogmatist's arguments with which he is confronted. The essence of the sceptic's method of equipollence is, when faced with an argument $\langle P, \text{therefore } Q \rangle$ to construct some rival argument $\langle P^*, \text{therefore not-}Q \rangle$, from which Two-Sided suspension of judgement over Q follows. As Benjamin Morison has put the point recently, 'in a slogan: the sceptic's skill is a skill at rebutting not undercutting' ('Argumentation', 305).

If the interpretation I have given of sceptic's argument at *M* 8. 471 is correct, however, then Morison's slogan requires modification. There are at least some instances where the sceptic is adept at deploying undercutting defeaters to generate suspension of judgement, and the sceptic's argument at *M* 8. 471 is one such instance. Confronted by the sceptic's AAP, which, for the sake of argument, has been agreed to be not demonstrative of its conclusion (i.e. not demonstrative of the conclusion that proof does not exist), the dogmatist urges that we cannot, on this basis, conclude that proof does not exist. The sceptic replies that though this is true, we equally cannot conclude, on this basis, that proof *does* exist. The sceptic's point is that suspension of judgement—One-Sided suspension of judgement—follows if all we have to go on is an argument against proof which we deem unconvincing. To conclude otherwise—whether the conclusion is that proof exists or that proof does not exist—would be a *non sequitur*.²¹

²¹ Sextus does have the vocabulary to express this line of thought—even if he does not invoke it here. Elsewhere in his discussion of the various logical features that, according to the Stoics, make an argument non-conclusive (*ἀσύνακτος*), Sextus lists 'incompleteness' (*παρὰ ἑλλείψιν*) as one of them (*PH* 2. 150; *M* 8. 434). The incompleteness in question involves, Sextus tells us at *PH* 2. 150, 'one of the things

4. The sceptic's response to the second horn of the dogmatist's dilemma (*M* 8. 472)

4.1. *The sceptic's argument*

Having dealt with the first horn of the dogmatist's dilemma and worked through the implications of the dogmatist claiming that AAP is not a proof, the sceptic now turns to the second horn, which assumes that AAP is a proof. This part of the dogmatist's argument runs as follows:

- D₂ <1. AAP is a proof.
 2. If AAP is a proof, then at least one proof exists, i.e. AAP itself.
 Therefore,
 3. Proof exists.>

The sceptic's response to D₂ is found at *M* 8. 472:

[ΤΙΟ] εἰ δὲ ἀπόδειξις ἐστὶ, πάντως ἀληθῆ ἔχει τὰ λήμματα καὶ τὴν ἐπιφορὰν· σὺν γὰρ τῇ τούτων ἀληθότητι νοεῖται ἢ ἀπόδειξις. ἦν δέ γε ἐπιφορὰ αὐτοῦ τὸ μὴ εἶναι ἀπόδειξιν· ἀληθὲς ἄρα ἐστὶ τὸ μὴ εἶναι ἀπόδειξιν, καὶ τὸ ἀντικείμενον τούτῳ ψεῦδος, τὸ εἶναι ἀπόδειξιν. οὕτω γὰρ ἀποδεικτικὸν θέλοντες ἀποδείξαι τὸν κατὰ τῆς ἀποδείξεως λόγον, οὐ μᾶλλον αὐτῆν τιθέασιν ἢ ἀναιροῦσιν. (*M* 8. 472)

needed for the drawing of the conclusion being omitted' (ἐν ᾧ παραλείπεται τι τῶν πρὸς τὴν συναγωγὴν τοῦ συμπεράσματος χρησιμεύοντων). Sextus goes on to illustrate this with the following example: the argument <(i) Wealth is either good or bad; (ii) Wealth is not bad; therefore, (iii) Wealth is good> suffers from incompleteness with respect to its premises. (i) needs to be revised to (i*) Wealth is either good or bad or indifferent and (ii) to (ii*) Wealth is neither bad nor indifferent. In the case of the first limb of the dogmatist's argument (i.e. D1), Sextus could have said something analogous. The argument <(1) AAP is not a proof; (2) If AAP is not a proof, then its conclusion is not convincing; (3) If the conclusion of AAP is not convincing, then we ought not to accept the conclusion of AAP; therefore, (4) We ought not to accept that proof does not exist> is incomplete with respect to its third premise. (3) needs to be revised to (3*) If the conclusion of AAP is not convincing, then we ought neither to accept the conclusion of AAP (i.e. that proof does not exist) nor to accept the negation of the conclusion of AAP (i.e. that proof does exist). However, unlike the case of the argument about wealth, in revising (3) to (3*) we now have an invalid argument, so the conclusion in turn needs revising from (4) to (4*) We ought neither to accept that proof does not exist nor to accept that proof does exist. For further discussion of how best to interpret 'conclusiveness' in this context, see J. Brunschwig, 'Proof Defined', in M. Schofield, J. Barnes and M. F. Burnyeat (eds.), *Doubt and Dogmatism: Essays in Hellenistic Epistemology* (Oxford, 1980), 125–60 at 129–32.

But if it [i.e. AAP] is a proof, then most certainly it has true premises and conclusion; for proof is conceived of with the truth of these. But its conclusion is that proof does not exist; therefore, it is true that proof does not exist and its contradictory, that proof exists, is false. For wanting in this way to prove that the argument against proof is probative, they no more establish it than do away with it.²²

What kind of argumentative manoeuvre is the sceptic countenancing here? At first glance, it seems that what the sceptic is doing is simply engaging in a classic deployment of his method of equipollence, resulting in Two-Sided suspension of judgement on the issue of whether proof exists. That is to say, when confronted by the dogmatist's argument D_2 , the sceptic fashions an opposing argument, which we can label S_2 :

- S_2 <1. AAP is a proof.
 2. If AAP is a proof, then its conclusion ('Proof does not exist') is true.
 Therefore,
 3. Proof does not exist.>

and the equipollence between these two arguments issues in suspension of judgement over whether or not proof exists.²³ At second glance, however, just as with our discussion of the sceptic's response to the first horn of the dogmatist's dilemma, it is precipitous to conclude that what is going on here is a standard application of the sceptic's method of equipollence.

4.2. *Opposing an argument versus superseding an argument*

As noted above, the standard method of equipollence involves the sceptic opposing argument with argument: confronted with the argument < P , therefore Q >, the sceptic opposes the argument < P^* , therefore not- Q > and, provided that these two arguments are judged to be equipollent to one another, suspension of judgement

²² Sextus repeats this point at *M* 8. 478.

²³ This is the view of Castagnoli, who, just as he finds equipollence at play in the sceptic's response to the first horn of the dogmatist's dilemma, finds it in the sceptic's response to the second horn: 'Again, the dogmatist, by saying that [AAP] is demonstrative, will no more affirm than deny the existence of proof... obtaining the same result as he would reach by grasping the first horn: equipollence of opposite theses' (*Self-Refutation*, 284).

follows. But it is not clear that this is what is going on in [T10]. Here the sceptic does not seem to be *opposing* S_2 to D_2 but *superseding* D_2 with S_2 .

To get a better sense of this distinction, it may be helpful to compare the manoeuvre we have here with an example of a standard piece of equipollent argumentation. When illustrating this method at *PH* 1. 31–3, Sextus gives us the following example. To the argument:

- A_1 <1. The tower appears to be square from nearby.
Therefore,
2. The tower is square.>

the sceptic opposes the argument:

- A_2 <1. The tower appears to be round from a distance.
Therefore,
2. The tower is round.>²⁴

These two arguments are equipollent to one another inasmuch as they have incompatible conclusions ('The tower is square' and 'The tower is round') and inasmuch as the reason given for believing that the tower is square is just as good as the reason given for thinking it round.²⁵

Now, S_2 and D_2 might also issue in incompatible conclusions and might adduce equally compelling reasons for those incompatible conclusions, but there is a crucial difference between S_2 and D_2 , on

²⁴ See *PH* 1. 32: 'We oppose what appears to what appears... for example... when we say, "The same tower appears round from a distance and square from nearby"' (*ἀντιτίθεμεν δὲ ἢ φαινόμενα φαινομένοις... ὁδὸν... ὅταν λέγωμεν 'ὁ αὐτὸς πύργος πόρρωθεν μὲν φαίνεται στρογγύλος, ἐγγύθεν δὲ τετράγωνος'*).

²⁵ The phenomenon of the square tower appearing round from a distance was a common example of perceptual illusion in antiquity. It is attested elsewhere in Sextus (*PH* 1. 18; 2. 55; *M* 7. 208, 414), and it was adopted by Descartes as illustrative of the fallibility of the senses in the Sixth Meditation (*The Philosophical Writings of Descartes*, trans. J. Cottingham, R. Stoothoff, and D. Murdoch, 3 vols. (Cambridge, 1984), ii. 77). However, what Sextus is emphasizing in the present passage is not that the senses are misleading when they report a square tower as looking round from afar, but that there is no more reason to suppose that the tower is square on the basis that it appears to be square from nearby than to suppose that the tower is round on the basis that it appears to be round from a distance. The equipollent moral of the *PH* 1. 32 passage is discussed in greater detail in B. Morison, 'The Logical Structure of the Sceptic's Opposition', *Oxford Studies in Ancient Philosophy*, 40 (2011), 265–95 at 269–87 and in Sienkiewicz, *Modes*, 34–41.

the one hand, and A_1 and A_2 , on the other. To return to our distinction between rebutting and undercutting defeaters, A_2 rebuts A_1 , whereas S_2 undercuts D_2 —the conclusion of S_2 ('Proof does not exist') undermines the very premise on which D_2 is founded.²⁶ This is not the case with A_1 and A_2 —the tower's being round is perfectly compatible with the tower appearing to be square from nearby (and indeed the tower's being square is perfectly compatible with the tower appearing to be round from a distance).²⁷

But S_2 does not *merely* undermine D_2 's starting points.²⁸ It does not merely deny that D_2 gives us reason to believe that proof exists. It also offers a positive argument for the conclusion that proof does not exist. S_2 both undercuts D_2 and supersedes it. Has the sceptic, therefore, emerged victorious? Not yet. For we might naturally wonder whether, in fashioning S_2 , the sceptic's reach exceeds his grasp. For the conclusion of S_2 not only undermines the premises of D_2 . It also has the curious property of undermining its own premises. How *this* feature of S_2 should be understood is the question to which I now turn.

5. The dogmatist's objection and the sceptic's counterargument (*M* 8. 479–81)

If the preceding reconstruction of the dialectic between sceptic and dogmatist is correct, the dogmatist has before him the following argument of the sceptic for his consideration:

²⁶ The kind of undercutting involved here is, therefore, different from the sort of undercutting Pollock was concerned to capture. It turns on attacking the premise of the argument rather than the connection between premises and conclusion. But for all that, it is still a type of undercutting defeater, as it does not directly challenge the truth of the conclusion in the form of a rival argument. See n. 20 above for this distinction.

²⁷ I am not here concerned to give an explanation of how a square tower might appear to be round from a distance or how a round tower might appear to be square from nearby (though Lucretius offers an explanation of the former phenomenon consistent with the principles of Epicureanism at *DRN* 4. 353–63). My purpose here is simply to draw attention to the fact that whereas the conclusion of A_2 ('The tower is round') is at least logically consistent with the premise of A_1 ('The tower appears to be square from nearby'), the conclusion of S_2 ('Proof does not exist') is not logically consistent with the first premise of D_2 ('AAP is a proof').

²⁸ The converse is not the case. The conclusion of D_2 ('Proof exists') is compatible with, indeed presupposed by, the premises of S_2 .

- S₂ <1. AAP is a proof.
 2. If AAP is a proof, then its conclusion ('Proof does not exist') is true.
 Therefore,
 3. Proof does not exist.>

It is at this stage that the dogmatist argues that the sceptic has undermined himself:

[T11] ναί, φασίν, ἀλλ' ὁ συνάγων τὸ μὴ εἶναι ἀπόδειξιν ἀποδεικτικὸς ὢν ἑαυτὸν ἐκβάλλει. (M 8. 479)

Yes, they say, but the argument concluding that proof does not exist, being a proof, tosses itself out.

Sextus will go on to offer a two-stage response to this objection of the dogmatist on behalf of the sceptic, but before considering these responses, it is first important to be clear on the nature of the dogmatist's objection.²⁹ In particular, we might distinguish two parts to the objection—the content of the objection and the target of the objection. While commentators have disagreed over the content of the objection, there has been pretty much unanimous agreement as to what the target of the objection is supposed to be. In this final part of the paper I want to suggest that a different target is actually in play, in light of our reconstruction of the course of the argument so far.

5.1. *The content of the dogmatist's objection: Self-refutation or self-elimination?*

Regarding the issue of content, according to what might be called the orthodox interpretation, the charge the sceptic faces in these last sections of *Against the Logicians* is one of self-refutation (περιτροπή).³⁰ Recently, this received view has been criticized convincingly

²⁹ Before offering his response to the dogmatist, Sextus sets out what the *sceptic's* own attitude towards his arguments is at M 8. 473–7 (thereby offering an answer to the question the dogmatist initially posed in [T3]). I pass over this passage here but return to it in Section 5.6 below.

³⁰ 'The skeptic doctrine is indeed self-refuting, but only after it has destroyed all the arguments of traditional philosophy' (C. L. Stough, *Greek Skepticism: A Study in Epistemology* (Berkeley, 1969), 146); 'One of the few brands of skepticism in the history of philosophy to... accept—and even embrace—the charge of self-refutation is Pyrrhonism, especially as it is represented to us by our most extensive source for

by Castagnoli, who stresses the importance of distinguishing between the dialectical acts of self-refutation (*περιτροπή*) and self-elimination (*περυνγραφή*). Castagnoli contends that in the present passages the charge the sceptic is facing is that of self-elimination rather than self-refutation, and that by accepting the consequences of self-elimination, the sceptic actually has an effective defence *against* the charge of self-refutation.³¹

The difference between these two sorts of reversal can be expressed as follows: suppose I maintain that *P*. If I come to undergo self-refutation, then I end up being committed to the contradictory of my initial proposal: I come to be committed to not-*P*.³² If *P* undergoes

Pyrrhonist “doctrine”, Sextus Empiricus’ (McPherran, ‘Skeptical Homeopathy’, 290–1); ‘I will take this acceptance of self-refutation (*peritrope*) as a defining characteristic of Pyrrhonian skepticism’ (R. J. Fogelin, *Pyrrhonian Reflections on Knowledge and Justification* (New York and Oxford, 1994), 4); ‘At all events, they [*sc.* Pyrrhonian sceptics] happily embraced self-refutation’ (Hankinson, *Sceptics*, 18).

³¹ ‘Sextus *never* accepts, and so much the less embraces, the dogmatic charge of self-refutation; what is interpreted by McPherran and many others as an admission of self-refutation is best reconstructed as a refined dialectical tool that Sextus uses *against* the dogmatic charges of inconsistency and self-refutation’ (Castagnoli, *Self-Refutation*, 252).

³² Self-refuting argumentation is, in fact, a genus under which fall several species (and indeed subspecies). J. L. Mackie, ‘Self-Refutation: A Formal Analysis’, *Philosophical Quarterly*, 14 (1964), 193–203 provides an influential threefold classification of types of self-refutation—‘absolute’, ‘operational’, and ‘pragmatic’, in terms of which much subsequent discussion of self-refuting arguments in the secondary literature has been couched. In outline (and according to Mackie) an absolute self-refutation occurs when the content of some claim, *P*, entails its own falsity (for example, in the case of the claim ‘Nothing is true’), an operational self-refutation occurs when there is no way of coherently presenting *P* without falsifying it, because the very act of asserting that *P* commits one to something which conflicts with *P* (for example, in the case of the claim ‘I believe nothing’) and a pragmatic self-refutation occurs when the way in which *P* is presented conflicts with *P* (for example, in the case of me saying ‘I am not saying anything’). A full discussion of the details of Mackie’s pioneering classification is beyond the scope of this paper, and, at any rate, I go on to argue that the final move in the exchange between sceptic and dogmatist in our passage turns on the phenomenon of self-elimination rather than self-refutation. Where Sextus *does* use the language of self-refutation in this stretch of text—namely in his opening formulation of the second horn of the dogmatist’s dilemma back in [T3]—there the kind of self-refutation envisioned seems to be a type of pragmatic one: if the sceptic purports to produce a proof of the non-existence of proof, then he commits himself to the existence of at least one proof and thereby falsifies his own conclusion. I say ‘type’ of pragmatic self-refutation, because, as Castagnoli notes (*Self-Refutation*, 160–1), Mackie’s formulation does not distinguish between a case where the *actual* way in which a proposition is put forward conflicts with what is presented and a case where the *intended* way in which

self-elimination, on the other hand, then by the end of that argumentative procedure, there is *nothing* to which I am committed (not-*P* included).³³

It is not the place here to adjudicate between the varied arguments that might be made in favour of the self-refutation interpretation and the self-elimination interpretation. As mentioned before, my primary concern is to challenge what commentators have taken the *target* of the dogmatist's argument to be rather than to take a side in the debate over what its content is. Having said that, if we work through the sceptic's two responses to the dogmatist's charge in [T11], that does provide some evidence in favour of the self-elimination interpretation, and hence that is the interpretation of the content of the dogmatist's argument which I shall accept for the remainder of this paper.

5.2. The sceptic's first response to the dogmatist's objection

The sceptic's first response to the dogmatist's argument is this:

[T12] πρὸς δὲ ῥητέον, ὅτι οὐ πάντως ἑαυτὸν ἐκβάλλει. πολλὰ γὰρ καθ' ὑπεξαίρεσιν λέγεται, καὶ ὡς τὸν Δία φημὲν θεῶν τε καὶ ἀνθρώπων εἶναι πατέρα καθ' ὑπεξαίρεσιν αὐτοῦ τούτου (οὐ γὰρ δὴ γε καὶ αὐτὸς αὐτοῦ ἦν πατήρ), οὕτω καὶ ὅταν λέγωμεν μηδεμίαν εἶναι ἀπόδειξιν, καθ' ὑπεξαίρεσιν λέγομεν τοῦ δεικνύντος λόγου, ὅτι οὐκ ἔστιν ἀπόδειξις· μόνος γὰρ οὗτός ἐστιν ἀπόδειξις. (*M* 8. 479)

a proposition is put forward conflicts with what is presented. As I have reconstructed the line of thought of [T3], the kind of pragmatic self-refutation at issue is a refutation of the second kind. For further critical discussion and refinement of Mackie's taxonomy, see Castagnoli, *Self-Refutation*, 17–23, 160–3, 205–7.

³³ I present the distinction between *περιτροπή* and *περιγραφή* here in dialectical terms rather than in terms of the pure falsification or elimination of the conclusion of the argument to reflect Sextus' dialectical framing of this exchange between the sceptic and the dogmatist. Back at *M* 8. 470 we are reminded that the sceptic has been posed a question by the dogmatist, namely 'Is your argument against proof itself a proof or not?' (*πότερον ἀπόδειξις ἐστὶν ὁ κατὰ τῆς ἀποδείξεως λόγος ἢ οὐκ ἀπόδειξις*). Whether [T11] expresses a charge of *περιτροπή* or *περιγραφή*, that charge should be understood within this dialectical context. The dogmatist is challenging the sceptic to give an answer to his question without incurring unacceptable commitments, for example committing himself to the existence of proof. Though I would not commit myself to the claim that *all* instances of *περιτροπή* and *περιγραφή* in ancient philosophical texts should be understood dialectically, when it comes to the particular stretch of text of *M* 8. 463–81, I am in agreement with Castagnoli, *Self-Refutation*, 282–3 about its dialectical character.

To which it should be replied that it does not in all cases toss itself out. For many things are said that allow for an exception, and just as we say that Zeus is the father of gods and men with the exception of himself (for, of course, he is not his own father), so too when we say that proof does not exist, we say this with the exception of the argument showing that proof does not exist; for this alone is a proof.

The thought being entertained here is as follows: suppose we have some argument which has as its conclusion that proof does not exist. Call this argument 'A'. The suggestion being made in [T12] is that A is exempt from its own conclusion. Proof indeed does not exist—but with one exception, namely argument A, which *is* a proof.

Given that this is Sextus' response to the dogmatist's claim that the argument against proof 'tosses itself out', that would suggest that the dogmatist's objection in [T11] assumes that the conclusion of A should be understood without any exceptions (and therefore should apply to itself). The dogmatist is claiming that the conclusion of the sceptic's argument A applies to itself, thereby stripping it of its demonstrative power. He is not claiming that, given that A is a proof, then there is at least one proof, contrary to A's conclusion. As Castagnoli puts it, the dogmatist's objection in [T11] is not:

1. If A is a proof, then there is at least one proof (i.e. A itself), contrary to the conclusion of A.

But rather:

2. If A is a proof, then it has a true conclusion (i.e. it is true that proof does not exist), and if it is true that proof does not exist, then A itself is not a proof.³⁴

Whereas in the case of (1) the assumption that A is a proof contradicts the conclusion that there is no proof, in the case of (2) the inference made to the conclusion that there is no proof, contradicts the initial assumption that A is a proof.

³⁴ See Castagnoli, *Self-Refutation*, 289. The logical difference between these two claims can be brought out by translating them into first-order predicate logic. Letting 'P' stand for '... is a proof' and 'A' stand for the argument which has as its conclusion that proof does not exist, the two claims read as follows:

1. $P(A) \rightarrow (\exists x)P(x)$
2. $(P(A) \rightarrow \neg (\exists x)P(x)) \wedge (\neg (\exists x)P(x) \rightarrow \neg P(A))$.

So the sceptic's first response to the dogmatist seems to suggest that the charge the dogmatist lays at the door of the sceptic in [T11] is one of self-elimination, rather than self-refutation. The dogmatist is suggesting in (2) that A's conclusion includes A in its own scope, not that A, *qua* proof, falsifies its own conclusion. The sceptic urges in response that it does no such thing. A's conclusion does not apply to A itself. A—and A alone—is the only proof in existence and, happily, concludes that there are no other proofs.³⁵

5.3. *The sceptic's second response to the dogmatist's objection*

The sceptic's second response to the dogmatist also supports the idea that the dogmatist's charge is one of self-elimination rather than one of self-refutation. Having canvassed the possibility that A—and A alone—is a legitimate proof, the sceptic's final move is to *accept* that A does 'toss itself out' in precisely the way that that previous response of the sceptic tried to avoid. But even if A tosses itself out in the sense that its conclusion equally applies to itself, that does not vindicate the dogmatist. As Sextus writes:

[T13] *κᾶν αὐτὸν δὲ ἐκβάλλῃ, οὐ διὰ τοῦτο κυροῦται τὸ εἶναι ἀπόδειξιν. πολλὰ γάρ ἐστιν ἄπερ ὁ ἄλλα ποιεῖ, τοῦτο καὶ ἑαυτὰ διατίθησιν. οἷον ὡς τὸ πῦρ δαπανῆσαν τὴν ὕλην καὶ ἑαυτὸ συμφθείρει, καὶ ὄν τρόπον τὰ καθαρτικά, ἐξέλασαντα τῶν σωμάτων τὰ ὑγρά, καὶ αὐτὰ συνεκτίθησιν, οὕτω δύνатаι καὶ ὁ κατὰ τῆς ἀποδείξεως λόγος μετὰ τὸ πᾶσαν ἀπόδειξιν ἀνελεῖν καὶ ἑαυτὸν συμπεριγράφειν.*

And even if it does toss itself out, that does not confirm that proof exists. For there are many things which put themselves in the same condition as they put other things. For example, just as fire after consuming wood destroys itself as well, and just as purgatives after driving the fluids out of bodies eliminate themselves as well, so too the argument against proof, having eliminated every proof, can cancel itself as well. (*M* 8. 480).

³⁵ Of course, the sceptic's strategy of exempting A from the scope of its own conclusion also serves as a response to the charge of self-refutation, were that the charge being made. If the conclusion of A is not 'Proof does not exist' but rather 'Proof does not exist, with the exception of A', then, were the dogmatist to claim A's being a proof falsifies its own conclusion, the sceptic would have a swift retort. No such falsification occurs if the conclusion is understood to be 'Proof does not exist, with the exception of A'.

The metaphors of fire and purgative drugs Sextus invokes in this passage seem to support the idea that it is self-elimination rather than self-refutation which is at issue here.³⁶ The sceptic's argument ultimately 'does away with itself' (*ἀνελεῖν*), just as a fire quenches itself having burnt through its fuel source and just as purgatives eliminate themselves having driven out the humours from a body. Just as we are left with no physical residue at the end of these processes, so at the end of the sceptic's argumentative procedure there is no dogmatic residue.³⁷ The sceptic ends up being committed not to the negation of his conclusion but to nothing at all. His argument has eliminated, not refuted, itself.³⁸

³⁶ Sextus deploys a third image in this context, that of a ladder being kicked aside once climbed. The ladder image follows on immediately from the images of the fire and the purgatives, but I deal with it separately in Section 5.7 as it has some important differences from either of these other metaphors.

³⁷ Some commentators emphasize the fact that the fire consuming the wood is temporally prior to the fire consuming itself and the purgatives driving out the fluids from the body are temporally prior to the purgatives driving out themselves. For this view, see McPherran, 'Skeptical Homeopathy,' 315–16. McPherran stresses this because, on his interpretation, it is crucial that the sceptic is persuaded by AAP at t_n , and then subsequently at t_{n+1} comes to realize that AAP is self-refuting, so that the sceptic avoids violating the psychological principle of non-contradiction by assenting to two inconsistent propositions ('AAP is a sound proof'; 'AAP is not a sound proof') at the same time. Others argue that the metaphors do not suggest the kind of temporal priority McPherran finds in them. Rather, it is more accurate to say that the process of the fire burning through its fuel source—which no doubt is a process that unfolds through time—coincides with the process of the fire burning itself out. The more the fire burns through its fuel source, the more the fire itself burns out, until, at the end of the process, both the fuel source and the fire are extinguished at the same instant. So, by analogy, though reasoning through AAP takes time, it is not that the sceptic first endorses AAP and then later comes to reject it; rather the more the sceptic works through the argument of AAP, the more his commitment to proof, including AAP itself, is loosened until at the end of the process, the sceptic frees himself of any commitment both to proof and to AAP itself. For this view, see M. Nussbaum, 'Skeptic Purgatives: Therapeutic Arguments in Ancient Skepticism', *Journal of the History of Philosophy*, 29 (1991), 521–57 at 550–1 and Castagnoli, *Self-Refutation*, 293–5. However, on either account, the point to emphasize is that, at the end of the process we are left with no dogmatic residue.

³⁸ One might wonder whether embracing self-elimination is any better for the sceptic, dialectically speaking, than embracing self-refutation. R. Ziemińska, 'Sextan Skepticism and Self-Refutation', *Polish Journal of Philosophy*, 6 (2012), 89–99 at 94–9 argues that it is no better, claiming that accepting self-elimination amounts to a 'dialectical evasion' on the part of the sceptic that is 'the end of rational discussion'. In response to this worry, one might emphasize the fact that the self-elimination involved—at least in the passage we are considering—is not the self-elimination of AAP *simpliciter* but the self-elimination of AAP *qua* demonstrative proof. From the fact that the sceptic accepts that no proofs exist, AAP included, it does not follow that the sceptic has put an end to rational discussion. The sceptic

5.4. *The target of the dogmatist's objection: AAP or S₂?*

Irrespective of whether the dogmatist's objection in [T11] turns on self-elimination or self-refutation, there is still the further question of what the *target* of the objection is supposed to be.

Let us return to the dogmatist's objection in [T11]:

[T11] *ναί, φασίν, ἀλλ' ὁ συνάγων τὸ μὴ εἶναι ἀπόδειξιν ἀποδεικτικὸς ὢν ἑαυτὸν ἐκβάλλει.* (M 8. 479)

Yes, they say, but the argument concluding that proof does not exist, being a proof, tosses itself out.

The consensus among commentators is that the expression 'argument concluding that proof does not exist' (*ὁ συνάγων τὸ μὴ εἶναι ἀπόδειξιν*)—which I labelled, neutrally, in Section 5.2 argument 'A'—refers to what I have labelled elsewhere 'AAP'. This is the sceptic's initial argument against proof which he casts in opposition to the dogmatist's argument in favour of the existence of proof, namely:

AAP <*p*', *q*', *r*', therefore proof does not exist>

According to this line of thinking, in [T11] the dogmatist is claiming that AAP eliminates itself.³⁹

still can offer (non-demonstrative) reasons for his position. It is just that—*qua* good sceptic—he will realize that there are equally good reasons that might be adduced in opposition to these and, subsequently, that suspension of judgement is in order.

³⁹ For the view that it is AAP which eliminates itself, see e.g. M. F. Burnyeat ('Protagoras and Self-Refutation in Later Greek Philosophy', *Philosophical Review*, 85 (1976), 44–69 at 49 n. 9): 'There is argument about it [*sc.* the non-existence of proof] which Sextus in the immediate sequel terms *λόγος*, and later he considers whether to admit that this argument does away with itself (M 8. 479–80; cf. *PH* 2. 188); McPherran ('Skeptical Homeopathy', 326–7): 'And just as the intended effect of a purgative is the return of the body to its natural state of healthful equilibrium minus the purgative (which—if retained—would prove a source of illness), so the intended effect of the PAP [*sc.* AAP] and the admission of its self-refutation is the return of the philosophically disturbed mind to a state of natural mental equilibrium, untroubled by even a single assertion or commitment to proof (which—if retained—would prove a toxic source of negative Dogmatism and its attendant mental anxieties); and Castagnoli (*Self-Refutation*, 291): 'the self-bracketing of AAP that Sextus accepts and embraces has as its result the expunction of AAP from the set of the alleged proofs in which it has been assumed *ex hypothesi*... Not only does AAP not incur reversal, but it is not even self-bracketing *tout court*. Only when coupled with the distinct assumption that it is a proof does AAP inscribe itself within its scope, "rejecting" itself in the plain sense that it concludes of itself too that it is not a proof.'

Now, it is certainly possible to take the expression ‘argument concluding that proof does not exist’ to refer to AAP in this way. But there is also another possibility—taking it to refer not to AAP, but the argument I have labelled S_2 , namely the sceptic’s initial argument against the second horn of the dogmatist’s dilemma:

- S_2 <1. AAP is a proof.
 2. If AAP is a proof, then its conclusion (‘Proof does not exist’) is true.
 Therefore,
 3. Proof does not exist.>

The relation between AAP and S_2 is an interesting one. There are clear similarities between these two arguments. For one, they share the same conclusion—both are ‘Arguments Against Proof’ in that sense. But there is also an important difference between them. These two arguments operate at different levels.

AAP is not, in fact, a single argument, but instead is meant to encompass that whole spectrum of arguments Sextus assembles against the existence of proof during the course of *M* 8. 300–462. Those arguments undermine dogmatic proof by mounting arguments against the terms in which it is defined. If we take the Stoic conception of proof, for example, which defines proof as ‘an argument [*λόγος*] which is conclusive [*συνακτικός*], true [*ἀληθής*], and has an unclear conclusion [*ἄδηλον συμπέρασμα*] which is revealed by the power of the premises’ (*ἐκκαλυπτόμενον ὑπὸ τῆς δυνάμεως τῶν λημμάτων*, *PH* 2. 143), the sceptic’s attack will turn on what it is for an argument to be conclusive, or what it is for its premises to be revelatory of the conclusion, and so forth.⁴⁰ All of these arguments against proof, therefore, have a first-order character about them. They argue against proof by arguing that the concepts in which proof is couched are unsatisfactory or confused or lead to inconsistencies. And it is these sorts of first-order arguments which fall under the banner of AAP.

S_2 , on the other hand, has a rather different character. S_2 —like AAP—is an argument against the existence of proof and, in this sense, is a particular type of AAP, but one which has a distinctively

⁴⁰ For further details on the content of these arguments against proof, see J. Barnes, ‘Proof Destroyed’, in M. Schofield, M. F. Burnyeat, and J. Barnes (eds.), *Doubt and Dogmatism: Essays in Hellenistic Epistemology* (Oxford, 1980), 161–81 and Hankinson, *Sceptics*, 209–12.

second-order character. It is a type of AAP which turns on the very status of AAPs themselves.

So, when the dogmatist claims in [T11] that the sceptic's argument 'concluding that proof does not exist, being a proof, tosses itself out', he might be referring either to the first-order AAP or the second-order S_2 . And there are two corresponding ways of interpreting the sceptic's counterargument to the dogmatist depending on whether we take the sceptic and the dogmatist to be discussing the self-elimination of AAP or the self-elimination of S_2 .

5.5. *Two interpretations of the sceptic's counterargument*

Suppose that we take the 'argument' in question here to be AAP rather than S_2 . In that case, the closing exchange between the sceptic and dogmatist turns on whether AAP applies to itself and—if so—whether that is problematic for the sceptic. The dogmatist issues his criticism in [T11], namely that *qua* proof AAP eliminates itself, to which the sceptic replies, first, that the elimination would not occur in the case where AAP was understood not as

AAP < p', q', r' , therefore proof does not exist>

but rather as

AAP* < p', q', r' , therefore proof does not exist with the exception of AAP*>,

and, second, that even *if* we took AAP to be a proof, it would conclude of itself that it is not in fact a proof, a consequence which the sceptic is perfectly happy to accept. Call this the First-Order Interpretation.

This is a perfectly coherent interpretation of the final exchange between sceptic and dogmatist and one which has at its centre the status of AAP. But alternatively, we could interpret this final exchange to be not about the status of AAP but about the status of S_2 . The dogmatist's challenge in [T11] would, therefore, amount to saying that the sceptic's response to the second horn of the dilemma—i.e. S_2 —eliminates itself, to which the sceptic would issue replies parallel to the replies issued in the First-Order Interpretation. The sceptic would argue that self-elimination would not occur if we understood S_2 to exempt itself from its own

conclusion, and furthermore, even if we did not do this and instead took S_2 to be a proof which eliminates itself along with every other proof, that is a consequence the sceptic is perfectly happy to welcome. Let us call this the Second-Order Interpretation.⁴¹

Which of them is the correct reading? It may seem, at first, that not very much hangs on whether we opt for the First-Order Interpretation or the Second-Order Interpretation—both, after all, end up with the sceptic embracing the self-eliminating property of his arguments. However, on closer inspection, there are at least two differences between the two interpretations, and it is these two differences, *ceteris paribus*, that give us reason to depart from the consensus and prefer the Second-Order Interpretation to the First-Order Interpretation.

5.6. *The seriousness of the dogmatist's challenge*

The first difference between the two interpretations concerns the seriousness of the dogmatist's challenge in [T11]. According to the First-Order Interpretation, there is a sense in which the dogmatist's challenge is not problematic for the sceptic at all. The sceptic need not be troubled by the dogmatist's claim that AAP, being a proof, 'tosses itself out' for the simple reason that the sceptic does *not* put forward AAP as a proof in the first place. The sceptic only concedes for the sake of argument that AAP is a proof, thereby rising to the challenge of the second horn of the dogmatist's dilemma. A less concessive sceptic might just as easily refuse to grant the dogmatist's starting point—that is, refuse to grant the dogmatist's premise that AAP is a proof.

Furthermore, the sceptic would be able to provide a principled reason for this refusal. As Sextus says at *M* 8. 473 when he expounds what the sceptic's attitude is towards AAP:

[T14] φήσουσι γὰρ τὸν κατὰ τῆς ἀποδείξεως λόγον πιθανὸν εἶναι μόνον καὶ πρὸς τὸ παρὸν πείθειν αὐτοὺς καὶ ἐπάγεσθαι συγκατάθεσιν, ἀγνοεῖν δέ, εἰ καὶ αἰσθίς ἔσται τοιοῦτος διὰ τὸ πολύτροπον τῆς ἀνθρωπίνης διανοίας. (*M* 8. 473)

⁴¹ In labelling these two interpretations 'First-Order' and 'Second-Order' respectively, I do not mean to imply anything over and above the fact that the first turns on the status of the sceptic's arguments against proof and the second turns on the status of the sceptic's arguments about his arguments against proof.

For they [i.e. sceptics] will say that the argument against proof is merely persuasive, and that for the moment it persuades them and induces assent, but that they do not know whether it will also be like this in the future, given the fickle character of human thought.

The sceptic is stressing that he is not claiming that AAP is demonstrative of its conclusion, but merely persuasive (*πιθανόν*). In fact, AAP does not even have to reach some particular objective threshold of plausibility. All that is required for the sceptic's argument is that AAP has the relational property of being *as plausible as* AFP. Far from harming the sceptic's position, the dogmatist's arguments in favour of proof are, therefore, *welcomed* by the sceptic:

[T15] εἰ γὰρ οἱ μὲν κατὰ τῆς ἀποδείξεως κομισθέντες λόγοι μεμενῆκασιν ἀνάντιρρητοι, οἱ δὲ εἰς τὸ εἶναι ἀπόδειξιν παραληφθέντες λόγοι πάλιν εἰσὶν ἰσχυροί, μήτε ἐκείνοις μήτε τούτοις προσθέμενοι τὴν ἐποχὴν ὁμολογῶμεν. (M 8. 477)

For if the arguments produced against proof have remained unrefuted, and the arguments taken up in favour of there being proof are also strong, let us attach ourselves neither to one set nor to the other, but agree to suspend judgement.

An argument against proof which is equally persuasive as an argument in favour of it is precisely what the sceptic is aiming at—an equipollence between opposed theses which leads to suspension of judgement over whether or not proof exists.

The picture, however, is rather different on the Second-Order Interpretation. For, according to that interpretation what the dogmatist is putting pressure on in [T11] is not the demonstrative status of AAP, but the demonstrative status of claims and arguments that the sceptic makes *about* AAP, for example the argument S_2 .

Now the sceptic can—indeed does—have a response to this objection, but the sceptic would not be entitled to simply sidestep the dogmatist's objection—as he can do in the case of the First-Order Interpretation—by merely denying that S_2 is a demonstrative proof and maintaining that it is simply one of pair of equipollent arguments which is only as persuasive as the opposing dogmatic argument against which it is pitted. For if my account of the sceptic's response to the second horn of the dogmatist's dilemma in Section 4.2 is correct, then S_2 is not an argument that merely *opposes* D_2 , but is a stand-alone argument which *supersedes* D_2 . The sceptic seems to be presenting S_2 as a stand-alone piece of

reasoning in its own right, and, consequently, it seems a perfectly reasonable request of the dogmatist to ask, of that bit of reasoning, whether it is demonstrative of its conclusion or not, and if it is, whether or not that is a problematic self-elimination of the sceptic's argument.

So, on the First-Order Interpretation the sceptic's final two arguments against the dogmatist at *M* 8. 479–81 are in a sense a sceptical extravagance. Strictly speaking, the sceptic does not need to offer these arguments, because they take as their starting point the dogmatist's assumption that the AAP is a proof, which the sceptic does not share. On the Second-Order Interpretation, on the other hand, the final two replies of the sceptic take on real import. They are the sceptic's response to the dogmatist's concern that the sceptic's arguments *about* AAP (rather than AAP itself) have a problematic demonstrative status. As a stand-alone argument, the sceptic is presumably putting forward S_2 as an argument that is demonstrative of its conclusion (or so the dogmatist might suppose). But if so, then its conclusion ('Proof does not exist') applies to and destroys the very demonstrative status of S_2 in the first place. According to the Second-Order Interpretation, it is to this objection of the dogmatist that the sceptic's final two counterarguments are addressed.

Adopting the Second-Order Interpretation, then, makes the sceptic's final two counterarguments a necessary response to a legitimate dogmatic worry, rather than making them an unnecessary exercise in sceptical virtuosity, responding to a dogmatic objection the basic assumption of which the sceptic has a principled reason to reject. That is the first point in favour of the Second-Order Interpretation. And this first point leads on to a second. The First-Order Interpretation ends up leaving a dialectical loose end between the sceptic and the dogmatist at the end of their exchange, which the Second-Order Interpretation does not. Consequently, the sceptic's response to the dogmatist becomes more complete if we adopt the Second-Order Interpretation.

5.7. *The completeness of the sceptic's response*

This point about completeness can best be brought out by considering the third metaphor Sextus introduces to illustrate the kind of

self-elimination of his own arguments which the sceptic is happy to countenance:

[T16] καὶ πάλιν ὡς οὐκ ἀδύνατόν ἐστι τὸν διὰ τινος κλίμακος ἐφ' ὑψηλὸν ἀναβάντα τόπον μετὰ τὴν ἀνάβασιν ἀνατρέψαι τῷ ποδὶ τὴν κλίμακα, οὕτως οὐκ ἀπέοικε τὸν σκεπτικόν, ὡς διὰ τινος ἐπιβάθρας τοῦ δεικνύντος λόγον τὸ μὴ εἶναι ἀπόδειξιν χωρήσαντα ἐπὶ τὴν τοῦ προκειμένου κατασκευήν, τότε καὶ αὐτὸν τοῦτον τὸν λόγον ἀνελεῖν. (M 8. 481)

And again, just as it is not impossible for someone who has climbed to a high place by a ladder to overturn the ladder with his foot after the ascent, so it is not unlikely that the sceptic, having arrived at the accomplishment of his task by means of the argument showing that proof does not exist, as it were by a ladder, should then do away with this very argument.

This celebrated image of the ladder follows immediately on the heels of the images of the fire and the purgatives in [T13] and so is clearly meant by Sextus to illustrate the same kind of self-elimination which the fire and the purgatives illustrate.

However, there is a further level of complexity to Sextus' image of the ladder which is missing from the earlier two images. In the case of the fire that extinguishes itself and the purgatives which drive themselves out of the body there is one item involved in the self-elimination, fire in one case and purgatives in the other. In the case of the ladder image there are at least two further elements of metaphorical significance: there is the person who scales the ladder (τὸν ἀναβάντα) and then kicks it away after his climb is finished, and there is the 'high place' (ὑψηλὸν τόπον) to which he ascends. Now, it is clear from [T16] that the climber of the ladder is supposed to represent the sceptic (τὸν σκεπτικόν), and this is the case whether one adopts the First-Order or the Second-Order Interpretation.⁴² However, when we consider the significance of the other elements of the metaphor (the ladder and the high place to which it leads),

⁴² Castagnoli notes that although Sextus is explicit in his metaphor that it is the sceptic who climbs the ladder, it is also a ladder the dogmatist can climb to escape the 'wretched lowlands of dogmatism'. Castagnoli continues: 'if they cannot be defused AAPs can become for the dogmatist a ladder, safe enough to scale the walls of dogmatism and climb to a better place, where persuasion of the non-existence of proof will finally counterbalance the opposite belief in its existence, producing ἐποχή' (Castagnoli, *Self-Refutation*, 306–7).

the First-Order and the Second-Order Interpretations yield rather different pictures.⁴³

To repeat the point again, according to the First-Order Interpretation, the final discussion between the sceptic and dogmatist concerns the status—demonstrative or otherwise—of AAP, and the last move in the exchange is for the sceptic to embrace the self-elimination of AAP. The sceptic assumes, for the sake of argument, that AAP is a proof and then teases out the implications of this in the second-order piece of reasoning which I have labelled S_2 and which concludes that there is no proof, AAP included.⁴⁴ AAP, therefore, expunges itself *qua* demonstrative proof. In terms of the metaphor, AAP is the ladder which ends up being kicked over after the sceptic has reasoned his way to the conclusion of S_2 , that proof does not exist, AAP included.

So on the First-Order Interpretation the ladder of AAP ends up falling down, but what, we might ask, is the status of the reasoning *about* AAP that I have just described the sceptic engaging in and which I have schematized in S_2 ? For that chain of reasoning—that is to say, the very reasoning that concludes that AAP expunges itself *qua* demonstrative proof—is by definition beyond the scope of AAP. It is a piece of reasoning about AAP.

To extend Sextus' metaphor, the First-Order Interpretation risks leaving at least one dogmatic ladder standing, one residual

⁴³ The image of the ladder recurs, perhaps most famously, as the penultimate proposition of Wittgenstein's *Tractatus Logico-Philosophicus*: 'My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) He must surmount these propositions; then he sees the world rightly' (L. Wittgenstein, *Tractatus Logico-Philosophicus* (London, 1922), 6.54). Though the image is the same, the moral is different. Sextus would not—indeed, does not—go as far as to say that upon climbing the ladder and reaching the 'high place', the sceptic 'sees the world rightly', for that would be an unacceptably dogmatic stance to take. Rather, it is reasonable to suppose that Sextus would say that upon climbing and kicking away the ladder, the sceptic will gain that cognitive tranquillity (*ἀταραξία*) which comes from appreciating that the (non-demonstrative) arguments for and against proof are equipollent to one another.

⁴⁴ See McPherran, 'Skeptical Homeopathy', 301–2, who translates [T16] as 'And again, just as it is not impossible for the man who has ascended to a high place by a ladder to overturn the ladder with his foot after the ascent, so also it is not unlikely that the Sceptic after he has arrived at demonstration of his thesis by means of . . . [the PAP, i.e. AAP] . . . as it were by a step ladder, should then abolish this very argument' and Castagnoli, *Self-Refutation*, 306, who writes, 'It is the Pyrrhonist who uses AAP as a ladder to ascend to a "high place", and then overturns it.'

piece of reasoning whose demonstrative status is open to question, the very reasoning about the demonstrative status of AAP that concludes that AAP expunges itself *qua* demonstrative proof. It is *this* ladder which, according to the Second-Order Interpretation, is kicked down. For according to the Second-Order Interpretation, this second-order piece of reasoning is precisely the piece of reasoning with which the sceptic is concerned. The second-order argument of S_2 reaches its conclusion that there are no proofs, including AAP and itself. Sextus' reference to the sceptic climbing the ladder 'to a high place' has, on the Second-Order Interpretation, an extra resonance, for the argument which ends up eliminating its own demonstrative power is quite literally a higher-order argument, an argument about the status of AAP itself. The Second-Order Interpretation, therefore, makes the sceptic's response to this objection of the dogmatist's more complete: it leaves one fewer dogmatic ladder standing than the First-Order Interpretation does. On the First-Order Interpretation, AAP falls but S_2 remains standing. On the Second-Order Interpretation, both fall.

At this stage, however, a natural cluster of questions arise. Even if it is true that the Second-Order Interpretation leaves one fewer dogmatic ladder standing than the First-Order Interpretation, does it succeed in leaving *no* ladders standing? Is it not the case that the same sort of reasoning that moved us from the first-order AAP to the second-order S_2 could not be applied in precisely the same way to S_2 ? If, according to the First-Order Interpretation, the sceptic kicks away the ladder of AAP but leaves standing the second-order ladder of S_2 which spells out the reasoning by which AAP is able to reach the conclusion that proof does not exist (itself included), then is it not the case that the dogmatist might point to the reasoning *about* S_2 which spells out how S_2 is able to conclude that proof does not exist (itself included) and ask of *that* piece of reasoning whether the sceptic supposes it to have the status of a demonstration? In principle, is it not possible to iterate this exchange between the sceptic and dogmatist *ad infinitum*? For any iterated version of the reasoning spelled out in S_2 , can't the dogmatist ask of *that* piece of reasoning what its status is?

The answer to these questions must be yes. There certainly seems to be no principled reason for thinking that the sceptic and the dogmatist will be restricted to a second-order discussion of AAP. If they can engage in second-order discussion of AAP, then

they can engage in third-order discussion of S_2 . In terms of Sextus' metaphor, there is always a further ladder to which the dogmatist can point and whose demonstrative status he can question. All of this is, of course, true but equally—and to conclude the metaphor—there is always a higher place to which the sceptic can climb and kick over said ladder. As long as the dogmatist keeps putting ladders in front of the sceptic, the sceptic will be content to keep climbing and knocking them down.

6. Conclusion

In this paper I have offered a reappraisal of how the sceptic's response to the dogmatist's dilemma at the end of *Against the Logicians* should be understood. In particular I have offered a reading of this stretch of text which departs from two aspects of orthodoxy: the first, that in this final exchange between sceptic and dogmatist we see the application of the sceptic's standard method of equipollence, and the second, that the final move of the exchange involves the sceptic embracing the dogmatist's charge that the sceptic's argument against proof eliminates itself. I have argued that both of these tenets of orthodoxy—as they stand—fail to capture the intricacies of Sextus' argument.

Regarding the first departure from orthodoxy, I have argued that there is not a straightforward application of the sceptic's method of equipollence in the sceptic's response to either the first or the second horn of the dogmatist's dilemma. With respect to the sceptic's response to the first horn, I distinguished between One-Sided and Two-Sided suspension of judgement and argued that the kind of suspension of judgement the sceptic's argument issued in was the One-Sided kind rather than the standard Two-Sided suspension of judgement. And with respect to the sceptic's response to the second horn, I argued that the sceptic's counterargument to the dogmatist does not merely oppose the argument in question but supersedes it.

Regarding the second departure, I have argued that the charge the dogmatist lays at the sceptic's door is not that his argument against proof eliminates itself but rather that his argument *about* his argument against proof eliminates itself. And it is this higher-order argument which the sceptic is content to say eliminates itself.

By interpreting the concluding passage of *Against the Logicians* in this way, I submit that we can both make better sense of the closing exchange between the sceptic and the dogmatist and at the same time render a service to them both: the sceptic's response to the first horn of the dogmatist's dilemma no longer turns out to be flawed, and the dogmatist's second challenge to the sceptic is no longer trivial but substantive, demanding a considered response from the sceptic. At the very least I hope to have shown that when thinking through the implications of the closing chapters of *Against the Logicians*, there are still interpretative depths to be plumbed—or at least argumentative ladders to be scaled to see where they lead.

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