

**ARISTOTLE, ISOCRATES, AND PHILOSOPHICAL PROGRESS:**

***PROTREPTICUS* 6, 40.15-20/B55**

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Abstract: In fragments of the lost *Protrepticus*, preserved in Iamblichus, Aristotle responds to Isocrates' worries about the excessive demandingness of theoretical philosophy. Contrary to Isocrates, Aristotle holds that such philosophy is generally feasible for human beings. In defense of this claim, Aristotle offers *the progress argument*, which appeals to early Greek philosophers' rapid success in attaining exact understanding. In this paper, I explore and evaluate this argument. After making clarificatory exegetical points, I examine the argument's premises in light of pressing worries that the argument reasonably faces in its immediate intellectual context, the dispute between Isocrates and Aristotle. I also relate the argument to modern concerns about philosophical progress. I contend that the argument withstands these worries, and thereby constitutes a reasonable Aristotelian response to the Isocratean challenge.

Aristotle identifies philosophical *theôria* as our complete happiness as human beings (*EN* X.7, 1177a17). But does this activity require an understanding that is simply too demanding for us to possess? Aristotle's contemporary, Isocrates, answers yes. In Isocrates' view, theoretical philosophers, who focus on "astronomy and geometry and studies of that sort" (*Antidosis* 261), seek an understanding beyond the ready grasp of finite human beings.<sup>1</sup> Such inquiries are "vain" (*Antidosis* 269). Students, Isocrates contends, should not "allow their minds to be dried up by these barren subtleties, nor stranded on the speculations of the ancient sophists," among

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<sup>1</sup> Translations of Isocrates are from the Loeb editions, sometimes with slight emendation.

whom he counts Empedocles, Parmenides, and Melissus (*Antidosis* 268). Given our human limitations, Isocrates thinks, the understanding that philosophical *theôria* requires proves too toilsome and laborious to be worth pursuing. If this Isocratean *demandingness worry* holds, and if our complete happiness is an ultimate end of pursuit, then perhaps we should deny that our complete happiness consists in philosophical *theôria*.<sup>2</sup>

In fragments of his lost work, the *Protrepticus*, Aristotle exhorts his audience to pursue a conception of philosophical *theôria* broadly continuous with the sort of philosophy that he sketches in *Metaphysics* A.1-2.<sup>3</sup> As part of his protreptic, Aristotle responds to Isocrates' *demandingness worry*.<sup>4</sup> This reply is preserved in Chapter 6 of Iamblichus' *Protrepticus* (40.15-20/B55), as well as in Chapter 26 of Iamblichus' *De Communi Mathematica Scientia* 82.17-22.<sup>5</sup> Here, Aristotle argues for the claim that philosophy – the “acquisition and use of wisdom” (κτῆσις τε καὶ χρῆσις σοφίας: 6, 40.2-3/B53; cf. 6, 37.7-9/B8) – is *easy*:

For with no pay coming from people to those who philosophize, on account of which [the latter] would have toiled that strenuously, and with a great lead extended to the other arts, nevertheless their overtaking [the practitioners of other arts] in exactness despite running a short time seems to me to be a sign of the easiness regarding philosophy.

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<sup>2</sup> For a full discussion of Isocrates' *demandingness worry*, see Walker 2019.

<sup>3</sup> On these continuities, see Walker 2018: 32-33. On the *Protrepticus* and *Metaphysics* A.1-2, more generally, see Jaeger 1948, 68-71; Wareh 2012, 47-48; and Seggiaro 2012, 62-73.

<sup>4</sup> On the *Protrepticus*, more generally, as a response to Isocrates, see Einarson 1936: 272-278; Jaeger 1948: 55-60; Düring 1961: 20-24, 33-35; Van der Meeren 2011: xxvi-xxx; Wareh 2012: 41-54; Collins 2015: 244-245, 255-257; Hutchinson and Johnson unpublished work B. Hutchinson and Johnson 2005 authenticate the Aristotle fragments found in chapters 6-12 of Iamblichus' *Protrepticus*. Hutchinson and Johnson 2018 argue that Aristotle's *Protrepticus* was a dialogue that featured an Isocratean character; they also now attribute *De Communi Mathematica Scientia* (DCMS) 26 to Aristotle's *Protrepticus*.

<sup>5</sup> Proclus, *Commentary on Euclid's Elements*, Prologue 1, 9, 28.14-17 closely paraphrases parts of the progress argument and attributes it to Aristotle. In what follows, I use Pistelli's 1888 edition of Iamblichus's *Protrepticus*. I cite passages primarily by reference to the Pistelli chapter, page, and line number, and then by the “B” numbering used in Düring's (1961) reconstruction. For the DCMS, I use Festa's 1891 edition. I have consulted various translations (including Düring's, as well as Hutchinson and Johnson's reconstruction-in-progress of the *Protrepticus*). Yet translations unless otherwise noted are my own.

Τὸ γὰρ μήτε μισθοῦ παρὰ τῶν ἀνθρώπων γιγνομένου τοῖς φιλοσοφοῦσι, δι' ὃν συντόμως οὕτως ἂν διαπονήσειαν, πολὺ γε προεμένους εἰς τὰς ἄλλας τέχνας ὅμως ἐξ ὀλίγου χρόνου θέοντας προεληλυθέναι ταῖς ἀκριβεῖαις, σημεῖόν μοι δοκεῖ τῆς περὶ τὴν φιλοσοφίαν εἶναι ῥαστώνης.<sup>6</sup>

According to this *progress argument*, the practitioners of various forms of expertise are in a kind of race with respect to exactness. In this race, some practitioners get an early lead. Yet philosophers, who leave the starting gate later than their competitors, nevertheless manage to surpass them. Philosophers' rapid progress in exactness under these conditions, Aristotle contends, shows that philosophy is, in some sense, easy. To be sure, philosophy is not *completely easy*, i.e., effortlessly simple, or free from any and all difficulties. Yet philosophy is not *merely possible, but overall difficult*, i.e., capable of some realization, but laborious on the whole. Instead, despite posing some inevitable difficulties, philosophy remains *overall easy*, i.e., generally feasible for human beings who commit reasonable effort to its pursuit.<sup>7</sup> (In what follows, one should keep in mind the precise sense in which Aristotle thinks that philosophy is easy. Although Aristotle's thesis is controversial, it is not the counterintuitive claim that philosophy is *especially* easy, or among the *very easiest* of human activities.)

The progress argument is not Aristotle's only response to Isocrates' demandingness worry. For immediately after the progress argument, Aristotle notes the pleasure that people take in philosophizing under conditions of leisure (40.20-24/B56). He also highlights philosophy's not requiring external resources (40.24-41.2/B56). We can reasonably read these passages as offering further defense of philosophy's easiness. Yet only in the progress argument does Aristotle explicitly claim that philosophy is easy.

In what follows, then, I examine the *Protrepticus*' progress argument as a key part of Aristotle's response to Isocrates' demandingness worry. I explore this brief, but puzzling,

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<sup>6</sup> *DCMS* 82.18 uses τοῖς φιλοσόφοις instead of τοῖς φιλοσοφοῦσι.

<sup>7</sup> For this reading, see Walker 2019.

argument for three reasons. (1) Scholars have largely neglected the *Protrepticus* as a source of Aristotle's ethical views. But the progress argument sheds new light on how Aristotle defends the contemplative life in the face of reasonable external challenges. (2) In contemporary philosophy, multiple writers have questioned whether philosophy makes progress, and if so, what sort and how.<sup>8</sup> By examining the progress argument, and by elucidating Aristotle's background views concerning the modes and means by which philosophers can and do make progress in attaining wisdom, we might benefit from Aristotle's own perspective on these issues. (3) Accordingly, the progress argument shows how Aristotle's ethics and conception of the human good find support from some of his views on the nature of, and proper (i.e., wisdom-conducive) modes of conducting, philosophical inquiry.

I begin by reconstructing the progress argument's premises and reasoning. After making clarificatory exegetical points, I examine the argument's premises in light of pressing worries that the argument reasonably faces within its immediate intellectual context, viz., the dispute between Isocrates and Aristotle. I contend that the argument withstands these worries, and thereby constitutes a reasonable Aristotelian response to the Isocratean challenge.

I. In introducing Aristotle's progress argument, Iamblichus writes that "the acquisition of it [i.e., *sophia*] is much easier than the [acquisition] of other goods" (40.13-14/B54). Following Iamblichus' lead, I take the progress argument to show that philosophy *qua* acquisition of wisdom is easy.<sup>9</sup> Philosophy is easy, in other words, because we may feasibly possess wisdom.

I reconstruct the progress argument as follows:

- (1) If the practitioners of an art or science rapidly attain (surpassing) exactness in it without pay as a significant external incentive, then that art or science is apt to be easy.

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<sup>8</sup> See, e.g., Dietrich 2011; Chalmers 2015; Cappelen 2017; Stoljar 2017.

<sup>9</sup> Cf. Van der Meeren 2011: 118-119.

- (2) Unlike the practitioners of the other arts, philosophers do not receive pay as a significant external incentive to develop philosophy.<sup>10</sup>
- (3) Nevertheless, philosophers have made rapid progress in surpassing the other arts in exactness.
- (4) Thus, philosophy is apt to be easy. [From 1, 2, and 3]

According to *Rhetoric* I.6, activities are easy (ῥῶδια) if they are done “either without pain or in a short time” (1363a23). *Rhetoric* I.6, I take it, does not strictly identify painlessness and rapid achievement as necessary conditions of an activity’s easiness. Instead, the *Rhetoric* construes painlessness and rapid achievement as *signs* of an activity’s easiness. Premise (1) of the progress argument alludes to this point. And the progress argument, as a whole, defends philosophy’s easiness by arguing that philosophy displays that second “sign” (σημεῖον) of easiness (40.19/B55). Those who philosophize, Aristotle says, have made rapid progress in exactness – and all without significant external incentives.<sup>11</sup>

Premise (2) does not specify what sort of pay constitutes a significant external incentive. But the *Protrepticus* presumably refers to payment in *money* as well as *honor*. Consider the substantial section of text at *DCMS* 26, 83.6-22. This material immediately follows a section of the *DCMS* (82.17-83.2) that overlaps virtually verbatim with Iamblichus, *Protrepticus* 6, 40.12-41, i.e., Aristotle’s defense of philosophy’s easiness. Within this larger section, *DCMS* 83.16-20 observes that people grant honor to other arts and payment to their practitioners. People, however, do not support contemplative studies and those who practice

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<sup>10</sup> The progress argument compares philosophy to an art (*technê*). In *Metaphysics* A.1-2, Aristotle identifies certain similarities between *sophia* and the productive arts: both understand the “why.” Yet *sophia* differs from the productive arts insofar as it, unlike the latter, does not seek an end beyond understanding itself.

<sup>11</sup> As I noted in the introduction, Aristotle also defends philosophy’s pleasantness in a passage that immediately follows the progress argument in *Protrepticus* 6. Aristotle may well think, then, that philosophy possesses *Rhetoric* I.6’s first sign of easiness, viz., the ability to be accomplished without pain. That the progress argument and the pleasure argument accord with *Rhetoric* I.6’s advice for constructing protreptic arguments is noticed (explicitly) by Hutchinson and Johnson (unpublished work A) and (indirectly) by Düring 1961: 231. On signs, and inference from signs, see *Prior Analytics* II.27 and *Rhetoric* I.2, 1357a32-33. On Aristotle’s views on such inferences, see Allen 2008: ch. 1.

them (83.16-18).<sup>12</sup> On the contrary, people often aim to *prevent* others from pursuing such studies (83.19-20).<sup>13</sup>

Since *DCMS* 26, 83.6-22 will be relevant in my discussion, I note that many scholars have attributed it to Aristotle's *Protrepticus*.<sup>14</sup> Two exceptions, Düring and Chroust, held that since the passage is concerned only with philosophy's development, it probably originated in Aristotle's *On Philosophy*.<sup>15</sup> By appealing to Iamblichus' standard methods for incorporating material from other authors, however, Hutchinson and Johnson have recently made a solid case for attributing *DCMS* 26, 83.6-22 to Aristotle's *Protrepticus*.<sup>16</sup> Yet even one who accepts Düring's view can admit that the material reveals Aristotle's commitments.

Premise (3) argues that philosophers actually have made rapid progress in exactness. Premise (3) is open to two readings, however. On a *historical development reading*, Aristotle is concerned with philosophers' rapid progress as members of a cooperative intellectual enterprise. On this reading, philosophy, through the contributions of these philosophers, has developed and advanced quickly as such an enterprise. Its rapid development as an enterprise thus signals philosophy's easiness. On an *individual development reading*, by contrast, Aristotle is concerned with the individuals who learn various arts and sciences. On this reading, Aristotle thinks that those individuals who learn philosophy attain exact expertise more rapidly than those who learn other bodies of knowledge. The capacity of individual philosophers to do so thus signals philosophy's easiness.<sup>17</sup>

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<sup>12</sup> Cf. Plato, *Republic* VI.489a-b; VI.500b; VII.528b-c (though Socrates here insists on philosophy's difficulty); *Hippias Major* 282b-283b (according to which the likes of Anaxagoras *lose* money).

<sup>13</sup> At *EN* V.6, 1134b6-7, Aristotle identifies honor as fitting payment (μισθός) for a good ruler. On honor and money as (insufficient) payment to philosophers, see *Protrepticus* 8, 46.11-15/B102 (a point expressed in a Pythagorean voice); *EN* IX.1, 1164b2-6. More generally, gratitude is properly owed to those who attain greater exactness in knowledge (*DC* II.5, 287b34-288a2).

<sup>14</sup> Rose, Walzer, Ross, and Gigon for instance, all include *DCMS* 26, 83.6-22 in their collections of Aristotelian fragments. Edelstein 1967: 69-70 describes the passage as "usually attributed to the *Protrepticus*."

<sup>15</sup> Düring 1961: 228; Chroust 1975: 93.

<sup>16</sup> Hutchinson and Johnson 2018: 147.

<sup>17</sup> I thank an anonymous reviewer for this suggestion.

As stated, the claims that these two readings advance need not conflict. If philosophy's easiness manifests itself in philosophy's ability to develop rapidly as an enterprise, for instance, such easiness would also make it possible for individual philosophers to learn philosophy rapidly. Likewise, if philosophy's easiness is apparent in individual philosophers' learning philosophy rapidly, then such easiness would also conduce to philosophy's developing rapidly as an enterprise of inquiry. But in premise (3), I take it, Aristotle is concerned principally with philosophy's historical development. Consider *DCMS* 26, 83.6-22, which glosses the argument and which invites a certain comparison with *Metaphysics* A.1, 981b17-25. This passage notes the development of (a) productive arts concerned with survival and (b) arts concerned with pleasure, e.g., music (83.7-12). It then highlights the rapid subsequent development of theoretical inquiries concerning "geometry and *logoi* and the other educational subjects" (83.14-15). This passage suggests, as does *Metaphysics* A.1-2, that philosophy marks the culminating development of those arts and sciences suited for leisure. For philosophy attains greater exactness than other arts. Corroborating the historical development reading is Proclus, *Commentary on Euclid's Elements*, Prologue 1, 9, 28.13-29.13, which paraphrases both (a) the progress argument as such and (b) *DCMS* 83.6-22's remarks, which highlight the theoretical sciences' rapid development.<sup>18</sup>

Premise (3), like the *Metaphysics* and the rest of the *Protrepticus*, attributes high degrees of exactness to philosophy as it has rapidly developed up to Aristotle's time. The *Protrepticus* construes philosophy as understanding of "the most exact truth" (7, 42.15-16/B65; cf. 10, 55.7-14/B48; 11, 58.8-9/B85). The same general section of *DCMS* 26 just mentioned

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<sup>18</sup> As further possible support for the historical developmental reading, I note *Protrepticus* 6, 40.2-3/B53's race imagery. Edelstein 1967: 90-91 finds relay race imagery in Aristotle's discussion of the development of the arts in *SE* 34, 183b29-31.

Proclus' paraphrase of the progress argument focuses exclusively on the mathematical sciences' rapid development. *DCMS* 26, 83.7-16, however, remarks on the larger development of the leisured arts, and insists that once arts conducive to survival and pleasure were perfected, people turned toward philosophizing (*ἐπεχείρησαν φιλοσοφεῖν*: 83.12). Here, Aristotle evidently does think that the mathematical sciences were among the theoretical sciences that developed rapidly. But I take his ultimate focus, in the *Protrepticus* as in *Metaphysics* A.1's remarks on the mathematical sciences that developed in leisure, to be on the development of philosophy as a science of *sophia*. (Again, see *Protrepticus* 6, 40.2-3/B53 and 6, 37.7-9/B8.)

(83.16-22) also notes that “exactness about the truth” is recent (83.6-7). Philosophy is a “most exact” understanding or science insofar as it concerns the most fundamental causes and explanatory principles, and insofar as such understanding is both most explanatory and deals with the fewest principles (*Metaphysics* A.1, 982a2; A.2, 982a21-28; *Posterior Analytics* I.27).

Given the *Protrepticus*’ other similarities to *Metaphysics* A, the latter work fleshes out what sort of superior progress in exactness premise (3) probably attributes to philosophers. In *Metaphysics* A, Aristotle identifies the quick progress that he believes philosophers have made in discerning the fundamental explanatory principles operative in nature. Thus, Aristotle highlights the relative inexactness of earlier accounts of nature, beginning with Thales’, and he emphasizes how later accounts are more exact. (a) When Anaxagoras intimated something like efficient and final causation (e.g., in his talk about *nous* as a principle of order and motion), Aristotle says, “he seemed like a sober person in comparison with those who spoke at random earlier” (A.3, 984b15-18; cf. *Physics* VIII.5, 256b24-27).<sup>19</sup> (b) Earlier philosophers, Aristotle says, discovered material and efficient causes in an inexact way, “as the untrained act in fights,” i.e., swinging away at random (A.4, 985a13-14). Some of these philosophers, however, showed greater exactness than their predecessors by discerning efficient causes, and not only material causes, at least to some extent (cf. *Metaphysics* A.3, 984a16-25). (c) The early philosophers describe the four causes, at best, “obscurely” (ἀμυδρῶς), “like one who lisps” (ψελλιζομένη: A.10, 993a11-16). Aristotle believes himself, however, to have made progress in discerning and explicitly demarcating these causes (e.g., in *Physics* II). In grasping these distinctions, and in making progress toward discerning the ultimate causes of things, philosophers attain a more exact understanding than the practitioners of other arts and sciences do.

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<sup>19</sup> The *Protrepticus* quotes Anaxagoras’s claim that human beings live “to contemplate the heavens and stars and moon and sun” [51.13-15/B19; cf. *EE* I.5, 1216a13-14]. The *Protrepticus*’ conception of god as *nous* also recalls Anaxagoras’ (8, 48.9-13/B108; 48.16-17/B110).



If philosophy makes progress, we might wonder, progress over what range? Does Aristotle believe in infinite progress, or does progress have some end-point?<sup>20</sup> As just intimated, Aristotle identifies an ultimate end that regulates philosophical progress, viz., attaining the truth about fundamental causes and explanatory principles. In attaining such truth, we seek to fulfill our desire to understand for its own sake in the face of wonder (*Metaphysics* A.1, 980a21; A.2, 982b12-17; 983a12-17). So, progress in philosophy consists in philosophy's advancing toward its end of fulfilling the desire to understand by attaining truth about fundamental causes and principles.

As philosophers proceed along the path toward such truth and understanding, however, their thought can become trapped in *aporiai* – “impasses” or “losses of way.” In this state, they cannot make forward progress, but are in, in a way, tied up (*Metaphysics* B.1, 995a31-33).<sup>21</sup> To move forward, philosophers must consider and resolve the dilemmas, for which the reasoning seems compelling on both sides, that bind their thinking. In resolving these dilemmas, philosophers discern the truth and attain understanding about the principles sought. Philosophers thereby progress from what is clearer and more knowable to us to what is clearer and more knowable by nature, viz., the fundamental causes and principles themselves (*Physics* I.1, 184a17-21; *Metaphysics* Z.4, 1029b1-12; *EN* I.4, 1095a30-b4). (I say more about such progress in Part IV.)

In resolving such *aporiai*, and in making progress toward truth and exact understanding, philosophers thereby also advance philosophy as a science. Philosophy, so construed, makes a certain progress toward maturity. Such progress, visible in the other arts, is akin to the biological development of living organisms. Thus, poetry makes progress for the sake of its mature form as an art, developing from embryonic kinds of mimesis to fully fledged tragic drama (*Poetics* 4). Similarly, Aristotle identifies early philosophy, in its “lispings” pre-Socratic condition, as a science in its youth (*Metaphysics* A.10, 993a15-16).

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<sup>20</sup> I thank William Desmond for questions on these matters. On *Metaphysics* A's views about philosophy's development, cf. Collobert 2002; M. Frede 2008; Barney 2012: 97-98.

<sup>21</sup> On the significance of the Greek etymology of *aporia*, see, e.g., Owens 1978: 214.

Aristotle apparently accepted that philosophy was about to attain such maturity. As Cicero reports, Aristotle ridiculed earlier philosophers who maintained that they had perfected philosophy. Nevertheless, Aristotle thought that philosophy's rapid progress points to its pending potential perfection: "since in a few years a great advance has been made, philosophy will in a short time be brought to completion" (*Tusculan Disputations* III.28.69; fr. 53 R3; ROT). We may reasonably wonder in what, exactly, such completeness consists. Yet we need not read Aristotle as arguing for the possibility of philosophy's *ending* itself altogether upon attaining perfection. First, Aristotle thinks that great floods periodically destroy civilization (*Meteorology* I.14, 352a29-32). Hence, he thinks, each art and science has probably been discovered in various historical epochs, only to perish and start anew in the next (*Metaphysics* Λ.8, 1074b9-13). Aristotle's remarks in the *Protrepticus* about the arts concern their development within this cycle, and these remarks allow for philosophy's rebirth and redevelopment in another cycle.<sup>22</sup> Second, and more saliently, Aristotle need not have thought that philosophy, somehow, was soon about to perish on account of its own success, any more than Aristotle thought that living organisms or other arts are apt to perish upon their own maturation. Aristotle elsewhere reminds us not to confuse X's attaining its end (in the normative sense) with X's dying (*Physics* II.2, 194a30-33).

In Cicero's report, then, Aristotle may simply think that philosophers will soon sketch a systematic science of wisdom in outline. Thus, in remarks on the development of political science, Aristotle notes that "nearly everything has been discovered, but it has not yet been connected" (πάντα γὰρ σχεδὸν εὔρηται μὲν, ἀλλὰ τὰ μὲν οὐ συνῆκται: *Politics* II.5, 1264a3-4). Similarly, Aristotle may think that a sufficiently systematized sketch of the science of wisdom is a robust marker of this science's completion. Such a sketch, however, would nevertheless be open to fuller specification over time (cf. *EN* I.7, 1098a20-24). More importantly, it would be open to *ongoing explanatory application* as philosophy, in its mature state as a science, is

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<sup>22</sup> *DCMS* 26, 83.7-8 specifies its concern with how fields of knowledge have developed "after the destruction and the cataclysm."

actualized by subsequent practitioners who exercise exact understanding to resolve subsequent *aporiai*. Philosophy, once again, would show kinship to the other arts. Thus, once poetry has attained maturity, subsequent poets exercise their perfected knowledge to perform their proper task, viz., producing well-crafted works of tragedy and comedy. Likewise, once philosophy has attained maturity, subsequent philosophers would exercise their perfected understanding to perform their proper task as well, viz., contemplating the world and resolving any subsequent *aporiai* that come to light.

For simplicity, I assume that the progress argument is valid. But is it sound? And how well does this argument address Isocratean worries about philosophy's demandingness, as these worries emerge within the argument's immediate dialectical context? In the next sections, I consider the main challenges that an Isocratean can raise.

II. Our Isocratean begins with premise (1). Grant – solely for argument's sake – that early philosophers made rapid progress in attaining greater exactness in their philosophical understanding. Even if willing to concede this point, an Isocratean can argue that such progress marks a lucky coincidence. And perhaps Aristotle should agree: he compares some of the earlier philosophers to inexperienced fighters who nevertheless manage to strike blows (*Metaphysics* A.4, 985a13-16). Any progress among the early Greek philosophers, the thought goes, need not imply anything interesting about philosophy's overall easiness.

To respond, Aristotle must show that any rapid progress on the part of early Greek philosophers was not merely coincidental. Instead, Aristotle must explain such progress in terms of philosophy's own proper features. To that end, Aristotle can appeal, first, to the ways in which nature itself regulates and propels philosophical investigations. He can appeal, second, to certain aspects of human nature, and to the status of philosophers as participants in a cooperative enterprise. These features of philosophy conduce to its overall easiness and explain the early philosophers' rapid progress.

On the first feature: Consider, for instance, Aristotle's remarks on how early Greek philosophers progressed from (a) recognizing only material causes to (b) recognizing efficient

causes as well. Initially, Aristotle suggests, these thinkers reasonably recognized the material cause (*Metaphysics* A.3, 984a16). All natural bodies are generated out of certain material stuffs (984a18). Yet appeal to matter to explain generation and corruption proves too incomplete, for material-causal explanations themselves give rise to new questions: we can ask “on account of what does this happen, and what is the cause?” (984a21). Material stuffs, after all, do not all by themselves generate natural bodies. Neither wood nor bronze causes itself to change (984a22-25).

Consequently, matter’s insufficiency for fully accounting for generation and corruption itself led philosophers to identify other causes. “And as people thus advanced,” Aristotle says, “the things themselves served as guides for them and compelled them to search” (984a18-19); these philosophers “were compelled by the truth itself” (984b10-11). Philosophers found themselves “compelled to follow the phenomena” and to account for them adequately, a task that pushed these philosophers forward to make new discoveries (A.5, 986b31). Steered by the phenomena, these philosophers thereby found themselves in a position to discern the efficient cause, at least in some way (A.3, 984a17-27). Moreover, Aristotle suggests, the phenomena continued to direct inquirers forward. For as the early Greek philosophers attempted to make sense of generation in terms of material and efficient causes, the explanatory insufficiency of such causes came to light. Grappling with the attendant *aporai*, the early philosophers were primed to discern the formal cause. “Even Empedocles occasionally stumbles upon this,” Aristotle says, “led by the truth itself, and is forced to say that the substantial being and the nature is the account” (*PA* I.1, 642a17-24; trans. Lennox).

In all these cases, Aristotle can say, nature itself guided the early philosophers’ progress toward truth and greater exactness in understanding. In the first instance, natural phenomena elicited wonder in these philosophers and called out for explanation (*Metaphysics* A.2, 982b12-17). Later, as these philosophers began to progress in their investigations, natural phenomena that these philosophers could not explain suggested to such philosophers the next steps to take. Philosophers found themselves “compelled” by natural phenomena that their earlier accounts did not explain to identify additional causes that *would* explain these phenomena. Natural

phenomena themselves, then, are apt, on the whole, to guide philosophers aright. Such guidance, in turn, is apt to make acquiring wisdom feasible.<sup>23</sup>

On the second feature: Aristotle can further explain how the early Greek philosophers attained rapid progress by appealing (a) to our natural truth-receptiveness as human beings and (b) to general cooperative mechanisms by which human inquirers are apt to discern philosophical truth. Here, Aristotle concedes some of Isocrates' worries about the limitations of human cognitive capacities. Aristotle grants that we face difficulties when we philosophize individually. It is "not easy," he says, to be continuously active by oneself (*EN* IX.9, 1170a6-7). Our individual truth-attaining capacities are constrained, especially concerning the non-sensible objects of intellect (*Protrepticus* 6, 38.14-22/B34; 7, 44.17-26/B76-77; *Metaphysics* α.1, 993b6-11; cf. *PA* I.5, 644b23-30). And even when we individually attain part of the truth, we might fail to attain other parts of it (*Politics* II.5, 1264a3-4).

Yet Aristotle can argue that we are "sufficiently suited by nature for the true, and for the most part happen upon the truth" (*Rhetoric* I.1, 1355a15-17). We are individually receptive to the truth (at least in part), given the rational powers that define us as human beings, powers that are truth-disclosive (*EN* VI.2, 1139b12-13). Hence, we each have something useful to contribute to an inquiry about some matter, and we are unlikely all to be mistaken (*EN* I.8, 1098b27-29; *EE* I.6, 1216b30-32).

Further, we can compensate for our individual limitations by philosophizing with others. Others can supply perspectives on the truth that we ourselves have overlooked. Philosophers therefore will have the greatest success in contemplating truth when "having coworkers" (*EN* X.7, 1177a34-b1). When individuals join together to judge (e.g., a tragic drama), they are apt to judge better than when they proceed individually (*Politics* III.11, 1281a40-b10; cf. III.15, 1286a25-32; III.16, 1287b24-30). For perhaps each individual is good

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<sup>23</sup> Aristotle suggests ways in which nature itself propels the development of poetry in *Poetics* 4, 1449a23; 24, 1460a4; cf. 7, 1451a9. For discussion, see Halliwell 1998: 92-95; Collobert 2002: 284. Edelstein 1967: 96n87 reasonably suggests that Aristotle gets the thought that reality can compel the intellect and steer inquiry from Plato, *Republic* VII.524c-d and 525d.

at judging some aspect of a whole (e.g., some aspect of the drama, such as its plot), but not the whole (i.e. the complete drama as such).<sup>24</sup> Similarly, each inquirer may be good at grasping some part of truth as a whole, but not the whole truth. Philosophical progress, then, is a cooperative achievement, at least in requiring many to contribute. And the task of acquiring wisdom is apt to be easy when one pursues it as part of a cooperative enterprise, one in which conversation enables philosophers to aggregate their individual discoveries. “The contemplation of truth is, on the one hand, difficult, on the other hand, easy,” Aristotle insists. “A sign: no one person can adequately grasp all of it, nor can all fail, but each says something about the nature [of things], and while each individually adds either nothing or little to [the truth], from all collected comes a certain magnitude” (*Metaphysics* *α.1*, 993a30-b5). Other thinkers, Aristotle says, help us to attain the truth in two ways. When other thinkers do hit upon some part of the truth, they convey it to the rest of us. When they fail to hit upon the truth, they spur us on to pursue the truth more fully (*Metaphysics* *α.1*, 993b11-19; cf. *DA* I.2, 403b20-24).

So understood, the rapid progress in exactness to which the progress argument alludes, and which Aristotle describes throughout *Metaphysics* *A*, counts as more than a lucky coincidence. Instead, it shows philosophers working well together, attaining the ends of truth and exact understanding without undue impediment. Moreover, Aristotle’s account of how such progress happens coheres, in part, with Isocrates’ own views about how progress happens in the other arts. For Isocrates, as for Aristotle, progress occurs through the process of correcting earlier contributions to a cooperative enterprise (*Evagoras* 7). Isocrates, then, should also allow progress to take place through such mechanisms in the case of theoretical philosophy.<sup>25</sup>

III. At this point, the Isocratean can refine the worry about premise (1). Perhaps, the Isocratean can say, if early Greek philosophy progressed rapidly without significant external incentives, that was because philosophy was easy only for some small set of people with special natural

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<sup>24</sup> See, e.g., Ober 2013: 112 for this thought.

<sup>25</sup> I thank Neil Mehta for questions on these issues.

talents for acquiring wisdom as conceived by Aristotle. Isocrates himself insists that people require the right nature if they are apt to excel in rhetoric (*Antidosis* 186-187; cf. *Against the Sophists* 10, 14-15, 17). Natural ability, he believes, is of greatest importance (*Antidosis* 189). Yet the cognitive skills Isocrates highlights – becoming a good debater and speech-maker – are within the general ken of human beings. Thus, he grants that, given sufficient education and experience, those who are “less generously endowed by nature” can excel those who are more endowed (*Antidosis* 191). Apparently accepting aspects of Isocrates’ view, Aristotle suggests that perhaps some people, by nature, can acquire wisdom more easily than others (see, e.g., *Topics* VIII.14, 163b9-16; *DA* II.9, 421a23-26; cf. *EN* X.9, 1179b21-23).<sup>26</sup> But even so, the Isocratean can say, acquiring the *recherché* sort of wisdom that Aristotle valorizes need not be easy for anyone else, including those whom Aristotle wishes to exhort in the *Protrepticus*.<sup>27</sup>

In reply, assume that some small group of intellectuals with special natural talents did in fact play a special role in sparking early Greek theoretical philosophy’s rapid progress, just as, say, those with special natural talents for improvisation played a special role in sparking progress in poetry (*Poetics* 4, 1448b21-23). This, of course, would be an important concession to Aristotle. For then, acquiring wisdom need not be overall toilsome for human beings as such. At least *some* thinkers were rapidly able to possess wisdom or some approximation of it. And for these philosophers initially to have progressed rapidly, acquiring wisdom must have had at least some general easiness-conducive features.

*These* features of philosophy, however, would also make it feasible for those lacking such natural talents to acquire wisdom as well, even if they have a harder time at it. Recall that, in identifying philosophical progress as requiring cooperation, Aristotle highlights ways in which we gain truer views from better thinkers. Thus, ordinary non-philosophers may not be able to acquire wisdom as easily as those especially well-suited to philosophy. Still, acquiring

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<sup>26</sup> See Leunissen 2012: 521-527 for one account of Aristotle’s views on how intelligence varies according to individual material natures.

<sup>27</sup> On Isocrates’ conception of philosophy, see Nightingale 1995: 26-28; Cooper 2004: 71-77; Depew 2004; Wareh 2012; Collins 2015: 174-177. On Isocrates on the individual’s nature, see Wareh 2012: 27-34.

wisdom need not be overall toilsome for the former, at least when they pursue wisdom with the help of the latter. Those for whom philosophy is easiest, after all, can (and do) teach others. And those for whom philosophy is more difficult can (and do) learn things from this group that they might otherwise find hard to discover on their own.<sup>28</sup>

Still in a concessive spirit, the Isocratean can press another worry against premise (1). Perhaps an activity's rapid initial progress in its early history shows nothing about how easy it is later on when more developed. In making whatever initial progress they might have (which the Isocratean will insist could not have been very substantial at all), perhaps early philosophers simply picked the lowest-hanging philosophical fruit, solving the easiest *aporiai* rapidly, but leaving more difficult, toilsome *aporiai* (viz., all the rest) for later philosophers. Suppose, then, that early philosophers did make initial rapid progress (e.g., by leaving behind Milesian materialist monism). If so, perhaps such philosophy, to that highly qualified extent, *was* easy. Still, the Isocratean can insist, later, more developed modes of theoretical inquiry – including that to which the *Protrepticus* exhorts its audience – need not also be easy.

In reply, Aristotle does note that those who first philosophized experienced wonder at the more obvious *aporiai* at hand; and, as they made initial progress in resolving these *aporiai*, these philosophers wondered about greater matters (*Metaphysics* A.2, 982b13-15). Further, Aristotle can admit that later philosophizing, having resolved initial *aporiai*, attains greater exactness than earlier modes. But the greater exactness of more developed modes of philosophy need not render later modes overall toilsome. For Aristotle can deny any sharp discontinuities between (a) earlier, less developed, and (b) later, more developed philosophical inquiry in either goals or means. Both (a) and (b) are concerned with first principles and causes. Both (a) and

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<sup>28</sup> Following Curzer 2012: 106, 400, I hold that Aristotelian virtues admit of degrees: see *EN* IV.1, 1120b9-11; IV.3, 1123b26-30; IX.8, 1168a33-35; IX.12, 1172a10-14; X.3, 1173a20-22. Hence, philosophy *qua* acquisition of wisdom could include the possession of sufficiently (if incompletely) developed wisdom. Such wisdom, which attains partial clarity and understanding about first principles and causes, would constitute a more modest intellectual accomplishment than completely developed wisdom. Yet it would be a realistic accomplishment for a broad range of people. Such an acquisition and use of wisdom may well be the sort of “philosophy” required for fine leisure in the best city (*Politics* VII.15, 1334a23, a32).



(b) proceed by working through *aporiai*. And both (a) and (b) attain truth when, guided by nature itself, they proceed through similar cooperative mechanisms. Hence, it is unclear why later, more developed modes of philosophy, or why *aporiai* discovered later on, must in principle become overall difficult. On the contrary, insofar as more developed and exact modes of philosophy successfully overcome the obscurities and imprecisions of earlier modes (cf. *Metaphysics* A.10, 993a15-16), such modes will be easier in a key respect. They will be free of the earlier modes' obscurities and imprecisions. To *that* extent free from impediments to attaining the complete truth, Aristotle can say, these more developed modes have compensating easiness-conducive features of their own.

In the *Sophistical Refutations*, moreover, Aristotle argues that an art or sciences's founding moment is actually the hardest for its practitioners. "For it may be that in everything, as the saying is, 'the first start is the main part'; and for this reason it is the most difficult; for in proportion as it is most potent in its influence, so it is smallest in its compass and therefore most difficult to see – but when this is once discovered, it is easier to add and develop the remainder" (*SE* 34, 183b22-26; ROT). This founding moment is relatively challenging because it requires the founding innovator to go beyond common ways of perceiving things (*Metaphysics* A.1, 981b13-17). And as Guthrie argues, the randomness and apparent arbitrariness of the human world makes it natural to suppose that the world really is controlled by divine caprice. Against this background, the initial advance beyond common ways of perceiving the world – substituting impersonal, natural explanatory principles for "personal" explanations – constitutes a striking intellectual achievement.<sup>29</sup> Hence, if philosophers have succeeded even in making the difficult first steps as rapidly as they have – with such innovators

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<sup>29</sup> Guthrie 1978: 28. On the explanatory limitations of *muthos*, see Algra 2006: 46-47. A long-standing dispute, initiated by Cherniss 1935, concerns the extent to which Aristotle is a fair-minded reader of his predecessors, or whether Aristotle distorts their views for the sake of telling a story that favors the superiority of his own views. Guthrie 1957 defends Aristotle's treatment of his predecessors.

as Thales making a decisive shift from *muthos* to *logos* in explanation – then, *a fortiori*, philosophy’s later development is apt to be even easier.<sup>30</sup>

In identifying philosophy’s initial development as its “most difficult” (*χαλεπώτατον*) stage, one may worry, *Sophistical Refutations* 34 contradicts *Protrepticus* 6’s claims for philosophy’s easiness. But the initial development of an art or science, *Sophistical Refutations* 34 holds, is the most difficult development of *any* art or science, even the very easiest. So, although philosophy’s first moment of development may be its most difficult moment relatively speaking, that need not render philosophy overall difficult.

IV. If premise (1) withstands Isocratean challenge, what about the progress argument’s other premises? *We* might question premise (2), viz., that theoretical philosophers do not receive pay as a significant incentive to develop their art. Yet Isocrates himself would be inclined to grant it. For Isocrates evidently takes pride in the wealth that he, unlike his theoretical opponents, had earned from teaching, especially since his family had lost money during the Peloponnesian War (*Antidosis* 145-152; 161). He thinks that the failure of theoretical philosophers to make money reveals that their wisdom lacks value (*Against the Sophists* 3-7). He takes particular pride in being counted as wealthy along with Gorgias, and unlike other so-called sophists, who make little or no money (*Antidosis* 155-158). In this context, note that Isocrates identifies both pre-Socratic natural philosophers (*Antidosis* 268) and Plato (*To Philip* 12) as sophists: Isocrates, unlike Plato, does not highlight teaching for pay as a characteristic of sophists.<sup>31</sup> His own greater wealth, Isocrates may even insist, signals the overall perceived easiness of his rhetorical educational program (and the overall toilsomeness of theoretical philosophy). For reasons of

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<sup>30</sup> Surveying the development in the sciences in ancient Greece, Edelstein 1967: 77 writes, “the modern verdict too must be that the progress achieved in the fourth century or from the time of Anaxagoras to that of Aristotle was incomparably greater than was that of the period from Anaximander to Anaxagoras.”

<sup>31</sup> On Isocrates’ pride in his wealth, see Jaeger 1944: 142, 319. On his conception of sophists, Tell 2011: 49.

concision, then, I bracket premise (2).<sup>32</sup> Instead, I examine how Isocrates might challenge premise (3), the claim that philosophers have made rapid progress.

In considering premise (1), I assumed that the Isocratean, if pressed, could perhaps grant that theoretical philosophers had made some progress. But the Isocratean, in practice, rejects this concession. Contrary to premise (3), the Isocratean contends, philosophers notoriously have *not* made rapid progress in attaining exact understanding. For philosophers, both in Aristotle's time and later on, have not converged in any widespread, collective way on true answers to major philosophical questions. Instead, philosophers all disagree. Thus, the *Protrepticus*' claims for philosophy's progress – and attendant easiness – seem dubious. Here, our hypothetical Isocratean foreshadows David Chalmers, who offers these criteria for philosophical progress, and who argues that contemporary academic philosophy has failed to meet them.<sup>33</sup> If Aristotle has a response to Isocrates, then, Aristotle would also have a response to the current debate.

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<sup>32</sup> According to premise (2), philosophers did not receive significant external rewards that could have incentivized their rapid progress. But one could criticize (2) on the grounds that theoretical philosophers received honor from both their students and other theoreticians. And perhaps that honor can explain their rapid progress. For Aristotle recognizes that we desire honor not just from anybody, but from the wise (*EN* I.5, 1095b28-30). And he recognizes that those who make discoveries are apt to be admired (*Metaphysics* A.1, 981b13-17).

In response, it seems entirely plausible, on the one hand, to think that philosophers – then, as now – were (and are) motivated by a search for prestige among other philosophers, and that the promise of recognition could well have been incentives to philosophize. Yet recall, on the other hand, the complaints of Xenophanes 21B2 and Plato, *Republic* 528b (discussed by Edelstein 1952: 597-600, who argues that the sciences in the period were, in fact, held in low esteem). Recall, further, the portrayal of theoretical philosophers by the likes of, e.g., Aristophanes and Isocrates; the trials (or attempted trials) of Anaxagoras, Socrates, and Aristotle himself; and the other indignities visited upon, e.g., Pythagoras and his followers, Xenophanes, and Zeno of Elea (detailed by Ahrens Dorf 1995: 9-11 and Melzer 2014: 148-153). These cases suggest that a substantial portion of non-philosophers took a dim view of philosophy in the *Protrepticus*' sense, and that one could more readily attain honor elsewhere, e.g., from the practitioners of other, already existing arts, as well as from non-artisans who honored those other arts. Moreover, the external obstacles that philosophers faced would stand, if anything, actively to impede their progress relative to the practitioners of other arts. Therefore, even if honor from students and other philosophers were incentives to philosophize, as seems reasonable to assume, such honor seems incapable of fully explaining philosophy's rapid progress. Philosophy's own easiness-conducive features would reasonably have been part of the story. (I thank Christopher Moore for questions on these matters.)

<sup>33</sup> See Chalmers 2015.

Isocrates himself raises this worry about disagreement. The wisdom that his opponents pursue, he says, “is disputed among themselves” (ὑπ’ αὐτῶν δὲ τούτων ἀντιλεγομένην: *Antidosis* 84). The “ancient sophists” could not agree on the number of basic elements of reality. At one end, Empedocles proposed four basic elements; at the other, Gorgias denied there were any (*Antidosis* 268).<sup>34</sup> Isocrates thus sees theoretical philosophy less as a truth-conducive activity than as a merely eristic one (cf. *Panathenaicus* 26-29; *Against the Sophists* 1; *Helen* 1-6). On this basis, Isocrates argues to young Alexander that he should pursue studies with him, rather than Isocrates’ rivals (among them, presumably Aristotle), whom Isocrates thinks engage in pointless disputation for its own sake (*Letter to Alexander*).

This worry from disagreement is powerful. Aristotle himself recognizes that early Greek philosophers disagreed about basic elements (*Metaphysics* A.3, 983b18-20; *DC* II.4-5). Yet it is striking how Aristotle, as opposed to Isocrates, construes such disagreement. Isocrates views such disagreement as a sign of theoretical philosophy’s overall difficulty. For Aristotle, however, such disagreement instead signals only the presence of *aporiai* in things themselves, which these disputes concern (*Metaphysics* B.1, 995a24-26; a30-31). Such *aporiai*, in turn, simply offer invitations to philosophize, i.e., to resolve the *aporiai* and thereby to resolve any existing disputes. Disagreement, then, by itself offers no reason for despair about philosophy’s prospects – any more than disagreement in other arts (including medicine) offers reason for despair about their own prospects.

This preliminary response, while reasonable as far as it goes, is not altogether sufficient. To bolster his reply, Aristotle can argue for the following three points: (1) The existence of some persisting, topical questions of philosophical debate is consistent with philosophy’s having made rapid progress in resolving philosophical *aporiai*. (2) The sorts of philosophical *aporiai* that Aristotle discusses themselves have features conducive to their own resolution, with the result that we should reasonably expect many such *aporiai* to have been

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<sup>34</sup> *P. Oxy.* 3659, sometimes suspected to be a fragment from the *Protrepticus*, perhaps in Isocrates’ voice, also highlights disagreement among philosophers.

resolved. (3) Disagreements among philosophers, to whatever extent they exist, actually have features conducive to resolving existing *aporiai*.

On (1): Aristotle admits the existence of some broad, topical philosophical questions – such as “What is being?” – which have a perennial character (*Metaphysics* Z.1, 1028b2-4). Yet he also recognizes the existence of narrower, aporetic questions about being – the aporetic questions that he charts in *Metaphysics* B, questions such as whether genera are the basic elements of a thing or whether the primary constituents of that thing are (B.3, 998a21-23). These latter questions differ from broad, topical questions such as “What is being?” For these aporetic questions pose dilemmas, for which strong arguments exist on both sides; as stated, broad, topical questions do not.

But Aristotle reasonably suggests that addressing the latter sorts of questions enables us to address the former: we must consider *aporiai* with an eye toward “the science we seek,” i.e., toward our investigation into being (cf. B1, 995a24-b4). (a) Aporetic questions provide conditions for the possibility of addressing larger, topical questions. Aporetic questions provide a *starting point* for, and give structure to, our inquiry into being. If we inquire without grasping the *aporiai* with which our inquiry confronts us, we do not know where to go. (b) Such *aporiai* enable us *to conclude* an inquiry. Once we recognize that we have resolved the relevant *aporiai*, our inquiry can come to a rest (B.1, 995a34-b2).<sup>35</sup> (c) Answers to aporetic questions about being can also actually be *constitutive* of answers to broader, topical questions. We more fully grasp what being is just to the extent that we resolve *aporiai* about, say, the basic elements of beings. Hence, in resolving *aporiai*, we do make some progress on answering broader, topical

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<sup>35</sup> On *Metaphysics* B.1 on the role of *aporiai* as providing the very conditions for inquiry, see Politis 2004: 66-77; Long 2006: 46-48; Laks 2009: 26, 45; Code 2010: 97-98, 109. As both Long and Code point out, identifying these features of *aporiai* enable Aristotle to reply to later skeptical worries according to which the very existence of *aporiai* precludes inquiry and knowledge; on the contrary, Aristotle can say, these features of *aporiai* make inquiry and knowledge possible.

questions.<sup>36</sup> We do so even if the broader, topical questions themselves remain living topics of investigation and dispute.<sup>37</sup>

On (2): The *aporiai* relevant to an inquiry concerning, e.g., the nature of being result from certain intrinsically puzzling features of being as such. When we are puzzled, Aristotle suggests, our thinking is metaphorically tied or knotted up; and the knot in our thinking, Aristotle maintains, results from a certain “knot” in the object of study (*Metaphysics* B.1, 995a29-31). More specifically, the existence of seemingly equally compelling opposing arguments on both sides of the dilemma binds our thinking (see *Topics* VI.6, 145b16-20). But this feature of an *aporia* – its emerging from the existence of two strong conflicting arguments – points the way to the *aporia*’s own resolution. Thus, Aristotle advises, “For those who wish to get clear of *aporiai* (εὐπορῆσαι) it is advantageous to discuss the *aporiai* (διαπορῆσαι) well; for the subsequent free play of thought (εὐπορία) implies the solution of the previous *aporiai*, and it is not possible to untie a knot of which one does not know” (*Metaphysics* B.1, 995a27-30; ROT, emended; cf. 995a33-b2). Once we have examined the arguments on both sides of the dilemma, and have understood how the aporetic dilemma arises, we are in a position to untie the aporetic knot in our thinking. We can either reject one side of the dilemma (because we can reject the argument for that side) or we can identify ways to reconcile the two sides.

Given that *aporiai* have the dilemmatic structure they do, we should expect many *aporiai* to have been solved without special impediment, as philosophers have gone about their work. Aristotle can point to this historical pattern in the early Greek philosophers’ progress beyond Milesian monism in *Metaphysics* A.3. On the one hand, some reasonings, as articulated by the Milesians, strongly support the view that causes are all material principles. On the other

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<sup>36</sup> On the link between larger questions and specific *aporiai*, see Politis 2004: 66, 82-83. My argument in this section has benefited from the stimulating discussion in Stoljar 2017: 12-15; 26, who distinguishes (1) *topic questions* – i.e., the highest-level big questions about a topic, which usually are questions of definition – from (2) *questions within, and about, a given topic*. While (2) are finer-grained than (1), (2) are still recognizably big questions, and certainly bigger than (3) *small questions* that pertain to particular accounts or discussions of (2).

<sup>37</sup> For the thought that solutions to even modest questions constitute viable forms of philosophical progress, see Cappelen 2017: 62-63.

hand, matter's inability to change itself strongly suggests the opposed position that not all causes are material principles. Hence, a resolution naturally comes to view: some, but not all, principles are material.<sup>38</sup> Some early philosophers, e.g., Thales, Anaximander, and Anaximenes, did identify only one sort of cause, viz., principles in the form of matter. But nature itself was apt to raise trouble for this view, and generated an *aporia* that, in virtue of its dilemmatic structure, was resolvable. In subsequently resolving the *aporia*, early philosophers progressed beyond early materialist views.

On (3): As Aristotle's approach to point (2) suggests, intimate familiarity with the arguments on behalf of both sides of a dilemmatic *aporia* conduces to one's resolving it. Thus, Aristotle characteristically surveys the views of his predecessors when he addresses *aporiai*, and he highlights the need to do so: "Further, the one having heard all the opposing arguments, as if they were opponents in a lawsuit, must be in a better state with a view to judging" (*Metaphysics* B.1, 995b2-4; cf. *Topics* I.2, 101a34-37; VIII.14, 163a36-b9; *DA* I.2, 403b20-24; *Metaphysics* A.3, 983b1-6). Having surveyed existing arguments on behalf of, and against, various views, philosophers can discern the strengths and weaknesses of those views and arguments. Hence, in articulating views and arguments on behalf of both sides of an *aporia*, the disagreements of philosophers actually benefit those seeking to resolve *aporiai*.<sup>39</sup> Moreover, in their disputes, philosophers articulate *endoxa*, or reputable opinions, about the subject matter under dispute. A proposed resolution to an *aporia*, however, is sufficiently justified when it is capable of preserving the most authoritative *endoxa* (*EN* VII.1, 1145b2-7), and finest when it is capable of explaining how the *aporia* arose (*Physics* IV.4, 211a7-12; cf. *EN* VII.14, 1154a22-26).<sup>40</sup> So, in their disagreements, philosophers also provide endoxic material conducive to

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<sup>38</sup> Cf. Stoljar 2017: ch. 3 on the sorts of dilemmatic boundary problems, similar to Aristotelian *aporiai*, about which philosophical progress has taken place, and about which it is reasonable to expect decent progress to take place.

<sup>39</sup> Politis 2004: 77 emphasizes that familiarizing ourselves with existing disputes "improves one's sensibility to the *aporiai* generated by the things themselves." More specifically, I contend, such familiarity improves one's sensibility to what would constitute viable solutions to such *aporiai*.

<sup>40</sup> See DaVia 2017: 395-396. In making these limited claims, I aim largely to bracket ongoing worries (such as those of D. Frede 2012) about the extent to which Aristotle's method is endoxic

justifying proposed resolutions. In these ways as well, philosophy is apt to progress as a cooperative enterprise.

The Isocratean might reply that Aristotle recognizes that it can be difficult even to articulate *aporiai*, let alone unravel and get beyond them (*Metaphysics* B.1, 996a15-17). Yet Aristotle need not hold that philosophy is effortlessly simple; again, his claim is that philosophy is overall easy, in spite of the difficulties that it does throw our way. The Isocratean might also hold that the solution of one *aporia*, instead of extinguishing wonder, often seems to generate a follow-up *aporia*, and that philosophy is thus a Sisyphean enterprise. Indeed, as philosophers solve some *aporiai*, Aristotle recognizes, they are taken with wonder by other *aporiai* (*Metaphysics* A.2, 982b13-15). Yet Aristotle can count the emergence of new *aporiai* as a sign that philosophy does make reasonable progress. For as we make reasonable progress in resolving philosophical *aporiai*, we are apt to develop a sensitivity to other, different “knots” with which the world confronts us. So, Aristotle can say, we should not be discouraged if, when philosophizing, we encounter new dilemmas to resolve.<sup>41</sup> (As intimated in Part I, this state of affairs is consistent with philosophy’s full development and successful operation as a mature science.)

V. In responding to the Isocratean worry from disagreement, Aristotle can also challenge the assumption that widespread collective convergence of philosophical opinion (whether rapid or not) is a necessary condition of philosophical progress.<sup>42</sup> True, such collective convergence may *signal* philosophical progress. As noted, Aristotle thinks that philosophers are apt to make progress when they inquire with other thinkers. Hence, we may reasonably expect the opinions of philosophers to converge, to some extent, as some philosophers do attain the truth. Thus,

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and in what sense. As DaVia 2017 suggests, such claims need not imply, for instance, that Aristotle always begins his inquiries by initially surveying *endoxa*, or that the *endoxa* that Aristotle ultimately attempts to preserve are always *endoxa* from such an initially surveyed set.

<sup>41</sup> For a different response to the issue of “successor problems,” see Stoljar 2017: 65-66.

<sup>42</sup> Chalmers 2015: 14, who identifies himself as a pluralist about the ways in which philosophy can make progress, denies that he is “simply equating” philosophical progress and collective convergence. But he thinks that attaining the truth is “one such value” – perhaps a primary one.



prefacing one of his own discussions, Aristotle says, “[I]t would be best for all human beings to show agreement with the things to be said; but if they do not, [it would be second best] for all [human beings to agree] in a certain fashion, at any rate, which they will do [if they end up] changing” their views (*EE* I.6, 1216b28-30). Consider a scenario in which at least some philosophers (a) successfully resolve the *aporiai* that give rise to discordant philosophical *logoi*, (b) identify principles that account for the phenomena, and (c) explain the sources of these *aporiai* to other philosophers. In such a case, those other philosophers, having attained clearer, more exact understanding, should, and many times will, modify their beliefs.<sup>43</sup>

But even when philosophical progress occurs, Aristotle does not expect widespread collective convergence on the truth. Instead, he holds out hope only that everyone will end up agreeing “in a certain fashion, at any rate” (τρόπον γέ τινα: 1216b29-30). For Aristotle identifies all kinds of reasons why philosophers may still end up failing to converge collectively on the truth, even when some philosophers have successfully performed tasks (a), (b), and (c). These reasons include inexperience (*Physics* I.8, 191a24-27, 191b30-34; cf. *EN* I.3, 1095a2-4), a lack of education (*Metaphysics* G.4, 1006a6-8), ignorance, and a temptation to seem profound (*EE* I.6, 1217a1-7). Philosophers are prone to fall in love with their views; hence, they tend to force the phenomena to fit their favored accounts, rather than the reverse (*DC* II.13, 293a27-30; III.7, 306a5-15). Still other philosophers love the feeling of victory in winning arguments; hence, they are prone to contrarian desires to defend their theses at all costs (*EN* I.5, 1096a2).<sup>44</sup>

Still, none of these obstacles to widespread agreement should preclude philosophy from making overall significant and robust progress. That (some) philosophers are prone to these temptations is nevertheless consistent with (other) philosophers’ being able to resist them and to move forward. Inexperience, ignorance, lack of education, and temptation, after all, hinder all kinds of activities that are, in themselves, generally feasible. Consider, for instance, stock market investing. Investor inexperience and ignorance, contrarian commitments to pet stock-

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<sup>43</sup> On *EE* I.6 and the process of changing views, see Barney 2012: 100-101.

<sup>44</sup> See Nussbaum 1986: 247, 260; Kraut 2006: 79, 83-84.

picking theories, and other limitations and temptations lead most investors, even seasoned professionals, to attain returns that fail to match those of the overall stock market. Yet matching the overall market remains, by itself, overall easy. One can simply invest in an index mutual fund. Acquiring wisdom, of course, need not be that easy. But just as the pervasiveness of certain cognitive biases need not make attaining average investment returns, by itself, difficult, the same follows for acquiring wisdom.

At this point, the Isocratean might reply that unless philosophers *collectively* converge on the truth, it is unclear how one can really say that philosophy as a scientific enterprise makes any progress at all, and, thus, how one discern any “easiness” regarding philosophy. But here, Aristotle can insist that philosophy plausibly counts as progressing when *at least some* of its practitioners progress toward philosophy’s ends – even if other practitioners reject their advances. The art of poetry, for instance, makes progress when particular poets make certain developments that actually enable the art to attain its mature form. Aristotle credits Homer, for instance, with developing the art of poetry by writing the *Margites*, a work with properly comedic elements that progress beyond crude, invective-laden lampoon (*Poetics* 4, 1448b35-1449a2). Suppose that Homer alone writes such a transitional work, which Aristotle thinks stands in the same relation to comedy that the *Iliad* and *Odyssey* stand in relation to tragedy. And suppose, further, that others keep writing lampoons. Even then, Aristotle can say, the art of poetry itself makes progress when Homer innovates. True, others may (and did) come to follow Homer’s lead and write proto-comedies as well. But if individual progress *within* an art or science short of collective convergence can constitute the progress *of* the art or science, then collective convergence within philosophy is not strictly necessary for philosophy’s progress.<sup>45</sup>

Finally, Aristotle can deny, more basically, that significant and robust philosophical progress even requires at least some philosophers actually to have attained the whole truth that they seek. Significant and robust progress can occur in other arts even when those developments

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<sup>45</sup> My response in this section has benefitted from Cappelen 2017: 70-72, who argues that “collective achievement” in philosophy can occur “by virtue of an individual achievement.”

do not by themselves attain the ends of those arts. Again, as *Sophistical Refutations* 34 contends, the first step in the development of an art or science is the hardest, and, by itself, constitutes significant and robust progress. Likewise, significant and robust philosophical progress can occur even when philosophers have not yet obtained the whole truth. Such progress occurs even when philosophers are on the way toward solutions – i.e., when philosophers are progressing toward solutions, and amass parts of the whole truth. Thus, even when the early philosophers did not attain the whole truth about causes, Aristotle nevertheless reasonably counts them as having made some progress in exactness: pre-Empedoclean philosophers progress as far as grasping two of the four causes, if hazily (*Metaphysics* A.4, 985a10-14). As suggested by Part II, even when early thinkers were mistaken, they nevertheless prepared the way for later efforts to attain more exact (and complete) accounts of the truth. In this respect, philosophy is like other arts, such as music. The achievements of the mediocre musician Phrynis, Aristotle suggests, are significant insofar as they provide the basis for the achievements of the later, superlative Timotheus (*Metaphysics* α.1, 993b11-19).

Insofar as early philosophers rapidly surpassed the practitioners of other arts in exactness, all without significant external incentives, then, Aristotle can appeal to their success as evidence of philosophy's overall easiness. Hence, even if acquiring *sophia* confronts human beings with inevitable difficulties, Aristotle can say, the rapid early progress of Greek philosophers – and, so, of philosophy as a science – shows that acquiring *sophia* remains feasible for us. Insofar as acquiring *sophia* is thus free from excessive demandingness and toilsomeness, theoretical philosophy, contrary to Isocrates, may yet contribute to our happiness.<sup>46</sup>

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<sup>46</sup> I have presented material from this article at the Rutgers University Classics Department; the Society for Ancient Greek Philosophy; the Ancient Philosophy Workshop at the University of Texas at Austin; the Nanyang Technological University Philosophy Department; the National University of Singapore Philosophy Department; the Pacific APA; the Workshop in Ancient Philosophy at the University of Oxford; "Philosophy in its Ancient Beginnings: On the Conceptualization, Criticism, and Justification of Philosophy in Antiquity" (a conference organized by Ronja Hildebrandt and Christopher Roser at Humboldt-Universität zu Berlin); the University of Hong Kong Philosophy Department; the Eastern APA (in a symposium organized by Brad Cokelet); and at the Sixth Metaphilosophy Workshop (organized at Nagoya University

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