

Introduction

I Theme and Orientation of This Work

This book is partly reconstructive, partly constructive. It attempts, in the main, to offer a reconstruction of Aristotle's concept of mind. It attempts to answer the question: What is mind, for Aristotle? In order to accomplish that interpretive feat, however, it advances a constructive principle, something Aristotle himself did not say, as a way of soldering together the various Aristotelian insights that address this general question. The constructive principle is what I call *the time-perception model*.

The account of Aristotelian mind to be found here is, in some respects, a controversial one. The controversies begin in the first chapter, where I argue that mind, for Aristotle, in fact does not receive "intelligibles" in the way that sensation receives "sensibles." Certain controversy will be provoked by the argument of Chapter 3, that for Aristotle mind is embodied. Further, in my commentary on DA III.5, I reject a popular interpretation of the "agent intellect" as divine. Beyond psychology, the excursus on essences and principles of Chapters 5 and 6 call into question certain mainstays of Aristotelian metaphysics and epistemology.

The point is not to be controversial, but to get Aristotle's conception of mind right. Hence, first of all, the argumentation here is entirely and solely based in the interpretation of Aristotelian texts, in particular the third book of Aristotle's *De Anima*. Second, independently of fidelity to Aristotelian texts, I have sought to construct an interpretation that is philosophically respectable, if not sound. Aristotle was a philosopher, and arguments having premises and conclusions are the main stuff of the texts interpreted here. Hence I have attempted to present Aristotle's concept of mind in a way that is both textually responsible and philosophically cogent.

What makes this twofold endeavor possible is the fact that Aristotle's concept of mind is more than a mere historical curiosity; it remains, in its general outlines, a viable model for conceiving of mind, and is deserving

of attention in its own right. It remains so in spite of the well-intentioned efforts of many an Aristotelian, who might for example have it that thinking, for Aristotle, is the reception of intelligible forms sent into our immaterial souls by some likewise-immaterial substance in the cosmic ether. If an interpretation like this were right – which is, of course, an interpretive possibility, in principle – then there would be no use championing Aristotelian mind as philosophically relevant – not, anyway, until minds are changed on a number of basic ideas. The happy circumstance is that the grounds justifying some of the more extravagant readings of the Aristotelian tradition are not good grounds.

2 Traditions in the Interpretation of Aristotelian Mind

Although it may seem in some respects controversial, the account offered here is a traditional one. Indeed, in certain important ways it is antique, as its basic ideas were first outlined by Aristotle's pupil and successor Theophrastus. The Theophrastean view, in short, is that thinking is an act accomplished by individuals. Traditionally, Theophrasteans have contended with interpreters of an opposite camp, that of Alexander of Aphrodisias, and on one question in particular.¹ The issue is whether, for Aristotle, thinking requires contributory efforts by a divine mind. To Theophrasteans, the answer to this question is no; to Alexandrians, yes.

In order to maintain the integrity of the Theophrastean view, however, a second issue must be constantly borne in mind. The second issue is whether, when we come to learn about the world through thinking, we *reveal* intelligibility or rather *make* it. On the typical Alexandrian view, learning is revealing the intelligibility of the world as ordered (or otherwise made intelligible) by an intelligent god. Certain Theophrasteans will also argue the learning-as-revealing line, without adhering to the divine-mind view. Most contemporary interpreters of Aristotelian mind, in fact, argue for some version of this Theophrastean view.² According to this

¹ This division is derived from the reconstruction in Brentano, "ΝΟΥΣ ΠΟΙΗΤΙΚΟΣ," p. 313. (N.B. "Theophrastean" and "Alexandrian" are not his expressions.)

² For a sampling, see Hamlyn, *DA II–III*, pp. 137ff., 148; Hicks, *De Anima*, p. 497; Wilke, "ΨΥΧΗ versus the Mind," p. 112; Kosman, "What Does the Maker Mind Make?" pp. 356–8; Modrak, "The ΝΟΥΣ-Body Problem," pp. 760, 764, 765–6; Modrak, *The Power of Perception*, pp. 113–79; Modrak, *Aristotle's Theory of Language*, esp. pp. 219–78; Polansky, *Aristotle's De Anima*, e.g., p. 454; Rist, "Notes on DA 3.5"; Robinson, "Mind and Body in Aristotle," pp. 19–21; Hardie, "Concepts of Consciousness"; Lear, *The Desire to Understand*, esp. pp. 125, 231ff.; Irwin, *Aristotle's First Principles*, e.g., pp. 324ff.; Ross, *Aristotle*, p. 153; Biondi, *APo II.19*, pp. 225f.; Scaltsas, *Substances and Universals*, pp. 102ff.; Owens, *The Doctrine of Being*, pp. 38off.

interpretation, thinking for Aristotle is *abstracting*, that is, revealing (already existent) intelligibility in the world.

That this latter sort of Theophrasteanism is really crypto-Alexandrian may be discerned by asking just how the world got itself intelligible prior to its being thought by actual thinkers. The question is a necessary one, internal to the Aristotelian enterprise, on the *Met.* IX principle that actualities always precede potentialities. If the actuality is not supplied or performed by the individual, then the natural place to find it – again, internal to the Aristotelian enterprise – is in the divine mind of *Met.* XII. Indeed, this is precisely the Alexandrian's stock textual argument. If the world is already potentially intelligible, something actually intelligent must have made it so, that is, a divine mind; and if thinking is revealing this intelligibility, it requires that prior contribution on the part of a divine mind. The Theophrastean who argues that thinking is merely revealing intelligibility is really an Alexandrian, requiring as she does an explanation for how the world got itself intelligible. For example, Aquinas, who famously argued against Alexandrian Averroists with the Theophrastean-sounding insistence that it is *this particular person* who thinks (*hic homo intelliget*), is in fact a crypto-Alexandrian in precisely this way.

Of course, if Aristotle's concept of mind is at all philosophically plausible, as I contend it is, it must be that some version of the Theophrastean interpretation is right. More specifically, if thinking, for Aristotle, is in fact something *this particular person* does, then an interpretation of Aristotelian mind must be found that makes no appeal to the contributory efforts of a divine mind – neither the Alexandrian nor the crypto-Alexandrian appeals just described. In particular, it must be shown how, for Aristotle, intelligibility is not simply found out there in the world, which implies the divine contribution, but is instead constructed by the thinker. I take up the mantle of Theophrasteanism along these lines.

3 The Main Contentions of This Work

The first main contention of this book is that mind, for Aristotle, is not a given faculty, but rather a state of intellectual achievement. Intellectual achievement refers to past success: coming to understand what is the case, “hitting upon the truth.” We attain intellectual achievement, for Aristotle, not by luck or inspiration, but through “research.” Broadly speaking, Aristotelian research is the attempt to find explanations. Having a mind, for Aristotle, means possessing the level and kind of insight afforded by progress and success in explanation.

This model of Aristotelian mind is at odds with a view prevalent among other interpreters – a view that I shall call “abstractionism.” According to the abstractionist, Aristotelian mind is the ability to perceive a certain sort of quality: an “intelligible” one. Now, that much the abstractionist and I are agreed on. However, the abstractionist (as I define her) believes that this ability, for Aristotle, exists innately in human beings, and that is where our views begin to diverge. Whereas I believe that this ability results from research, the abstractionist believes that the ability to perceive intelligible realities is a result of having a certain natural perceptual faculty.

My intellectual-achievement view also differs from an imagined third interpretive possibility, however – a view that might be called “positivism” or “strong constructivism.” According to the strong constructivist, Aristotelian mind is an ability that derives nothing at all from any natural abilities. When we hit upon the truth, we are not activating or making use of any of our natural abilities; we are developing an entirely new ability. For the strong constructivist, thinking is entirely artificial. By contrast, my view is that the abilities on which mind is premised, and from which mind is derived, are indeed natural, innate abilities. Although mind itself is not innate, the faculties of sensation and memory, for example, are.

As I shall argue, two very general considerations favor the middle of the road on this issue. The first is that Aristotle’s psychology is naturalistic, in some suitably general sense of that concept. Perceptual capacities are immanent to us as animals of a particular natural constitution. So if mind is an Aristotelian perceptual capacity of any sort, it must have some footing in that natural constitution. The second general consideration bears on Aristotle’s rejection of Platonic recollectionism: the idea that mind exists innately in us – fully formed, though dormant. Aristotelian empiricism requires that understanding derive from experience and research, so mind must have some footing beyond mere natural psychological constitution. The trick in grasping Aristotelian mind seems, therefore, to lie in maintaining the immanence of understanding to our natural constitution, without thereby committing us to the extravagances of innatism.

The second main contention of this book is similarly situated between an abstractionist and a strong constructivist interpretation. This second contention relates to a fundamental feature of Aristotle’s psychology of perception: the claim that perceptual faculties correlate, characteristically, with certain sorts of perceptible objects (or properties). Understanding the nature of the objects that correlate with mind is part of understanding what mind is – for perceiving those sorts of objects is what mind does, characteristically. Mind, for Aristotle, thinks “thoughts” or “intelligibles”

(νοητά). On an abstractionist interpretation, what the mind does when it thinks thoughts is to grasp something that was potentially intelligible, just as vision grasps something that was potentially visible. The abstractionist believes that, for Aristotle, there are objects or properties in the world that are potentially thinkable, prior to their being grasped by mind. On a strong constructivist interpretation, there are no intelligibles prior to their being grasped by mind. Mind simply constructs them. They do not have truth contents.

The view I favor lies, again, somewhere between these two extremes. According to the view I argue for here, the objects of thought exist independently of thinking, but not *qua* thinkable. Making the world thinkable is one of the characteristic acts of mind itself. Hence, where there are no thinkers, there are no thinkable objects. However, the things to which thoughts characteristically refer are not similarly dependent.

The third main contention of this book is its advancing the particular model I propose for describing mind and thinking. The need for a model of this sort arises from the particular constraints of my interpretation, as outlined in the preceding two main contentions. According to the first contention, there is no given potentiality for thinking. According to the second, there is no given potentiality for being thought. Hence thinking would seem to be impossible. I call this the “bridge problem,” as it bears on bridging the gap between an unintelligent thinker and an unintelligible world. The model I propose for solving the bridge problem is what I call the time-perception model. In short, what the time-perception model says is that thinking is like perceiving time.

The time-perception model is premised on a few considerations. One is that, in Aristotle’s view, human beings are innately (and, in certain respects, uniquely) capable of perceiving time. So, unlike the ability to think, the ability to perceive time is a natural and given ability. Likewise, secondly, things in the world are “in time,” much as this fact is perceivable only by humans, that is, by time-perceivers. Time, then, is in fact a real dimension of the natural world. Unlike our ability to think, our ability to perceive time, then, is explained merely by appeal to the way we are by nature, just as the ability for things to be perceived in time is explained by appeal to the way they are by nature.

This connection proves useful, thirdly, for the reason that thinking and time perception share a common structure; it is in light of this common structure that I say thinking is “like” time perception. In Aristotle’s view, what we do when we perceive time is to see that some connection between two moments (*before* and *after*) is held together by a third or middle term.

For example: A second hand moves from “1” to “2.” “1” is *before*; “2” is *after*. What links them, and explains why the one is *before* and the other *after*, is the passage of time. Time is the “middle term” joining *before* to *after*. What we do when we are thinking, for Aristotle, is, similarly, to grasp middle or explanatory terms. These terms explain the relation between other terms. Moreover, what accomplishes the explanation is making out relations of *priority* and *posteriority*. For example: Planets don’t twinkle. What explains this fact is that the planets are proximate to us. In Aristotelian parlance, this fact about planets is *prior* or “before,” and the fact that they don’t twinkle is *posterior* or “after,” because it “follows” from and depends on the prior fact. As in the perception of time, there is a certain right order of terms. Not twinkling, for example, does not explain the planets’ proximity. Their proximity is, rather, explanatory of (i.e., prior to) the fact that they do not twinkle. Like time perception, thinking is perceiving a relation between “before” and “after” rightly.

A fourth consideration bears on the usefulness of the time-perception model for understanding the active and passive elements in thinking. In contrast to simple sensations, which are merely passive, the perception of time requires active, constructive contributions on the part of the perceiver. These active contributions come chiefly in the form of judgments about priority and posteriority – notably, contributions made by mind. In the accounts of mind and time, Aristotle describes this sort of contribution as one of “making [*x* and *y*] one.” In the case of time, these efforts yield time perception proper, that is, as passive. In the case of mind, the unifying effort of mind *qua* active yields a sort of perception by mind *qua* passive. If the link between thinking and time perception holds in the way I suggest, time perception offers us a refreshingly clear paradigm for thinking about the notoriously difficult “active” and “passive” structure of DA III.5.

The link between thinking and the perception of time in Aristotle has more than the superficial support of external similitude, and I do not adopt the time-perception model merely on the conditional basis that it makes Aristotle’s concept of mind easier to understand. Aristotle himself suggests the link in claiming that a thought and the time of a thought are essentially inseparable (DA III.6, 430b15). Further, he describes thought’s objects in ways that, appropriately, evoke temporal relations. Aristotelian principles and essences are both said to be “prior,” or “before,” and to explain what is “posterior,” or “after.” The strange locution for Aristotelian essences, “the what it *was to be*” (τὸ τί ἦν εἶναι) indicates a temporal relation.

In attempting to capture Aristotle’s concept of mind by means of the time-perception model, I emphasize that it is a *model*. That is to say, I am

not contending that for Aristotle what we are doing when we are thinking is perceiving time. For there are certain cases, like the thinking of eternal truths, where we do not seem to be thinking about time or about temporal objects. Although it might be possible to bring these cases under a more general understanding of temporality – where, for example, eternity is one of a number of ways of being in time – I make no such insistence here.

A more literal and presentable way of describing thinking according to the time-perception model is to say that thinking is, in the Aristotelian sense, *inferential*. According to Aristotle, an “inference” (συλλογισμός) is “an account in which, certain things being laid down, something other than what is laid down follows from them.”³ As I have said above, mind for Aristotle is a virtue rather than a natural capacity. Likewise, thinking (mind’s activity) is a result, rather than a precedent, of grasping principles. In describing thinking as inferential, I do not mean, then, that thinking proceeds to the grasping of principles by means of inference. Rather, I mean that, when mind has come to grasp principles, then it has grasped its subject in an inferential way. That is, in grasping principles, we understand that from which our once-questionable fact derives. For example: Having grasped that non-twinkling is an effect of proximity, we see that the non-twinkling of planets “follows” from the prior principle. (To be clear: We do not “proceed to” the principle by means of inferences.) When I say, then, that thinking is inferential, I mean that the sort of insight yielded by thinking – by grasping principles – is inferential. In grasping principles, we come to see how facts “follow from” them.

It should be said that the abstractionist needs none of this machinery. She has what is, in fact, a rather elegant answer to the question of how thinking is possible. It is possible through the conjunction of two things: a thinker naturally capable of receiving forms; and forms that are by nature intelligible. With these tools in tow, the explanation of how thinking is possible is, for the abstractionist, no more difficult than the explanation of how any sort of movement is possible. In defending the time-perception model as a means of solving the bridge problem, I not only have to justify the model as a solution; I also have to justify the legitimacy of the problem.

4 The Way There

The three contentions outlined above are supported and expounded on in the following ways.

³ *Top.* I.1, 100a25–7.

4.1 Part I

Part I, comprising three chapters, outlines some of the main presuppositions of Aristotle's account of mind, while also addressing some of the more obvious objections to the view of Aristotelian mind that I defend.

Some Aristotelians will see a fundamental problem with my actuality-first view, citing (among other texts) a comparison in DA III.4 between thought and sensation. According to their interpretation of that text, mind grasps intelligibles in just the way that sensation grasps sensibles; and sensibles are, after all, sensible prior to their being sensed, just as sensation is a potentiality prior to actual sensation. Chapter 1 offers a brief textual argument against this reading of the relevant passage. According to my interpretation, that passage is a "dialectical" one, and a *reductio*: Aristotle is demonstrating the *absurdities* that follow from the assumption that mind is like sensation in being a precedent potentiality. He goes on to defend the view that the potentialities to think and to be thought do not precede, but rather follow, actual thinking – in overt contrast to the potentialities associated with sensation.

Chapters 2 and 3 center on the question of the relationship between mind and body. While this connection may seem anachronistic, some form of the mind-body question is crucial for Aristotle's psychology, given the role of form and matter in Aristotelian psychological explanation, which I describe in Chapter 2. Aristotelian psychological explanations consist in demonstrating a relation between a form and a matter such that the matter is seen as necessitated by the form. This explanatory schema encounters a certain characteristic difficulty with mind, and for two main reasons. The first, which is well known, is that there do not seem to be, in Aristotle's view anyway, any particular material constituents immediately associated with mind. In other words, there does not seem to be any matter (or organ) that thinks. The second reason for the difficulty, which is less recognized in this capacity, is Aristotle's commitment to the idea that mind is, in a way, identical with the entirety of the individual human being.⁴ Mind, for Aristotle, is ultimate and final in the composition of the human. It "completes" her.

Aristotle's considered position on the mind-body relation, I argue, has two salient features. The first feature, in so many words, is that mind is not matter. This has a metaphysical and a functional aspect. Metaphysically,

⁴ Consider, e.g., NE X.7, 1178a2–3: "It would seem that mind is the individual, because it is authoritative and best."

it means Aristotle is committed to some version of the thought that what goes on in thinking is irreducible, as such, to material states. Functionally, it means there is no explicating mind in the way that material states are explicable – say, in the way that the presence of light-sensitive matter is explicable in terms of vision (i.e., the animal has eyes because it sees). Now, vision and other functions are not like mind in one crucial way. For they are all themselves explicable under terms like survival (i.e., we have vision because we must find food, etc.). Owing to its ultimacy and finality, however, mind is never explicable in the same way. Mind is an *explanans*, never an *explanandum*. Mind is form, not matter.

The second salient feature of Aristotle's mind-body view is that there are, however, certain material constituents necessarily associated with mind. Aristotle articulates – fairly specifically, in fact – what sorts of material constituents are required for mind-havers. These include not only the faculties of sensation and imagination, in a formal sense, but their material constituents also. Thus, Aristotle's view is that, while mind is not matter, it has a necessary relation to matter. Hence Aristotelian mind is embodied, or μετὰ σώματος, in Aristotle's way of putting it.

This is not a popular interpretive view, by any means. To bolster it, in Chapter 3 I look in detail at passages that other interpreters have taken to suggest that Aristotle viewed mind as disembodied, and I argue that those passages are not problematic for the embodied view. Indeed, as I claim, in every way that Aristotle himself poses the question whether mind is embodied, he answers yes. After having shown that Aristotle does not view mind as disembodied, Chapter 3 goes on to show how Aristotle himself views mind as embodied. I argue for three senses of Aristotelian embodiment of mind. First, mind requires sensation, along with the physical apparatus of sensation. Mind also requires imagination or representation (φαντασία). Without a sensing and imagining body, which is a material body, there is no thinker. Second, in a direct fashion, mind immediately impacts the body's present state. Thinking dreadful thoughts forces the body to undergo certain changes. Finally, action demonstrates a necessary link between mind and body. Aristotelian mind depends on, and directly and indirectly affects, the body.

4.2 Part II

Part II comprises a single chapter, Chapter 4. Chapter 4 articulates Aristotle's theory of mental activity and perception, by way of a line-by-line commentary on DA III.5. There are a number of difficulties that this chapter is

intended to answer. The first is the general difficulty any interpreter must answer to in describing this obscure text. Among the many especially problematic aspects of this text, the light metaphor, the language of “honor,” and the “we don’t remember” line are particularly strange. By assessing each of these odd lines in detail, the interpretation that I develop at least meets basic criteria for making sense – or so I believe.

A second difficulty of DA III.5 is particular to any Theophrastean who argues that thinking is an ability of individuals. The difficulty is that Aristotle describes mind in this chapter as “immortal” and “eternal” – a boon to those in the Alexandrian camp. Consistent with the view that I have defended in Chapters 2 and 3, I argue against reading any part of this distinction as relating to a literally immortal or disembodied mind. I show this in two ways. The first is to demonstrate the importance of Anaxagoras’ interpretation of mind to Aristotle’s own, and to see in attributions of immortality and the like a reference to Anaxagoras. The second is to emphasize that, for Aristotle, thoughts refer to eternal truths, and mind is identical with its objects. But Aristotle’s emphasis on the fact that there is no thinking without mind *qua* embodied and passive gives good reason not to take this identity literally.

The third difficulty that DA III.5 presents has to do with the central theory of the chapter – the distinction and relation between active and passive mind. According to my interpretation, active and passive mind are not literally two minds, but rather two sorts of acts the mind engages in, in order to think. The first sort of act is constructive and corresponds to Aristotle’s “maker” or “active” mind. The second sort of act is perceptual and corresponds to Aristotle’s “passive” or “potential” mind. I describe their relation such that what mind *qua* active does is to make something thinkable, and what mind *qua* passive does is to perceive it. The sum of these acts is thinking – a constructive followed by a perceptual act.

4.3 Part III

Part III consists of two chapters. These chapters are premised on the belief, derived from Aristotle’s psychology, that perceptual abilities are constitutively defined by the sorts of objects they relate to. Two objects figure prominently in Aristotle’s various discussions of the sorts of things mind grasps – essences and principles. Accordingly, with a view to better grasping mind, Chapters 5 and 6 offer interpretations of these objects.

Chapter 5 looks to *Met.* VII as a guide to Aristotle’s understanding of essences. Of particular interest to that discussion, from an interpretive and

scholarly view, is the potential for describing essences in terms of form and matter. Some have argued that matter has no place in the description of essences. Others have argued that it does. I argue that it depends on the particular thing at issue. According to this interpretation, essences are not generally describable in terms of matter and form. I argue, rather, that they ought to be understood in terms of priority and posteriority. An essence is a fundamental, *prior* cause of the being of a substance, and it is this prior cause, *as prior* (i.e., in relation to a posterior), that is mind's object in the thinking of essences.

Chapter 6 offers an interpretation of the grasping of principles in *APo* II.19. Scholars have argued, by turns, that this grasping ought to be understood in a rationalist or an empiricist vein. I voice reservations about either view. There are reasons to suspect that, in Aristotle's view of understanding, mind and sensation make different and equally essential contributions to the discovery of principles, and there are reasons to suspect that neither faculty alone provides final, conclusive insight into principles. Rather than put the grasping of principles down to one or the other faculty, I argue for rooting the grasping of principles in a particular sort of methodology – what Aristotle calls “research.” Research, in short, yields insight into causes, and into principles where these causes happen to be ultimate ones.

4.4 Part IV

Many of the arguments of this book are premised on the idea that, in order to defend a viable, Theophrastean interpretation of mind in Aristotle, it must be that the thinker is in some way capable of *making* the world intelligible to herself. Part IV defends, in its particulars, the time-perception model as a way of answering the problems unique to this demand.

Chapter 7 offers, by way of introduction, an interpretation of Aristotle's conception of time in *Physics* IV, with emphasis on two tasks. The first is to distinguish between two senses of time: time as perceived; and time as a real dimension of the natural world, which I call “temporality.” This distinction helps us understand Aristotle's ambiguity on the question whether time exists independently of mind. In one sense, it does not – because time perception is uniquely possible for humans. In another sense, time does exist independently of mind – as temporality. The second task of Chapter 7 is to show how time perception can be used to model the active-passive structure of thinking.

Chapter 8 develops the time-perception model from the internal perspective of Aristotle's psychology. I argue that time is the medium of all