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The Human Intellect: Aristotle's Conception of Nous in his De Anima

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The Human Intellect:

Aristotle's Conception of Νοῦς in his *De Anima*

Caleb Murray Cohoe

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Abstract

I examine Aristotle's account of *nous*, the intellect or power of understanding, in the *De Anima* (*DA*) and the implications this account has for Aristotle's conception of the human being. At the beginning of the *DA* Aristotle presents what I argue is a condition for separability in existence: the soul is separable from the body if it has some activity that can be done without the body.

In order to determine whether Aristotle thinks the soul meets this condition, I lay out his metaphysical views concerning human beings. I argue that for Aristotle the human being, not the body or the soul, is the underlying subject of all human activities, including understanding. I then argue that Aristotle's conception of the soul is compatible with the soul having powers and activities that do not involve the body. If the intellectual power and its activities can exist separately from the body, the human being can as well.

I present Aristotle's account of the intentionality of cognitive states, both perceptual and intellectual, and use this account to reconstruct and defend Aristotle's argument in III 4 that the intellect cannot have a bodily organ. Understanding is universal, but any cognitive activity that operates through bodily organs will be particular.

I then argue that in *DA* III 5 Aristotle introduces a human intellectual power, the productive intellect, which draws out the intelligible characteristics of things from the images we possess in order to produce understanding. I maintain that my Human Intellect view, according to which Aristotle is claiming that the *human* intellect is undying and divine, is superior to the Divine Intellect view, on which Aristotle's claim is about a divine extra-human intellect. On my view, understanding is not an activity that is done with the body, it only employs the soul. Aristotle can reasonably maintain that understanding no longer requires images after the destruction of the body, since there is no longer a need to coordinate with other cognitive powers. Human beings persist after death because we continue to understand, although we can no longer remember or experience emotions.

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I. Introduction: The Human Intellect in Aristotle's *De Anima*

What is it to truly understand something? What do the activities of understanding that humans engage in reveal to us about human beings and their relationship to, and place in, the world? In this dissertation I examine Aristotle's answers to these questions. I carefully consider his account of νοῦς, the intellect or power of understanding, in the *De Anima* (*DA*) and the implications this account has for Aristotle's conception of the human being. For Aristotle, understanding is the power that most fundamentally distinguishes human beings from non-human animals. Some animals share with us capacities for perception, memory, and imagination but no animal is able to understand what something is. In this dissertation I argue that, for Aristotle, understanding is crucially different from all the other activities of ensouled living things because it is a non-bodily activity. This activity belongs to human beings just in virtue of our souls, not our bodies. On my interpretation of Aristotle's *De Anima* (*DA*), what I will call the Human Intellect interpretation, all of Aristotle's claims in this work about νοῦς or intellect are about the human intellect, including those that describe it as everlasting and undying. On my view, the non-bodily character of the activity of understanding means that it can continue after the destruction of the body, allowing human beings to survive death through the continued exercise of the intellect in understanding. The human soul can exist and perform intellectual activities apart from the body.

Aristotle's *De Anima* is one of the fundamental texts in psychology and the philosophy of mind and has remained so from antiquity to the present day, engaging a wide array of thinkers throughout the centuries. There has been much recent discussion on Aristotle's conception of the soul and its relation to the body, both generally and with a particular focus on Aristotle's theory of perception, but Aristotle's conception of νόησις, understanding, has been relatively

neglected, despite its prominence in the tradition of commentary stretching from antiquity through the Renaissance and beyond. Νοῦς or intellect is central to Aristotle's thought. An adequate grasp of Aristotle's theory of the intellectual capacities is crucial for grasping his view on the relationship between the soul and the body, since the intellectual capacities are the human soul's most distinctive faculties and have the most complex relationship to the body. Νοῦς is also central to Aristotle's ethics and first philosophy or metaphysics. The claim that νοῦς is the most divine aspect of us and the identification of the activity of νοῦς with happiness, εὐδαιμονία, are some of the central and most striking features of his Nicomachean Ethics. In Aristotle's first philosophy, he claims that the divine being on which all of nature depends is identical to the perfect activity which is (divine) νοῦς. Careful study of Aristotle's conception of understanding in the *De Anima* lays the groundwork for better understanding and appreciating the significance of Aristotle's use of νοῦς in the other parts of his philosophy. Aristotle's carefully articulated account of understanding is worth examining in its own right. It also gives us a better grasp of Aristotle's natural philosophy as a whole and contributes to understanding other areas of Aristotle's thought.

In the remainder of this introductory chapter, I lay out the structure and overall aims of the dissertation, as I attempt to provide a complete account of Aristotle's theory of the human power of understanding, or νοῦς, in the *De Anima*. In Chapter II I present Aristotle's metaphysical framework, as it relates to living things. For Aristotle, a human being is composed out of the human soul, the form that accounts for what the human being is, and a human body, matter organized in the appropriate way for carrying out human activities. Although soul and body are intrinsically connected, Aristotle asks at the beginning of the *DA*, but postpones answering, whether the human soul might be separable from the body. He presents a separability

condition: the soul is separable from the body if it engages in, or can engage in, some activity that can be done without the body, with the activity of understanding being the most plausible candidate. I argue that Aristotle is offering a condition for separability in existence, not just a condition for separability in definition or kind.

I then outline the main existing contemporary and historical interpretations of νοῦς as it is discussed in the *DA*. On my preferred view, in the *DA* Aristotle consistently uses the term νοῦς to refer to the intellect or power of understanding that belongs to individual human beings. Other interpretations hold that (at least in some *DA* passages) the νοῦς that Aristotle speaks of is a separately existing substance, not the intellect of any particular human being. Different versions of this interpretation offer different accounts concerning the nature of this substance, but they all hold that νοῦς in this sense is not a power internal to the human being. I present evidence from the first two books of the *DA* in favor of my interpretation. In Chapter III I discuss passages from *DA* I and II that initially seem to provide support for the other interpretation. I argue that a reading that takes νοῦς to be a power internal to the human being does a better job of explaining them.

In Chapter IV I examine Aristotle's views on what a human being is and, in particular, his views on what the proper subject of human activities and affections is. I argue that for Aristotle the human being, composed of body and soul, is the underlying subject of all the human activities of an individual (ones that they engage in specifically as human beings), not the body or the soul. Although the composite human being is the subject, the human soul, the goal-directed capacity for performing human activities, plays a commanding role in accounting for what human beings are and for what we do, insofar as we are human beings. Against some interpreters, I argue that the soul is not merely the set of capacities or powers possessed by the

living body as something alive. For Aristotle, the soul is *prior* to the body: it is the form and actuality (i.e. the soul) that makes the material, living thing the specific unified being that it is. The living body has its existence and characteristics because of the soul, not vice versa. In understanding what a living human being is, and its specifically human activities, we must grasp the latter as being for the sake of the human soul. I then discuss the criteria Aristotle uses for determining the value and distinctiveness of an activity.

In Chapter V I consider whether the separability of intellectual activity from the body (i.e., the possibility of its being carried on apart from the person's embodiment) would be compatible with Aristotle's overall views on the soul and its relation to the body, particularly with his claim that the soul is the form of the body. I present two alternative interpretations of Aristotle's conception of the soul: (1) the soul is constituted by a unified and interrelated set of powers; (2) the soul is ontologically prior to its powers and is not constituted by them. I conclude that both interpretations are compatible with the relevant texts. Using these interpretations of the soul, together with my earlier claim that the composite human being is the proper subject of human activities, I argue that the separability of intellectual activity from the body is compatible with Aristotle's overall view of the soul. If the intellectual power and its activities can exist separately, then when, after the destruction of the human body, they do exist separately, the human being also continues to exist. I argue that this view is preferable for textual and philosophical reasons to a position according to which the primary subject of understanding is the intellect or the soul or one according to which understanding switches primary subjects after death. On my scenario, after the destruction of the body, the human being is no longer a composite of soul and body but instead comes to be constituted by the soul, with its single power of understanding.

I turn to *DA* III 4, the beginning of Aristotle's main discussion of νοῦς, in Chapter VI. I present Aristotle's account of the aboutness or intentionality of cognitive states, both perceptual and intellectual. This is based upon a distinction that he lays out in *DA* II 5 between material changes, in which one material quality is replaced with another from the same range (e.g. the greenness of an apple is replaced by red), and cognitive changes, in which a cognitive subject goes from (only) potentially cognizing to actually cognizing something (the person goes from being able to see to actually seeing a red apple). Undergoing a material change is not sufficient for cognition (although certain material changes may result in or contribute to cognitive change) but undergoing a cognitive change is.

I reconstruct and defend Aristotle's argument in III 4 that the intellect cannot have a bodily organ. I discuss Aristotle's views concerning the requirements for serving as a bodily organ of cognition. I show why Aristotle holds that bodily organs limit the scope of the cognitive powers that operate through them. What if the intellect operated through a complex combination of bodily organs? For Aristotle, some of the things that we understand do not have distinctive bodily or material characteristics and thus could not be cognized by any sort of combination of bodily organs. I employ his account of the differing characters of perception and understanding to further illuminate his reasons for insisting that understanding has no bodily organ. For Aristotle, cognitive powers with bodily organs, such as the senses, are always spatiotemporally limited, but the understanding is not. Aristotle claims that our understanding applies to all instances of the thing understood wherever and whenever they exist. Given the characteristics of understanding, it cannot have a bodily organ. Aristotle's own account allows him to avoid these difficulties. The intellect in its nature is only "potential," it does not actually possess any form either cognitively or materially. Thus nothing prevents it from cognitively possessing all forms.

In Chapter VII I address Aristotle's claim that the intellect never understands without employing images, φαντάσματα. I argue that Aristotle's empirical epistemology strongly motivates connecting our intellectual activities to the perceptual activities that are in direct contact with the world around us. Aristotle has a further motivation for holding that understanding always takes place together with appropriate images: understanding needs to operate in coordination with our other cognitive powers. If human beings are constituted so that we cannot understand something when our perceptual powers are focused elsewhere, our intellectual activity will not conflict with or take attention away from more immediately necessary concerns related to perception and movement. Although images are a precondition for understanding, I argue that they are not part of the activity itself. Aristotle's account of what it is to understand something does not involve the imagination or its organ. Further, unlike in the case of the sense-organs, the images that we employ in understanding do not determine what we understand. The same image can be employed to aid in understanding many different things and many different images can be employed in order to aid understanding the same thing.

I present my interpretation of *DA* III 5, a notoriously difficult and contested passage, in Chapter VIII. I argue that Aristotle introduces an intellectual power, the productive intellect, which draws out the intelligible characteristics of things from the images we possess, in order to produce understanding. Such a power is needed since, for Aristotle, enmattered things are only potentially intelligible. The intelligible characteristics that they possess cannot act directly on the intellect in the way that perceptible qualities act on the perceptive powers. I argue that this intellectual power is part of the human soul and that Aristotle's claims about the undying and everlasting nature of the intellect are claims about the human intellect. I also consider and develop alternative interpretations of this chapter according to which the productive intellect is

an extra-human intellect. I compare the strengths and weaknesses of my interpretation and its rivals. I argue that my preferred interpretation does a better job of explaining what this chapter adds to Aristotle's psychological account of human understanding. My interpretation shows how Aristotle uses the productive intellect to explain how we acquire understanding.

In Chapter IX I evaluate the overall evidence concerning Aristotle's views on the separability of the human soul and present the two most plausible interpretations. (1) Aristotle denies that human beings or any of our components persist after the destruction of the body. Although he does not think that any bodily process is a constituent of understanding, the dependence of understanding on imaginative activity means that it cannot happen without the body. Hence it fails to meet Aristotle's separability condition. Aristotle carefully inquires into whether the soul is separable from the body, both because this is an important question in its own right and because he wants to conduct a serious examination of Platonist views concerning the immortality of the soul, but in the end he does not think that understanding meets the separability condition. The everlasting and undying intellect mentioned in III 5 does not belong to an individual human being. (2) Aristotle introduces the separability condition because he thinks that understanding meets it. Understanding is not an activity that is done with the body, it is an activity of the soul on its own. Human beings persist after death because we continue to understand, although we can no longer remember anything or experience emotions. Aristotle can reasonably maintain that understanding no longer requires images after the destruction of the body. The loss of the body removes the possibility of conflict with other cognitive powers, as these are no longer operative, and eliminates the need to coordinate our understanding with our spatiotemporal life; thus the intellect does not need to employ the imaginative power when separated from the body. Aristotle's empirical constraints on the acquisition of knowledge are

still satisfied, as the objects of understanding would be limited to things that had been grasped while embodied. I address several objections to this second interpretation based on alleged inconsistencies with other parts of Aristotle's thought. I conclude by arguing that Aristotle's views on the intellect clearly show that he is neither a materialist nor a Cartesian dualist. We should accept one of the two intermediate positions I have presented. I argue that the second interpretation, on which human beings persist and continue to understand after death, makes better overall sense of Aristotle's account of the non-bodily character of intellectual activities and on his insistence that our understanding is both human and divine.

II. The Separability of Soul and Intellect in *De Anima* I and II

1. Introduction

In order to understand Aristotle's views on the intellect and the implications these views have for his overall position on the nature of human beings we need to understand some of the general features of his metaphysics. In this chapter I present Aristotle's notion of matter and form and its application to the case of human bodies and souls. I then lay out some of the most prominent interpretations of Aristotle's views on soul and body and discuss what impact Aristotle's statements on the intellect have for these views. I outline my own interpretation of Aristotle's views on the intellect, the Human Intellect view, and contrast it with two rival interpretative strategies. I then present evidence from *Metaphysics* Λ and from books one and two of the *De Anima* (*DA*) to support my contention that Aristotle, in the *De Anima*, is examining whether the human soul is able to exist separately from the body, in virtue of having a non-bodily activity. Contrary to Myles Burnyeat's claims, Aristotle is looking into whether the soul is separable in existence, not separable in definition or kind, and his question is about the separability of human souls from bodies, not about the separability of divine beings from bodies.

2. Aristotle's Hylomorphic Account of Soul and Body

If we are to understand Aristotle's account of understanding and the implications of this account for his view of the human being we first need to grasp the general conception of form and matter that Aristotle employs. Aristotle offers an account of the soul and its relation to the body that differs significantly from both materialism and Cartesian dualism, the two views around which much of contemporary debate in the philosophy of mind is oriented. Dualists take there to be two fundamental kinds of beings or substances, bodies and minds, while materialists or physicalists hold that physical things or properties are fundamental and that mental properties,

if there are any, are dependent on and are determined by the physical. The dualist needs to explain why we should think there are two fundamental kinds of being, how they interact, and whether human beings should be identified with their minds or with some combination of mind and body. The materialist needs to give an account of what the physical or material is, show how the physical can account for the mental, and show what, if anything, the human being should be identified with.

In contrast, on Aristotle's understanding, the human soul and the human body together make up one substance: the human being. Neither is a complete substance on its own. Instead, they make up a form-matter composite, the soul serves as the form of the living thing and the body as the matter. Aristotle's understanding of the human being is a particular case of his commitment to hylomorphism, a commitment that extends from basic materials and compounds, such as fire, water, and gold, through to the full range of perishable living things.

In order to understand Aristotle's conception of the human being as a composite of soul and body we need to understand his more general notion of form and matter. I will briefly lay out some of the central features of these notions, features about which there is a broad scholarly consensus. Let us take the example of a bronze statue of Socrates. For Aristotle the bronze is the matter of this statue because the bronze is that out of which the statue is made and which remains in the statue. Aristotle centrally employs three related characterizations of matter. First, matter is that out of which something comes to be. The statue of Socrates comes to be out of the bronze. Secondly, the matter is that which underlies and persists through change. The bronze was there before the statue was shaped, is there now in the statue, and will continue to persist when we change the shape of the statue. Thirdly, the matter is that which is potential with respect to the form, it is what is able to take on the form in question. The bronze is potentially a statue of

Socrates, even before it is shaped into a statue. It is the kind of thing that is able to take on the shape of Socrates. On Aristotle's understanding matter is always the matter of something. It is always matter relative to some form.[1]

While the statue example helps illustrate these three characteristics of matter, it might suggest a misleading picture of the relation between form and matter. The statue example might suggest that matter is fundamental and that form is an accidental characteristic which is determined by the matter. One could understand forms as abstract, causally inert properties that depend on or supervene on matter. Given the matter, the thing will have a certain determinate form: the form may be different from the matter in some way but it is determined by the matter. In opposition to this view, Aristotle holds that form is the determining factor and matter is what is determinable and in need of determination. When the matter of something is of a certain sort this limits, to some extent, the range of forms it can acquire. The bronze out of which the statue is made may limit how thick or thin the shape of the statue can be and which classes of shapes it can take on. The matter, however, does not require that the statue take on one particular form. Of itself, the matter does not explain why the statue has the form that it does. The fact that the statue is made out of bronze does not account for its being in the shape of Socrates, as opposed to the shape of Plato or of an elephant or of a cube.

To more fully understand Aristotle's position we need to consider his understanding of forms, the relativity of form and matter, and different levels of form and matter. Forms are what make some matter to actually be something. Forms can be either substantial or accidental. Substantial forms make some matter a substance of a certain kind, while accidental forms make a certain substance have a certain kind of accident or property, such as some quantity, quality,

[1] *Physics* I 7, II 3.

place, or relation. Socrates is a human being because he possesses the form of human being. The form of human being is a substantial form because it makes Socrates exist by making Socrates the substance that he is. In this case, the body is the matter which is able to be a human being.[2] Socrates is wise because he has the form of wisdom. This form is a state that Socrates possesses and Socrates himself serves as the matter. As a human being Socrates is able to be wise and the form of wisdom makes Socrates actually wise. The shape of a statue is only an accidental form which explains why the example suggested that forms are less fundamental than matter. A substantial form makes a thing exist simply speaking, as the form of human being makes Socrates exist, while accidental forms make something exist in a certain way. Wisdom does not make Socrates exist, simply speaking, but rather it makes Socrates have being in a certain way, by having the quality of wisdom.[3]

Aristotle's understanding of matter is significantly different from typical contemporary understandings of matter. For Aristotle matter is always said in relation to some form. At any given level, the matter is what is determinable and the form is what is determinate. Things can serve as matter for some form while being themselves a form-matter composite. The bronze, for instance, is the matter of the statue while itself being composed of form, the form of bronze, and matter, the copper and tin out of which it is made. It is because the bronze has a form of its own that there is a limited range of shapes that it can take on. Any limiting that the matter does will be due to its possessing some lower level form. On Aristotle's understanding even non-living things and the elements are composed of matter and form. There are not some entities which are matter and some which are form but rather every sublunary thing, from the simplest elements all

[2] There are a number of interesting complications here and a broad scholarly literature on the question of how the body, as described by Aristotle, can be the matter of the human being. Cf. Ackrill 1972/73; Whiting 1995.

[3] For some of the key passages on the distinction between substances and accidents and substantial and accidental forms see *Categories*, 3-5; *Physics* I 7-8; II 3; *Metaphysics* Z 1.

the way up to human beings, is composed of matter and form.[4] Aristotle is thus generally committed to hylomorphism, to understanding things in terms of matter and form. His hylomorphism also operates at multiple levels: what is matter and determinable with respect to a higher level may be form and determinate with respect to a lower level, as in the case of bronze.

3. Interpretations of Aristotle's Views on Soul and Body

Aristotle's understanding of the human being as a composite of soul and body comes out of this more general commitment to understanding things in terms of matter and form. There is little scholarly consensus, however, about what Aristotle means when he claims that human beings are composed of soul and body. Does Aristotle think that the soul is a substance or a set of properties or capacities of the body or some other sort of thing? How do the soul and body depend on one another? There is a wide spectrum of opinions, ranging from those who take Aristotle to be some sort of materialist to those who see him as espousing an essentially Platonic view of the soul, with many similarities to Cartesian dualism.[5] In Chapter IV I lay out and evaluate these various positions more fully.

For now I would like to mention two of the most plausible intermediate positions, the two positions that I will discuss and develop most fully in this work. On the first position the soul is ontologically and causally distinct from the body, but cannot exist apart from the body or do

[4] Aristotle thinks that there are also separate substances which are wholly without matter or potentiality, so not every substance is composed of matter and form (*Metaphysics* Λ 6-10).

[5] Although a number of recent commentators have seen Aristotle as a precursor to functionalism in the philosophy of mind and thus as a materialist of some kind (e.g. Sorabji 1979; Barnes 1979, 33; 2000, 107; Nussbaum and Putnam, 1995; Cohen 1988; 1995; Guthrie 1981, 284; Wilkes 1978, ch.7; Hartman 1977) there are strong reasons for thinking such interpretations are misguided. First, Aristotle does not evidence any commitment to the idea that functional states are realizable in many different sorts of matter, one of the central motivations for much of contemporary functionalism. Indeed, texts such as *Physics* II 2 and *DA* I 1, 403a24-b19 suggest that Aristotle thinks that in the case of natural things and their activities and affections, their matter is an essential part of what they are. He also opposes the idea that it is the matter or the physical constituents of something that exclusively determine its functional states, another prominent part of contemporary materialist functionalism. Those who go to the opposite extreme and see Aristotle as something like a Platonic dualist include H.M. Robinson (Robinson 1978; 1983; 1991).

anything in separation from the body. On this position, all souls, even the intellectual souls that human beings possess, have this status. The second position, which I argue for in this work, agrees that most souls have this status but maintains that the intellectual souls that human beings possess have a special status. I maintain that, for Aristotle, human beings are different from all other perishable living things. On my interpretation, the human soul can exist and perform intellectual activities apart from the body.

4. Rival Interpretations of Νοῦς in the *De Anima*

Aristotle makes a number of striking claims about intellect, νοῦς, in the *De Anima (DA)*, his central work on the soul, claims that need to be addressed and incorporated into any overall reading of his views on body and soul.[6] While considerable attention has been given to Aristotle's theory of perception and its implications for his views on body and soul, Aristotle's claims about the intellect have often been neglected or downplayed. In fact, they are central to Aristotle's psychology. One of the opening questions that Aristotle raises in the *DA* is whether the human soul might be able to persist after the destruction of the composite human being.[7] He then appears to return to this question in his discussion of intellectual activities in book three. In *DA* III 4 Aristotle claims that understanding, unlike perception, has no bodily organ and is separate from the body and then in *DA* III 5 Aristotle describes the productive intellect as undying and eternal. These claims need to be incorporated into our understanding of Aristotle's psychology.

[6] Following Myles Burnyeat I will consistently use "intellect" to translate "νοῦς," the power of understanding, and "understand" to translate "νοεῖν," the correlative verb. Aristotle standardly uses "νοεῖν" to indicate an occurrent intellectual activity so my usage of "understand" should typically be understood in this way. There are, however, cases in which "νοεῖν" can be used to cover a habit or disposition (e.g. *DA* III 3, 427b8-11). When required I will add in additional qualifiers to make the sense clear (e.g. speaking of the activity of understanding as opposed to the habit or disposition of understanding).

[7] *DA* I 1, 403a10-16. In section 6 I argue for this interpretation of the passage.

I maintain that in all these passages Aristotle is speaking of the human intellect. On my interpretation, what I will call the Human Intellect interpretation, Aristotle holds that human beings have an activity that is non-bodily, the activity of understanding. This activity belongs to human beings just in virtue of the soul: it has no bodily component. Its non-bodily character means that it can continue after the destruction of the body, allowing human beings to survive death through the continued exercise of the intellect in understanding. The human soul can exist and perform intellectual activities apart from the body.

Many other commentators deny that Aristotle is advocating the persistence and separability of the human intellect. They offer three sorts of responses to his discussions of intellect. Some simply try to downplay the force or significance of these passages, claiming that Aristotle is not actually claiming that the human intellect or soul could exist separately from the body and persist. Others take these passages to be speaking not of the human intellect, but of a divine intellect. On the Divine Intellect interpretation, as I will call it, the intellect that Aristotle describes in the *DA* as undying and everlasting is actually a separately existing divine intellectual substance, identified on one version of this view with the first mover of *Metaphysics* Λ.[8] Proponents of this view can hold (though they need not) that Aristotle is a materialist about human beings, if not about all beings. A third group takes these passages to suggest that although Aristotle generally understands the soul to be the form of the body and correlated with it, he has a sort of Cartesian or Platonist view of the intellect. On the Platonist Intellect interpretation, as I call it, the intellect has a separate existence and history from that of the whole human soul.

[8] There are a variety of Divine Intellect interpretations: some interpreters, such as Myles Burnyeat (Burnyeat 2008), hold that this divine intellect is being talked about in nearly all the *DA* passages that mention νοῦς. Other Divine Intellect interpreters such as Victor Caston (Caston 1999) and Michael Frede (M. Frede 1995, 1996) hold that it is only in *DA* III 5's discussion of the productive intellect that Aristotle uses νοῦς to refer to a divine, extra-human intellect.

Although united to the human being in some way, it is a substance in its own right and exists separately from the human soul.

After laying out these rival interpretations, I will argue that the most important texts about the separability of the soul and intellect in *DA* I and II 1-4 fit well with my interpretation and raise serious difficulties for alternative interpretations. In the next chapter I will consider some passages in *DA* I and II 1-4 that at first reading seem to lend these alternative interpretations support and show that my interpretation of Aristotle's claims about the intellect makes better textual and philosophical sense of Aristotle's conception of the intellect.

The first positive rival view is the Platonist Intellect interpretation. On this interpretation, Aristotle's views on the intellect are very much like those of the Platonists. His views on the intellect are fundamentally discontinuous with his general views on the soul. While the soul and the powers other than intellect are the forms of bodies of a certain sort, the intellect is not. Aristotle thinks that the intellect is a substance in its own right and persists after the destruction of the composite and the destruction of the whole soul. This view has a number of variations, depending on whether everything which Aristotle calls νοῦς, intellect, is supposed to be a separate substance or just the νοῦς ποιητικός, the active intellect of III 5, whether the intellect is responsible for all the activities of thought or just some, and whether there is only one intellect for all human beings or one for each human being. These variations will be relevant to our discussion of *DA* III 4-5, but for the time being we need merely note that all these views take the intellect to be a substance existing separately from the human soul, but united to it in some way.

Historically, there are a number of commentators on Aristotle's understanding of the intellect who fall into this camp.[9] There are fewer contemporary commentators who advocate

[9] E.g. Averroes 1982, 2002; Avicenna, 1956, 1959, 2005. See Davidson 1992 for commentary on these authors understanding of the intellect.

such a view, though Lloyd Gerson, notably, has done so.[10] There are, however, a number of contemporary commentators who claim that Aristotle's statements about intellect in the *DA* imply a view of this sort. On their view we should acknowledge that Aristotle does make these claims about the intellect while also recognizing that they are inconsistent with Aristotle's overall view of soul. In consequence, we should downplay and minimize these claims since they are inconsistent with Aristotle's best, most unified, and most attractive view of the soul, and see them as temporary lapses, probably borne of lingering Platonist influences. Such interpretations thus fit well with developmentalist readings of Aristotle, particularly with those which see a fundamental conflict played out within the Aristotelian corpus between passages and themes which developmentalists take to be Platonic and those they take to be anti-Platonic.[11]

The other important rival view is the Divine Intellect interpretation. According to this view the intellect that Aristotle discusses in the *DA* is actually a separately existing divine intellectual substance. This interpretation has recently enjoyed a resurgence in popularity, with some variation on this view held by a number of prominent contemporary interpreters including Myles Burnyeat, Victor Caston, and Michael Frede. This view also has a number of proponents in the commentary tradition, prominently including Alexander of Aphrodisias. I include under the Divine Intellect interpretation both those who hold that the intellect that Aristotle discusses in the *DA* is to be identified with Aristotle's god, the first mover of *Metaphysics* Λ, and those who hold that it is some other, lower, divine substance, as long as this substance exists in its own right and does not simply exist to take on the role of the human intellect. As with the Platonist Intellect interpretation the view comes in a number of variations, depending, for instance, on what role the divine intellect is supposed to play in human intellectual activities. For the most

[10] Lloyd Gerson, "The Unity of Intellect in Aristotle's 'De Anima.'" *Phronesis* 49, 4: 2004, 348-373.
[11] Jaeger 1934 and Düring & Owen 1960 offer the two most important developmentalist interpretations.

part, we can leave discussion of these variations aside until we turn to *DA* III 4-5, but it will be important for this chapter and the next to distinguish between Burnyeat's version of the Divine Intellect interpretation, which claims that in the *DA* Aristotle typically uses νοῦς, intellect, to refer to the divine intellect, and a more moderate Divine Intellect interpretation according to which it is only the νοῦς ποιητικός, the productive intellect of III 5, that is a divine intellect. Burnyeat insists that the passages I will consider from *DA* I and II are about the divine intellect while more moderate Divine Intellect interpreters need not maintain this point.

On the Human Intellect interpretation, Aristotle takes the intellect to be a power of the human soul. In contrast, both the Platonist Intellect interpretation and the Divine Intellect interpretation take the intellect Aristotle discusses in (parts of) the *DA* to be a separate substance with a different being from that of the human soul. They differ in how they take this substance to relate to the human being. Proponents of the Platonist Intellect interpretation take this intellect to be essentially related to the human being. Either it is an additional component which helps to make up the human being or, if it is not actually part of the human being, its existence is at least to be explained with reference to the human being. On their interpretation the reason for thinking that such an intellect exists comes from its role in human thought. On the Divine Intellect interpretation, in contrast, the intellect does not exist primarily to enable human thought. Although it plays a role in human thought, the divine intellect exists as a separate intellectual substance in its own right.

5. The Separability Thesis and Discussion of *Metaphysics* Λ 3

Before entering into a detailed discussion of the central texts on intellect in *DA* III 4-8, there are several important earlier passages about intellect that we need to consider. It will also be important for us to consider Aristotle's statements about intellect in the light of his overall

understanding of the soul. In the remainder of this chapter and in Chapter III I look at the most important passages concerning intellect in books I and II 1-4 and consider the philosophical issues about the intellect which they raise. I show that Aristotle consistently takes the intellect to be a power of the human soul. He repeatedly leaves open the possibility that the human soul may be separable in existence from the body and thus may persist after the destruction of the composite. Aristotle claims that the soul's separability from the body will depend on whether the soul has some activity or affection that is proper to it, with the activity of understanding being the most plausible candidate.

My view better accounts for these passages than the Platonist Intellect interpretation or Burnyeat's version of the Divine Intellect interpretation. The interpretation of these passages that I present is, however, compatible with the more moderate Divine Intellect interpretation according to which Aristotle considers the possibility that the human soul or intellect is separable from the body but finally denies that this is the case, holding that only the divine intellect is imperishable and everlasting.[12] In the next chapter and the remainder of this chapter I will be arguing against Burnyeat's version of the Divine Intellect interpretation which holds that Aristotle consistently uses νοῦς, intellect, to refer to the divine intellect. Advocates of this moderate Divine Intellect interpretation could accept everything I say about these passages without modifying their view, as our interpretative differences concern Aristotle's answer, in *DA* III, to the question of separability, not the nature of the question.

[12] This seems to be the sort of interpretation advocated by Michael Frede (M. Frede 1995, 1996) and Caston (Caston 1999). Hendrik Lorenz has rightly emphasized to me the importance of distinguishing between these different versions of the Divine Intellect interpretation. Advocates of a Platonist Intellect interpretation could also maintain a similarly restrained position and hold that the Platonist Intellect is only at issue in *DA* III 5. Since, however, on the Platonist Intellect interpretation the separately existing intellect is usually taken to explain all the intellectual activities that human beings perform and, moreover, all the supporters of a Platonist Intellect interpretation that I have seen think that Aristotle typically uses νοῦς in the *DA* to refer to this separate intellect, I will not discuss this hypothetical restrained Platonist Intellect interpretation in any detail.

In Chapters IV and V I then consider what we should take Aristotle's view of soul and body to be and whether the possibility of the human soul existing separately from the body is consistent with Aristotle's claim that the soul is the form of the body. I claim that when we carefully look at the way in which the soul, for Aristotle, accounts for the unified capacities and activities of human beings, we see that the separability of the human soul is consistent with Aristotle's views on the connection between the human soul and body.

The suggestion that the human soul might be able to exist separately from the body and persist after the destruction of the composite human being may at first appear un-Aristotelian. Central to the *DA* is the doctrine that the soul is the form of the body and that the human being is a composite of body and soul. How can this understanding allow for an aspect of the soul that is not the form of the body or of any of its parts? How could the soul or some aspect of it continue to exist separately after the destruction of the composite? Given these difficulties, we may feel that our default interpretative stance should be some version of the Divine or Platonist Intellect interpretations on which anything which is described as imperishable or as being actually separated from the body, such as the productive intellect of *DA* III 5, must not be the human soul or some human power of understanding, but rather some extrahuman entity.

In his *Metaphysics* Λ, however, Aristotle suggests exactly the alternative I have just raised doubts about. In his discussion of the difference sorts of causes, αἴτια, Aristotle contrasts the moving and formal causes, noting that moving causes preexist what they bring about while formal causes exist at the same time as, not before, the composites of which they are the forms.[13] The health of the healthy man exists at the same time as the healthy man, and the shape of the bronze sphere at the same time as the bronze sphere. Aristotle then notes that:

[13] *Metaphysics* Λ, 3, 1070a21-26

> Whether any [form] remains afterwards should be considered. In some cases there is nothing to prevent this, e.g. if the soul is of this kind (not all soul, but intellect; for it is doubtless impossible for all [soul to remain])[14]

Aristotle here explicitly leaves open the possibility that some forms may be able to exist after the destruction of the composites of which they are the forms and suggests that the human intellectual soul may well be such a form.[15]

Aristotle's claim that in some cases nothing prevents some form from remaining may seem to be very qualified. Is Aristotle really claiming that the human intellectual soul might persist or is he just pointing out some respect in which the persistence of this soul is not ruled out? An examination of Aristotle's usage of the phrase, suggests that Aristotle is indicating something he takes to be a genuine possibility. Οὐθὲν κωλύει, nothing prevents, is a common expression in Aristotle, occurring in the corpus over two hundred times.[16] Aristotle repeatedly uses it in his *Prior Analytics* to indicate that something might be the case, usually employing it in conjunction with an example in which that thing is in fact the case.[17] For example, in the *Prior Analytics* Aristotle claims that nothing prevents there being more than one middle term between

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[14] *Metaphysics* Λ, 3, 1070a24-6. εἰ δὲ καὶ ὕστερόν τι ὑπομένει, σκεπτέον· ἐπ' ἐνίων γὰρ οὐδὲν κωλύει, οἷον εἰ ἡ ψυχὴ τοιοῦτον, μὴ πᾶσα ἀλλ' ὁ νοῦς· πᾶσαν γὰρ ἀδύνατον ἴσως·

[15] μὴ πᾶσα ἀλλ' ὁ νοῦς is ambiguous. It could be taken as "not the whole soul, but only the intellectual power or aspect," in which case Aristotle would be suggesting that only one of the powers or aspects of the human soul (or a similarly constituted soul), the intellect, is able to persist, which might suggest that he holds something like the Platonist Intellect view. Alternatively it could be taken not as referring to powers or aspects of the soul, but to different kinds of soul: "not all sorts of soul, but only the nous-kind [i.e. the kind of soul which includes intellect]." Aristotle differentiates different souls on the basis of their powers at a number of different points in the *De Anima* (e.g II 3 414b32-415a13) and also considers the question of whether different powers should be considered different souls or parts of the same soul (*DA* II 2 413b13-16). This suggests that terms such as ὁ νοῦς could plausibly be taken either to refer to a part of a soul or to refer to a certain kind of soul on the basis of its distinctive power. On this second reading human souls could persist, while those of worms could not. In light of Aristotle's statements elsewhere and given philosophical considerations, I adopt the second reading, but for present purposes, we need only note that neither reading offers help to those who want to see the intellect as something extrahuman. Aristotle is either speaking of one power of a human soul or of one sort of soul among the different kinds of soul, all of which are, given the context, the forms of different sorts of bodies. Thus Aristotle could not be talking here about the first mover or some other divine intelligence which lacks any body or any potentiality for change.

[16] There are 167 occurrences of οὐδὲν κωλύει and 41 occurrences of οὐθὲν κωλύει in the version of Aristotle's corpus found in the *Thesaurus Linguae Graecae.*

[17] In some cases, the example is left to the reader.

two terms.[18] Then, in support of this, Aristotle gives a schematic example in which there are indeed multiple middles between two terms. Usage elsewhere in the corpus is of a similar character. When Aristotle claims that nothing prevents *X* from being *Y*, he regularly indicates some example or scenario on which some *x* is *y*. This passage is therefore most plausibly read along these lines. Aristotle is claiming that the intellectual soul is a plausible candidate for a form that persists after the destruction of the composite. Nothing prevents a form from persisting because the intellectual soul, if it is of a certain kind, is an example of a form that can persist.

Thus this passage not only offers the possibility of some form or aspect of a form existing after the destruction of the composite, but suggests that this may be so for the human soul, the very case in which we are interested. Depending on our reading of μὴ πᾶσα ἀλλ' ὁ νοῦς, Aristotle is suggesting either that the intellectual sort of soul which humans have persists or that the intellect, an aspect of the human soul, persists. The kind of persistence discussed here is not some Platonic doctrine of the eternal existence of the soul on which the intellect would both preexist and remain after the destruction of the composite.[19] Indeed, Aristotle does not allow any exceptions to his claim earlier in the passage that forms begin to exist at the same time as the composites of which they are forms. It is rather the possibility of continued existence of the form in question that he considers. Aristotle is discussing here the persistence of the form of some particular composite, not the persistence of some universal. He is not here claiming (as he does elsewhere) that there have always been human beings or trees and that there will continue to be after the destruction of this human being or tree. Instead, he is suggesting that in some cases the form of a particular composite, or an aspect of it, may persist after the human being's destruction.

[18] *Prior Analytics,* I 25, 41b38-42a2.
[19] Contra W.D. Ross 1924, Volume II, 357.

Although this passage could be interpreted in accordance with the Platonist Intellect interpretation, it is clearly not amenable to a Divine Intellect interpretation. The intellect under discussion is or belongs to a soul that is the form of some body. It is the soul that informs the living body and comes to be at the same time as the composite (or an aspect of this soul) that is a candidate for survival, not some extrahuman entity, otherwise Aristotle's query would make no sense.

Given Aristotle's clear suggestion of the persistence of νοῦς in *Metaphysics* Λ, we may reasonably expect that he would consider this position and quite possibly endorse it in the *DA*. Even if we think that Aristotle's views may have changed between these two works, we should still consider the *Metaphysics* Λ position as an interpretative possibility. If *Metaphysics* Λ is an authentic work of Aristotle's, it reflects a view that Aristotle himself held at one time and thus a view he would deem worthy of consideration. The fact that Aristotle, clearly operating with a similar understanding of form, soul, and intellect, held that intellect may remain after the destruction of the composite gives us good reason to think that this is a view he found intelligible and may have held in the *DA*. That Aristotle held such a view does not in itself dissipate the philosophical problems I have raised—we shall return to these after considering the position he does adopt—but it does prepare us to consider whether he advocates such a view in the *DA*.

6. The Separability of Body and Soul in *DA* I and II 1-4

The *De Anima* is an inquiry into the nature and substance of the soul, into the sort of thing that the soul is and the properties that it has.[20] In the first book of the *DA* Aristotle introduces the subject matter of his inquiry, the soul, and raises several important questions about it before going on to dialectically examine the opinions of his predecessors. One of the first

[20] *DA* I 1, 402a7-10. General commentaries on the *DA* include Rodier 1900, Hicks 1907, and Polansky 2007.

questions which Aristotle raises is whether there are affections which are proper to the soul or not.[21] He observes that almost all of the affections of the soul such as being angry, desiring, and sensing, seem to involve the body, but he leaves room for an exception to this general claim, noting that:

> If, therefore, there is something proper [to the soul] among the works or affections of the soul, it is possible that the soul be separated. If, however, nothing is proper to it, it would not be separable, but just as to the straight as straight many things happen, e.g. the straight touches the [bronze] sphere at a point, still, the straight, being separated, will not touch. For it is inseparable, if it is always with some body.[22]

Aristotle here lays out two alternatives: either the soul has some activity or affection which is proper to it, not to a combination of body and soul, or it does not. If it does, then the soul in question can be separated. If not, then the soul will be like the straight, something which can be separated in thought, but not in reality. For Aristotle, we can consider the straight apart from any body to which straightness belongs, as we do in mathematics, but there is no straightness in reality apart from the straightness of some body. The geometer supposes that straightness, something which is not separate from body, is separate.[23] Since straightness, in fact, does not exist separately from body, what is true of the straight depends on what is true of the straight body. The straight, considered in itself and not as belonging to a body, does not touch a sphere at a point, since it is not a body and does not interact with bodies. Since, however, the straight only exists in matter, as an attribute of a body, in reality it does touch the sphere at a point.[24]

What, precisely, is the separation that Aristotle is discussing in this passage? Myles Burnyeat, one of the most prominent advocates of the Divine Intellect interpretation, suggests

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[21] Ibid. cf. *DA* I 1 403a2-28. I will consistently translate "πάθη" as "affections"

[22] *DA* I 1, 403a10-16. εἰ μὲν οὖν ἔστι τι τῶν τῆς ψυχῆς ἔργων ἢ παθημάτων ἴδιον, ἐνδέχοιτ' ἂν αὐτὴν χωρίζεσθαι· εἰ δὲ μηθέν ἐστιν ἴδιον αὐτῆς, οὐκ ἂν εἴη χωριστή, ἀλλὰ καθάπερ τῷ εὐθεῖ, ᾗ εὐθύ, πολλὰ συμβαίνει, οἷον ἅπτεσθαι τῆς χαλκῆς σφαίρας κατὰ στιγμήν, οὐ μέντοι γ' ἅψεται οὕτως χωρισθέν τι εὐθύ· ἀχώριστον γάρ, εἴπερ ἀεὶ μετὰ σώματός τινος ἐστιν.

[23] *Metaphysics* M (XIII) 3, 1078a21-23. ἄριστα δ' ἂν οὕτω θεωρηθείη ἕκαστον, εἴ τις τὸ μὴ κεχωρισμένον θείη χωρίσας, ὅπερ ὁ ἀριθμητικὸς ποιεῖ καὶ ὁ γεωμέτρης.

[24] *Metaphysics* M (XIII), 2-3.

that Aristotle is using the claim that there is some activity or affection peculiar to soul to infer that there is a separate kind of soul, one that is not related to any body and whose only activity is understanding.[25] Burnyeat misleadingly parallels this passage with one from *DA* II 2 in which Aristotle discusses the separability of powers, such as the nutritive and sensitive, from one another.

Although both passages are talking about beings separable, χωριστὴ, in existence, the objects involved in the separation are different.[26] In II 2 Aristotle is explicitly discussing the separability of the different powers of soul from one another: whether any of the different powers which living things have can be found on its own in a soul.[27] Aristotle claims that the nutritive power can be separated from the other powers, since it is the only power in plants, but that the other powers cannot be separated from it, since all mortal living things possess the nutritive power. The separation at issue here is existential separation between powers of the soul: can there be a soul that has one power but not another?

All the powers of the soul are different in account (τῷ λόγῳ ἕτερα), since the activities and objects by which they are defined differ, but some powers cannot exist separately from other powers.[28] For instance, Aristotle holds that everything which has a sensitive power also has an appetitive power, but that these powers are different in account because of their different activities and objects.[29] Aristotle claims that all the powers are different (ἕτερα) in account from one another, not that they are all separable (χωριστά) in account. To claim that one power is separable in account from another would be to claim that one could characterize the first power

[25] Burnyeat 2008, 28-9. As noted above, one can be an advocate of the Divine Intellect interpretation while disagreeing with Burnyeat on this point and agreeing with my view.

[26] I will consistently use either "separable" or "separate" to translate χωριστὴ (both meanings are found in Aristotle) and "to be separated" for χωρίζεσθαι.

[27] *DA* II 2, 413a31-413b1.

[28] *DA* II 2, 413b30-32; *DA* II 3, 414b1-6.

[29] *DA* II 4, 415a18-23.

and its objects and activities without including the second power and its activities and objects in one's account, just as the geometer can give an account of straightness without mentioning body. Aristotle's arguments for the connectedness of various powers in III 12-13 suggest that he thinks that many, perhaps all, of the powers that are not separate in existence are also not separable in account. For instance, Aristotle's discussion of the relation of locomotion to the other powers implies that one cannot give an account of the local motion of an animal and its locomotive power without also mentioning the role of sensation in locomotion as well as the fact that the animal provides itself with food via locomotion.[30] II 2 is discussing whether the different powers of the soul are separable in existence from one another.

In I 1, however, the separability in question is clearly the separability of the soul from the body, not the separability of one power of soul from another, since no powers of the soul are mentioned. Aristotle notes that almost all affections of the soul involve the affections of the body, but claims that if there is some work or affection proper to the soul, the soul can be separated, clearly meaning separated from the body. What kind of separation could occur if there were an activity or affection proper to soul, an activity or affection that does not involve activities or affections of the body? Since Aristotle claims that if nothing were proper to soul, soul would be like straightness, he is not just talking about there being a separate account for soul and its activity. This is true of straightness, which has its own separate account that does not mention body, but cannot exist apart from body. Even if the account of this activity of soul is entirely separate from and makes no reference to body, this would only be sufficient for this activity to be separable in account from body. Being separate in account from body is a stronger distinction than being merely different in account, but Aristotle is asking whether the soul is

[30] *DA* III 12, 434a30-434b2; *DA* II 3, 414b1-6; *DA* II 2, 413b30-32; II 4, 415a18-23.

separate in an even stronger sense: whether the soul is not only separate in account but in being.[31]

The separation of soul from body in question is therefore most plausibly read as one of existence. If a soul has an activity that is proper to it, then it is capable of existing separately from any body that it may animate. We can reconstruct the inference as follows: works or affections are not capable of existing on their own, they are the works and affections of some underlying thing which can exist through itself. If there is an activity or affection which is proper to a soul then this activity does not belong to the body at all. It must belong either to the soul as such or to the human being as such. Thus either the human being in question or the soul in question must be something capable of existing through itself apart from the body, since it is, on its own, the fundamental subject for an activity, apart from the body.[32] Since the soul or the human being exists through itself and has an activity or affection it can perform apart from the body, it can exist separately from the body. Thus from there being an activity proper to a soul we can infer that that soul (or the human being who possesses it) is capable of existing through itself and therefore of existing separately from any body it may animate.[33]

If there is such a soul what would it be? Contra Burnyeat, Aristotle is speaking of what would be true of the human soul if understanding is an activity proper to it, not about a divine soul which is never essentially related to a body or an intellect which is separate from the human soul. There are several difficulties with understanding this passage as speaking of a divine intellect. To begin with, it commits Burnyeat's version of the Divine Intellect view to claiming

[31] *DA* I 1, 403a10-12.

[32] I discuss which of these two options is best motivated, both textually and philosophically, in Chapters IV and V of this work.

[33] Cf. Thomas Aquinas, *Sentencia Libri De Anima* (*SLDA)*, 1984, Liber 1, Lectio 2, 3-6.

that everything which understands has or is a soul, including the first mover.[34] This claim is not found anywhere in Aristotle's corpus. Aristotle describes the divine beings as living and as active, but not as having souls or being ensouled. It is easy to see why he avoids describing them as having souls. In book two of the *DA* Aristotle defines the soul as the first actuality of the body and says that because of this, "those assume well to whom it seems that the soul is not without body nor is some body. For it is not a body, but something of a body."[35] Given this, it is hard to see how to make sense of immaterial bodiless beings having souls, since they have no intrinsic relation to bodies. Burnyeat's Divine Intellect interpretation also needs to make sense of why there is so little discussion of divine beings in Aristotle's treatise on the soul, if these divine beings have or are souls. Aristotle also does not seem to be putting forward the Platonist Intellect view here, since he is discussing the persistence of the soul, not of the intellect or some other power separate from the soul.

The Human Intellect interpretation that I advocate best explains this passage. Aristotle is claiming that if understanding is an activity proper to the soul, then in ensouled beings which have this activity the soul which is responsible for this activity, the intellective soul, will be able to persist after the destruction of the composite, since it (or the human being which possesses it) exists through itself. This reading avoids introducing souls which are not related to bodies.[36] It also makes sense of the uncertainty which Aristotle expresses about whether the activity of understanding is bodily or not. After noting all the activities which are evidently done together with the body, Aristotle says that:

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[34] Since *Metaphysics* Λ 9 argues that the divine intellect just is the activity of understanding since there is no distinction between its activity and its substantial being, perhaps Burnyeat would want to say that the divine intellect is a soul, instead of having a soul.

[35] *DA* II 2, 414a18-21; II 1.

[36] The human soul is essentially related to the human body even if it exists separately at some time. I present a more thorough discussion of whether Aristotle's conception of the soul allows for it or some aspect of it to exist separately in Chapter V.

> Understanding seems most to be proper [to soul]. But if this is some sort of imagination or is not without imagination, not even this could be without body.[37]

If Aristotle is speaking of the human intellect and its activity, then his reticence over whether understanding is bodily or not is understandable. Aristotle repeatedly notes that his predecessors conflated thinking and perceiving and thus were inclined to think that thinking depends on the body.[38] Further, on Aristotle's own view imagination, while not the same as understanding, is required in order for us to understand. Given this dependence on imagination, understanding may well be dependent on the body and not something "proper to" the soul. Aristotle's reticence is not comprehensible on Burnyeat's Divine Intellect view as the divine intellect has no body and thus we cannot even entertain the possibility that its understanding is in some way bodily.

Further support for the idea that the intellect discussed by Aristotle in the *DA* is consistently conceived of as one of the powers of a soul which is essentially connected to a body comes from a passage in chapter five of book one. Aristotle is discussing the idea that the soul is a collection of soul parts and suggests that on this view each soul part should hold together some part of the body, since the entire soul holds together the entire body. He then says that this view seems impossible, "for which part the intellect holds together or how, is difficult even to fabricate."[39] Aristotle raises a serious difficulty for this view based on the claim that the intellect, which would, on the view being discussed, have to be one of the parts of the soul, evidently does not hold together any part of the body. If the intellect is essentially a separate substance, either a divine substance or a substance related to, but separate from, the human soul, then Aristotle's objection is irrelevant. It is only if the intellect is a power which evidently belongs to a soul

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[37] *DA* I 1, 403a8-10. μάλιστα δ' ἔοικεν ἰδίῳ τὸ νοεῖν· εἰ δ' ἐστὶ καὶ τοῦτο φαντασία τις ἢ μὴ ἄνευ φαντασίας, οὐκ ἐνδέχοιτ' ἂν οὐδὲ τοῦτ' ἄνευ σώματος εἶναι. I will consistently translate "φαντασία" as "imagination." I discuss Aristotle's notion of φαντασία and my reasons for this translation at the end of section 1 of Chapter VII.

[38] e.g. *DA* III 3; cf. *DA* I 2; I 5.

[39] *DA* I 5, 411b18-19.

which does hold a body together that the objection applies. If the intellect does not belong to a soul that holds together a body, then it could still be true that for every soul which holds together some body, every part of that sort of soul holds together some bodily part. This passage thus provides evidence against interpretations that deny that the intellect is a power of the human soul, such as Platonist Intellect interpretations and Burnyeat's version of the Divine Intellect interpretation.[40]

The end of chapter one of book two offers decisive evidence that Aristotle is considering whether the human soul or some aspect of it is separable, since it has an activity that is not bodily, not whether there is a divine kind of soul, unrelated to a body. Aristotle, in summing up his contention that the soul is the form of the body, says:

> That, therefore, the soul is not separable from the body, or some parts of it [are not separable from the body], if it is of a nature to have parts, is not unclear. For the actuality of some of these parts [of the soul, if they are parts,] is the actuality of these [bodily organs]. But [if it is of a nature to have parts] nothing prevents some parts [from being separable from the body], because they are the actualities of no body.[41]

Here, as in the passage from I 1, Aristotle is discussing the separation of the soul from the body and he gives the same conditions as in the earlier passage, refined in light of the understanding of the soul which he has put forward. Aristotle uses the language of parts here in talking about the soul, but he does not take the soul to have quantitative parts. The soul is a unity with different powers. Speaking of the parts of the soul is either to speak of these powers or to speak of the definitional parts of the soul. Just as a human being has definitional parts that are not quantitative parts (e.g. "rational" and "animal") so the soul can have definitional parts without having

[40] *DA* I 5, 411b5-30. I shall return to this passage when discussing whether the separability of the intellect is compatible with the unity of the soul. As noted above, other Divine Intellect interpretations can concede that in many passages Aristotle is speaking of an intellect that is a power of the human soul, as long as they maintain that the crucial passages in *DA* III 5 are about a divine, non-human intellect.

[41] *DA* II 1, 413a3-7. ὅτι μὲν οὖν οὐκ ἔστιν ἡ ψυχὴ χωριστὴ τοῦ σώματος, ἢ μέρη τινὰ αὐτῆς, εἰ μεριστὴ πέφυκεν, οὐκ ἄδηλον· ἐνίων γὰρ ἡ ἐντελέχεια τῶν μερῶν ἐστὶν αὐτῶν. οὐ μὴν ἀλλ' ἔνιά γε οὐθὲν κωλύει, διὰ τὸ μηθενὸς εἶναι σώματος ἐντελεχείας.

quantitative parts. Since speaking of parts may suggest quantitative parts, I will speak of different aspects of the soul to avoid misleading terminology.[42]

Aristotle here suggests that an aspect of the soul whose activity is not the actuality of any part of the body may be separable. Every aspect of the soul which is the actuality of some part of the body depends on the bodily part of which it is the actuality and its activities are done together with this part. Thus all such aspects of the soul and their activities will be with the body and inseparable from it. If, however, there are aspects of the soul which are not the actualities of any part of the body and they have their own activities, they may be separable. While introducing the claim that the soul is the actuality of the body, Aristotle wants to leave open the possibility that some aspect of the soul is separable in existence from the body. As in I 1, this separation is existential, not merely in account. If an aspect of soul is the actuality of some part of the body it cannot be separable in being. Only an aspect that has an activity or affection completely proper to it, or an entity that has such an aspect, can be separate in being.

This passage does not fit with Burnyeat's Divine Intellect interpretation. Aristotle is here considering the soul, as a whole, as the actuality of a certain sort of body and noting that this holds true of most of its powers as well: they are also the actualities of certain parts of the body. He then notes that if there are any powers which are not the actualities of parts of the body, they may be separable. The language of "parts" of the soul makes sense if the question is about whether the aspect of the human soul responsible for understanding is the actuality of some part of the human body or not. It does not make sense if by "parts of the soul" Aristotle means to refer to distinct kinds of souls, among them one unconnected to a body in any way. The language of "parts" of the soul here clearly suggests different powers within one individual soul, not generically different

[42] Cf. *Metaphysics* Z 10-12.

freestanding individual souls, as on Burnyeat's version of the Divine Intellect interpretation. The language of parts also tells against any Platonist Intellect interpretation on which the intellect is neither a definitional part nor a power of the human soul.

The claim that some aspect of a soul may persist seems to suggest the Platonist Intellect interpretation on which it is the intellect and not the human soul which persists. However, this passage is consistent with claiming that the human soul or the human being persists. If some aspect of the soul is not the form of any part of a body then it will also be true that that sort of soul will not entirely be the form of the body. Thus if the non-bodily activity of that aspect of the soul ultimately belongs to the soul itself or to the human being itself, the soul or the human being may be separated.

If, however, intellect is the only power of the human soul with an essentially non-bodily activity, there is a way in which only the intellectual aspect of the human soul would persist after separation from the body. Even if the whole human soul or human being is separated from the body, the other psychic powers will no longer be able to be exercised, since they are powers that operate through parts of the human body, and this body has been destroyed. This allows for a sense in which we can claim that only the intellect persists, which can help explain Aristotle's ambiguity in certain passages. It is reasonable to say that only the intellect persists, if this is understood as contrasting the intellect with the other powers of the soul. The claim that intellect alone persists is problematic for the position I will develop only if we understand it as claiming that the intellect persists but the human soul does not, as on the Platonist Intellect interpretation. We are not forced, however, to take such a reading and I will argue in Chapter V that there are philosophical reasons for adopting the reading I favor.

Having laid out some of the passages that support the Human Intellect view that I advocate, I turn in the next chapter to some passages that seem to support rival views. I will return to the question of what the proper subject of intellectual activities is in Chapters IV and V. There I argue that on Aristotle's view the human being is the proper subject of human activities, including intellectual activities. If human intellectual activity can continue after the destruction of the body, then human beings can survive death through the continued exercise of our intellects in understanding.

III. Νοῦς in *DA* I 4 and Other Disputed Passages in *DA* I-II

1. Introduction

In Chapter II, I presented evidence showing that throughout *DA* I and II 1-4 Aristotle consistently conceives of the intellect as a power of the human soul. He repeatedly leaves open the possibility that the human soul may be separable in existence from the body and thus may persist after the destruction of the composite.[1] Aristotle claims that the soul's separability from the body will depend on whether the soul has some activity or affection that is proper to it, with the activity of understanding being the most plausible candidate. Thus the possibility Aristotle considers in the *DA* is fundamentally the same as the one he raises in *Metaphysics* Λ 3.

I will now consider some passages from *DA* I and II 1-4 that some interpreters think tell against my interpretation, the Human Intellect view, and support its rivals. I begin by considering an important passage from *DA* I 4 where Aristotle apparently treats the intellect as a separate substance. I then examine Myles Burnyeat's claim that several passages in *DA* I and II 1-4 strongly distinguish τὸ νοεῖν and τὸ θεωρεῖν, understanding and contemplating, from thinking, τὸ διανοεῖσθαι, and other less impressive human intellectual activities. On Burnyeat's view, understanding and contemplating are divine activities that belong primarily, not to human beings, but to non-bodily intellects, such as the first mover. These activities are essentially different from ordinary human intellectual activities.[2] I argue that Aristotle consistently presents all the different intellectual activities as a co-extensive class and consistently holds that human beings are capable of independently performing all these activities. Finally, I consider two passages in *DA* II which some interpreters take as evidence for a sharp distinction between perishable sorts

[1] In Chapters IV and V I consider whether this possibility is compatible with Aristotle's views on body and soul and what the metaphysical implications for human beings would be if we had a separable activity.

[2] Burnyeat 2008, 15-19, 29-33..

of soul, such as those of human beings, and the intellect, a separate and imperishable being. I argue that in these passages Aristotle is speaking of the human intellectual soul and not of some extra-human intellect.

On my interpretation, the Human Intellect view, Aristotle consistently takes the intellect to be a power of the individual human soul. In contrast, on the Platonist Intellect and Divine Intellect interpretations some of the claims Aristotle makes about the intellect or soul, particularly claims about the possibility of the soul or intellect existing separately, are not claims about the human soul or a power belonging to it. Some defenders of these interpretations hold that many or all of Aristotle's claims about intellect, ὁ νοῦς, concern an entity outside of the individual human soul. Others hold that Aristotle only introduces an extra-human intellect when he speaks of the productive intellect in III 5. Thus addressing these passages from books one and two will not be decisive in adjudicating between my interpretation and its competitors. Nevertheless, coming to a better understanding of the claims Aristotle makes in these passages contributes to our overall understanding of intellect and intellectual activities and to our interpretation of III 5. If Aristotle elsewhere in the *DA* repeatedly makes claims about an extra-human intellect or at least introduces such a notion, then there would be no reason for us to be surprised if such an intellect shows up in III 5. If, on the other hand, there is no indication in the rest of the *De Anima* that Aristotle intends to discuss an extra-human intellect, defenders of the Platonist Intellect interpretation and the Divine Intellect interpretation need a convincing account of why Aristotle brings in an extra-human intellect in that chapter.

2. Νοῦς in I 4

Prior to III 5, the most important passage which seems to provide evidence against my interpretation and in favor of either the Divine Intellect or Platonist Intellect interpretations comes

from chapter four of book one. Here Aristotle seems to contrast the intellect, an incorruptible substance, with certain activities which perish along with the destruction of the composite:

> But the intellect seems to come to be within us as a sort of substance, and a substance not subject to destruction. For, if anything could destroy it, it would be the dulling of age. As things are, what happens is doubtless just like what happens to the sense organs. For if an old man could procure an eye of the right sort, he would see just as well as a young man. Hence old age is not due to the soul's being affected in a certain way, but to the thing [*sc.* the body] in which the soul resides being affected, just as in the case of drunkenness and disease. In like manner, then, understanding and contemplation decline because something else within is destroyed, while in itself it [*sc.* the intellect] is unaffected.
>
> But thinking and loving or hating are not affections of that [*sc.* the intellect], but of this thing [*sc.* the composite human being] having that, insofar as it has that. Hence also, when this [*sc.* the composite human being] perishes there is neither remembering nor loving. For these did not belong to that [*sc.* the intellect], but to the common thing [*sc.* the composite human being], which has now perished.
>
> But perhaps the intellect is something more divine and unaffected.
>
> That the soul is not such as to be subject to change is therefore clear from these things.

> ὁ δὲ νοῦς ἔοικεν ἐγγίνεσθαι οὐσία τις οὖσα, καὶ οὐ φθείρεσθαι. μάλιστα γὰρ ἐφθείρετ' ἂν ὑπὸ τῆς ἐν τῷ γήρᾳ ἀμαυρώσεως, νῦν δ' ὥσπερ ἐπὶ τῶν αἰσθητηρίων συμβαίνει· εἰ γὰρ λάβοι ὁ πρεσβύτης ὄμμα τοιονδί, βλέποι ἂν ὥσπερ καὶ ὁ νέος. ὥστε τὸ γῆρας οὐ τῷ τὴν ψυχήν τι πεπονθέναι, ἀλλ' ἐν ᾧ, καθάπερ ἐν μέθαις καὶ νόσοις. καὶ τὸ νοεῖν δὴ καὶ τὸ θεωρεῖν μαραίνεται ἄλλου τινὸς ἔσω φθειρομένου, αὐτὸ δὲ ἀπαθές ἐστιν. τὸ δὲ διανοεῖσθαι καὶ φιλεῖν ἢ μισεῖν οὐκ ἔστιν ἐκείνου πάθη, ἀλλὰ τουδὶ τοῦ ἔχοντος ἐκεῖνο, ᾗ ἐκεῖνο ἔχει. διὸ καὶ τούτου φθειρομένου οὔτε μνημονεύει οὔτε φιλεῖ· οὐ γὰρ ἐκείνου ἦν, ἀλλὰ τοῦ κοινοῦ, ὃ ἀπόλωλεν· ὁ δὲ νοῦς ἴσως θειότερόν τι καὶ ἀπαθές ἐστιν.
>
> ὅτι μὲν οὖν οὐχ οἷόν τε κινεῖσθαι τὴν ψυχήν, φανερὸν ἐκ τούτων·[3]

At first reading Aristotle seems to be claiming here that the intellect is a sort of substance, separate from the human being, and is incorruptible in a way that the human being and ordinary human activities are not. Such a reading would provide support for the Divine Intellect and Platonist Intellect interpretations which take the intellect to be a separate substance. I will consider a reading of the text along these lines, using Burnyeat's interpretation of the passage as a model, and show how this sort of reading cannot explain many features of the text. By closely

[3] *DA* I 4, 408b18-31. Translations are my own but reflect my consultation of Hicks and Burnyeat.

examining this passage and its context I will show that we can interpret this passage much more satisfactorily if we read it not as expressing Aristotle's own views, but as dialectically examining a reputable position (ἔνδοξον) about the intellect which seems to show that the soul, or at least the intellect, can be subject to change.

Aristotle presents the view, examines it and shows its relevant implications for the question of whether the soul is subject to change, and then, in the final sentence of the passage, reserves for himself the right to give a different account of the intellect. My dialectical interpretation best resolves the interpretative difficulties of this passage and explains its place in the context of the chapter. Once read in this way, this text offers no support for interpretations on which Aristotle takes the intellect to be a substance separate from the human soul. The text helps to explain why some have held the Divine Intellect or Platonic Intellect interpretations, since if this reputable opinion is taken as Aristotle's own position, it might suggest something like these interpretations. However, the passage itself ultimately tells against these interpretations, rather than supporting them.

In order to interpret this passage satisfactorily we need to first consider its larger context. Aristotle is in the midst of an extended series of arguments against the idea that the soul is subject to change. The larger section within which our passage is embedded, 408a34-b31, begins by bringing forward new, more plausible reasons one might have for thinking that the soul is subject to change. We say that the soul experiences emotions, perceives, and thinks and all these things seem to be motions. Since the soul is the subject of these activities and affections and these are motions, we should think that the soul is subject to change. Aristotle argues against this conclusion but does so while still accepting almost all of his interlocutors' (presumably certain Platonists') premises. He allows for the sake of argument that being glad and thinking and all the

other activities attributed to soul are motions, that each of them involves being moved, and that in each case being moved will be due to the soul. Aristotle explicitly concedes that to be angry, then, will be a certain movement of the heart and thinking will likewise be a certain movement of the heart or some other organ. Aristotle here concedes two things that his own theory of the soul denies: that all these activities are motions and that there is some bodily organ for every activity.[4]

Even with these concessions Aristotle thinks he can show the falsity of the claim that the soul is moved. Aristotle famously claims that saying that the soul is angry is like saying that the soul weaves or builds; it is not entirely wrong, but it is better and more accurate to say that the human being pities, learns, or thinks in virtue of the soul. I will postpone a detailed discussion of what this means to Chapter IV, where I argue that Aristotle is best understood as holding that the soul is the primary cause or explanatory factor of living activities, while the composite living thing is the proper subject of these activities.[5] Aristotle goes on to present the crucial claim for his argument: the movements the Platonists posit do not take place in the soul. Instead, sometimes they terminate in the soul after coming from the body, as in perception, where motions in the sense-organs terminate in the soul, and sometimes they begin from the soul but occur in the body, as memory begins from the soul and issues in movements in the sense-organs. So, even if we hold (with the Platonists) that all these activities are movements and that the movements come from the soul, the soul will not be moved. The soul will be a source and terminus of motion, but the movements in question will always be those of the body. Thus the

[4] *DA*, I 4, 408a34-b11.

[5] Thus I do not take τῇ ψυχῇ in 408b15 to be an instrumental dative, but something more like a dative of agency or dative of first cause. In this I agree with Polansky 2007, 113. See Chapter IV for further discussion of this passage and my overall interpretation of the relationship between body, soul, and composite.

entire activity should be ascribed, not to the soul, but to the composite human being, working through both body and soul.[6]

We now come to the beginning of the passage we have been examining: "But the intellect seems to come to be in us as a sort of substance, and a substance not subject to destruction."[7] Many proponents of the Divine Intellect or Platonic Intellect interpretations take this sentence and the rest of our passage as a statement of Aristotle's own views on the intellect.[8] For example, Burnyeat, an advocate of the Divine Intellect interpretation, claims that this entire passage straightforwardly offers support for a number of the key claims of the Divine Intellect interpretation:

> [This passage] implies a) that *nous,* unlike ordinary thought, is divine and immortal, (b) that it can come to reside *in* a human being as itself an extra kind of substance, distinct from the mortal substance it resides in, and (c) that it remains completely unaffected by the death of its temporary human vehicle.[9]

Burnyeat reads the statement that "the intellect seems to come to be in us as a sort of substance" as an expression of Aristotle's own position on the intellect. The intellect is a sort of indestructible substance that somehow comes to be in the distinct substance of a human being. This exemplifies the approach of advocates of both the Divine Intellect and Platonist Intellect interpretations. Many within both groups of interpreters take the statement that the intellect seems to be a sort of substance within us to represent Aristotle's own position.[10] They then disagree on what sort of being this separate intellect is. When we consider the passage as a whole in its argumentative context we will see that Aristotle is not claiming on his own behalf that the intellect is a separate substance from the human soul, divine or otherwise. Interpretations along

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[6] *DA*, I 4, 408b11-18.
[7] *DA*, I 4, 408b18-19. ὁ δὲ νοῦς ἔοικεν ἐγγίνεσθαι οὐσία τις οὖσα, καὶ οὐ φθείρεσθαι.
[8] E.g. Gerson 2004; Burnyeat 2008.
[9] Burnyeat 2008, 30-32.
[10] Cf. Gerson 2004.

these lines cannot make good sense of the rest of the passage and of how this passage fits into the larger context.[11]

The opening sentence of the passage merely claims that the intellect seems (ἔοικε) to be a sort of substance within us. This claim is clearly a dialectical one and there is no reason we need to take this claim as Aristotle's own view. Throughout book one Aristotle repeatedly uses ἔοικε plus an infinitive or similar verbal constructions to introduce an opinion of dialectical significance. This opinion may form a starting point for some claim about the soul or it may be used as evidence against certain claims about the soul. The opinions introduced in this way are plausible claims about the soul, claims that are commonly held, held by the wise, or, as in this case, held by Aristotle's interlocutors: they are ἔνδοξα.[12] They are not necessarily held by Aristotle himself. We cannot assume that whenever Aristotle says that something seems to be the case he is decisively committing himself to that claim. He may simply be pointing out a relevant opinion that needs to be addressed.[13]

Both the advocates of the Divine Intellect interpretation and the Platonic Intellect interpretation take the δέ in this opening sentence to signal a contrast between what is true of the intellect and what is true of the soul or perhaps what is true of the other powers, activities, or affections, of the soul.[14] In the context of the passage it is unclear exactly what these interpreters

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[11] Burnyeat 2008, 30-32.

[12] For discussion of the role of ἔνδοξα for Aristotle see Owen 1961; 1968; Irwin 1988; Bolton 1990; Smith 1997.

[13] Aristotle does use ἐστιν at other points in this passage, (eg. 24-25) but on my interpretation the entire passage is examining and working out this dialectical opinion and thus any of the positive assertion may be put forward as parts of or implications of the view in question even if they are not stated tentatively or conditionally. *DA* I 1, 403a16-17, offers a clear example of Aristotle introducing a plausible opinion that he does not commit himself to. This passage comes directly after the passage we examined earlier in which Aristotle discusses the conditions under which soul could have a non-bodily activity or affection. Aristotle states that "it seems that all the affections of the soul are with body," a claim that offers no room for exceptions. This is a plausible opinion about the soul and Aristotle goes on to work from it, but in stating this claim Aristotle has obviously not committed himself to its truth, given that he has just explicitly left room for a possible exception to it.

[14] E.g. Burnyeat's translation of this sentence: "It would seem the *intellect*, on the other hand, comes to reside in us as a kind of substance, and one not subject to destruction." (Burnyeat 2008, 31)

think δέ is supposed to pick up or contrast with. Aristotle has just claimed that it is better to say that the human being is the subject of various psychological activities and affections, not the soul. Perhaps they think that Aristotle is contrasting the intellect and the soul, claiming that the intellect has its own activities and affections, unlike the human soul. Although I think this suggestion is right in a way, the rest of the passage makes clear that this contrast is not one Aristotle is putting forward on his own behalf. The δέ is best read as being adversative, signaling that the following claim is an objection to Aristotle's initial answer. Aristotle has claimed that the soul is not subject to change and is not the proper subject of psychological activities. The Platonists, Aristotle's interlocutors in this section of book one, hold that the intellect is a separate indestructible substance within us. This gives them a reason to deny Aristotle's claim that the soul is not subject to change and thus Aristotle introduces their claim with δέ. Aristotle is not claiming on his own behalf that the intellect is a separate substance that has its own activities and is subject to change.

The reputable claim put forward by the Platonists—that the intellect exists as a separate substance—gives them grounds for holding that the intellect is subject to change. On my reading, Aristotle is aware that this reputable opinion might undermine his contention that the soul is not subject to change. He is working in this passage to address and defuse that worry. The problematic nature of this claim for Aristotle can be seen if we consider what I take to be the implicit train of reasoning that Aristotle is working to address. Since, the Platonist might say, you are willing to concede that the intellect is a separate substance, it must also be the sort of thing that can be the subject of activities and affections. Common usage regularly attributes psychological activities such as thinking and loving to the soul (or the intellect, if the intellect and the soul are not distinct), so there is good reason to think that these activities properly belong

to the intellect or soul. Moreover, these activities are precisely the activities that are distinctive of living things: that is why they are psychological or soul-activities. Given all this, we should take the intellect or soul to be the proper subject of all these psychological activities. Since it is the proper subject of them, the motions or changes which are proper to these activities will also belong to it. Thus the intellect or soul would be subject to change.

This is the conclusion Aristotle is resisting and, on my reading, the rest of this passage shows him working to resist this chain of reasoning while conceding the reputable opinion that is its starting point. The claim of the first sentence that the intellect is not subject to destruction is supported by the considerations in the remainder of the paragraph, from 408b19-25. The next sentence is introduced by γὰρ, suggesting that we are about to get an explanation for the claim of the preceding sentence, some reason to think that it is true. I will lay out what I take to be the argument of this paragraph and then consider whether the whole passage is better read as a position that Aristotle himself is putting forward or as Aristotle responding to his Platonist interlocutors.

The argument begins by assuming that if anything could destroy the intellect, it would be the feebleness of old age. But the relation of old age to the intellect is the same as in the case of the sense-organs. If an old man had an eye of the right sort, he could see just like a young man. His psychic power of sight is unimpaired, it is his bodily organ that is impaired. Aging and decline come about not by the soul being affected, but by the body which contains the soul being affected, just as drunkenness and sickness affect one's activities not by harming the soul, but by affecting the body. Thus understanding and contemplation pass away because something else within is destroyed. Intellect in itself is unaffected. Since old age was the most plausible

candidate for destroying the intellect and it does not destroy the intellect, the intellect is indestructible in itself.[15]

Several features of this passage suggest that Aristotle is putting forward dialectical considerations of some kind, not trying to put forward his own thesis about the intellect supported by an argument in his own person. To begin with, the argument that is supposed to support the claim that the intellect is indestructible gives us no greater reason to think that the intellect is indestructible than to think that the sense powers are indestructible, as commentators have repeatedly noticed.[16] Aristotle clearly thinks that the sensitive soul of an animal ceases to be with the destruction of its bodies and thus considerations in favor of the indestructibility of the intellect that rely on a comparison to the senses cannot, for him, be decisive. Further, if this passage is simply presenting Aristotle's own positive views on the intellect the passage would not fit into the immediate context, Aristotle's discussion of whether the soul is subject to change, or, more generally, into the dialectical examination of views on the soul that Aristotle is engaged in in *DA* I 2-5. It is also worth noting that there are no other passages in the *DA* in which Aristotle describes intellect as some sort of substance which enters into us, casting further doubt on whether this is a position which he himself holds.[17]

On my interpretation Aristotle is responding to a reputable opinion which he himself does not fully endorse. He gives some evidence in favor of this position, but does so in order to point out that this evidence supports Aristotle's own contention that the soul (or intellect), as such, is not subject to change. Aristotle starts with the claim that the intellect is a sort of indestructible

[15] *DA*, I 4, 408b18-25. Cf. *Republic* X 610a-611e.

[16] E.g. Hicks and the commentators he cites (Hicks 1907, 277-8), Hamyln 1993.

[17] Although Burnyeat claims that this is part of the substance of III 4-5, he would concede that no similar phrase occurs there. At most, only one of the two intellects described in III 5 could be said to come in from the outside (*pace* Averroes [Averroes 1985, 112; 1987, 199]). Aristotle says in the *Generation of Animals* that "intellect alone comes in from outside and is divine," (*GA* II 3, 736b27-9) but despite this superficial similarity in wording, the embryological issues which prompt this claim are different from the issues of the *DA* and thus the passage is not relevant for this debate, as Burnyeat, W.D. Ross, and Victor Caston agree (Burnyeat 2008, 49, fn. 31).

substance within us. He then supports this claim by dealing with one significant objection to it, the idea that the intellect may be destroyed by old age since its activities decline in old age. The evidence of intellectual decline seems to be one of the most significant problems for those who take the intellect to be an indestructible substance. If the intellect's activities decline with age, one might reasonably think that the intellectual substance itself is in danger of decaying and perishing. Aristotle here offers a response to this worry. There are two options for construing the argument he gives. We can think of this response either as a line of argument that Aristotle himself is advocating or as Aristotle's presentation of a line of argument that some other relevant interlocutor has already put forward. I discuss the implications of these two ways of reading the text below, after laying out my interpretation of the response Aristotle presents.

The response that Aristotle offers is to make an analogy to perception. Just as we think that the activities of the sense-powers are affected by the condition of the body, but the sense-powers themselves are not, so we should think that the activities of the intellect can be affected by the condition of the body, but the intellect itself is not. It is not entirely clear how close this analogy is supposed to be. Is it merely illustrative or does it assume that the intellect and the sense-powers function in the same way (by, say, employing bodily organs)? This is an important question for two reasons. First of all, the palatability of the argument to both Aristotle and his Platonist interlocutors depends on the assumptions about the intellect that it makes. Secondly, the way we construe the analogy to the senses makes a difference when it comes to the degree to which the argument will support Aristotle's contention that the intellect or soul is not subject to change.

One option is to read the analogy to sense-powers as only illustrative. On this reading the passage is non-committal on the exact similarities between the intellect and the sense-powers

and, in particular, it is non-committal as to whether the intellect, like the sense-powers, has a bodily organ. On this reading, the intellect need not have a bodily organ on which its activities depend, its activities only need to be liable to being affected by the condition of the body. This reading avoids attributing a bodily organ to thought and is therefore compatible with the argument of Plato's *Theaetetus* according to which the soul considers the objects of thought "alone and through itself," not through the bodily powers as in the case of perception.[18] There is also good Platonic support for allowing the activities of the intellect to be affected by the condition of the body, as the *Timaeus* illustrates.[19] On this reading, the claim is only that the intellect's activity can be impaired by the body, not that its activity is bodily or has a bodily organ in some important way. It is reasonable to think that this sort of claim would be acceptable to the Platonists.

The difficulty with this weak reading is that it may not do enough to establish the point Aristotle wants to make: that the intellect is not subject to change. On the weak reading the condition of the body may impair the activities of the intellect but this does not, on its own, give us sufficient reason to think that the intellect is not the proper subject of psychological activities and their attendant changes. The absence of light may prevent me from seeing, but this does not cast doubt on the fact that I am the proper psychological subject of my seeing or on the fact that the changes that seeing involves take place in me. The weak reading offers little support to Aristotle's assertions in the next paragraph that the proper subject of psychological activities, including intellectual activities, is the human being, not the intellect or soul. Now this difficulty doesn't entirely rule out the weak reading. Aristotle may just be neglecting to distinguish between necessary conditions, which are not always constitutive, and the sort of constitutive

[18] *Theaetetus* 185e.
[19] *Timaeus,* 87d-88c.

dependence that would imply that the intellect alone cannot be subject to change. The arguments Aristotle offers against a position in exploratory contexts, such as *DA* I 4, are not always watertight.

We should, however, consider a stronger reading on which the parallel of the intellect with the senses is much closer, a reading offered by Thomas Aquinas, among others. On this reading, the case of the senses is used to suggest that the intellect likewise depends on some bodily part or organ which is required for its activity. The decay in intellectual activity is to be explained by the decay of the relevant bodily part, not by the decay of the intellect itself. Just as the decline in sight of the old man is due not to a decline in the power of his soul to see, but to a decline in the bodily organ which contributes to sight, so the decline of intellectual activity comes from a decline of the body. When the body is drunk or diseased, the activities of the soul are impaired, but the soul is not harmed. Understanding and contemplation fade away when something else within, i.e. whatever serves as the bodily organ of thought, is destroyed, but the intellect itself is not destroyed. Any case of an observed decline or impairment of intellectual activity can be explained by the impairment of the relevant bodily part, leaving the intellect untouched and indestructible.[20]

[20] *DA*, III 4; cf. Thomas Aquinas 1984, *'Sentencia Libri De Anima,'* (*SLDA)* Liber 1, Lectio 10, 18-22. In his own account in book three Aristotle does make the use of images a necessary condition for our activity of understanding (*DA* III 3, 428a16-18 (cf. III 3, 427a17-427b26); III 7 431a14-20, III 8, 432a3-14). Thus the activity of understanding is indirectly dependent on the power of imagination, which does have a bodily organ. Given this, one might think that he could accept this version of the argument. This is not the case. Since the strong reading is premised on the similarity between the intellect and the senses it clearly proves too much. According to the argument, wherever there is a distinction between body and soul and the decline in activity can be attributed to body, the soul in question will not be subject to destruction. This is a difficulty which commentators who take this passage to be expressing Aristotle's own opinions have struggled with (cf. Hicks 277-8). Aristotle denies that the soul of any non-rational animal can persist the destruction of its body, but this passage does not offer the sort of distinction between different levels of dependence that would be necessary for Aristotle to differentiate between the senses and the intellect. Further, the analogy seems to essentially rely on intellect's dependence on the body in a problematic way. For Aristotle, an argument for separation can only come from the soul or an aspect of it having a proper activity that is not in any way a bodily activity (*DA* I 1, 403a10-15). One cannot move from a combination of dependence and distinction to independence. One alternate way of taking this passage would be to take it just as making the claim that neither sensitive nor intellectual souls are destructible in the way that bodies are (and thus,

The strong reading implies that understanding and contemplation properly belong to the composite human being, not the soul. This implication allows for the argument that Aristotle will offer in the next paragraph, giving us a consideration in favor of the strong reading. On this reading, understanding and contemplation are said to decline because of the destruction of some bodily part which serves as their organ. This implies that they are activities which are dependent on both the body and the soul and thus, like seeing, they are affections of the composite human being, not of the intellect alone, since they depend on the body. Therefore the intellect, on the conception of the intellect used in this passage, is not the proper subject of psychological activities and is not subject to change.

The strong reading offers an argument for the indestructibility of the intellect that Aristotle himself would not accept, since it relies on a parallel between the senses and the intellect and denies that the intellect has any activity that is proper to it. If the intellect has no activity or affection proper to it, such as understanding or contemplation, it would fail the criteria for separability which Aristotle discusses in both *DA* I 1 and II 1. He may, however, be offering a dialectical argument, with premises that his Platonist interlocutors would accept. The close parallel between the sense powers and the intellect which the strong reading employs may be less problematic for them. The Platonists could hold that it is the same indestructible intellectual soul that is the proper subject of both sensation and intellectual activities and thus the argument would not be in danger of proving too much.[21] The fact that the intellect would fail Aristotle's

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absent other, opposing, considerations, they might turn out to not be able to cease to be). This would fit with Aristotle's views on the soul as they are developed in books two and three, as for him no soul is liable to a process of perishing of the sort that a living body undergoes. Animal souls, nonetheless, cease to be with the destruction of animal bodies. This reading would make the sense of "not being subject to destruction (οὐ φθείρεσθαι)" at issue a technical one and much weaker than one might have thought, as something could be indestructible while also ceasing to be at some point.

[21] Cf. *Theaetetus* 184-186 where the sense organs are presented as instruments used by the soul in its own activity of perceiving. It is plausible to think that the same indestructible soul is the subject of both intellectual and perceptual activities, even if it instrumentally makes use of the sense organs in the case of perception.

separability criterion may also be unproblematic. The Platonists need not be committed to Aristotle's criterion for separability in existence: being the proper subject of an affection or activity. Instead, they may think that some sort of distinguishability criterion, like the one employed in this argument to distinguish between the power of sight and the organ of sight, is sufficient to guarantee separate existence and being. As long as the intellect and its conditions of existence can be conceived separately from those of the body, it can exist separately.

The crucial question is whether Aristotle's interlocutors in this passage would be willing to concede that the intellect has something like a bodily organ. The idea that the brain is the seat of the intellect and may also be something like the organ of thought was already present in Greek thought, being found in Alcmaeon and in the Hippocratic corpus.[22] There is little support for this idea in our Platonic dialogues, however. As we have noted, the *Theaetetus*, in speaking of the soul as considering the objects of thought "alone and through itself," seems to rule such a conception out. The *Timaeus* gives a bodily location to the intellectual part of the soul and suggests that a number of the physical features of the brain are necessary for it to receive intellectual soul, but it does not go so far as to claim that the brain is the organ of thought.[23]

Nevertheless, the broader context of this passage in I 4 supports the claim that Aristotle takes his interlocutors to hold that intellectual activities have something like a bodily organ. In Aristotle's opening discussion of whether the soul as the subject of psychological affections is subject to change he dialectically concedes that thinking, διανοεῖσθαι, like being angry, is some movement of the heart or another similar organ (presumably the brain). This suggests that, on the view Aristotle is discussing, intellectual activities such as thinking are bodily in just the same way as getting angry or fearing. All of these activities essentially rely on the movements of a

[22] Alcmaeon, DK, B1a, A5, A8, A10; *On the Sacred Disease.* Cf. Philolaus, DK, B13.
[23] *Timaeus,* on the brain, 73b-d, 75a-76d; on the relation of soul and body, 41c-44c; 87e-88b.

bodily organ. This view may not be the most common Platonist position or the most philosophically defensible one, but it is a view that is decisively opposed to Aristotle's own position that the soul is not subject to change. In contrast, Platonists who hold that intellectual activities do not involve a bodily organ or actual physical movements would have no grounds for claiming that the intellect or soul is subject to change in a sense that would be objectionable for Aristotle. Aristotle may be focusing on this one particular view which is decisively opposed to his own position that the soul is not subject to change.

Does Aristotle accept the considerations of this paragraph in *propria persona*? On the strong reading, he clearly does not, as he argues in *DA* III 4 that the intellect, unlike the sense-powers, has no bodily organ. On the strong reading Aristotle is offering considerations that are not his own, but are either already put forward by his interlocutors or are put forward by Aristotle on behalf of them. On the weak reading, Aristotle's own view on the question is less clear. He might, along the lines of this reading, think that the intellect's dependence on the body is sufficient for making intellectual activity bodily in some way or at least for holding that it belongs to the composite of body and soul and not the intellect as such. He may, alternatively, think that the fact that the intellect does not have a bodily organ means that its activity is non-bodily and that any dependence it has on the body is not sufficient for attributing this activity to the composite human being instead of the intellect. To address this question we need to examine what he says about the relationship between the soul, the intellect, and the composite, a topic I address in Chapter V, and what he says about the intellect and its connection to the body, a topic I address in Chapters VI and VII.

There are, then, some considerations in favor of each reading. The weak reading would clearly be acceptable to the Platonists and maybe also to Aristotle himself, but it supports

Aristotle's contention more weakly. The stronger reading would establish Aristotle's contention, but may not be acceptable to Aristotle's interlocutors and is not an analogy that Aristotle himself would accept. Neither the weak nor the strong readings, however, support the Divine Intellect or Platonic Intellect interpretations of this passage. Moreover, neither Divine Intellect nor Platonic Intellect interpretations of this passage offer us a good explanation for why Aristotle puts forward the sorts of considerations in favor of the intellect's separateness that he does in this paragraph.

If the intellect under discussion is the divine intellect of *Metaphysics* Λ or some other divine being, arguing for its indestructibility by comparing it to the power of sight is one of the least convincing routes one could take. On the Divine Intellect interpretation the indestructibility of the intellect is obvious, the question is how such a substance can come to be in us. This passage, however, offers questionable considerations for the indestructibility of the intellect and does not give us any account of how this intellect comes to be in us. On the whole, this paragraph gives us little reason to think that the intellect under discussion is the divine substance of *Metaphysics* Λ.

The Platonist Intellect view has a different problem. On the Platonist Intellect view we need to establish the indestructibility and separate existence of the intellect via texts such as this. But the fact that Aristotle's argument for the indestructibility of the intellect relies on the analogy to the senses and is either simply a response to an objection or rules out the intellect having a proper affection creates special difficulties. Unless Platonist Intellect interpreters want to hold that the sense powers are also separate indestructible substances, the reasons this passage adduces for the indestructible nature of the intellect will not be helpful. Aristotle looks to be

denying the very condition he elsewhere gives for the separability of the intellect: that there is some activity or affection proper to it.

In the next paragraph Aristotle argues that thinking, loving, hating and other affections do not belong to the intellect itself, but to the composite human being who possesses intellect and thus that the intellect or soul is not a subject of change. Again, I will consider what sense the Divine Intellect and Platonic Intellect interpretations can make of this passage before showing how the dialectical reading is superior.

The most plausible way for followers of the Divine Intellect or Platonic Intellect interpretations to read the rest of the passage, from 408b25-29, is as providing a contrast between the perishable composite and the imperishable intellect. In the view of Burnyeat, for example, the rest of the passage makes it clear that the composite human being and its affections pass away while the divine and unaffected intellect remains. Burnyeat claims that Aristotle here sharply separates off thinking, loving, and hating, which are affections of the composite human being, not the intellect, from understanding and contemplation, activities that do belong to the intellect. The claim that Aristotle is distinguishing two different relations that affections have to the intellect is not supported by the text. Although this section does emphasize that thinking, loving, and hating do not properly belong to the intellect, it does not suggest that understanding and contemplation do. In fact, the implication of the passage as a whole is that all these affections, including understanding and contemplation, belong to the composite human being insofar as it possesses intellect. The Divine Intellect and Platonic Intellect interpretations take the concluding sentence of the passage to confidently assert the divinity and impassivity of the

intellect. This supposed confidence, however, has no grounding in any of the arguments given in the rest of the passage.[24]

Burnyeat correctly notes that Aristotle is here denying that the affections of loving, hating, and thinking belong to the intellect. Aristotle is not, however, denying that these affections belong to the intellect because they belong to some other power, some human power of thought, as Burnyeat suggests. Instead, Aristotle explicitly attributes these affections to the human being precisely insofar as he has intellect, thus showing that the intellect is the power of the soul responsible for them.[25] They are affections which belong to the soul-body composite.

The striking claim that we can only love or hate or think insofar as we have intellect is simply ignored by Burnyeat. It should, however, cast doubt on whether Aristotle is expressing his own views here. On Aristotle's own developed view of the intellect given in book three, the intellect is not primarily responsible for loving or hating. There Aristotle claims that the part of the soul that he will call intellect and that he will discuss in *DA* III 4-8 is that part in virtue of which the soul thinks (διανοεῖται) and conceives (ὑπολαμβάνει).[26] In III 4-8 the intellect is

[24] Burnyeat 2008, 31-2.

[25] One could claim, as Hicks does (Hicks, 276-278), that ἐκεῖνο here in lines 26-28 refers to soul, not intellect, although this requires ignoring the gender of ἐκεῖνο, as soul is feminine while ἐκεῖνο is neuter. Even if we accept this suggestion, however, we are left with the question of how the soul and the intellect are related in this passage and what this paragraph contributes to the argument. On this reading the first paragraph is meant to preserve the indestructibility of the intellect, the second paragraph argues that some affections do not belong to the soul, and the conclusion is about the divinity and impassivity of the intellect. If we take the second paragraph to be discussing a claim entirely unrelated to that of the first, we cannot make sense of the δὲ which introduces the claim that thinking, loving, and hating do not properly belong to the soul. We also cannot make sense of this δὲ by supposing that this second paragraph contrasts the affections of thinking, loving, and hating with understanding and contemplation, since the argument of the first paragraph required that activities of understanding and contemplation can be affected by what happens to the body just like thinking, loving, and hating. Even if we do pursue this approach, it requires a contrast between some activities, such as understanding, which properly belong to the soul and some which do not, such as loving. Thus the intellect and the soul are still practically synonymous in this passage, since belonging properly to the intellect means belonging properly to the soul and not belonging properly to the soul means not belonging properly to the intellect. If we take the soul and the intellect as entirely separate we lose the contrast.

[26] *DA* III 4, 429a22-3. In a similar passage at the beginning of III 4 Aristotle states that his subject will now be the part of the soul in virtue of which it knows (γινώσκει) and judges (φρονεῖ). In both passages it is clear that the intellect is conceived of as the aspect of the soul responsible for intellectual activities, not for any other kind. It is

conceived as the aspect of the soul responsible for intellectual activities. The intellect, and its grasp of good and evil, virtue and vice, plays a role in many cases of loving or hating but these activities depend more crucially and more constitutively on desire and on the body.[27] Indeed, Aristotle uses loving and hating in *DA* I 1 as examples of affections that obviously involve the body.[28] Why would he suggest in this passage that loving and hating belong to us just insofar as we have intellect? Even if there is an extended conception of intellect according to which it would be properly responsible for loving and hating, this broader conception is not the one at issue in III 4-8 and so this passage in I 4 would lose much of its relevance for understanding these later chapters.

This issue is of special concern for proponents of the Divine Intellect interpretation who think this passage is about the divine intellect. According to these proponents, the divine intellect is supposed to in some way be responsible for our intellectual activity, but this is the only human activity for which it is required. I am aware of no proponent of this view who thinks that our ability to love or hate is dependent on the presence of the divine intellect in us, but this is precisely what the Divine Intellect reading of this passage commits us to.[29] Attributing such a broad range of psychological activities and affections to the intellect is a particularly severe difficulty for Burnyeat's version of this view, as according to him the intellect or νοῦς as such is responsible for only one intellectual activity, the activity of completed and perfected

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also worth noting that Aristotle, contra Burnyeat, does not seem to be drawing any strong distinction between different sorts of intellectual activity.

[27] The friendship of the virtuous, for instance, depends on their knowledge of virtue and each other's virtue, and thus on the intellect, but friendship is not a quality of the intellect itself. For the connection between intellect and desire in cases of movement or action (among which are loving and hating) cf. *DA* III 10, 433a13-25.

[28] *DA* I 1, 403a16-19.

[29] *DA* III 10, 433a9-13 does offer an extended use of νοῦς according to which νοῦς can be responsible for local movement and thus perhaps can also be responsible for love and hate. However, this sense of νοῦς encompasses imagination as well as understanding and the responsibility of intellect for movement is quickly restricted to practical intellect. No proponent of the Divine Intellect view thinks that when Aristotle speaks of νοῦς in this extended sense he is speaking of the divine intellect.

understanding of essences, τὸ νοεῖν. The divine first-actuality intellect is, properly speaking, not even supposed to be responsible for thinking, τὸ διανοεῖσθαι, much less loving and hating. This section attributes too wide a range of affections to the composite human being insofar as it has intellect. This is especially problematic for proponents of the Divine Intellect interpretation who think this passage is about the divine intellect, but it presents a challenge for any interpretation of this passage.[30]

The Platonic and Divine Intellect interpretations can only address this difficulty by leaning on the supposed force of the assertion about the divinity of the intellect in the last sentence of this passage. This only emphasizes the question of where the strength of this forceful conviction about the intellect is supposed to come from. Burnyeat, along with most translators, takes the ἴσως in the last line of our passage as "doubtless," and renders it as, "The *intellect*, on the other hand, is doubtless a thing more divine and one that cannot be affected." Given the nature and force of the argument put forward here one can hardly help having doubts about the divinity and impassibility of the intellect. As D. W. Hamlyn puts it,

> Aristotle then concludes with the assertion that the intellect itself is unaffected and is something more divine. There seems little here in the way of an argument for that conclusion.[31]

Interpreting this section as a dialectical response to a reputable opinion about the intellect that threatens Aristotle's claims about the soul, with the concluding sentence offering Aristotle's tentative statement of his own position on the intellect, gives us a better reading and avoids the aforementioned difficulties. As I will discuss below, on my interpretation Aristotle's final claim is a hesitant expression of his own views, not a confident assertion of something he takes himself to have demonstrated. In this passage Aristotle is using the considerations he presented in favor

[30] Burnyeat 2008, 30-32. *DA* I 1, 403a16-19.
[31] Hamlyn 1993, 81.

of the indestructibility of the intellect to argue against the Platonists' contention that the soul or the intellect is moved and can serve as the proper subject of psychological activities and affections.

Given that understanding depends on something bodily within (whether, as on the strong reading, because it has a bodily organ or, as on the weak reading, because the body's condition can impede the activity), all the activities these Platonists want to ascribe to intellect will also depend on the body and be activities of the composite, not the intellect. Aristotle thus says that "thinking and loving or hating are not affections of that [namely, the intellect], but of this thing [namely, the composite human being] having that, insofar as it has that."[32] He uses thinking, loving, and hating here since these activities were said earlier in the passage to involve the movement of some bodily part and depend on the body.[33] Given this, when the composite human being perishes the intellect no longer remembers or loves or performs any other activities of this kind, since these are properly affections of the human being as a whole, not of the soul, and depend on the composite which has been destroyed. Understanding and contemplation are assumed to depend on the body as well and thus these activities will also belong to the composite and cease after it perishes. Since all these motions and activities perish with the composite while the intellect does not, they must belong to the composite and not to the intellect or soul. Thus the soul is not subject to change.[34]

My interpretation explains how this section relates to the first section of our passage and how it relates to the larger argumentative context in which Aristotle aims to show that the soul is

[32] *DA*, I 4, 408b25-7. An alternative reading would be to take τουδὶ τοῦ ἔχοντος ἐκεῖνο as referring, not to the composite human being, but to the bodily organ of the intellect which possesses the power of understanding just as the bodily organ of sight, the eye, possesses the power of sight. The overall point— that these activities are activities of the composite human being and involve both body and soul—remains the same on either reading.

[33] *DA*, I 4, 408b5-11; cf. *DA*, I 1, 403a16-18.

[34] *DA* I, 4, 408b25-9. Cf. Thomas Aquinas 1984, *SLDA,* I, 10.18-22.

not moved. This section completes Aristotle's arguments against the Platonic idea that the soul is moved. Even assuming that the psychological activities in question are movements and require movements, these activities belong to the composite, not to the soul or the intellect, and the movements they require belong to the body, not the soul. On my interpretation the wide range of psychological activities that are attributed to a human being insofar as he has intellect do not present an interpretative problem, because Aristotle is not giving his own position on the intellect, but examining a reputable opinion. Aristotle's interlocutors may identify the intellect with the soul or have some other view according to which they are perfectly content to say that the human being loves or hates insofar as he has intellect. For his present dialectical purposes, Aristotle need not specify the proper range of the activities and affections that belong to us insofar as we have intellect. Given the dependence of the intellect on the body, whatever affections these interlocutors attribute to intellect will, properly speaking, belong to the composite and their movements will belong to the body.

Similarly, my interpretation does not require that Aristotle is, in *propria persona*, committing himself to denying that the soul or intellect has an activity or affection proper to it and thus to thinking that the soul fails the criterion for separability which Aristotle discusses in I 1. That may be the view he develops in book three (and perhaps he is even foreshadowing it here), but his discussion in this passage does not commit him to such a view. Aristotle is just attempting to give a plausible account of why the intellect is not subject to change. The key to his account is the claim that the intellect depends on the body in some way for its activity, a claim put forward in the context of giving evidence for the indestructibility of intellect. Aristotle does not fully examine this claim or its implications, as would be required for him to offer his definitive answer to the question. Instead, he uses this claim for his own dialectical ends. As I

noted above, it is not clear whether this claim is put forward by him on behalf of his interlocutors or whether they themselves are advancing it. In either case, Aristotle does not say enough about the intellect and its activity in this passage to make his own views clear. For his own answer to the question of whether understanding is proper to the soul we need to turn to his discussion of intellect in book three, a discussion in *propria persona*, not to this brief dialectical passage.

Aristotle concludes the passage by saying: "But perhaps the intellect is something more divine and is unaffected."[35] Like Burnyeat I take the δέ here to be adversative. Burnyeat and other advocates of the Divine Intellect or Platonic Intellect interpretations take the contrast to be between the intellect and the composite human being, which perishes. I think this reading is a reasonable one but I also think the δέ could be used here to signal a contrast to be between Aristotle's own view of the intellect and the view of the intellect that has just been expressed in this passage. I take the ἴσως to qualify or soften Aristotle's claim, translating it as "perhaps." Most other translators take it to have strong positive force. Burnyeat, for instance, translates it as "doubtless."[36] Aristotle uses ἴσως in both senses, but in context the qualifying use of ἴσως is more plausible. Up to this point in book one Aristotle has not yet made any decisive arguments for the divinity and impassibility of the intellect. On Aristotle's own view the considerations put forward in this passage do not decisively establish the divinity and unaffectedness of the intellect either. In *DA* I 1, the previous passage where Aristotle discussed intellective soul and its separability, he was careful to speak tentatively. Aristotle is indicating that he has not yet given his own account of the intellect and suggesting that on his account the intellect will be, in some

[35] *DA* I 4, 408b29. ὁ δὲ νοῦς ἴσως θειότερόν τι καὶ ἀπαθές ἐστιν.
[36] Burnyeat 2008, 31.

significant sense, divine and unaffected (whether by being more divine and unaffected than the composite or by being divine and unaffected in some more absolute sense).[37]

Aristotle then ends the preceding discussion and opens his next discussion by saying that it is clear from these things that the soul is not subject to change.[38] My interpretation makes sense of this claim as it allows us to explain why this discussion of the intellect and its activities occurs in the midst of the larger discussion about whether the soul is moved. Aristotle is arguing that the Platonists' conception of the indestructibility of the intellect requires it to employ the body and thus does not allow for activities which are proper to it. Therefore, the intellect or soul is not the proper subject of psychological activities and there is no reason to claim that it is moved. On the Divine and Platonic Intellect interpretations of this passage Aristotle is simply interjecting a brief section about his own views on the intellect for some reason. We are left with an oddly placed digression into a discussion about whether the soul is moved. Proponents of these views may argue that Aristotle is stepping in to point out the difference between his conception of the soul and the Platonists. If this is so, why would Aristotle focus on the intellect instead of talking about his different conception of the psychological activities in question, such as whether they really are motions? Why is Aristotle's discussion of the intellect here in tension with his statements about it elsewhere? Unlike the Divine and Platonic views, my interpretation explains how this passage fits into the surrounding context and why it contains claims that are in tension with Aristotle's own views.

[37] On my Human Intellect interpretation, the intellect will turn out to be more divine and unaffected than the dialectical passage preceding this sentence would suggest, as, for Aristotle, intellect is more divine and unaffected than the sense powers to which it is compared in this passage. It is also worth noting that θειότερόν need not have a comparative sense, it could also be understood as "rather divine," but the import would be similar: Aristotle is suggesting that in some important way he thinks the intellect is divine.

[38] *DA* I 4, 408b30-1.

This passage is best read as a dialectical examination of a reputable Platonist position about the intellect, not as expressing Aristotle's own views on the intellect. Aristotle lays out the Platonist view, shows its relevant implications for the question of whether the soul is moved, and then, in the final sentence of the passage, reserves for himself the right to give a different account of the intellect and points forward to his discussion of the intellect in III 4-5. As I have noted earlier, proponents of the Divine Intellect or Platonist Intellect interpretation need not be committed to reading this particular passage as being about an extra-human intellect, since they may hold that it is only in *DA* III 5 that such an intellect is discussed, so my arguments against these interpretations of this passage do not establish the falsity of these interpretations more globally.

3. Νοεῖν and Other Intellectual Activities in *DA* I and II

I will now turn to some other passages from *DA* I and II that some interpreters, particularly Myles Burnyeat, have alleged indicate a sharp distinction between the divine intellect and its divine activity and merely human souls and activities. We saw above that Burnyeat attempts to use the passage from I 4 to separate off τὸ νοεῖν and τὸ θεωρεῖν, understanding and contemplating, from τὸ διανοεῖσθαι, thinking. Understanding and contemplating are held to be the distinctive activities of the separated divine intellect, whether this is God or just some substance beyond the individual human. These activities occasionally come to be in us, but they are essentially different from thinking and other ordinary human intellectual activities. These human activities are taken to be bodily and to either be independent of the divine intellect or less directly dependent. I will argue that none of the passages from *DA* I and II that Burnyeat cites support such a distinction.

One initial difficulty for this interpretation is that this passage from I 4 is the only one in which it is even intimated that thinking, τὸ διανοεῖσθαι, is bodily in some way. Aristotle does not use any intellectual activity in his repeated lists of activities which evidently are with the body.[39] Although Aristotle in this anti-Platonist passage speaks of thinking as if it required the body, when expounding his own views he couples thinking with understanding, the activity which all interpreters concede is non-bodily. For instance, in chapter three of book two when discussing the different powers of soul which are present in different living things Aristotle says that:

> To some other [kinds of living things], the thinking power and intellect belong, as, for instance, to human beings, and, if there is some other such living thing or something more honorable, [to these].[40]

This is one of the only passages in the *DA* that mentions the possible existence of living things that are either similar to or more honorable or higher than man and Aristotle does not hesitate to attribute the capacity for thought as well as understanding to them. Indeed, he closely associates these two powers, strongly connecting them using καὶ…τε καὶ and omitting the definite article for νοῦς. In speaking of living things more honorable than us, Aristotle is presumably speaking of immortal, indestructible, living things, such as the stars or perhaps the unmoved movers.[41] Given this, if Aristotle does in fact think that thinking is bodily, it would be inappropriate to ascribe the power for thinking, a power for an essentially bodily activity, to such beings. This passage further suggests, contrary to these interpreters, that the power of thought

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[39] E.g. *DA* I 1, 403a5-7, 16-27.

[40] *DA* II 3, 414b18-19. ἑτέροις δὲ καὶ τὸ διανοητικόν τε καὶ νοῦς, οἷον ἀνθρώποις καὶ εἴ τι τοιοῦτον ἕτερον ἔστιν ἢ τιμιώτερον. I am using "thinking power" to translate "τὸ διανοητικόν," the power responsible for thinking (διανοεῖσθαι) in contrast to intellect (νοῦς) the power responsible for understanding, τὸ νοεῖν.

[41] Aristotle probably does not have the completely non-bodily unmoved movers in mind, given the restricted context of the *DA*. Aristotle clearly thinks that the unmoved movers are living things, as he indicates in *Metaphysics* Λ, but they do not have bodies and thus do not have souls that are related to bodies, seemingly leaving them outside of the range of the *DA*'s consideration (they are not discussed as such anywhere in the work, with the possible exception of III 5 where they would still not be considered in themselves).

and the power of understanding are inseparable. If you are able to understand, you are able to think, and vice versa.

The close connection between understanding and other intellectual activities can be seen in a number of passages. Towards the end of chapter five of book one Aristotle discusses whether the different psychological activities such as knowledge, perception, and desire belong to the whole soul or to different parts of the soul. He lists a number of activities which belong to the soul, including knowledge and opinion, but he leaves out understanding. He then asks "whether each of these [activities] belong to the whole soul, whether we understand and perceive and are moved and do and suffer each of these things with the whole [soul]."[42] When initially listing the activities of the soul Aristotle excludes understanding, but when asking whether these activities belong to the whole soul he uses understanding as one of his examples. If understanding is sharply distinct from any human intellectual activity and involves a divine intellect in a special way, one would expect a more careful separation from ordinary human intellectual activities. Understanding should appear in both lists along with some merely human intellectual activity set in opposition to it. If, however, understanding is simply one among many different intellectual activities, it is entirely understandable that Aristotle would freely move between them, using thought and opinion to stand in for the full range of different intellectual activities in the first case but using understanding to the same effect in the second case.[43]

We see further evidence that understanding and other intellectual activities are of the same sort in chapter four of book two. There Aristotle is discussing how to proceed in investigating the different sorts of soul. He maintains that in order to say what each of these different powers are one must first consider their activities and objects. Aristotle mentions the

[42] *DA* I 5, 411a30-411b3.
[43] *DA* I 5, 411a26-411b6.

different kinds of soul and different soul powers he will be investigating: the sensitive power, the nutritive power, and the power of understanding, τὸ νοητικὸν. He then mentions the activities and objects corresponding to these powers: τὸ νοεῖν, the activity of understanding and τὸ νοητός, the intelligible, in the case of the power of understanding. He says nothing about any other sorts of soul or powers. If the power of understanding characterizes a distinct kind of soul, a divine soul, while the kind of thought which all human beings share comes from a different, human, power of thought, we should expect Aristotle to list this power of thought as a distinct sort of soul to be investigated. Instead, only the power of understanding is mentioned. Taken together with the earlier passage paralleling thought and understanding, this suggests that the power of understanding is inseparable from the other intellectual powers and that the intelligible is the common object of the various intellectual activities. This impression is only furthered by Aristotle's treatment of intellectual activities in book three, as we shall see.[44]

4. Intellectual Soul in *DA* II 2 and 3

There are two passages in *DA* II which some advocates of the Divine or Platonist Intellect interpretations have pointed to as providing evidence for a sharp distinction between perishable sorts of soul, such as those of human beings, and the intellect, a separate and imperishable being. The first comes from Aristotle's discussion of the separability of the parts of the soul in chapter two of book two. Here Aristotle claims that the intellect and the contemplative power seem to be a different kind of soul: they alone can be separated. Although an initial reading of this passage might suggest something like the Divine or Platonist interpretation, the context of the passage shows that Aristotle is here noting a difference between the intellective power and the sensitive and nutritive powers, all of which belong to the human soul. There is no distinction here between

[44] *DA* II 4, 415a16-20. I discuss the relevant passages from *DA* III in Chapters VI through VIII.

a divine separate being and the perishable human soul. Instead, Aristotle is once again bringing up the question he will turn to in book three: are (human) intellectual activity and the (human) power of intellect responsible for this activity non-bodily and able to exist separately from the body?[45]

Aristotle begins this passage by noting that the soul is the principle of the psychological activities and powers and is defined, "by the powers of nutrition, sensation, thought, and motion."[46] Aristotle then raises the question of whether these powers are souls or aspects of the soul, and if aspects, whether they are only separable in account or also in place.[47] Aristotle argues that the vegetative and sensitive powers are not separable in place. He considers the case of plants and insects that continue to live after being divided. Since both parts continue to live for a time their souls, though one in actuality, must be divisible, as their separation produces two different living things with two different principles of life. We observe all the same powers in each of the divided parts which are alive.[48] Each of the living parts of the insect evidently has sensation and motion according to place and Aristotle argues that they also have the power of appearance and appetite. Thus even when divided each part of the living thing retains all the powers it had before. This suggests that the vegetative and sensitive powers are not separate in place, since these powers are found throughout the bodies of the living things that have them. Even in cases where the living thing itself has been divided, its parts retain all its powers.[49]

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[45] For a Divine Intellect interpretation of these passages see Burnyeat 2008, 17-19, 32-33.

[46] *DA* II 2, 413b12-13. Note again that Aristotle apparently does not see a need to include the intellect in this list of fundamental powers.

[47] *DA* II 2, 413b12-13.

[48] Aristotle is considering the most generic and fundamental level of powers: the vegetative, sensitive, and intellectual, not the more particular sense-powers of sight, hearing, etc. He himself thinks that most of the particular sense-powers are in some sense localized in an organ (cf. II 12), but he holds that the power of touch is found throughout the animal (cf. II 10-11) and thus that the sensitive power is as well.

[49] *DA* II 2, 413b14-24. cf. Thomas Aquinas 1984, *SLDA,* II, 4.1-6.

Aristotle then says that:

> about intellect and the contemplative power, nothing is yet clear, but it seems to be a different kind of soul, and this alone can be separated, as the everlasting from the corruptible. It is clear from these [considerations] that the remaining parts of the soul are not separable, as some say.[50]

After suggesting that the case of the intellect may be different from that of the vegetative and sensitive powers he claims that all the remaining parts of the soul are not separable in place. If the intellect is a fundamentally different kind of soul from the human power of thought then there is a serious gap in Aristotle's argument. He has given evidence that the sensitive and vegetative powers are not separable in place, but he has given us no reason to think that the power of thought is not separable in place. On any interpretation that makes a fundamental distinction between the power of thought and that of intellect Aristotle has failed to discuss one of the fundamental powers of the soul. Divine and Platonist Intellect interpreters who want to use this passage to support their interpretations also need to explain why Aristotle contrasts the intellect with the remaining parts of the soul, as if the intellect was one among many powers which can be united in one soul.[51]

Aristotle claims that nothing is clear yet about the intellect because he has not yet investigated whether it has a bodily organ and thus cannot definitively say whether it is separable in place or not. Anticipating his position in book three that the intellect does not have a bodily organ, Aristotle says that the intellect seems to be a different kind of soul. If it does not use the body it will not be the actuality of any part of the body and thus will be different in kind from all the powers of the soul that are actualities of the body. This allows for the possibility that the intellect can be separated from the other aspects of the soul. They are connected to the body of which they are actualities and cannot exist separately from that body but the intellect can be

[50] *DA* II 2, 413b24-29.
[51] *DA* II 2, 413b27-8.

separated from them and from the body, as the everlasting from the corruptible. Such an idea fits with Aristotle's discussions of separation in the other passages we have examined.[52]

Aristotle then claims that it is clear that the remaining powers of the soul are different in account from one another. If the activities of two powers are different, as sensing and opining are different, then the powers themselves are different, so the sensitive power and the opinionative power are different. Burnyeat claims that this shows that the power of opinion and other human intellectual powers are different then the divine power of intellect.[53] First of all, at best this passage shows that the power of opinion is different than the intellect. In fact, Aristotle is simply trying to show the reason he has for thinking that all the powers of the soul are different in account from one another. The method he proposes is to contrast their activities. To show the efficacy of this method he needs a clear example of activities which are different from one another. Aristotle chooses sensing and opining. This need not suggest that he thinks that the power of opinion is fundamentally different from the intellect and belongs to a different kind of soul. The contrast between opinion and sense may just be a clear example of two distinct activities or the first example that came to his mind. Further, separation in account is a weaker sort of separation and holds true of powers which at a more generic level are unified. The activity of sensing is different than the activity of imagining, so their powers are different in account, but Aristotle still holds that these powers are inseparable from one another. The same thing may hold of opinion in comparison to understanding.[54]

The last passage which some proponents of the Divine Intellect or Platonist Intellect interpretation adduce in attempting to separate intellect from the human soul and from other

[52] *DA* II 2, 413b24-28. cf. *SLDA,* 2.4.7-8.
[53] Burnyeat 2008, 32-33.
[54] *DA* II 2, 413b29-32. For the connection between sensation and imagination cf. *DA* III 3, 428b10-17.

intellectual powers comes from the end of chapter three of book two. Here Aristotle is discussing the order of the different powers of the soul and says that:

> Lastly, the fewest [living things] have calculation and thought. For among mortal beings those which have calculation also have all the remaining [powers], while those which have each of these [other powers] do not all have calculation. Indeed, some do not even have imagination, while others live by this alone. About contemplative intellect there is a different account. It is clear, therefore, that the most proper account concerning soul is the account about each of these [sorts of soul].[55]

Burnyeat claims that Aristotle is here distinguishing calculation and thought and the powers responsible for them from the (divine) contemplative intellect. On his view Aristotle is introducing the contemplative intellect as something new and claiming that the intellect requires a different account than the account given to any of the previous powers, such as the powers of calculation and thought.[56]

Burnyeat may be right in thinking that Aristotle is distinguishing between the contemplative exercise of intellect and its practical exercise.[57] Aristotle may have in mind the distinction between the theoretical and practical intellect, along the lines he lays out in *NE* VI 1.[58] Such a claim is, however, compatible with a Human Intellect reading of the passage. Distinguishing between calculation and contemplation and claiming that we should give a

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[55] *DA* II 3, 415a7-13. τελευταῖον δὲ καὶ ἐλάχιστα λογισμὸν καὶ διάνοιαν· οἷς μὲν γὰρ ὑπάρχει λογισμὸς τῶν φθαρτῶν, τούτοις καὶ τὰ λοιπὰ πάντα, οἷς δ' ἐκείνων ἕκαστον, οὐ πᾶσι λογισμός, ἀλλὰ τοῖς μὲν οὐδὲ φαντασία, τὰ δὲ ταύτῃ μόνῃ ζῶσιν.περὶ δὲ τοῦ θεωρητικοῦ νοῦ ἕτερος λόγος. ὅτι μὲν οὖν ὁ περὶ τούτω ν ἑκάστου λόγος, οὗτος οἰκειότατος καὶ περὶ ψυχῆς, δῆλον.

[56] Burnyeat 2008, 17-19.

[57] There is also an alternative interpretation of this passage, according to which Aristotle is contrasting imagination and intellect. On this reading, Aristotle wants to establish that there are some living things which live by imagination alone and some which live by understanding and imagination. If imagination and understanding are the same there would not be these two separate classes. The view that understanding and imagination are the same is mentioned in book one and addressed again in Aristotle's discussion of imagination in book three (*DA*, I 1, 403a8-9; III 3, 427a18-427b1; 427b27-428a4, 428a17-18). Aristotle himself parallels understanding and imagination or otherwise connects them in several passages (*DA*, III 7, 431b2-9; III 10, 433a9-14; *De Motu Animalium* 6, 700b17-22). Given this, it would be reasonable for Aristotle to register his disagreement with the identification of understanding and imagination here. On this reading, Aristotle is showing that he takes imagination and understanding to be different and thus can hold that some living things, like human beings, have both powers, while some living things have only imagination (*DA* II 3, 415a7-13. cf. Thomas Aquinas 1984, *SLDA* II, 6.4). Since, however, I want to show that Burnyeat's understanding of the passage is compatible with the Human Intellect view, I will concentrate on his reading.

[58] Hendrik Lorenz suggested this parallel to me.

different account of each does not imply that only one of these belongs to the human soul. The theoretical intellect can be importantly different from the practical intellect while still being a part or aspect of the individual human soul.

Aristotle concludes his discussion of the different kinds of soul by claiming that in order to give a proper account of soul as a whole we need to give the proper account of each sort of soul. Aristotle's work will need to give us an account of every sort of soul. This, once again, brings up a key problem with Burnyeat's interpretation: we do not get the separate accounts of thinking and understanding which this passage demands. We get an account of understanding, but not a full and separate account of thinking, a gap Burnyeat can only address by claiming that "Aristotle takes thinking more or less for granted."[59]

Throughout books one and two of the *De Anima* Aristotle closely links understanding and the other intellectual activities. He also repeatedly leaves open the possibility that the intellect may be separable from the body. The intellect is taken to be a power of the human soul, not some divine, extrahuman understanding, and the intellectual powers and activities are taken to be a single coextensive class.

[59] Burnyeat 2008, 19.

IV. Who am I? Aristotle's Views on Soul and Body

1. Introduction

Who am I? What am I? Am I my mind, my body, my brain, my soul? A wide variety of answers have been put forward in response to these questions, both in contemporary discussion and throughout the history of philosophy. The different answers given to these questions lead to very different views about which activities belong to me, properly speaking, and about which activities we should value. In this chapter I will examine Aristotle's views on what a human being is and, in particular, his account of which activities and affections are human ones. I will then present Aristotle's criteria for determining the value of a given activity or affection.

2. Aristotle's Account of What a Human Being is

In the *De Anima* (*DA*) Aristotle offers a general account of what living things are, attempting to account for the activities that living things engage in and the unity that, in the case of each living thing, these activities display. His account draws upon his metaphysics of matter and form, so that his position concerning the nature and unity of living things is continuous with his broader account of the requirements for being a unified whole. His account focuses on the persistence of living things and on the activities and affections that distinctively characterize them.

Aristotle's account of human beings, however, is not merely an application of a generic account of substance or of living thing. At the beginning of book two of the *DA* Aristotle does offer a general account of living things. This account is centered around Aristotle's definition of the soul. Soul, for Aristotle, is the component of a living thing that *makes* it a living thing. He says "If, then, we have to make a general statement touching soul in all its forms, the soul will be

the first actuality (ἐντελέχεια) of a natural organic (ὀργανικόν) body"[1] (*DA* II 1, 412b4-6). However, Aristotle quickly goes on to note the incomplete nature of this definition, comparing it to the case of geometrical figure. We can give a general definition of figure (Euclid offers "that which is contained by any boundary or boundaries" (*Elements* I, Def. 14)) but to really grasp what figure is we need experience concerning the different kinds of figure (*DA* II 2, 414b20-415a13). We need to understand triangles, quadrilaterals, and other-many sided figures and their properties and interrelationships before we can reach a satisfactory understanding of figure. Similarly, we need to come to a better understanding of the activities that living things perform, such as growing, reproducing, moving from place to place, and sensing (and the interrelationships between these activities), in order to understand what the soul, the principle of these activities, is. Both Aristotle's initial characterization of the soul and his later claims that the soul is "the principle of the previously mentioned activities and is determined by them, by the powers of nutrition, perception, thought and motion" and that the soul is "that by which primarily we live and perceive and think" need to be filled out further by examining the activities for which the soul serves as principle.[2]

This also applies to our understanding of what a human being is. Although some kinds of human activities, such as digesting food or perceiving, are also performed by other living things, our way of doing them, and thus the sort of body and soul we use to do them are distinctive. Further, Aristotle thinks that human beings have some abilities and activities that no animal or plant has, such as our ability to understand what something is. Because of the distinctive nature

[1] The body is potentially alive. Soul makes it actually be alive and is thus the body's actuality (ἐντελέχεια) or form (εἶδος), as Aristotle describes it at *DA* II 1 412a19-21. Aristotle calls it a *first* actuality (ἐντελέχεια), because it is a capacity for living activities not an activity itself. He claims that the soul as first actuality has the same sort of relationship to the various life-activities that the state of having knowledge has to the exercise of knowledge (412a22-28). There are two alternative options for understanding ὀργανικόν: it could be taken as 1) a natural body *having organs* or 2) a natural body *serving as an instrument* (I discuss these interpretative options below in section 3 b).

[2] *DA* II 2 413b11-13; 414a12-13.

of our activities, Aristotle's account of human beings will be importantly different than his account of an oak tree or an ostrich.

Aristotle's views on the nature of the body and the soul and their interrelationship are crucial to his attempt to account for the unity, persistence, and nature of living things and their activities. On this all commentators agree. They disagree, however, about what Aristotle's account of the relation between body and soul in living things actually is. Commentators generally recognize that Aristotle thinks that in some way what a human being is involves both body and soul, Aristotle's famous hylomorphism. They disagree about what Aristotle's hylomorphism amounts to. There is a crucial dispute about what the proper subject of human activities is: the body, the soul, or the living thing composed out of both.

In this chapter, I present my interpretation of Aristotle's position concerning what body and soul are, what I call the Composite View, and its application to the question of what a human being is. Briefly and roughly put, on my view Aristotle holds that human beings are composed of a human body and a human soul, the goal-directed capacity for performing human activities. The composite human being, consisting of these two combined into a unity, is the underlying subject of all human activities. Although the composite human being is the subject of all activities, the human soul plays a crucial role in accounting for what human beings are and for what we do. On my view, the composite living thing is what sees, eats, moves from place to place, and so on, while the soul's role in its doing these things establishes a strongly privileged place for it in the composite entity. Further, for Aristotle, the soul and the powers that it includes, although not the proper subjects of our life activities, are the subjects of certain transitions, transitions from being in mere capacity to being actively exercised, that are crucial to these life activities. The soul or the power of sight does not see, but we see in virtue of our power of sight being exercised.

I will start by contrasting my position with two other interpretations of Aristotle's views on body and soul. I explain their textual and philosophical motivations and identify what I find unsatisfactory about them. I then develop my own Composite View interpretation. I describe why the Composite View makes better sense of Aristotle's claims and how it allows him to offer a complex, coherent, and attractive philosophical view concerning human beings. After explicating the Composite View, I discuss its implications for Aristotle's account of the unity, persistence, and nature of human beings. On my interpretation of Aristotle a wide range of activities, from digestion to moving from place to place to thinking, are human ones, but some of these activities are more valuable and more distinctively human than others.

3. Two Rival Views of Aristotle's Position on the Proper Subject of Human Activities

The central differences among interpreters concerning Aristotle's view of soul and body can be brought out by considering a key question: what, for Aristotle, is the proper subject of the activities that a living thing, as such, performs? Is it the body, the soul, or the living thing composed out of both? Three main interpretations provide answers to these questions. I have outlined my view. Let me now discuss two alternative views.

a. The Attribute View

On the first view I will discuss, what I call the Attribute View, Aristotle takes the soul to be a disposition of the body.[3] As Jonathan Barnes puts it "[Aristotle's] definitions [of the soul] construe the soul not as a substance (like, say, the heart or the brain) but as an attribute (like, say, life or health)."[4] On this view, the soul is not something that could exist on its own or be the subject of certain attributes, because Aristotle holds that the soul is "just a disposition of the

[3] For various versions of this view see Barnes 1979, 33; 2000, 107; Granger 1996; Guthrie 1981, 284; M. Frede 1995, 98.

[4] Barnes 1979, 33.

body."[5] Thus it is the body and not the soul that is the proper subject of life activities. Aristotle uses the terminology of soul to speak of the distinctive sets of capacities that the bodies of living things have. These capacities are functional ones that distinguish living bodies from non-living ones. Different living things are distinguished from one another by the different capacities of their bodies. A human body is the proper subject of living activities in virtue of the distinctive capacities that it has. On this interpretation, Aristotle is turning decisively away from a Platonic conception of the soul, where the soul is a separate substance and is all on its own the subject of life activities. Aristotle, on this view, comes across as a precursor to contemporary functionalism in the philosophy of mind.

There are some considerations in favor of the Attribute View. Certain texts of Aristotle can be read so as to support the view, such as a passage from *DA* II 2 that Barnes cites: "the soul is not a body, but it belongs to a body, and that is why it is in a body, and in a body of a definite kind" (*DA* II 2, 414a20-22). The Attribute View also allows Aristotle to account for the unity of the body and the soul, a concern of central importance to Aristotle and to both opponents and defenders of body-soul dualism. Since the soul is a set of bodily capacities, it could not help but be unified to the body. Thus Aristotle, according to one typical translation of *DA* II 1 412b6-7, claims, "Hence too we should not ask whether the soul and body are one..."[6]

When we consider the context of the passage just cited, however, we see that Aristotle is not offering a pre-emptory response to concerns about body-soul unity. The translation I cited—"we *should* not ask whether the soul and body are one"—suggests that Aristotle thinks that the question of unity does not arise or is a "category-mistake," à la Gilbert Ryle.[7] This, of course, fits with the Attribute View: if the soul is just an attribute of the body, then there is no need to ask

[5] M. Frede 1995, 98; Cf. Barnes 1979, 33; 2000, 107; Guthrie 1981, 284
[6] *DA* II 1, 412b6-7. Trans. Hamlyn 1993.
[7] Ryle 1949, 11-24.

whether they are united. However, as Christopher Shields has argued, Aristotle claims that there is no need to ask, not because the question is nonsensical or ill-conceived, but because Aristotle thinks he has a clear and satisfying answer.[8]

In context the passage goes as follows:

> Hence it is not necessary to inquire whether the soul and the body are one, anymore than [one needs to inquire whether] the wax and the shape are one; or, in general, whether the matter of each thing and that of which it is the matter are one. For one (τὸ ἕν) and being (τὸ εἶναι) are said in many ways, and actuality (ἡ ἐντελέχεια) is the controlling sense.[9]

Aristotle does not introduce the example of the wax and its shape to warn against making category mistakes or to give an example of a substance and its attribute. Instead, he clearly identifies the example of the wax and its shape as a case of the unity of form and matter: just as one does not need an explanation for why the wax and its shape are one or generally for why the matter of each thing and that of which it is the matter are one, one does not need an explanation for the unity of soul and body. This is not because the form is an attribute of the matter. On the contrary, it is because, as Aristotle puts it, actuality is the most proper way of anything's being and of its being one, and the soul is actuality. Aristotle is claiming that the unity and being of the living body depends on the unity and being of the soul.

On my interpretation, Aristotle is here drawing on claims from his metaphysics. In *Metaphysics* Θ 8 Aristotle argues that actuality is prior to potency and in *Metaphysics* H 6 he connects the unity of the composite to the unity of form. I follow Verity Harte in my understanding of *Metaphysics* H 6. She holds that Aristotle is arguing that the unity of actuality and potentiality, of form and matter, depends on the intrinsic and immediate unity that the form

[8] Christopher Shields, "The priority of soul in Aristotle's *De Anima*: Mistaking categories?" In D. Frede and Burkhard Reis eds., *Body and Soul in Ancient Philosophy*, 267-90. Berlin: Gruyter, 2007.

[9] *DA* II 1, 412b6-9.

(or actuality) has.[10] As Harte puts it "the unity of a composite is seen not simply to imply, but to be grounded in the unity of form."[11] Even commentators on Aristotle's *Metaphysics* who disagree with this claim would concede that Aristotle is committed to thinking that form is, in the most important ways, prior to matter and that the unity of the form has an important role to play in understanding the unity of the composite. For the purposes of my discussion of the *De Anima* I will take it that Aristotle, in the *Metaphysics*, argues that form or actuality is prior to matter and that the unity of form explains the unity of the composite. Although these two claims are not undisputed among *Metaphysics* commentators they fit well with the text of the *Metaphysics* and with the passage from the *De Anima* at issue, as we shall see.

On my reading, Aristotle's position on the unity of soul and body in this passage of the *De Anima* is simply an application of the general metaphysical position concerning the priority of form and actuality that he articulates in the *Metaphysics*. Aristotle claims that the living thing composed of form and matter is one because its form, its soul, is one in a primary and immediate way. As in *Metaphysics* H 6 the unity of the composite is explained in terms of the unity of the form. For Aristotle the being of the human form, the human soul, is fundamental. Thus the human soul is not simply a collection of dispositions of a body. A human being exists in virtue of his human soul existing and the being and unity of the animated human body comes from the form and first actuality that is the soul, not vice versa. Aristotle is answering the question concerning the unity and status of the soul and body by claiming that they stand to one another in a relationship of potentiality to actuality. Just as the wax, which is able to take on a shape, is one

[10] *Metaphysics* IX (Θ) 8; *Metaphysics* VIII (Η) 6. Aristotle uses ἐντελέχεια throughout the *DA* and ἐνέργεια in *Metaphysics* Θ, but both are opposed to δύναμις and the two terms can be virtually synonymous. Cf. *Metaphysics* Θ 8, 1050a21-23. Not all commentators agree with Harte's interpretation of this passage, but there is general agreement on the fact that Aristotle thinks there is an important relationship between the unity of the form and the unity of the composite (Harte 1996).

[11] Harte 1996, 299.

with the shape that determines it, so the body, which is able to be alive, is one with the soul which makes it alive. Because the soul is itself a unity, the living body composed of the soul and the body that is potentially alive can also be unified. For Aristotle the soul's unity explains the unity of the living thing it informs.

b. The Soul View

This suggests that attempts to reduce Aristotle's notion of the soul to an attribute of the body are misguided. Indeed, Aristotle's emphasis on the priority of the soul together with some of the claims he makes elsewhere on behalf of the soul might suggest that he thinks human beings are best characterized as souls, or as souls using bodies. On this second view, what I call the Soul View, explicated by Stephen Menn and also put forward by other commentators who see Aristotle's position as more continuous with that of Plato, the soul is the subject of all the life activities of a thing, even those that involve the body.[12] In sharp contrast to the first view, Menn holds that Aristotle's account of the soul turns out to be close to the views of the soul put forward in certain Platonic dialogues such as the *Philebus* and the *Theaetetus*.[13] This second view reflects Aristotle's commitment in the *DA* to the priority of soul and offers a simple answer to the question of what the subject of living activities is. Menn recognizes that for Aristotle most activities of a living thing are common to body and soul, but on his interpretation this means only that the soul uses the body as an instrument for these activities.[14] The Soul View fails to account for the way in which Aristotle thinks that most living activities are essentially bodily and fails to account for the strong sort of body-soul unity that Aristotle finds in them.

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[12] Stephen Menn, 2002, "Aristotle's Definition of Soul and the Programme of the *De Anima*," *Oxford Studies in Ancient Philosophy*, 22: 83-139.

[13] Menn 2002a, 96-102, 135-9. Menn notes some important differences, such as Aristotle's insistence that the soul is an unmoved source of movement, but these do not qualify his contention that for Aristotle, as for Plato, the soul is the proper subject of life activities.

[14] Menn 2002a, 135-9.

Stephen Menn develops and defends this Soul View. He argues that we should understand "natural organic body" in Aristotle's claim that the soul is "the first actuality (ἐντελέχεια) of a natural organic (ὀργανικόν) body" to mean a natural body that "is an instrument or is suited for being used as an instrument."[15] Aristotle is claiming not that the parts of the body are instruments of the whole body, but that the whole body and its parts are instruments of the soul. As Aristotle himself says: "all natural bodies are instruments of soul, as those of animals so too those of plants, as being for the sake of the soul"[16] (*DA* II 4, 415b18-20). Menn also draws attention to a number of passages in which Aristotle speaks of the soul as using the body, suggesting that the soul is the subject of psychological activities operating through the body as through its instrument.[17] Menn emphasizes and develops the idea that Aristotle models the relation of soul to body on the relation of art to instrument. The soul-body relation differs, however, from the typical art-instrument relation in that "the soul moves its body from within, as an internal and not merely an external ἐντελέχεια of the organic body."[18] There is no need for a separate artisan or instrument beyond the natural organic body itself, because the soul is present within this body serving as its internal mover and principle.

While Menn may be right in thinking that Aristotle sees the whole body as an instrument of the soul, the claim that the soul is the primary subject of the living thing's activities and that its relationship to the body is primarily that of art to instrument is difficult to fit with Aristotle's strong insistence on the unity of body and soul and on the importance of the composite. The Soul View must account for the famous passage in *DA* I 4 where Aristotle states that:

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[15] Menn 2002a, 109.

[16] Trans. Menn. Menn 2002a, 109-10.

[17] Menn cites *Protrepticus* B59, "part of what is in us is soul and part is body: the first part rules and the second is ruled, the first part uses and the second lies under it as an instrument" and *DA* I 3, 407b25-6, "the art must use [its proper] instrument, and the soul must use [its proper] body." He also mentions Aristotle's claim in *Politics* I 5 that "the soul rules over the body with a despotic rule" and Aristotle's description of the human hand as ὄργανον πρὸ ὀργάνων in *DA* III 8, 432a1-2 and *PA* IV 10, 687a20-1.

[18] Menn 2002a, 139.

> Saying that the soul is angry is like saying that the soul weaves or builds: it is, doubtless, better not to say that the soul pities or learns or thinks, but that the human being does so in virtue of the soul. (*DA* I 4, 408b11-15)

This passage tells against the Soul View. Aristotle is claiming that the human being is, strictly speaking, the thing that pities, learns, and thinks. We do so in virtue of the soul (or, in an alternative construal, through the soul) but Aristotle clearly suggests that the soul is not the primary subject of the activities of a living thing.

How might proponents of the Soul View respond? They could invoke the context of this passage and claim that it is only because Aristotle wants to deny that the soul is moved that he attributes these activities to the composite, since all the activities he mentions are taken, in this passage, to involve motions. Furthermore, since, for Aristotle, an activity belongs to both the patient and the agent, the body will be part of the activities of a living thing as the patient of those activities.[19] However, this line of response still doesn't give a good account of why Aristotle claims that it is better to say that these activities belong to the composite in virtue of the soul.

The problem with the Soul View is that the importance and value of the composite substance and of its body is lost. As Menn puts it:

> [T]he soul needs the sense-organs for sensation only in the way that the art needs its instruments for its activities. And, likewise, the art needs the artisan for its activities, whether of production or of cognition, only in the way that the art needs its instruments for its activities. The artisan, or the relevant part of his body, is special only in being the ὄργανον πρὸ ὀργάνων, the first instrument through which the subsequent instruments are used.[20]

On this account the person who possesses the art has no special status, beyond being the first instrument used by the art, and neither, presumably, does the composite human being who

[19] Cf. Menn 2002a, 135-7.
[20] Menn 2002a, 137.

possesses the soul. This seems to clearly go against both the passage from I 4 and Aristotle's general insistence on the unity of body and soul and the importance of both.

4. The Composite View

This leads me to the third view, the Composite View, which I favor. On this view, the composite living thing is the proper subject of life activities. It performs these life activities *in virtue of the soul*. The third view has not been clearly articulated in the recent literature, partly because it is not always properly distinguished from the Attribute View. The third view, as I develop it, recognizes Aristotle's commitment to the priority of the soul and to the claim that the body is used by the soul as an instrument, claims that were used to argue in favor of the Soul View. However, it also takes seriously Aristotle's claims about the unity of living activities and the way in which the activities of ensouled things are bodily.

On this view the composite living thing, the individual human being, performs the various human activities. The soul (and the various capacities it includes) is the primary explanatory factor that accounts for the individual human being's ability to carry out such activities. The human being performs the activities and the soul, a component of the human being, explains, in ways I will discuss, why the human being can perform these activities. This pattern, where one entity is the proper subject of a given activity or affection, while a related but distinct entity is the explanatory factor, can be found in a number of cases. The key requirements for this relationship are (1) the first entity (not the second) is the proper subject of the activity or affection in question, (2) the second entity is a primary explanatory factor for the activity or affection in question, and (3) there is an appropriate connection between these two entities.

Let us consider a few examples, beginning with the sporting realm. We can say that Manchester United won the soccer game in virtue of Javier Hernandez scoring. Hernandez was

the person responsible for the goal that won the team the game, so sports writers can say "Hernandez won the game." However, strictly speaking, it is only teams that can win games. Even if Hernandez were the only player on either team to touch the ball during the game, it would still be his team that won, strictly speaking, because of the nature of the sport. Nevertheless, Hernandez and his actions are mentioned because of the crucial explanatory role they play in Manchester United's victory. This kind of example can be found at an individual level as well. A commentator could say that Rafael Nadal's forehand won him the game. This claim is made because his use of his arm to make forehand shots was decisive in his victory, not because his left arm is the thing that should receive the trophy. The player wins the game, but some of his actions (and the parts he employs in performing them) play a primary role in explaining his victory. We can find similar examples in a variety of contexts. Someone might claim either that Winston Churchill's rhetoric kept up British morale during the Blitz or, equivalently, that Winston Churchill kept up British morale by using his skill as a rhetorician. Churchill's rhetoric is not a free-standing entity that can on its own take credit for being responsible for such a result. Winston Churchill is the one responsible, in virtue of employing his rhetorical skills. This sort of relation can also be found in cases that do not involve living things. Diamonds are hard because of the face-centered cubic structure of their constituent atoms. The diamond is hard, not the face-centered cubic structure. Nevertheless, it is the structure that explains why the diamond is hard.

In all these cases, one thing is the proper subject of the activity or affection in question and another, related, thing is a primary explanatory factor.[21] In such cases, we may make claims

[21] For my purposes I need only a general characterization of what a primary explanatory factor is and how it relates to the proper subject of an activity or affection. I mean to leave open questions concerning how many primary explanatory factors a given activity or affection can have, exactly what sorts of things can be explanatory factors (they might be parts of the subject, properties of the proper subject etc.), and what the precise requirements

that attribute the activity or affection to this explanatory factor but these claims are compatible with thinking that the explanatory factor is not, in fact, the proper subject. In all of the examples there is a close relation between the proper subject of the activity or affection and the explanatory feature. Javier Hernandez is a member of the Manchester United team, Rafael Nadal's left arm is a part of him, Churchill's rhetoric is a skill possessed by Churchill, and the cubic structure of the diamond is a property of it. Both the proper subject and the explanatory factor play an important role in understanding the activity or affection in question. It is their close inter-relationship that allows them to play these distinct but related roles.

Aristotle himself does not lay out a distinction precisely on the lines I am suggesting, but his discussion of "that in virtue of which (τὸ καθ' ὅ)" in *Metaphysics* Δ 18 presents a distinction that is quite similar to the one I have introduced. Here Aristotle recognizes two main senses in which something can be said to be "that in virtue of which." In the first sense, something is "that in virtue of which" when it is the matter or underlying subject of the affection or activity in question. This sense is similar to my notion of being the proper subject of an activity or affection, but unlike my notion it does not carry with it any requirement of being the *proper* subject of an activity or affection. According to Aristotle's first sense, something is "that in virtue of which" in the sense of being a subject as long as it is, in some appropriate way, the matter or underlying subject of the activity or affection in question, even if the way in which it is

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are. It is, however, important to note that not all explanatory factors are primary ones: the weight of the soccer ball, while it plays an explanatory role in the scoring of the goal, is not a primary explanatory factor. Similarly the strings of Nadal's tennis racket, the frequency of the radio waves broadcasting Churchill's voice, and the fact that diamonds are made out of carbon atoms may all play some explanatory role in the various cases, but they do not play a primary one. An activity or affection may be attributed to a primary explanatory factor, but it is not usually attributed to these sorts of secondary factors. Primary explanatory factors need to have a tight connection with the proper subject while many secondary explanatory factors will be extrinsic to the proper subject (such as Churchill's radio waves). To be a *primary* explanatory factor something must not only contribute to explaining the activity or affection, but do the main work of explaining why that activity or affection is taking place and explaining why the proper subject is the proper subject of that activity or affection. This does not rule out the possibility that in some cases there are multiple primary explanatory factors (perhaps overlapping or containing one another) that meet these criteria.

the matter or underlying subject is not the primary one. In Aristotle's second main sense the form is "that in virtue of which" some affection or activity belongs to something. Aristotle goes on to note that this sense can also be extended to any sort of cause, in much the same way that the concept of explanatory factor can be extended. My notion of primary explanatory factor, although similar, is meant to be somewhat broader than Aristotle's notion of form as that in virtue of which, as my notion can include parts of the proper subject of a given activity (such as Nadal's arm) or items that are intermediate between the proper subject and the form of the relevant activity or affection (for Aristotle, Churchill's soul explains his possession of rhetorical skill, but it is neither the proper subject that performs Churchill's speeches nor the form of rhetoric).

Nevertheless, the overall contrast is very close. There are two classes of things that can be described as bringing about an attribute or activity or as being that in virtue of which some activity or attribute belongs: one class has this property by being the subject of the relevant activity or affection and the other has this property by being a cause or explanatory factor of the relevant activity or affection. I introduce the notion of *proper* subject to be able to distinguish an entity that is, in some non-primary sense, the matter or subject of an activity or affection from the entity that is, most properly speaking, the subject of an activity. On my framework, there can only be one proper subject of a given activity or affection, its primary underlying entity. Other entities that may be subjects in a non-primary sense do not count as proper subjects. So, on my division, the eye or the sense of sight is not the primary subject of seeing, the human being is. On my division I can describe the eye and the sense of sight as primary explanatory factors, but not as proper subjects. Given Aristotle's broader notion of the matter or underlying subject sense of that in virtue of which, he is often willing to make multiple attributions of subjecthood, saying

that the eye or the sense of sight sees, as well as the man. Since my purpose, however, is to find out what, according to Aristotle, is the *primary* subject of living activities I am interested in the more restricted sense of subject, according to which there can only be one proper subject. Focusing on this sense will help us to understand how Aristotle's various claims about living activities and the entities responsible for them fit together.

In the *DA* Aristotle explicitly employs the sort of distinction described in the *Metaphysics*. In *DA* II 2 Aristotle distinguishes two ways in which something can be said to be "that by which (ᾧ) we live" or "that by which we know," two ways which parallel the division he makes in *Metaphysics* Δ 18.

> Since "that by which we live and perceive" is said in two ways, just as "that by which we know" (for we say both that knowledge is that by which we know and that the soul is that by which we know, for we say that we know in virtue of either of these) and similarly that by which we are healthy is both health and some part of the body or the whole; and of these knowledge or health is a shape and a form, an account and, so to speak, an activity of what is receptive, in the one case of what is receptive of knowledge, in the other case of what is receptive of health. For the activity of the things that are such as to act seems to be in that which is affected and in what is disposed in the relevant way. The soul is that by which primarily we live and perceive and think; so that it would be an account and a form, but not matter and the underlying thing in question.[22]

Here Aristotle distinguishes between two ways of being that by which we know (or live etc.). Something can be that by which we know by being the form that makes someone know (i.e. knowledge) or by being the underlying subject that takes on this form and supports it (i.e. the soul is the underlying subject by being that which is receptive of knowledge). This division closely follows that of Δ 18 and is similar to my division: on the one hand, we have a form or explanatory factor that makes something what it is and, on the other, the matter or underlying subject that exemplifies that form. Again, however, it is important to notice that Aristotle's notion of subject is broader than my notion of proper subject. Anything that can serve in some

[22] *DA* II 2, 414a4-14. My translation and understanding of this passage have been influenced by Lorenz 2007.

way as the matter or underlying subject with respect to the relevant activity or affection counts as a subject, even if it is not the primary subject of that activity or affection. So Aristotle's claim here that the soul is the subject of knowledge need not mean that Aristotle would deny that the human being is also (and maybe primarily) the subject of knowledge.

This means that in one context Aristotle can speak of something as form while in another context he will speak of it as matter or subject. For instance, in this chapter (II 2) Aristotle is arguing that the soul is the form by which we live and perceive, not the underlying subject that lives and perceives. In discussing the example of knowledge, however, Aristotle treats the soul as the underlying subject of knowledge, the thing that is receptive of knowledge, the form in question. This does not mean that Aristotle thinks the soul is really matter and an underlying subject, not a form. Instead, it means that in certain contexts Aristotle thinks that the soul can be spoken of as something underlying, as something potential and receptive in relation to some more determinate activity or affection. Entities such as the soul and its powers are forms and actualities themselves, but also have the potential for further actualities. They are forms capable of taking on other, further forms.[23] Thinking that they can be spoken of as underlying subjects in some contexts does not, however, commit Aristotle to holding that they are ever the primary subjects of the relevant activities or affections.[24]

I will argue that Aristotle holds that the human being who possesses the soul and its powers is always the primary subject of human activities and affections, even if the soul and its powers can, in some cases, be treated as subjects in some secondary sense. On my division of senses, entities such as the soul and its powers are not the primary subjects of living activities, since there is another more primary subject: the composite human being. Instead, these entities

[23] Cf. Lorenz 2007.
[24] Cf. Lorenz 2007.

count as primary explanatory factors, even if they are not always identical to the relevant form, since both their actualities and their potentialities explain, in crucial ways, how human beings are able to perform our activities. This fits with the examples I discussed in making my distinction. Rafael Nadal's arm is, in some sense, the underlying subject that carries out his forehand and is moved when he hits the ball. However, the primary subject of that action, the entity who, properly speaking, hits the ball, is Nadal himself, not his arm. Similarly, Javier Hernandez is in some sense the underlying subject who won the game, by being the subject of the game-winning action of scoring the goal. This does not, however, mean that he is the entity who won in the primary sense. Instead, it is his Manchester United team who won and is the proper subject of the victory.

On my interpretation of the *DA* Aristotle makes an important distinction between the composite human being, the substance which is the proper subject of human activities, and the soul, the substantial form in virtue of which we human beings are able to perform our activities. The soul does not, strictly speaking, hope, learn, or think, but it is what allows us to hope, learn and think.[25] The soul and the powers or capacities that it includes are the primary explanatory factors for the activities and affections of living things. They are the forms that enable us to perform and carry out our human activities and affections. To take an example, when Odysseus hears the sirens he is exercising his capacity to hear. This does not, however, mean that his capacity is the thing that hears. Instead, Odysseus hears in virtue of his capacity. We sometimes say that the eye sees or that the ear hears or that the mind understands something. Aristotle can make sense of these locutions, since he concedes that the relevant capacities and the bodily parts in which they reside are active in these changes and he may even be able to concede, where

[25] *DA* I 4, 408b11-18.

appropriate, that they are underlying subjects of these changes, in the broader sense of subject laid out in *DA* II 2 and *Metaphysics* Δ 18.[26] When Odysseus hears something he is exercising his capacity to hear and something is happening to his ears, because the ears are where the relevant capacity is located and where certain changes are taking place. Aristotle can concede all this, however, without conceding that Odysseus's ears hear in the primary sense, rather than Odysseus himself.

Odysseus is the proper subject, while his ears and his capacity to hear are primary explanatory factors in accounting for his hearing.[27] The force of this distinction comes out when we contrast the claim that Odysseus's ears hear a sound with the claim that Odysseus's ears are large. The latter claim is just about his ears, not about Odysseus himself. It is not true that if Odysseus's ears are large, then Odysseus is large. In contrast, if Odysseus's ears hear a sound then Odysseus hears a sound. We can say that Odysseus's ears hear because the ears are a primary explanatory factor in hearing: what happens to Odysseus's ears explains Odysseus's hearing (or lack thereof).

On my interpretation, Aristotle consistently employs this general approach in his account of the activities and affections of living things. I will discuss Aristotle's reasons for claiming that the composite human being is the proper subject of human activities while the soul is the primary explanatory factor below, but I first want to make a point about the general structure of this model. The model's structure does not rely on Aristotle's distinctive views about what human beings are. Someone might agree that the distinction between explanatory factor and proper subject applies in the case of human activities, but have a dramatically different account of what

[26] As evidenced by his discussion of perception in *DA* II 5, 7-10. I discuss the special case of the intellect, which Aristotle holds does not have a bodily organ, in section 9 d.

[27] The ear is a primary explanatory factor because it is the part of Odysseus that is affected when he hears. His capacity to hear is a primary explanatory factor because it explains why Odysseus, in the given circumstances, hears.

the explanatory factors and proper subject are. One could adopt the general structure of the model while thinking that the proper subject of human activities is the brain, or the body, or the soul, not the whole human being composed of body and soul, as, on my reading, Aristotle does. Similarly, one might think that the primary explanatory factors of human activities are not the soul and the powers that it includes, but the motion of certain atoms or the activity of neurons in certain regions of the body. Aristotle's views on human activities are of interest both for the particular position he puts forward about what human beings are and for the more general model he presents, a model that could be employed even by those with significantly different views concerning the nature of human beings.

5. Why Aristotle Holds that the Soul is the Primary Explanatory Factor of Human Activities

Now why, on Aristotle's view, is the composite human being the proper subject of living activities while the soul is the primary explanatory factor? I will start by addressing the question of why Aristotle thinks that the soul explains and accounts for the activities I perform. Why think that the soul, instead of the body or both soul and body, primarily explains my ability to engage in living activities? If I did not have a body, indeed, if I were not composed of a body in the way that I am, I would not be able to move around, perceive, and do many of the other activities that together, on Aristotle's view, make me a human person. There are also things about the human body as such that distinguish it from other animal bodies and from non-living bodies. Aristotle recognizes that the body plays an important role in human activities, just as it does in the cases of all living things. This is why he insists that human beings are composites of body and soul and that human activities involve the body.[28] Nevertheless, he does not think that my body or its

[28] *DA* II 1; *DA* I 1 403a3-403b19.

affections are the primary explanatory factors of what I do. It is not in virtue of being a body that I do what I do, but in virtue of having a soul with certain capacities.

Two examples that Aristotle often employs provide useful parallels for understanding why Aristotle thinks that the soul plays a primary explanatory role in human activities. In the first example, a man moves a rock out of his path by pushing it out of the way with a stick. The rock is moved by the stick which is moved by the hand, which is moved by the man, who is not being moved by something else.[29] Aristotle claims that the man, not the stick, is primarily responsible for moving the rock, even though the stick is the proximate mover of the rock. Why? Because the stick, on its own, is not capable of moving the rock. If we examine the stick we can see that, when being moved by something, it is the sort of thing that could move a rock (e.g. it's sufficiently tough and rigid to impart movement to the rock without breaking), but we also see that it is not the sort of thing that can move itself. It can't, on its own, initiate motion. So, when the stick does move the rock, it is doing so because it is being used as an instrument of something else which is inherently capable of moving other things: the man who moves it with his hand. The man is the subject responsible for moving the rock, not the stick, and his ability to move things is the primary explanatory factor for the rock's movement.

A second example that Aristotle often employs is the case of a doctor healing a patient. Aristotle in various places speaks both of the art of medicine and the doctor as healing a patient, but he suggests that the most precise formulation is that the doctor heals the patient in virtue of possessing the art of medicine, since the doctor is "that in which the principle of [action] exists."[30] This is because the art of medicine that the doctor possesses plays the primary

[29] *Physics* VIII 5, 256a6-256b3.

[30] *On Generation and Corruption* (*GC*) I 7 324a24-324b6 (cf. II 9, 335b21-4). *Physics* II 3 195b22-5 speaks of the art of house-building as the primary cause of the house being built and *GC* I 10, 328a22-3 speaks of the art of medicine as producing health, but these claims fit well with my interpretation. On my view, the art of

explanatory role in accounting for why the doctor acts as she does and why her actions result in the patient's health. The actions recommended or carried out by the doctor—resting, surgery, eating certain foods and taking certain drugs etc.—do not on their own give a full explanation of the patient's recovery. Rest is sometimes advisable and sometimes not. The drugs that will heal one patient will harm another one and likewise with surgery. It is insofar as these actions are manifestations of the art of medicine, the art that determines how to produce health for any given patient, that they contribute to the patient's health. If the doctor is tired and prescribes the wrong drugs or course of treatment, then the doctor is not exercising the art of medicine. In such a case the doctor is not acting as a doctor and her possession of the art of medicine does not explain her actions. When the doctor is employing the art of medicine, the actions she initiates will be conducive to health. It is not, however, the actions themselves that primarily explain why the patient gets well, but the doctor's use of the art of medicine.

In the case of the stick, certain features of the stick help to explain the stick's ability to move the rock. Similarly, in the case of healing, certain features of the actions and drugs prescribed help to explain how they contribute to the patient's health. However, Aristotle maintains that it is the man's ability to move himself that primarily explains why the rock is moved and it is the doctor's knowledge of the art of medicine that primarily explains why the patient is healed. The doctor will make certain bodily movements and employ certain instruments to carry out her art and the man taking a walk will make certain bodily movements and use an appropriate instrument to move the rock, but the features of these movements and instruments do not play a primary role in explaining what happens. It is the ability of the mover and the knowledge of the doctor that are the primary explanatory factors. They determine what

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medicine is the primary explanatory factor (which, in this case, means it is the primary moving cause), while the doctor who possesses the art of medicine performs the healing, strictly speaking.

the appropriate instruments are and how to employ them. The instruments play an important supporting role in the explanation, but it is only a supporting role.

These cases are parallel to Aristotle's views on the relationship between a human being, her soul, and her activities. The composite human being is responsible for human activities, but the soul is the primary causal or explanatory factor. The body plays an important, but supporting, role in accounting for the activities and affections of living things. It is employed by the composite, as the doctor employs her body and medical instruments in performing her actions and the walker his stick, but the body and its features do not play a primary explanatory role.

In *DA* II 4 Aristotle mentions three ways in which the soul is a primary explanatory factor that accounts for the activities and being of living things:

> Now the soul is the cause and principle of the living body. Cause and principle are spoken of in many ways. The soul is a cause in three of the ways already distinguished. For the soul is a cause as the source of motion, and as that for the sake of which, and as the substance of ensouled bodies. That it is the cause as substance is clear; since for all things the cause of their being is substance, and the being for living things is their living, the cause and principle of which is soul. (*DA* II 4, 415b9-14)

I will start by discussing the way in which Aristotle holds that the soul is the cause of the being of a living thing. For Aristotle, the soul is what makes the body a living thing. Having a body of a certain kind is not what makes me human or distinguishes me from non-living things. There are many non-living bodies made out of the same elements and compounds, bodies that contain carbon, water etc. A human corpse can have the same bodily parts as I have, arranged similarly, but it fails to be alive. As I discussed above in section 3 a, for Aristotle, a human being exists in virtue of his human soul existing and the being of the animated human body comes from the form that is the soul, not vice versa. The soul is what makes me a human being and what enables me to perform human activities, using both my soul and my body.

Aristotle also maintains that ensouled bodies are what they are for the sake of soul. I have the kind of body I have because it is the kind of body needed for my life, for performing my living activities. My limbs, eyes, ears, and other organs are tools of the soul: they aid my soul in allowing me to perform human activities.[31] Finally, Aristotle claims that the soul is needed to account for the distinctive sorts of movement that animals engage in: the motions of animals have their origin in the soul.[32] Consideration of the bodies of animals does not explain why they move where they do when they do. When we take into account the goal-directed nature of the soul and the activities it initiates, such as bodily movement, we find an explanation of the way animals move. They move in order to exercise the soul's capacity for life-activities. The soul is also crucial to explaining the distinctive sorts of changes living things undergo.[33] In particular, the soul is crucial to explaining cognitive activities. According to my reading of *DA* II 5, Aristotle there argues that in cognition the soul undergoes a certain sort of transition, a transition from capacity to exercise, from being receptive of a form to taking on a form. This transition of the soul explains the nature and characteristics of cognition.[34]

6. Why Aristotle Thinks that the Composite Substance, Not the Soul, is the Proper Subject of Human Activities

I have laid out a number of ways in which Aristotle holds that the soul plays a primary explanatory role, with the body playing only a secondary role. So why, on my interpretation, does Aristotle hold that it is the composite human being who, strictly speaking, hears, learns, and hopes? I will first discuss why Aristotle thinks that it is not the individual psychological

[31] *DA* II 4, 415b15-21.
[32] *DA* II 4, 415b21-3.
[33] *DA* II 4, 415b23-28.
[34] My account of this passage follows closely that of Lorenz 2007. I discuss this passage more fully in Chapter VI, section 2.

capacities themselves that are the proper subjects of these activities. I will then discuss why he thinks that the soul is not the proper subject.

Aristotle has good reason to deny that the activities of a living thing properly belong to its capacities or powers, given his conviction that living things display certain unified patterns of behavior involving a variety of interconnected capacities. If we attribute living activities to the living thing's capacities and the parts in which they reside we face serious difficulties in accounting for the unity of a thing's life activities. If for example, we think that my eyes are what see, in the primary sense, and my feet are what move, then we face a dilemma. Either the whole human being can also be properly said to see and move or not. If it can properly be said to see and move, we face a problem of too many subjects. If the eye is a seeing thing performing a certain action of seeing and I am also a seeing thing performing the same action, then we have two different things that are not the same, but are performing the same activity, in the same primary and proper sense. We would need an explanation for how there could be two subjects of the same activity and how to distinguish them. If, on the other hand, we deny that the human being as such sees or moves, then we need to explain how the various parts are able to interact and co-ordinate with one another. How can Odysseus, or his desiring part, want to move towards the sirens, if it is only his ears that hear?

Claiming that the human being sees or desires in some secondary sense does not dissolve these issues. Instead, such a claim raises the question of whether a human being is one unified substance or something more like a mass of separate substances, such as an army or a colony of ants. Such a position is decidedly unattractive to Aristotle, given his firm commitment to thinking that human beings are one of the pre-eminent examples of unified substances. Further, Aristotle is particularly sensitive to concerns about the unity of the living thing. One of the main

functions of the soul is to be a principle of unity. If the soul turns out to have a number of non-unified capacities as parts, then there needs to be some further explanation for the unity of the soul (and the human being), a regress that Aristotle wants to avoid.[35] There is good reason to think that psychological capacities are not the proper subjects of living activities.

Why doesn't Aristotle think that the soul is the proper subject of living activities, especially if he does think that the soul is the cause of the living thing's life, in the ways I discussed above? One of the key considerations against the Soul View is Aristotle's contention that most activities of the living thing involve both body and soul.[36] In *DA* I 1, Aristotle claims that the activities of living things are enmattered. They essentially involve the body, the material component, as well as the soul, the formal component:

> All the affections of the soul—spiritedness, gentleness, fear, pity, confidence, and further, joy, loving, and hating—would seem to involve the body, since whenever we have them the body is affected in some way. A sign of this is the fact that sometimes, though something violent and striking affects us, we are not provoked or frightened; and sometimes we are moved by something slight and faint, when the body is swelling and in the condition that accompanies anger. This is even more evident from the fact that sometimes, though nothing frightening is happening, people are affected just as a frightened person is. If this is so, then clearly affections are forms that involve matter. Hence the definitions will be, for instance: "being angry is a certain motion of this sort of body or part or power produced by this cause for this end." (*DA* I 1, 403a16-28)

Aristotle thinks it is apparent that soul neither acts nor is acted upon without body (*DA* I 1, 403a5-7). He uses anger and fear as his central examples: sometimes our imagination (φαντασία) on its own can produce feelings of anger or fear and their bodily affections, while at other times the condition of our body can result on its own in similar feelings. The Soul View has difficulty accounting for this tight connection between body and soul. If the body is merely an instrument of the soul and the soul itself is unmoved then why can changes in the body

[35] *DA* I 5, 411b1-30.

[36] E.g. *DA* I 1 403a3-403b19. Aristotle sets aside the case of human intellectual understanding (νόησις) and its relation to the body as something to be returned to later (in *DA* III 4-5).

produce these sorts of psychological changes? Changes in the instrument of an art may hinder the exercise of that art, as the rustiness of a saw may hinder the exercise of carpentry, but they do not produce some other (unintended) exercise of art or alter the art itself. The soul's relation to the body is closer and more reciprocal than that of an art to its instruments.

Proponents of the Soul View, who think that the soul is the proper subject of living activities, may note that there are passages where Aristotle speaks of the soul perceiving or understanding. I want to make two important points here on behalf of the Composite View. First, Aristotle in many contexts thinks that several different locutions can be acceptable as long as we understand them correctly. In an example that R. D. Hicks draws attention to, Aristotle parenthetically states in a discussion of the perfect activity of the senses in the *Nicomachean Ethics*, "let it make no difference whether we say that the sense-power is active or that in which the sense-power is."[37] We have already looked at examples in which the primary explanatory factor is said to be the subject of the activity or affection in question without this requiring that we deny that some other entity is the proper subject. We sometimes speak of my eyes seeing some object or my mind grasping some truth but do not *ipso facto* commit ourselves to the philosophical position that the eyes are what primarily sees or the mind what primarily understands, instead of the human being. On my view when Aristotle claims that the soul perceives he is claiming that the soul is the primary explanatory factor (and maybe is *a* subject in the broader non-exclusive sense of *DA* II 2 and *Metaphysics* Δ 18), not that the soul is the proper subject of perception.

The Soul View also cannot rely on simply citing passages in which the soul is described as performing some activity, since in a number of passages Aristotle also speaks of the various

[37] *NE* X 1174b17-8, αὐτὴν δὲ (int. τὴν αἴσθησιν) λέγειν ἐνεργεῖν, ἢ ἐν ᾧ ἐστί, μηθὲν διαφερέτω; Hicks, 275.

capacities of the soul as performing activities.[38] For example, Aristotle speaks not only of the soul thinking and understanding but also of the intellect understanding (e.g. *DA* III 4, 429a10-11, 17-18, 22-24). Aristotle also sometimes switches subjects abruptly, indicating that we should not place too much weight on particular locutions. In *DA* III 7 431b2-6, for instance, Aristotle starts by saying that the faculty of understanding (τὸ νοητικόν) understands, but then seems to switch subject (either to the soul or to the human being) without any explicit indication of this switch. The Soul View needs to account for these passages. If proponents want to maintain that it is always the soul that is the subject, then they must concede that these locutions do not in themselves determine Aristotle's position, in accordance with my reading. If, however, they allow that in some cases it is not the soul, but individual powers of the soul, that are the subjects of psychological activity then they face the problems of co-ordination and of too many subjects that I discussed above. Thus these locutions do not tell against the Composite View on either approach.

The *DA* passage that seems to offer the strongest evidence against my position comes from Aristotle's discussion in *DA* III 2 of the relationship between the perceptible object and its activity and the being affected of the sense-power. There Aristotle claims that:

> If change and acting and being affected are in that which is acted on, it is necessary that also sound and hearing in operation are in the power of hearing. For the operation of what is such as to act and to effect change comes to be in that which is affected; which is why it is not necessary for that which effects change to undergo change.[39] (*DA* III 2, 426a2–7)

Here Aristotle seems to be discussing what the proper locus of hearing is and he seems to be claiming that hearing is an activity of the power of hearing and takes place there. This claim does

[38] Of course, he also speaks of the composite substance as performing activities, but proponents of the Soul View would presumably claim that in these passages he is just speaking loosely or ascribing activities to it in a secondary sense.

[39] Trans. H. Lorenz, altered. εἰ δὴ ἐστιν ἡ κίνησις καὶ ἡ ποίησις καὶ τὸ πάθος ἐν τῷ ποιουμένῳ, ἀνάγκη καὶ τὸν ψόφον καὶ τὴν ἀκοὴν τὴν κατ' ἐνέργειαν ἐν τῇ κατὰ δύναμιν εἶναι· ἡ γὰρ τοῦ ποιητικοῦ καὶ κινητικοῦ ἐνέργεια ἐν τῷ πάσχοντι ἐγγίγνεται. διὸ οὐκ ἀνάγκη τὸ κινοῦν κινεῖσθαι.

not seem to fit with my insistence that, for Aristotle, the proper subject of living activities such as hearing is the living substance in question, the human being.

In interpreting this passage it is important to keep in mind the point that I discussed above in section 4: Aristotle's notion of subject as "that by which" is broader than my notion of proper subject. As long as the entity is the matter of the activity or underlies it in *some* way, it can be spoken of as the subject. Given this, Aristotle's claim that hearing is in the power of hearing need amount to no more than the claim that, in some appropriate way, the power of hearing is a bearer of the activity of hearing.[40] One could similarly claim that the healing action of the doctor takes place in the arm of the person being injected with drugs, even though it is the person who is being healed, not her arms. Given Aristotle's allowance of multiple subjects of activities and affections, his claim that the power of hearing is a subject does not require that it is the proper subject.[41]

Further, it is important to note that Aristotle's claim here is about the power of hearing, not the soul. This passage does not support the idea that the soul, as opposed to the various psychic powers, is the proper subject of activities. If we were to understand Aristotle as here

[40] Cf. Lorenz 2007.

[41] Ryan Cook offers an alternative reading of Aristotle's attributions of psychic activities to the soul and its powers (Ryan Cook, Unpublished Dissertation). On his view, we should distinguish between complete vital activities and their psychic constituents. The complete vital activity is typically a form-matter composite, the proper subject of which must be a hylomorphic composite (the person). Perception, for instance, always has a material and a formal aspect and, as a complete vital activity, belongs to the person. The relevant part of the soul is, however, the proper subject of the psychic constituent (a purely cognitive affection). On Cook's view, Aristotle is prepared to use terms like "hearing" and "perception" to denote either the form-matter composite, or the purely psychic constituent. I believe this may be the correct view about perception and thus that Aristotle may be referring only to the purely psychic constituent of hearing in this passage. Nevertheless, I think that there are multiple cases in which Aristotle does speak of something as the subject where it is not the primary and proper subject (for instance, in speaking of a part of the subject as the subject—cf. Aristotle's insistence in *Categories* 3a30-33 that the parts of substances can be called substances). There is also the crucial case of understanding. The activity of understanding is purely psychic and is not a form-matter composite, so either the intellect or the human being must be the proper subject of both psychic constituent and vital activity. I maintain that the proper subject here is still the human being. On my view, Aristotle sometimes attributes understanding to the intellect because the intellect is *a* subject, in the broader sense of subject as "that by which," not because the intellect is the proper subject of understanding. Although I am sympathetic to Cook's thesis about Aristotle's use of the language of perception in the *DA*, this thesis is controversial so in my interpretation I am just relying on the claim I have already argued for: that Aristotle sometimes speaks of something as a subject, when it is not the proper subject.

making a claim about the proper subject of hearing and then apply the pattern of Aristotle's analysis here to other psychic activities, the conclusion would be that the different psychic powers are the proper subjects, not that the soul is the proper subject. Aristotle's point here is focused on the fact that not only the reception of the patient, but also the action of the agent, takes place in the patient. For this point the question of whether it is some part of the patient or the patient as a whole that is affected is not crucial. Aristotle wants to maintain that the teaching of the teacher takes place in the pupil as much as the learning of the pupil does. For the purposes of this point Aristotle does not need to indicate whether the intellect, or the soul, or the pupil himself is *primarily and properly* the subject of the change.

7. The Relationship between the Soul and the Composite Substance

I have discussed why Aristotle thinks that the soul is the primary explanatory factor of living activities and why he thinks that the composite living thing, not the soul, is the proper subject of living activities. I want now to discuss further the relationship between the composite substance that performs living activities and the soul that explains the substance's ability to engage in these activities. Aristotle has a developed account of how the composite substance is connected to its activities in virtue of the soul. Aristotle argues at the beginning of book two of the *DA* that the soul is the first level of actuality for a living thing. It is a goal-directed actuality that enables the living thing to perform its characteristic activities. The soul of any living thing includes certain powers, which are potentialities for further developed actualities, for acting and being acted upon in certain ways, such as reproducing, perceiving, moving, and thinking. On Aristotle's account, Odysseus's soul is what makes him a human being and what ensures that he has the powers of a human being, such as sense-perception and desire. When Odysseus acts he exercises some of these powers.

We can think of the relation between the composite substance, the soul, and its powers as an ontological pyramid. At the base there is the substance, the human being composed out of body and soul. The soul makes the human being a human being and includes a range of powers which are active at different times and in different activities. Each activity belongs to some proximate power which belongs to the soul which belongs to the human being. Thus each activity ultimately and properly belongs to the human being, in virtue of the actuality that is the soul and the further abilities that the soul includes. The soul and the particular powers it includes explain the activities of the living thing; they are grounded in the composite substance to which they belong.

8. Aristotle's Understanding of the Body

What about the body? What is Aristotle's understanding of the animated body and what role does it play in the activities of living things? Human beings, like other ensouled living things, need a certain sort of body to perform the activities that characterize us. On my reading of Aristotle, the body of a living thing is defined and determined by the activities it performs and the powers of the soul it needs to perform these activities. On this account, not everything that is within the perimeter of a living thing's body is part of the living thing. For example, it is only when a horse has digested the food that it has eaten and has begun to use it to maintain its body that the food actually becomes part of it. It is only then that it is actually contributing to the horse's life. Thus parasites or mistakenly ingested objects will not, strictly speaking, be part of the body of a living thing unless they contribute to its activities or are teleologically directed

towards its life in some other way.[42] All the parts of the body of a living thing are instruments that contribute to or help to carry out one of our life activities.

On my interpretation of Aristotle, there are no human activities that involve only our bodies. Since the human soul is the principle that gives us the ability to perform human activities, Aristotle holds that all human activities must involve the soul. This does not mean that all living activities involve the soul in some sort of conscious or cognitive way. I do not have to be aware of my soul's role in my digestive and nutritive processes. For Aristotle, a whole class of living things, plants, lack any cognitive abilities but still count as living things in virtue of the activities of growth and reproduction that they engage in, activities that their souls account for and explain.[43]

Can Aristotle, on my interpretation, effectively distinguish the bodies of living things from the external instruments that living things employ? Why are my hands and hair part of my body, while my bicycle and coat are not? The role of nutrition and maintenance is crucial for Aristotle's characterization of the body and its organs. To be a part of the living body something cannot just play a role in a living activity, it has to be maintained as the part that it is by the nutritive processes of growth and bodily maintenance. My hands, my nose, and all my other bodily parts are self-maintained by internal processes. My bicycle and coat are not. I can choose to repair them or have them repaired but my body does not naturally act to repair them.[44] This criterion shows the importance of Aristotle's claim that the nutritive power must be shared by all ensouled living things (*DA* III 12, 434a22-26). Since the power of nutrition plays a crucial role in

[42] Thus on Aristotle's view certain bacteria might count as part of the human body due to their importance for digestive processes and for maintaining health.

[43] *DA* II 3-4.

[44] The action of perceptibles on the body is an interesting intermediate case. Aristotle holds that the activity of the agent is in the patient (*DA* III 2) so in a way the color or sound comes to be in me and thus comes to be part of me, though it is the color and sound as active in me, within, that are part of my body (and soul), not the color or sound without.

determining what is part of a living thing's body, Aristotle has good reason to think that this power must be present in all ensouled living things.

So, for Aristotle, the living thing, a substance composed of body and soul, is the proper subject of living activities. The soul plays a primary role in explaining its activities, but is not the proper subject of living activities. The body plays an important, but secondary, role and serves as an instrument of the soul.

9. Implications of Aristotle's View

a. Criteria for Survival

What does Aristotle's view of body and soul imply for my survival and for the extent and value of my human activities? I will first lay out my interpretation of Aristotle's views on human persistence and then turn to Aristotle's views on the hierarchy of value found in human activities. On my interpretation of Aristotle, as long as the human soul, the first actuality in virtue of which a human being is able to perform living activities, continues to inform and organize an appropriate body, the human being persists. I can survive the loss of much of my body, as long as there remain appropriate parts of my body that my soul can use for performing my activities. The particular history and composition of my bodily parts does not change my identity, because, for Aristotle, the role and identity of the living body comes from its function in my life activities. So, on my interpretation of Aristotle's theory, the replacement of the cells or atoms of my body with others of the same type does not affect my identity.[45] The food that I ingest becomes part of

[45] This holds at least in the case of replacement via natural processes. Aristotle does not discuss precisely what sort of non-natural processes a human being can persist through. There are also difficult cases: organ transplantation, for instance. Once a person successfully undergoes a kidney transplant and the organ is functioning normally within her body, there is reason to think that the organ is part of the recipient, even if it retains some of the characteristics of its donor. However, if the person's body refuses to accept it and her immune system tries to harm it, then the kidney fails the self-preservation test (or partially fails it, since the body is still be providing the kidney with oxygen and nutrients), giving us reason to wonder whether the kidney counts as part of her body. Thus in one way the kidney is part of her body, since the kidney is being used as an internal instrument to carry out some of her living activities, but in another way it is not, since the body is trying to reject it.

my body when it is broken down and starts to play a role in my life functions, either by giving my body energy or by becoming part of existing bodily structures.[46]

Further, in order to survive I do not need to continue to perform any one particular human activity. For Aristotle, the soul is a first actuality, an ability to perform activities, not an activity or affection itself. This means that as long as I retain the ability to perform human activities I persist, even if I am in a coma or am constrained in some other way. As long as my ability to perform human activities persists, I persist, even if my body is hindering me from performing these activities. It is only when my life is gone and my soul no longer organizes my body that I die.

b. Aristotle's Views on Personal Character

Thus for Aristotle my personal identity and survival depend on the continued existence of my soul and its continued ability to inform and organize my body. Aristotle's account of body and soul is primarily concerned with what makes me the substance or kind of thing that I am, with my metaphysical identity. It does not focus on an important issue in contemporary discussions of personal identity: the question of what makes me me, as opposed to some other person. Aristotle has two lines of thought that are relevant to this question. To begin with, the sort of person that I am will, for Aristotle, depend on the particular body and soul that I have. In his biological writings Aristotle discusses how the bodily characteristics of a living thing can influence their affections and activities.[47] Particular features of my body and soul may explain the sort of person that I am.

We find Aristotle's views on the factors that make me the particular sort of person that I am most fully laid out in his ethical writings. For Aristotle the sort of individual human person I

[46] *DA* II 4 416a21-416b31.

[47] E.g. *De Caelo*. 288b15-19, *De Partibus Animalium* II 4; 651a14; 655b12-13, *De Generatione Animalium* 745a15-20.

am depends on the sort of character that I have and the way in which my capacities are developed and exercised. Here Aristotle's notions of habit (ἔθος) and stable disposition (ἕξις) are important. As Aristotle says in the *NE*:

> So the virtues arise in us neither by nature nor against nature. Rather, we are by nature able to acquire them, and we are completed through habit (ἔθος). (*NE* 1103a24-6)

I am a human being by nature and perform generically human activities by nature. However, the particular way I act—whether virtuous, vicious, or somewhere in between—comes not from my human nature, but from my character, my ethical and intellectual upbringing and habits. We can say "he's not the same person he once was," when speaking of someone whose character has drastically altered, because of striking differences in his activities and values.

For Aristotle activities are primary: I am what I do.[48] What I do, however, depends on the habits, character and disposition I have. The sorts of knowledge that I have (or fail to have) and the sorts of virtues that I have (or fail to have) will govern the sorts of activities I engage in, the sorts of activities that constitute my life. The particular character of my human activities, particularly my voluntary actions, are regulated by my character.[49] When my character changes, my activities will change. This leads to a change in my life and my being. Thus, for Aristotle, my character, the ethical and intellectual habits I have, make me the sort of person that I am. Who I am, in this sense, is bound up with my ethical character and my knowledge, both practical and theoretical. Nevertheless, for Aristotle, my character is a quality of me, not something substantial. It is long lasting, but it does not make me the substance I am. I can remain the same human being while changing my character. For Aristotle, my character determines the sort of

[48] As we saw above, I am a human being because I am able to perform human activities.

[49] Aristotle does, however, allow for the possibility of acting out of character. My character is the stable disposition I have that inclines me to act a certain way. I can act against this disposition on any given occasion. I can also change my character over time, particularly in response to the influence of my family, friends, and society.

person I am, both as an individual and as a member of a political community, but it does not determine my metaphysical identity.

c. Aristotle's Hierarchy of Human Activities

Aristotle thinks that any activity that involves an exercise of one of the capacities that belong to me in virtue of having a human soul will be a human activity, so that digesting food will be a human activity, as well as remembering to take out the trash or enjoying listening to music. Falling through the air, by contrast, is not a human activity, because it depends only on the composition of my body, not on any ability of my soul. Aristotle, however, does not think that all activities are equally human or equally make us what we are. He shows this clearly in his discussion of human pleasure in *NE* X 5 which relies on a hierarchy of human activities.

> Of those pleasures which are thought to be decent, which kind, or which particular pleasure, should one take to be the pleasure of a human being? Or is it clear from the activities, since the pleasures are consequences of these? The pleasures completing the activities of the complete and blessed human being (whether these activities are one or many) are properly said to be human pleasures, the others are human pleasures secondarily or even more remotely, according to their activities.[50]

Aristotle claims here that the question of which pleasures are properly human ones depends on which activities are human. Some activities are properly said to be human while others count as human ones secondarily or at an even greater remove.

For Aristotle what it is for a living thing to be is for is it to live a certain sort of life, to perform certain living activities. Living a human life is what it is for a human being to be. I satisfy this requirement in a minimal sense by possessing a human soul that enables me to perform the sorts of activities that human beings do. But life, for Aristotle, is in doing more than in being able to do, in the exercise more than in the capacity.[51] It is in performing human

[50] *Nicomachean Ethics* X 5, 1176a23-28.
[51] *Metaphysics* Θ 8.

activities that I am fully human and in performing the most human activities that I am most fully human. Aristotle's appeal to readers of his *Nicomachean Ethics* to live a truly human life is not just an exhortatory ethical slogan: it reflects his deepest metaphysical commitments about the nature of life.[52]

Aristotle offers two criteria for the value of a given activity of a living thing. First of all, the most valuable activities of a living thing will be activities that are characteristic of it. These activities should in some way be expressive of what that living thing is. For example, in the *Nicomachean Ethics* Aristotle argues that the life of reason, the life of human activities that are either rational themselves or ordered by reason, is more valuable than the life of nutrition and growth or the life of perception because the life of reason is more distinctively human.[53] Aristotle also claims that living activities are valuable insofar as they resemble the divine being, which, for Aristotle, is the eternally existing first unmoved mover, self-thinking thought. Activities that resemble the divine by imitating either its eternal existence or its ceaseless activity of contemplation are valuable both because of their likeness to the divine and because of their inherent orientation towards the divine.[54]

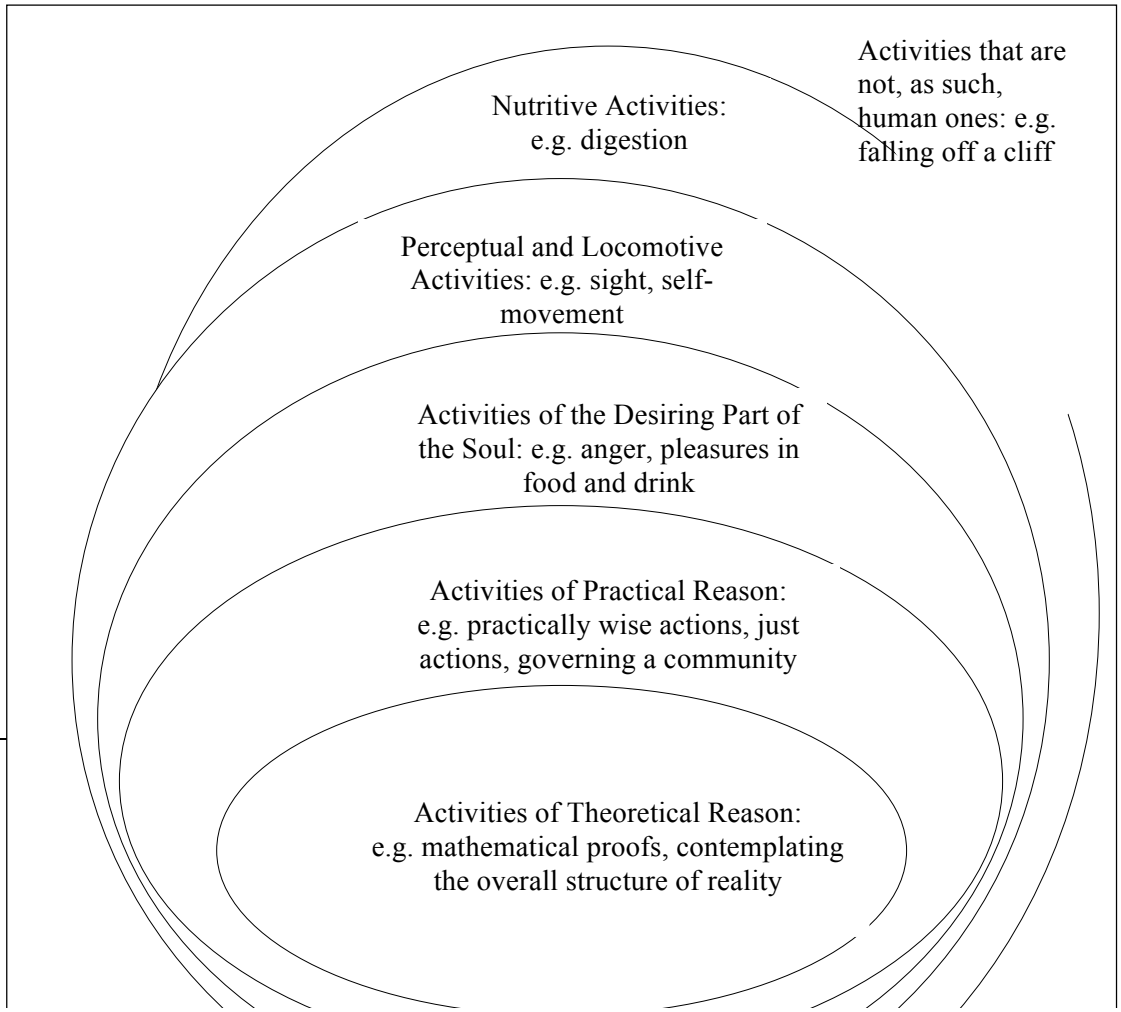
These criteria result in a hierarchy of values for human activities. Nutritive activities, such as the body's self-maintenance or reproduction, are valuable because they allow us to continue our existence and the existence of the human species.[55] Many other living things, however, also perform these activities, so they are not distinctive of us. Perceptual activities, such as perceiving and remembering, allow us to gain knowledge about the world and also distinguish us from plants. However, these activities are shared with all the other animals, so

[52] *Nicomachean Ethics* I 7, X 7.
[53] Cf. *NE* I 7, 1097b24-1098a21.
[54] *DA* II 4 415a26-415b7 and *Metaphysics* Λ 1072b16-28; 1075a4-10.
[55] *DA* II 4 415a26-b7. Cf. *NE* I 7, 1097b33-1098a5.

they are not distinctive of humans as such.[56] Further, the knowledge we obtain from them is spatiotemporally limited, and thus less like the divine knowledge.

For Aristotle, actions that embody ethical virtue and practical wisdom—just or courageous actions and wise decisions about practical matters—are distinctively human.[57] They also resemble the divine because of the way in which they are governed by reason. Aristotle, however, holds that the most valuable human activities are activities of theoretical understanding. For Aristotle grasping the nature of the universe and the divine being on which it depends is the most valuable activity, both because it involves the exercise of a distinctive human ability and because it is most god-like.[58] The intellect's activity of contemplating reality is at the center of Aristotle's hierarchy of human activities, as the accompanying diagram illustrates (Diagram A below).

Diagram A: Aristotle's Hierarchy of Human Activities



d. Aristotle's Special Role for the Intellect

Indeed, at times Aristotle seems to suggest that human beings really are our intellects. Aristotle emphasizes the extent to which human beings are their understanding at a number of points in his *Nicomachean Ethics*. One of the key passages is from his discussion of love and care for oneself in book nine:

> [The good person] wishes for himself what is good and what seems so and does it (for to practice the good is characteristic of the good person) and for his own sake, since he does it for the sake of his thinking part (τὸ διανοητικόν), which is what each person seems to be. Moreover, he wishes himself to live and to be preserved. And he wishes this for the part by which he judges (τοῦτο ᾧ φρονεῖ) more than for any other part. For being is a good for the excellent person, and each person wishes goods for himself. And no one chooses to become another person, even if that other will have everything when he has come to be (for, as it is, even now the god has the good). Rather, [he wishes goods] on condition that he remains whatever he is; and each person would seem to be the understanding part (τὸ νοοῦν), or that most of all. (*NE*, IX 4, 1166a14-23)

Aristotle is here using the claim that what we are most of all is our intellectual part (here seemingly taken to include both our practical and theoretical powers of thought) to support his contention that we do good things for our own sake. He points to our acting for the sake of our thinking and judging part and uses this as evidence that this part, and its activity, is what makes us human.

Aristotle also claims that this part and its activity is what makes us divine. For him, theoretical intellectual activity is the human good because it meets both criteria: it is a distinctively human activity and it is the human activity that most resembles the divine. Aristotle presents both these claims in this famous passage from the end of the *Nicomachean Ethics*:

> As far as we can, we ought to make ourselves immortal, and go to all lengths to live a life in accord with our supreme element; for however much this element may lack in bulk, by much more it surpasses everything in power and value. Moreover, each person seems to be this [i.e. his understanding (ὁ νοῦς)], if he is his controlling and better element. It would be absurd, then, if he were to choose not his own life, but someone else's. (*NE*, X 7, 1177b34-1178a5)

The intellect is our "controlling and better element," the thing that enables us to live a distinctively human life, the sort of life that is most valuable for human beings. It is, at the very same time, the element that allows us to make ourselves immortal by participating, to some limited extent, in the divine activity of understanding reality. For Aristotle, the intellect makes us what we are and connects us to the divine. Thus its activity is most human, most divine, and most valuable.

The distinctive characteristics of theoretical intellectual activity, the activity Aristotle holds to be of the greatest value, raise important issues, as Aristotle thinks that the intellect's relationship to the body is different from that of the nutritive or perceptive abilities. As I have discussed, at the beginning of the *DA* Aristotle raises the question of whether intellectual activities can be performed without the body.[59] He goes on to examine the character of intellectual activities in *DA* III 4-8.[60] There he claims that the intellect does not have a bodily organ. This raises a key question: on Aristotle's view could there be an activity of an ensouled thing that did not involve the animated body? On the Attribute View, this possibility is straightforwardly ruled out, because the soul is just the set of capacities of the living body. The living thing or its soul cannot have any abilities or activities that go beyond the body. On the Soul View, in contrast, such a possibility is unproblematic, because it is the soul, not the body, that is always the subject of living activities. Some activities may make use of the body, but there is no requirement that all activities do so. On my version of the Composite View, Aristotle can allow for the possibility of non-bodily human activities as long as these activities ultimately belong to the human being. Even if the soul and the intellect are the primary explanatory factors of these activities, they can properly belong to the human being as long as the intellect is

[59] *DA* I 1, 403a10-16. For discussion of this passage, see Chapter II, section 6.
[60] *DA* III 4, 429a18-b5.

appropriately grounded in the human being. As long as human intellectual activities and our intellectual powers are coordinated with our non-intellectual activities and powers (and the bodily organs these powers require) they can be part of human life.

This leaves open an interpretative possibility that I will explore in the following chapters: Aristotle does think that human intellectual activities are non-bodily, while also holding that these activities are co-ordinated with perceptual bodily activities because of the auxiliary involvement of imagination in our intellectual activities. What would such a position mean for human survival? If, on Aristotle's view, my soul will survive the destruction of my body and continue to understand things, do I still exist? On the one hand, the composite human being, the unity of soul and body, no longer exists. Moreover, the soul could no longer remember or feel or do any non-theoretical human activity. Nevertheless, on this proposal, my soul, the form that makes me what I am, continues to perform a human activity, the kind of activity that makes me what I am. If I am the subject of this activity while united with my body, would I not continue to be the subject of it after separation from the body? In the next chapter I will examine this question by looking more closely at Aristotle's notion of the soul and at the question of whether intellectual activities are an exception to Aristotle's general claim that the composite human being is the proper subject of human activities.

V. Separability and the Soul as the Form of the Body

1. Introduction

Could the soul be the form or first actuality (ἐντελέχεια) of the body, as it is on Aristotle's view, while also being separable in existence from the body? Could the soul have a part or aspect which does not organize the living thing's body or one of its bodily parts? Many commentators have thought that Aristotle's conception of the soul rules out this possibility.[1] Charles Kahn, for example, maintains that the claim that the intellect "is essentially incorporeal and has no bodily organ" or any similar claim of incorporeality is "incompatible with [Aristotle's] general definition of the *psuchē* as form and actualization of the body."[2] The soul and its parts cannot exist without the body nor can they have any activity that is non-bodily. On this view, if Aristotle does affirm, or even countenance, such a possibility he is being inconsistent with the view of the soul he puts forward in *De Anima* (*DA*) II 1-3. In this chapter I examine Aristotle's conception of the soul, building on my discussion of Aristotle's views on soul and body in the previous chapter, in order to determine whether Aristotle can, in fact, allow for such a possibility. I argue that Aristotle's conception of the soul allows for the possibility that some kinds of soul include powers that are not the powers of any part of the body and that can be exercised without the body. If there is, in fact, some activity that is separable from the body, in the sense that Aristotle outlined in *DA* I 1, then Aristotle's own view of the soul implies that the soul responsible for that activity can exist apart from its body.

In the previous chapter I argued that Aristotle holds that the composite human being, consisting of the human body and human soul combined into a unity, is the underlying subject of all human activities. Although the composite human being is the subject of all activities, the

[1] E.g. Hartman 1977; Wilkes 1978, 115f.; Sisko 1999, 253, 264-6.
[2] Kahn [1992] 1995 in Nussbaum and Rorty [1992] 1995, 360.

human soul, the goal-directed capacity for performing human activities, plays a crucial role in accounting for what human beings are and for what we do. On my view, the composite living thing is what sees, eats, moves from place to place, and so on, while the soul's role in its doing these things establishes a strongly privileged place for it within the composite entity. There are two sets of questions about the soul that are important for the topic of this chapter and were not fully explored in the previous chapter. The first concerns the relationship between the soul and the powers of the soul. Is the soul something over and above its powers or is it constituted by its distinctive powers? This question is important for grasping Aristotle's view on the nature and unity of the soul. This, in turn, allows us to consider whether Aristotle's view of the soul allows for a power of the soul that is not the power of any part of the body. Would such a power fit with the rest of the soul in an appropriate way or would Aristotle hold that its properties are incompatible with the nature of the soul?

The second set of questions concerns whether intellectual activities are an exception to Aristotle's general claim that the human being is the proper subject of human activities. If intellectual activities do turn out to be done without the body, is the human being still their proper subject or is it, instead, the soul or the intellect? This question is important for determining what entity, if anything, Aristotle thinks might be able to exist without the body. If intellectual activity persists after death, who is doing the thinking? Am I doing it or is my soul or my intellect the entity performing the thinking?

I will address the first set of questions by presenting and developing two alternative interpretations of Aristotle's conception of the soul. On the first view, the soul is constituted by a unified and interrelated set of powers. On the second view, the soul is ontologically prior to its powers and is not constituted by them. I show that both interpretations are compatible with the

relevant texts from Aristotle. I then argue that on both interpretations Aristotle can allow for a power of the soul that is not the power of any part of the body and that on both views the soul can persist if there is some power of the soul that persists.

I then turn to the second question, concerning the proper subject of activities that are non-bodily. Using my two interpretations of Aristotle's views on the soul as well as the views on the relationship between soul, body, and human being I articulated in the previous chapter, I show that the living thing is still the proper subject of activities that are non-bodily. Given Aristotle's conception of the soul as the unifying principle of the life activities characteristic of any given kind of living thing, understanding and the power of understanding must belong to the human soul itself (and thus to the composite human being), whether or not the intellect is involved in organizing some part of the body. The intellect cannot be a power or substance separate from the human soul. I then show that this conception of the soul is compatible with Aristotle's understanding of the soul as the form of the living thing.

Finally, I examine what happens, on Aristotle's view, when a composite living thing with a non-bodily activity is destroyed. Assuming that some human intellectual activities meet Aristotle's separability criterion, what happens after death? I argue that if the intellectual power and its activities can exist separately, then when, after the destruction of the human body, they do exist separately, the human being also continues to exist. I argue that this view is preferable to one on which the primary subject of understanding (νόησις) is the intellect or one on which understanding switches primary subjects after death. After the destruction of the body, the human being is no longer a composite of soul and body but instead comes to be constituted by the soul, with its single power of understanding.

2. Two Views of the Soul: Soul before Powers and Refined Constitution

In this section I will present and develop two alternative interpretations of Aristotle's conception of the soul and outline their respective advantages and difficulties. There are two fundamental roles that are generally recognized as essential to Aristotle's characterization of the soul in the *DA*. In the first place, the soul is what distinguishes living things from non-living ones. As the first actuality of a natural organic body, the form organizes the body of a living thing in a distinctive way.[3] In this sense the soul is defined in relation to the body and is seen as organizing the body and working through it. Secondly, the soul, as the substantial form of the living thing, is the primary explanatory factor of living activities. It is "that by which primarily we live and perceive and think." On this conception, the soul is the principle of living activities and "is determined by them, by the powers of nutrition, perception, thought and motion."[4] The soul is the actuality that explains all the activities and affections that are characteristic of the living thing in question. I will argue that both roles are compatible with the soul having a part or aspect that is not the form of the body or its parts.

In Chapter III I argued that the Attribute View, according to which the soul is only an attribute of the body, should be rejected. According to this view the soul is not something that could exist on its own or have its own powers that operate separately from the body because Aristotle holds that the soul is "just a disposition of the body."[5] Against this, I pointed out that Aristotle thinks that the soul is ontologically prior to the body it informs.[6] The unified actuality that is the soul explains the unity and existence of the living thing and its body. Aristotle claims that the soul is a cause and principle of the living body in three ways: as substance, as source of

[3] *DA* II 1, 412a19-412b10.
[4] *DA* II 2, 414a12-13, 413b11-13.
[5] M. Frede 1995, 98; Cf. Barnes 1979, 33; 2000, 107; Guthrie 1981, 284.
[6] Chapter IV, section 3 a.

motion and as that for the sake of which.[7] In these three crucial ways the soul and its powers explain why the living thing is able to perform the living activities in which it engages. Since Aristotle thinks that the soul is prior to the body, both ontologically and in the order of explanation, he can allow for the possibility that the soul has certain powers that do not operate through the body.

One might, however, still think that Aristotle's commitment to the unity of the soul requires him to reject this possibility. Can a soul that informs a body and is itself a unity have a part that does not operate through the body and that persists after the destruction of the composite? On one view, what I will call the Naïve Constitution view, the answer is no. On the Naïve Constitution view, the soul is constituted by its powers and is nothing over and above the powers of the soul. The human soul is just the collection of powers that the human being has, including the specific powers of nutrition, sensation, and thought that belong to human beings. These powers exist as the actualities or organizations of different parts of the body and the soul exists as the collection of these powers. Now, for the sake of argument, assume that Aristotle thinks that the human intellect can continue to operate after the destruction of the composite human being, but that the other powers of the human soul cannot. On this scenario, the human soul as such cannot persist, since the human soul is constituted by all its powers and the non-intellectual powers do not persist. The nutritive and sensitive powers partially constitute the human soul and they cease to exist with the dissolution of the composite. When they cease to exist, the human soul does as well. Either the human intellect alone among the powers of the human soul persists or at best the human soul becomes a new kind of soul. The old soul was constituted of a variety of powers, whereas the new soul is constituted by one power, the

[7] *DA* II 4, 415b9-14.

intellectual power. These two souls, however, would have different constitutions and different criteria for persistence, so this cannot be a case of the same soul persisting through change. Given the Naïve Constitution view, on this scenario the power of intellect is the only thing that could plausibly be said to persist.

This creates its own problems as the intellectual power would have a separate history and existence from the rest of the powers of the human soul. If all the powers taken together are to constitute the human soul they must either share the same histories and the same being or there must be some further explanation for why they constitute one thing with a unified history and being, the human soul. However, Aristotle rejects the latter possibility because he wants the soul to be internally unified, without standing in need of some further, external source of unity.

Aristotle discusses the need for psychic unity in *DA* I 5 where he is arguing against the Platonic position that we think with one part of the soul and desire with another:

> Now some say that [the soul] is divisible and that one part of it understands, another desires. What, then, holds the soul together, if it is naturally divisible? Surely not the body; on the contrary, it seems that the soul holds the body together. At least, when it has departed, the body disperses and rots away. If, then, some other thing makes the soul one, that other thing would rightly be soul. It will be necessary then to ask again whether this is one or many-parted. For, if it is one, why not say straightaway that the soul is one? If, however, it is divisible, then again the argument (λόγος) will ask what it is that holds *it* together, and thus the argument will proceed to infinity. (*DA* I 5, 411b5-14)

Aristotle here raises a problem for any view that says the soul is divided and, as such, needs something that accounts for its unity. The soul, Aristotle claims, is supposed to be a principle of unity since it unites the body and makes it the body of one person. If the soul stands in need of being unified, then, Aristotle says, whatever makes the soul one would have a better right to be called soul, simply because it, in unifying the soul powers, makes the body it animates the body of one person. We will then ask if this thing is a unity or needs to be unified. If it is a unity then why not hold that the soul is one from the beginning, instead of introducing a higher level of soul

which unifies the collection of powers initially called the soul? If this thing itself has parts, then the same question recurs and can go on doing so ad infinitum. Aristotle thinks that the soul, as a principle of unity, must be internally unified. For Aristotle, any satisfactory account of the soul must offer an explanation of the soul's unity that does not appeal to any external factors. Either the soul must itself be one or its parts must be internally unified so that it does not stand in need of anything external to account for its unity.

Given Aristotle's position on the unity of the soul, if we are operating with the Naïve Constitution view of the soul we should deny that any part of the soul can exist or operate separately from the body, since this would allow for the possibility of a non-unified soul, having different parts with different histories and standing in need of something external to unify these parts. Thus on this view we should either reject the claim that the intellect can survive the destruction of the composite or reject the claim that the intellect is a power of the human soul.

However, Aristotle's position on the unity of the soul raises a fundamental difficulty for the Naïve Constitution view. This view itself does not sufficiently account for the soul's unity. On this view, the soul is made up of many different powers which are united in some way. If the soul's being is derivative from these various powers, its unity must also be derivative. But the powers of the soul are diverse, so we need some further explanation of what unifies them so as to constitute a soul. If there is some further external explanation for the soul's unity then the soul will not be a principle of unity in the way that Aristotle thinks that it is. The Naïve Constitution view may offer some notion of the soul as an explanatory unity, but it cannot account for the metaphysical unity that Aristotle holds the soul possesses.

So what sort of unity does Aristotle think holds between the soul and its powers, and is this sort of unity compatible with one of the soul's powers being non-bodily and able to persist?

There are two plausible interpretations of Aristotle's view of the relationship between the soul and its powers. One position, what I will call the Refined Constitution view, holds that the soul is constituted by its powers, but that these powers are internally unified. The other position, what I will call the Soul before Powers view, distinguishes between the soul and its powers and holds that the soul is prior to its powers. I will present these two views and briefly discuss their strengths and weaknesses. I will then turn to the question of whether they are compatible with the soul having a non-bodily power that can persist.

The Refined Constitution view, as the name suggests, also holds that the soul is constituted by its powers, but offers a more plausible interpretation of how the soul can be constituted by its powers while still being a unity. On this view the soul is not a disparate collection of powers but instead an internally integrated and interrelated system of powers. The human soul, for instance, is ultimately defined by the intellectual power and this, Aristotle argues, presupposes the sensitive and nutritive powers.[8] The ultimate differentia of each kind of soul, in particular, would internally account for the being and unity of the soul, just as the parts of the definition can internally account for the definition's unity on Aristotle's account.[9] The human soul would be an internally integrated and interrelated system of powers, unified by the intellectual power. For there to be an intellectual power a perishable living thing must have a sensitive and a nutritive power. On the Refined Constitution view each of these powers would be its own separate actuality but the intellectual power, which is the primary actuality of the human soul, would require these further actualities and account for their presence. The human soul

[8] *DA* III 12.

[9] Cf. *Metaphysics* Z 12, *Metaphysics* H 6. In non-human cases it would not be some further and ultimate power, such as the intellectual power, which defines the animal or plant but instead the specific sort of sensitive or nutritive power of that living thing. Something about the dog's specific way of living and sensing requires it to have the specific sort of sense and nutritive powers and the specific sort of sense and nutritive organs that it does, as opposed to the sort that a camel has or the sort that a clam has.

would then be constituted by the actualities that are these different powers along with the integrated and unified relationships between these powers. This Refined Constitution view retains the constitution of the soul from its powers but is better able to account for the metaphysical and psychological unity of the soul.[10]

Although this view is more plausible it still faces a difficulty. Aristotle's own discussions of how something complex can be internally unified without standing in need of any external principle, as put forward in *Metaphysics* Z and H, do not apply in any obvious way to the case of the powers of the soul. In *Metaphysics* Z the notions of matter and form and of genus and differentia are the focus of Aristotle's discussions of definition and unity. The explanation of unity put forward in H 6, in turn, seems to crucially rely on the parts of the complex thing standing in a relationship of actuality to potentiality. It is because one aspect is actual and the other potential that something can be a unified whole composed out of these two parts. The relationship of the parts of the soul to one another does not seem to fit well into the categories discussed in Z and H. On the Refined Constitution view there is a different actuality for each of the soul's different powers (in addition to the body that serves as matter). We then need to understand why these different actualities are internally unified. The different actualities do not stand to one another as potentiality to actuality, nor do they stand to each other as species to genus or differentia to genus or matter to form. Given this, it is not clear how Aristotle would account for their unity. These different actualities do not fit smoothly into the views on internal unification which Aristotle defends in the *Metaphysics*. Fully laying out this problem would require carefully examining the relevant texts of the *Metaphysics* as well as the full range of critical opinion concerning them, an undertaking beyond the scope of my project. I will simply

[10] My account of this view and my understanding of it have been shaped by discussions with Hendrik Lorenz.

note that this is a worry that the Refined Constitution view needs to address: how are the parts of the soul internally unified? Does their internal unity fit with one of the ways of being unified that Aristotle lays out in *Metaphysics* Z and H or are they unified in some other way?[11]

The second interpretation, the Soul before Powers view, avoids these sorts of difficulties concerning unity. On this interpretation the soul is itself one and has being in the most proper way, as actuality, while the unity and being of its powers is derivative.[12] On this view, the soul is a principle of unity not only for the body but also for the powers of the soul, powers that are posterior to the soul itself. The soul gives rise to the powers of the living thing, its potentialities for certain distinctive activities or affections, activities or affections that allow it to realize its form. As the soul is a unified actuality, the powers it gives rise to will be unified in their operation. Since, however, the soul and its powers are distinct there is no need to find a way of internally unifying them into one complex. These two views offer different interpretations of how Aristotle meets the challenge he laid out at the end of *DA* I 5. On the Refined Constitution view, Aristotle does think that the soul is, in a qualified way, a complex thing made up of parts, but this complex thing is internally unified. On the Soul before Powers view, in contrast, the soul is a unity that gives rise to differentiated powers, as required for the life of the thing in question.

Both interpretations of Aristotle's views on the soul can offer a better account of co-operation between powers of the soul than the Naïve Constitution view. Our powers of perception and thought, for instance, work in coordination with one another instead of operating independently. This allows us to use diagrams in pursuing mathematical proofs, for instance. If the soul were just a collection of disparate powers then there would be no reason for these powers to function in a unified way instead of as the separate entities that they are. As things are,

[11] For discussion of the crucial texts in the *Metaphysics* see, inter alia, Scaltsas, Charles, Gill (eds.), 1994; Witt, 1989; and Gill, 1989.

[12] Cf. *DA* II 1, 412b8-10.

the sensations that we receive often affect the exercise of our power of thought: observing the stars may lead to my thinking about the causes of their movements. If we think of the soul as simply a collection of powers, as on the Naïve Constitution view, we do not have a satisfactory explanation for why our powers and their activities are connected in the unified way in which they are. These two interpretations can provide such an explanation. On the Soul before Powers view, all the powers derive from the soul and thus do not operate entirely independently or in isolation from one another. They are related to each other because of their common relation to the soul. On the Refined Constitution view the powers are all internally related by being related to the specific difference of the soul in question. Their operations will be related to one another and, in particular, to the operations of the most distinctive power of their soul.

Both interpretations also offer accounts of the explanatory roles played, respectively, by the soul and its powers, though these accounts differ significantly. In considering a given activity of digestion, perception, or thought, we can ask what, for Aristotle, the primary explanatory factor is.[13] Is it the soul or the relevant power? Do they both explain the activity in different ways? Is one primary? On the Refined Constitution view, since the soul *is* the interrelated collection of powers both the power and the soul are the explanatory factor and both explain in the same way. If my power of digestion explains this activity then the soul also explains this activity, since my power of digestion is not something different from my soul. Different powers of the soul will explain different activities, but in each case it will be the power and the soul that it partially constitutes that explain the activity. On the Soul before Powers view, in contrast, the soul and its powers are distinct and play different explanatory roles. The relevant power for this particular activity will be its primary explanatory factor, while the soul will explain why the

[13] Cf. Chapter IV, section 4.

living thing has this power and, more generally, why it has the sort of powers and the sort of life that it does. On the Soul before Powers view the soul has a general explanatory role. It is the primary explanatory factor of the life of the thing in question while the powers play the primary explanatory role when it comes to the individual activities and affections of that thing.

I think that both views are compatible with the texts we have from Aristotle concerning the soul. I want, however, to examine a passage from Aristotle's discussion of the definition of the soul in *DA* II 3 that initially seems to provide some evidence favoring the Soul before Powers view. First we need to note a key difference between this view and the Refined Constitution view. On both the Soul before Powers view and the Refined Constitution view the soul of a plant is the same actuality as its nutritive power, since the plant has no other powers. The two accounts diverge when it comes to animals. On the Soul before Powers account animals have a perceptive soul that is one unified actuality which involves two different derivative powers: the nutritive power and the perceptive power. The Refined Constitution view holds that there are two actualities, the nutritive power and the perceptive, that are interrelated and unified so as to constitute a perceptive soul. These powers are separate actualities, not just potentialities of the one actuality that is the perceptive soul.

In *DA* II 3 Aristotle compares accounts of the soul to accounts of geometrical figure and indicates that there is an important difference between the soul and its powers. He notes that just as there is no figure whose proper account is the common account of figure, so there is no sort of soul whose proper account is the common account of soul.[14] There is also an order and sequence among the accounts of soul-powers, just as there is in the accounts of figure. At the end of this passage Aristotle says, "for among figures and among the ensouled, the prior always belongs to

[14] *DA* II 3, 414b24-415a1.

the later potentially (δυνάμει), as the triangle in the quadrilateral, the nutritive in the sensitive."[15] Aristotle is here using an example to point out two similarities in the relations which different kinds of figures and different kinds of soul have to one another. Different kinds of figure and different kinds of soul have sequential relations between themselves, and their varieties are not mutually exclusive, as proper species of a genus are.[16] Just as the quadrilateral comes after and depends on the triangle, so the perceptive soul comes after, and in a way depends on, the nutritive soul.

The important claim for our purposes is that the earlier sorts of soul or of figure are in the later ones potentially (δυνάμει), not actually. The quadrilateral is not two triangles, although it can be divided into two triangles. It is a unified figure which depends in a certain limited way on the triangle, since some of its properties and powers depend on those of the earlier figure. Understanding what a triangle is helps us to better understand what a quadrilateral is. For instance, quadrilaterals have interior angles equal to four right angles, because they can be divided into two triangles, each of which has interior angles equal to two right angles. For Aristotle, there is not some actual triangle which constitutes or partially constitutes the quadrilateral.[17] Similarly, the perceptive soul is not the nutritive soul. Instead there is a unified perceptive soul which possesses some of the properties and powers of the earlier, nutritive, soul.

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[15] *DA* II 3, 414b29-32. ἀεὶ γὰρ ἐν τῷ ἐφεξῆς ὑπάρχει δυνάμει τὸ πρότερον ἐπί τε τῶν σχημάτων καὶ ἐπὶ τῶν ἐμψύχων, οἷον ἐν τετραγώνῳ μὲν τρίγωνον, ἐν αἰσθητικῷ δὲ τὸ θρεπτικόν.

[16] Cf. Hicks, 337; Polansky, 195. As Polansky points out, (Polansky, 195) the different sorts of soul do not have a strict species-genus relationship to the general account of soul, since their differentia are themselves souls. This is again similar to the case of figure where the differentia of the later figures are themselves figures. Thus soul cannot be given the most proper sort of species-genus definition. cf. *Metaphysics Z*, 4, 1030a11ff.

[17] Although the quadrilateral is divisible into triangles, when divided it is no longer a quadrilateral, but two triangles. The actual quadrilateral is not composed of triangles though it is able to be divided into triangles. In contrast, the perceptive soul is not able to become a nutritive soul or several nutritive souls. Aristotle argues that when an organism is divided its separated parts possess the same sort of soul and the same soul powers that the organism possessed when it was whole (*DA* II 2, 413b15-24). When a worm is divided in half there will now be two worm parts each with perceptive souls.

The nutritive soul helps us to understand the perceptive soul, but there is not some nutritive actuality which constitutes or partially constitutes the perceptive soul.

On the Refined Constitution view, it may seem that the actuality that is the nutritive soul is actually present, not just potentially present, since the perceptive soul is partially constituted by a separate actuality that is the nutritive power. Such a view would not fit well with Aristotle's claims in the text. The quadrilateral is its own unified figure, it is not partially constituted by an actual triangle, or two actual triangles, or an actual triangle plus some other shape. It is potentially a triangle because of the way in which its properties partially depend on those of triangles, not because there is a triangle actually present in it. Similarly, the perceptive soul, like the nutritive soul, is one unified actuality. It involves different powers, but is not constituted out of multiple separate actualities. Some of its properties depend on those of the nutritive soul, but the nutritive soul is not actually a part of it. The Refined Constitution view can, however, avoid this difficulty by distinguishing between the nutritive soul and the nutritive power. The Refined Constitution view is not claiming that the nutritive *soul* exists as part of the animal soul but just that there is an actuality that is the nutritive power that exists alongside the actuality that is the sensitive power. The nutritive power can be a distinct (but interconnected) actuality without being a separately existing soul. Thus the Refined Constitution view is compatible with this text.

Going forward I will operate on the assumption that both views are viable and look at their implications for the persistence and separability of the soul. Before turning to the question of separability, let us first look at what these two views say generally about the way in which the state of the body can affect the soul and its powers. What, if anything, happens to the soul and its powers when the bodily organ of some power is damaged? What happens to Gloucester's soul and to his power of sight when his eyes are plucked out? On Aristotle's view the power of sight

resides in the organ of sight, the eyes, so it is plausible to think that the power of sight is destroyed.[18] This would seem to cause a problem for the unity of the soul, on either view. Since Gloucester's power of sight is destroyed, but the other powers of his soul are not, his power of sight now has a different history than the rest of the powers of his soul and than his soul as a whole. This suggests that we need some external account for why his power of sight was unified with the other powers of his soul (and with his soul, if it is something distinct). But the soul, as a principle of unity, cannot stand in need of such an account, as we have discussed. On the Refined Constitution view, the destruction of Gloucester's power of sight would also imply that Gloucester's soul is liable to change, since it is now constituted differently, a possibility that Aristotle vehemently argues against.[19]

There are three different sorts of response one could make to this difficulty. The first is to concede that Gloucester's power of sight is affected, but deny that his soul is affected. Secondly, one could maintain that the parts of the body which the various powers of the soul require turn out to be parts of the body that cannot be destroyed without the destruction of the composite, so that the soul and its powers persist as long as the composite does. Finally, one could claim that neither Gloucester's soul nor his power of sight is affected by the destruction of his eye.

The first sort of response, which concedes that the power of sight is affected, but denies that the soul is affected, is open to proponents of the Soul before Powers view. They can concede that organ damage may harm or destroy the powers of the soul that rely on these organs, but deny that it affects the soul itself. On this position the soul itself is unaffected by anything that happens to the body. The actuality that is the soul remains what it is and is able to restore these powers if the bodily organs are repaired or replaced. Gloucester does lose his power of sight

[18] *DPA* II 10, 656a29-32, 656b6-7. 27-35; *DA* II 1, 412b18-22, 413a2-3, II 7 419a12-21.
[19] *DA* I 3-4.

when he loses his eyes, but his soul is unaffected and his power of sight can be restored, since he still has the soul from which this power derives. This position would concede that a soul ceases to be when there are no longer any living activities it can enable, when it stops being a first actuality. This is why, in the case of most living things, the soul ceases to be when the composite is destroyed: there are no living activities it can enable. Short of the complete destruction of the composite, however, any other sort of damage a living thing may suffer will not harm its soul as such.

A proponent of the Refined Constitution view might also attempt the first sort of response and say that the human soul is primarily constituted by the generic powers of nutrition, sensation, and thought, not by all the particular powers such as sight. Gloucester's power of sight can be affected without his soul being affected. This response faces a serious difficulty, however. Presumably if the human soul is constituted from these generic powers, the generic power of sensation will in turn be constituted by the various particular human powers of sensing. The human soul as such does not simply have a generic power of sensing. It has a different power for each sensible and one of these powers is the power of sight. Thus the power of sight could not be lost without affecting the sense power and this could not fail to affect the human soul, if it is constituted out of the soul powers. This is a serious problem for the Refined Constitution view and it also illustrates the risks this option has even for a proponent of the Soul before Powers view. Drawing such a sharp distinction between the powers of the soul and the soul itself may endanger the unity and connection that is supposed to exist between the soul and its powers.

The second sort of response is to maintain that the parts of the body which the various powers of the soul require turn out to be parts of the body that cannot be destroyed without the destruction of the composite. Even though the loss of the requisite organs would affect the soul

and its powers, the soul is not in danger of losing a power or of changing because all the requisite organs persist as long as the composite does (and thus as long as the whole soul does). In response to the case of Gloucester, this respondent would hold that the power of sight persists, in some damaged form, in the heart, which for Aristotle serves as the central unifying organ of perception.[20] In the *De Sensu* Aristotle argues that there is an internal medium of sight, in addition to the eye itself, since the soul or the perceiving aspect of the soul is not situated at the surface of the eye.[21] This internal medium transmits colors to the location of the perceptive aspect of the soul and thus may well connect the eye to the heart, as T. K. Johansen argues.[22] On this line of response, the organ of sight would consist not just in the eye, but also in this internal medium and the heart itself. Thus even if the eye is destroyed some parts of the organ of sight persist. Since the heart cannot cease to be without the composite also ceasing to be, some part of the organ of sight will persist as long as the composite persists. The persistence of part of the organ of sight allows for the power of sight to persist as well. The power of sight will not have a different history from that of the soul as a whole. What holds true of sight will be true of the other senses whose organs are primarily located in the head. In each case the heart, as the central unifying organ of perception, will be part of the organ of the sense modality in question and the power in question will have the same history of that of the whole soul.

This proposal is intriguing but it goes beyond claims found in the Aristotelian corpus. Aristotle describes the heart or a place about the heart as being the origin or principle of sensation, ἀρχὴ τῶν αἰσθήσεών ἐστιν ὁ περὶ τὴν καρδίαν τόπος, and as that from which

[20] *De Partibus Animalium*, (*DPA*) II 10, 656a28-b3, 656b22-27, *De Sensu* (*DS*) 2, 438a13-439a6. Cf. *DA* III 2, *DS* 7; *DA* II 7.

[21] *DS* 2, 438b7-16.

[22] Johansen 1998, 91. *DPA* II 10, 656b17-21 only mentions passages from the eye to the brain, but one could argue that there will then be passages from the brain to the heart that would complete the transmission of color.

sensation proceeds, τὴν δ' αἴσθησιν ἀπὸ τῆς καρδίας, but he never describes it as the organ of all the senses.[23] On the contrary, he repeatedly identifies the organ of sight as the eye and its location is repeatedly given as the head.[24] Connections between the eye and the heart are useless for seeing when the eye is absent. Just as the legs are what allow human beings to walk, the eyes are what allow us to see, even if the heart also contributes to seeing. Without the eye itself, it seems plausible to think that the remaining bodily parts lose any potentiality they may have had for seeing.

Considered generally, this strategy is a plausible response to the problem of organ destruction only if every power of the soul can be tied back to the heart or some other organ whose destruction entails the destruction of the composite. If there are some powers that are located in organs whose destruction is compatible with the continued survival of the composite, then the problem will remain. For instance, proponents of this position would have to also tie the power of local movement in every animal back to the heart or some other vital organ, as opposed to limbs whose destruction does not require the destruction of the animal.[25] The second proposal is a serious alternative to be considered, but to be convincing it needs to be worked out in a way that would successfully address these challenges. Proponents need to show that Aristotle does in fact think that none of the bodily organs that the different powers of the soul depend on can be completely destroyed without the destruction of the composite.

The third sort of response is to deny that the soul or its powers are affected by the destruction of parts of the body. According to this response neither Gloucester's soul nor his power of sight are affected by the destruction of his eye or other parts of his body. The proponent

[23] *DPA* II 10, 656a28, 656b24.
[24] *DPA* II 10, 656a29-32, 656b6-7. 27-35; *DA* II 1, 412b18-22, 413a2-3, II 7 419a12-21.
[25] The most plausible move here would be to argue that for Aristotle the heart (or equivalent) always serves as the unmoved starting point for local movement (*DMA* 1, 4).

of the Soul before Powers view could adapt this line of response by holding that although Gloucester can no longer engage in activities of seeing, his power of sight has not been destroyed, since his soul, which is the source of his ability to see, is still present. Were he to regain the appropriate organs of sight his power would be restored, but he would not have a new power. Instead now that he again has the proper matter his old power of sight would be reactivated. In cases of organ transplants the person receives a new organ, but they do not, as it were, get a new soul power. Instead, the soul provides the same power of the soul to a different organ. As long as the human soul remains in a composite human being, they remain the same person and potentially have the same powers of the soul.

A proponent of the Refined Constitution view could take a similar position, holding that as long as the specific differentiating power of the soul is present the rest of the powers will be present, at least potentially, and thus the soul will remain what it is. If, in all the cases, the specific differentiating power of a soul is located in parts of the body whose destruction requires the destruction of the composite (or is not even located in the body), then the differentiating power will persist at least as long as the composite does. In plants the nutritive power is found throughout the body and thus persists as long as the unified body that is the plant does. In animals the sensitive power is located in parts of the body, such as the heart, whose destruction is equivalent to the destruction of the animal. Aristotle holds that the differentiating power of human beings, the intellect, has no bodily organ and thus is not located in a part of the body and is unaffected by the body.[26] On this position, if the differentiating power remains, then the other interrelated powers of the soul that depend on it must also remain. The soul will be unaffected by

[26] *DA* III 4 429a18-429b5.

anything that does not affect the differentiating power and the differentiating power will not be able to be affected without destroying the composite.

According to each of the three options, the soul and its powers are not, in general, damaged or destroyed by changes to the body, even by changes that severely damage the body. It is only when the bodily organs necessary for the operation either of the soul as a whole or for one of its powers are completely destroyed that either the soul or one of its powers can be damaged or cease to be due to an affection of the body. There are, however, important differences between these options when it comes to the possible persistence of the soul after the destruction of the composite. The second option rules out the possibility of the soul, as such, surviving, since according to this option the soul is affected by the loss of the organs required for any of its powers. The destruction of the composite involves the loss of many such organs and thus would change and affect the soul. Even if some part of the soul persisted and was active, it would now have a different status and history than the other parts of the soul. This would raise the questions about unity discussed above, though perhaps they could be resolved in this special case since in such circumstances there is no body that needs to be unified. In any case, the second option rules out the possibility of the continued existence of the whole soul. On the first and third options, in contrast, the persistence of the soul depends on its ability to continue to perform some distinctive activity. If there is some distinctive living activity that doesn't use any bodily organs, then the soul can continue to exist and support this activity. The soul as a whole is unaffected as long as it is able to operate and serve as a principle for the relevant sort of living activity (even if, as on option one, some of the powers of the soul are lost or otherwise affected).

According to at least two of the three options then, the soul, given the right conditions, could continue to exist even after the body is destroyed. This holds true on both the views of the

soul I developed above. On the Soul before Powers view the soul can continue to exist as long as it can serve as the grounds for some living activity. Similarly, on the Refined Constitution view it is plausible to think that as long as the specific differentiating power and the activity it produces continue to exist, the soul continues to exist. Thus I have shown that both of the two main views under consideration leave room for the possibility that the soul could persist after the destruction of the composite, if one of its living activities persists.

3. The Soul, the Intellect, and Non-Bodily Activities

I have presented two viable interpretations of the soul's relationship to its powers: the Soul before Powers view, where the powers of the soul depend on and flow from the unity that is the soul, and the Refined Constitution view, where the soul is constituted by an interrelated set of powers that depend on the specific difference of the living thing in question. I then presented several alternative options as to what happens when the bodily organ of a soul power is damaged, arguing that two of these alternatives leave open the possibility that the soul can persist undamaged even after the body is destroyed, as long as it can still serve as a principle for some living activity. I will now consider whether Aristotle's understanding of the soul allows for the possibility of powers of the soul that do not have bodily organs and whether the non-bodily activities of such powers, e.g. understanding (assuming, for now, that it is non-bodily), would belong to the human being, the soul, or the intellect.

Fundamental to Aristotle's conception of the soul is the claim that the soul is the first principle of life, "that by which first we live and sense and think." [27] Given Aristotle's conception of the soul as the first actuality which includes the powers for all the life activities of a living thing, the capacity of understanding (and the activity it is responsible for) must belong to

[27] *DA*, II 2, 414a12-13.

the human soul, whether it is a bodily activity or not. All the activities of a living thing must flow from its soul because the soul includes the powers responsible for all the activities of a living thing, either by consisting of them or by being the principle of them. If there is some activity, such as understanding, which belongs to human beings and is not in any way a bodily activity, then nothing prevents this capacity from belonging to the actuality that is the soul. The soul must account for all the affections and activities of the living thing. Aristotle thinks that human beings can clearly perform acts of understanding. Given this, we must have the ability to understand and thus we must have an intellect. We must also have the kind of soul or first actuality which includes the power of intellect. Thus human beings can be said to have a rational or intellectual soul, as opposed to living things that have only a perceptive or nutritive soul.

The human soul, like every soul, is one and has being in the most proper of ways, as actuality.[28] Nothing about the soul, taken as an actuality, prevents the soul from having some power which is not the organizing principle for some part of a body. An actuality does not have to be bodily or essentially tied to a body; the unmoved mover of *Metaphysics* Λ, for instance, is an actuality entirely separate from any body.[29] There is also no need for a first actuality to be bodily or essentially tied to a body. In *DA* II 1 Aristotle uses the possession of knowledge as an example of a first actuality, in opposition to the second actuality of exercising knowledge, but he does not think that knowledge, as a first actuality, needs to be bodily or located in a body, as he makes clear in *DA* III 4.[30]

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[28] *DA*, II 1, 412b8-9. For more on this passage and the meaning of this claim see Chapter IV, section 3 a.

[29] *DA*, II 2; *Metaphysics* Λ, 6. Aristotle uses ἐντελέχεια throughout the *DA* and ἐνέργεια in *Metaphysics* Λ, but both are opposed to δύναμις and the two terms are often synonymous. cf. *Metaphysics* Θ (IX), 8, 1050a21-23.

[30] *DA* II 1, 412a22-28. Since the understanding that the unmoved mover has (or, rather, is) is purely actual (*Metaphysics* Λ 6 and 9), we cannot use the unmoved mover as an example of something that is non-bodily but has a first actuality. Aristotle's definition and understanding of knowledge does, however, leave room for the possibility of living things that can have knowledge both as a first actuality and a second actuality but are not bodily at all.

Given the unified relationship that Aristotle holds obtains between the composite, the soul, and its powers, the activity of understanding needs to ultimately be attributed to the human being, not to the power of the soul that is intellect, even if understanding is non-bodily. Even assuming (as I will argue in Chapters VI and VII) that understanding is non-bodily, the composite human being will still be the ultimate subject of the activity of understanding. In the previous chapter I argued that Aristotle distinguishes between being a primary explanatory factor, which the soul and the intellect are with respect to the activity of understanding, and being the proper subject of an activity. There I argued that the composite human being is the proper subject of all human activities, while the soul and its powers play the primary explanatory roles.[31] The soul and the intellect are the primary explanatory factors of understanding, but understanding still properly belongs to the human being since the intellect is appropriately grounded in the soul which, in turn, is grounded in the human being. As long as human intellectual activities and our intellectual powers are coordinated with our non-intellectual activities and powers (and the bodily organs these powers require) they can be part of human life. Aristotle will discuss and argue for such interconnections in *DA* III 3 and 7-11.[32]

If, alternatively, we took the power of understanding, the intellect, to be the ultimate subject of the activity of understanding then the intellect would need to have being through itself, since it has its own proper activity. But then the intellect would have its own being which is different than the being of the human soul or the human composite. The intellect would no longer be a power of the human soul, but its own kind of soul or its own substance. This would leave us with no account of how the intellect is unified with the soul or how activities which are proper to it can be activities of the human being. Aristotle would have failed to give an account

[31] Chapter IV, sections 4-5 and 9.
[32] For more on these interconnections see Chapter VII.

of the soul and the intellect that avoids the problem he raised in *DA* I 5. This difficulty faces any Platonic Intellect interpretation, according to which the intellect is not included in the human soul, but has a separate existence and history from that of the whole human soul, although it is essentially related to the human being and to human thought.

As we saw in section 2 of this chapter, the soul is supposed to be the principle of unity which accounts for the unity of the human being's life and powers. If we need a further principle for the soul's unity with the intellect, then the soul will no longer be the fundamental principle of unity. Further, two separate substances cannot unite to form one substance without ceasing to actually be two separate substances. So on the supposition that the human being and the intellect remain separate substances, the union between the intellect and the human being will not be substantial, but at best something weaker. Since, on such views, the human being and the intellect are different substances, human intellectual activities will have to ultimately belong to either one or the other, since all activities and affections have one ultimate subject.[33] If these activities belong to the intellect, they will not be the activities of the human being whose thought they are supposed to be. If they belong to the human being and not to the intellect, we need an account of why we should postulate such a separated intellect. How does it contribute to human thought and why should we think that it is a separate substance?

Given these difficulties, we have good reason to reject the Platonist Intellect view on which the intellect is a separate substance from the human soul. This view offers an unattractive interpretation of Aristotle. On the Platonist Intellect interpretation Aristotle's position on the intellect is not consistent with his overall view of the human being, the soul, and its powers. Attributing inconsistency to Aristotle, especially on such an important subject, should be a last

[33] Or some intellectual activities and affections will belong to one and some to the other.

resort. There is little to be gained from such an interpretation. Instead, we are in danger of missing the interest and insight of Aristotle's views if we settle for claiming that they are inconsistent instead of considering how they might be consistent. We should only entertain the possibility that Aristotle's view is inconsistent if there is no alternative reading which gives Aristotle a unified and consistent understanding of the soul and of intellect. We should, therefore, read Aristotle as ultimately attributing the activity of understanding to the human being, in accordance with his general views on the relationship of living activities to the living thing. The intellect is the primary explanatory factor for our activities of understanding, not the proper subject of these activities.[34]

If the activity of understanding is non-bodily then the intellect, the power responsible for it, will also be non-bodily. Could Aristotle reasonably maintain that the intellect is not a form organizing the living thing's body or parts of its body, even though it belongs to the human soul, a soul which is the form organizing the living thing's body? Such a position looks problematic if we take matter to be causally prior to form and therefore need to explain how forms can come from matter. How could the dispositions or affections of matter produce some form or aspect of a form which is entirely unrelated to matter?

Aristotle, however, does not think this is the right direction of explanation for the human being, as I argued in Chapter IV.[35] The human soul is the form or actuality of the human being. It organizes a body that has life only potentially. As form and actuality, the soul is prior to the body. In *Metaphysics* Θ Aristotle argues that in every way actuality is prior to potentiality: in account, in being, and even in time. In each individual, actuality is posterior in time to

[34] On my interpretation this is consistent with Aristotle speaking of the intellect understanding or the soul understanding, as he does in places. On my view, crucial explanatory factors can be said to perform the relevant activities (the player who scored the winning goal is said to win the game, the ear is said to hear) without one thereby incurring a commitment that they are the *proper* subject of that activity (cf. Chapter IV, 4-5). My interpretation of *DA* III 4-5 in Chapters V to VII fits well with this reading.

[35] Chapter IV, 3a (cf. sections 4-5).

potentiality: there is some matter that is potentially this human being before this individual human being actually exists. In each case, however, the potential thing is posterior in time to an actually existing thing through which the potential thing is brought into being, and is made actual. The matter that is potentially a human being is made to be a human being by a pre-existing actual human being. Since Aristotle holds that actuality has this temporal priority (in addition to its priority in being and account) and that species and their substantial forms exist everlastingly, he does not have the problem of explaining how some form with a non-bodily aspect can come to be from body. There has always been some actually existent human being with the form in question who can pass this form on through imposing it on some suitable matter.[36]

For Aristotle the priority in being of actuality means that the actuality that is the soul determines the being that the living body has, rather than the other way around. The claim that the soul is the form of the living being, the thing that makes its body a living body, commits Aristotle to the view that the existence of every ensouled body and of every part of that body is explained by the soul that gives it being. Every part of the body plays some function in the life of the thing which the soul explains, either by directly serving as a tool or organ for some operation of the living being or by being required for these operations, even if not directly used as a tool.[37] Given what a human being is and the activities human beings engage in the human form needs to be realized in matter. For Aristotle, a body of precisely the sort that we have is needed for our human functions. Since the parts of the body serve as the organs or tools for the various operations of the human being, such as nutrition, locomotion, and sensation, their structure and composition is determined by the functions the body needs to perform in contributing to the

[36] *Metaphysics* Θ (IX) 8.
[37] Cf. *DA* II 4, 415b15-23

human being's life activities. The living body, as such, has no form or actuality on its own apart from the soul. It is only because of the soul's actuality that it has the life it does and is organized in the way that it is. The soul is the source of the organization of the body because it gives structure and composition to the body.[38]

Since the soul accounts for the existence of the living body, but the body does not account for the existence of the soul, Aristotle is not committed to claiming that every aspect of the soul needs to be accounted for in terms of the body or some bodily part. Soul gives being to the living body, it does not receive being from the body. Thus there is no difficulty with the soul having some power which is not the actuality of any part of the body, as long as it is not the sort of actuality that needs to be the actuality of a body. When discussing the way in which the soul is the first actuality of a body Aristotle explicitly makes room for an exception for parts of the soul that are not actualities of any part of the body.[39] All the aspects of soul that are organizing principles for some part of the body and require bodily organs in order to be activated cannot actually exist apart from the body. Their being consists in informing and structuring matter in a certain way. The soul requires a suitable organ, an eye, in order to realize its power of sight, and in this way the body limits the actuality that is the soul. This sort of limitation does not apply to activities or affections that are essentially non-bodily. If there is some activity, such as understanding, which belongs to human beings and is not a bodily activity, then there will be a power of the soul responsible for it which is not the actuality of any part of the body. Such a situation would leave open the possibility I discussed above: that the whole soul could continue to exist after the destruction of the body, by continuing to serve as the principle and first actuality

[38] Cf. *DA* II 1-3. For more on this see Chapter IV, sections 7-8.
[39] *DA* II 1, 413a3-7. Cf. my discussion in Chapter II, section 6.

for this non-bodily activity. The soul (or some parts of it) need not, as a matter of definition, require bodily organs in order to be what it is.

I will discuss the implications of this possibility for survival below, but first I want to be clear about the way in which the soul may be non-bodily on my interpretation. I have shown that Aristotle's claim that the soul is the first actuality that explains all the powers, activities, and affections of the living being allows for the possibility of a soul having powers for activities or affections that are not themselves the forms of any bodily part. How does my position on the soul differ from the position of some advocates of the Divine Intellect interpretation, according to which intellect (νοῦς) in the *DA* is a separately existing divine intellectual substance? Could they not invoke this understanding of the soul on behalf of their interpretation, claiming that divine beings can be said to have soul because they possess an actuality that explains their activities?

First of all, I should note again that there is a sharp divide here between different advocates of the Divine Intellect interpretation. Some, such as Myles Burnyeat, hold that Aristotle, in the *DA*, is consistently speaking of the divine intellect when he speaks of νοῦς, while others, such as Michael Frede and Victor Caston, hold that it is only in *DA* III 5 that Aristotle uses νοῦς to refer to an intellect that is divine, not human.[40] I am now considering Burnyeat's version of the interpretation which requires that divine beings have souls. Unfortunately for Burnyeat, Aristotle does not countenance souls which are not essentially related to bodies. The human soul, no less than the souls of animals or plants, is the form of the human being. Aristotle is only allowing for the possibility that there is some aspect of the soul's actuality that goes beyond the body. Even if the soul continues to exist after the destruction of

[40] Burnyeat 2008; M. Frede 1996; Caston 1999.

the composite, it will still be related to the body, since the state of its powers, including its intellect (given the dependence of human understanding on prior occurrences of perception), will depend on the body it inhabited.[41] There is no reason to think that Aristotle wants to countenance souls that are not the forms of some material thing and are not essentially related to bodies. Aristotle describes the first unmoved mover of *Metaphysics* Λ as actuality, as activity, as living, and as understanding, but not as a soul.[42] Given all these terms which Aristotle can and does use to characterize any similarities between our life and the divine life, he has no need to use the term soul or ensouled in describing this divine being.[43] Both his definition of the soul in the *DA* and his consistent usage throughout the corpus indicate that it is only first actualities that can animate bodies that Aristotle considers to be souls.

Even if we allow the term "soul" to be used of entities that are not essentially related to a body, advocates of the Divine Intellect interpretation still cannot use the distinction between a first actuality and further actualities as the basis for an account of soul that would apply to the divine intellect. One might claim that anything which has some sort of first actuality which enables it to have further actualities and is potential with respect to them has a soul. This understanding of the soul as first actuality would seem to allow for an extension of soul to beings which do not have bodies. However, such an understanding of soul does not help if the intellectual soul that Aristotle is speaking of when he discusses intellect is the divine intellect and first unmoved mover of *Metaphysics* Λ or one of the other unmoved movers. There is no potentiality in the divine intellect. It is its own activity. It does not have the potential to engage in understanding but instead its very being is understanding. Thus we cannot use the conception of

[41] Cf. *Posterior Analytics*, II 19.

[42] *Metaphysics* Λ, 6, 7, 9.

[43] There is a broader sense of divine according to which heavenly bodies which are not subject to decay and destruction also count as divine. Aristotle could describe such heavenly bodies as having souls or since they also have bodies to which these souls are related, albeit bodies of a special kind (cf. *Metaphysics* Λ 8).

soul as first actuality to attribute soul to the divine intellect, since the divine intellect has no levels of potentiality and actuality. Aristotle's conception of soul could only apply if the divine intellect Aristotle is speaking of is some lesser divine being whose being involves potentiality, perhaps an ensouled planet. But this position is deeply unattractive and none of the contemporary advocates of the Divine Intellect interpretation incline to such a view.[44]

What, then, does the possible continued existence of the human soul imply for the question of human survival? Assuming, for the moment, that human intellectual activity is non-bodily and can continue after the destruction of the human body, does the human person survive? In order to answer this question, we need to first determine what the subject of the activity of understanding is after the body is destroyed. If understanding persists after death, am I the one understanding or is it rather my soul or my intellect?

I previously argued that the intellect is not the proper subject of intellectual activities performed during embodied human life, since that would mean that the intellect has its own separate being from that of the soul or the human being. Instead, the human being is the proper subject of understanding, while the intellect is a primary explanatory factor. Given that the intellect is not the proper subject of human understanding when embodied, there is reason to think that it still is not the proper subject of human understanding after death, as long as there is some better candidate. If, however, the human intellect is the only part of the soul or person that can continue to exist after the destruction of the body, as on the second of the three options for how the soul is affected by changes to the body, the intellect may be the only possible proper subject.[45] I argued above, however, that on the other two options for how the soul is affected by changes to the body, options open to proponents of either the Soul before Powers or Refined

[44] *Metaphysics* Λ, 6, 7, 9.

[45] I will not elaborate this option or pursue it further, other than to say that I have not argued that it should definitively be ruled out, but I have given reasons for thinking that there are other viable interpretations.

Constitution view, the soul will continue to exist as long as one of its distinctive living activities continues after the destruction of the body. Given the assumption that the activity of understanding continues, the human soul would continue to exist, serving as a principle and potentiality for such activity.

The subject of understanding would, then, be either the soul or the human being, if the human being continues to exist. On the scenario we are considering will the human being continue to exist if the soul does? I argued in Chapter IV that, for Aristotle, the human being is the primary subject of human activities and affections, while the soul is the primary explanatory factor that makes human beings what we are and enables us to perform our activities. This is true of all human activities and affections, not just those that have bodily components, since the distinction between explanatory factor and proper subject depends on the claim that the human being underlies the soul and human activities, not on a specific claim about the bodily character of these activities. As I discussed in section 7 of Chapter IV, we can think of the human being as standing at the base of an ontological pyramid with the soul, the powers of the soul, and the living activities performed extending successively upwards from this base. The activities belong to the powers which belong to the soul which belongs to the human being. The human being is the proper subject of these activities since it is the ultimate underlying subject. It is not, however, the primary explanatory factor, as the soul and its powers will be more central to explaining why the given activities took place. All human activities are, however, grounded in the human being and are the activities of the human being. This account does not require that the human activities in question be bodily in any way. Instead, they need to merely come out of certain powers which belong to the soul which belongs to the human being. The activity of understanding, whether bodily or not, certainly meets this condition. Just as the intellect is not the proper subject of

understanding (irrespective of whether understanding is bodily in some way) because it belongs to the soul, so also the soul itself is not the proper subject of understanding because it belongs to the human being. The human being is the proper subject of understanding as long as this human being persists.[46]

What, then, are the conditions of survival for human beings? Since, for Aristotle, human beings are human beings in virtue of the living activities we perform and the souls we possess that make us who we are and enable us to perform these activities, the continued persistence of the soul along with the continued persistence of some distinctive human activity is sufficient for the survival of the human being. In the case of non-human animals there are no living activities that can continue without the body and thus neither the soul nor the animal can persist after the destruction of the body. If, in the human case, we are assuming that the activity of understanding can continue after the destruction of the body, then the most valuable human activity continues, so human life continues. Aristotle holds that "the being for living things is their living" (*DA* II 4, 415b13) and living is found primarily in activity. If I am still actively understanding, then I am still living and still existing.

Admittedly, on this scenario the human being is no longer a unity of soul and body since the body has been destroyed. This means that I cannot remember or feel or do any non-theoretical human activity, but this does not mean that human life ceases. Just as my failure to be able to perform certain human activities (e.g. unassisted locomotion or hearing) does not mean that I am no longer a human being, so the loss of these other activities and the loss of the body do not completely destroy human life and activity. I would lose the use of my body and its organs,

[46] It is worth noting that in *DA* I 4 408b25-31 thinking is explicitly described as belonging to the composite human being insofar as it has intellect. Although, as I discussed in Chapter III, this claim is made in a dialectical context, I believe it reflects Aristotle's own position as it is simply an application of the general claim about the priority of the human being he makes earlier in the chapter.

but I would not face the total loss of myself. On this proposal I would still possess my human soul, the form that makes me what I am, and would continue to perform my most valuable activity, the activity of understanding. This is sufficient for my continued existence. My constitution as a human being would change. I would no longer be composed of body and soul but would be constituted by my soul and its one active power, the power of understanding. I would retain what, for Aristotle, is my most valuable capacity and my most valuable activity. If the best activity of human beings is still taking place, the human person will persist because of the continuance of that activity. I have argued that this persistence is compatible with Aristotle's view on the nature of the soul and its connection to the body.

VI. Why the Intellect Cannot Have a Bodily Organ: *De Anima* III 4

1. Introduction

Trees, tables, rocks, and quarks aren't about anything. In contrast, our sense-perceptions and our thoughts are about something.[1] Indeed, their aboutness or intentionality is one of the most distinctive features of our cognitive activities.[2] We see red, we hear middle C, we think of the number two. Our sense-perceptions and thoughts are essentially about something beyond themselves: any proper account of our cognitive activities needs to explain this feature.[3] Our ability to understand what something is also has several features that distinguish it from our powers of sense-perception. Our ability to perceive through the senses (henceforth, perceive) is limited by our sense-organs.[4] Humans, like other animals, can only perceive the kinds of things that our sense-organs give us access to and these ranges are wider or narrower in different animals. In contrast, the human ability to understand something does not have such clearly delineated limits.[5] We can understand such disparate things as the number two, humanity,

[1] My account will focus on the intentionality of perceiving with the senses (αἴσθησις) and understanding (νόησις), as these lay the foundation for Aristotle's account of the aboutness of memory, beliefs, desires etc.

[2] The term "intentionality" enters modern philosophical usage through Brentano's discussion of many of the same passages from Aristotle that I consider here (Brentano 1977). He adopted the term from medieval usage.

[3] Alternatively, an account could attempt to explain away this appearance.

[4] I will be using "perception" (as a short-form for the more expansive "sense-perception") and cognates to translate "αἴσθησις" and cognates. Perception, like αἴσθησις, is always about something, making it the best available term for my purposes. However, the range of things we can, in conventional English, be said to perceive is much broader than the range of objects Aristotle thinks can in themselves be objects of αἴσθησις. Someone can perceive a remark as hurtful, but Aristotle would not take this to be a case of αἴσθησις. Thus by perception I will mean sense-perception in the sense laid out in *De Anima* II 6 (as explicated below at the end of section 2). In this chapter Aristotle allows for some extended uses of αἴσθησις, but he holds that these are cases of perceiving "incidentally." Although the term "sensation" successfully conveys the close connection between sense-organs and the objects of our sensation, for Aristotle αἴσθησις is always about something, whereas some of the things we call sensations (e.g. pain) do not seem to be, making "sensation" unsuitable for my purposes.

[5] We do, of course, have certain cognitive limitations. These limitations clearly constrain the way we go about our intellectual activities (e.g. the duration of our intellectual activities and the number of things we can think of at once are limited). Do they also suggest that some class of objects is outside the range of our understanding? A satisfactory answer to this question requires extensive investigation into both the nature of human understanding and the nature of reality, a much more demanding inquiry than that required in the case of sense-perception. On some theories, the objects of our knowledge may turn out to be intrinsically limited, due either to some feature of human knowing (e.g. if human knowledge is intrinsically limited by the human perspective or if human reason is unable to

redness, and belief. Further, our understanding of a kind of thing seems to be applicable to all the instances of that kind regardless of where (or whether) these instances are in space or time.[6]

In this chapter I present Aristotle's account of the aboutness or intentionality of cognitive states, both perceptual and intellectual. His account is based around the notion of possessing a form in a distinctly cognitive way. Whenever something possesses a form in this cognitive way, the activity of possessing that form is intrinsically about the form, and the subject is aware of the cognitive object of that activity. Based on this account and on the differences between perception and understanding, Aristotle argues that the activity of understanding cannot have a bodily organ. No physical structure could enable a bodily part or combination of bodily parts to act as an organ of understanding, transmitting the full range of forms that the human intellect can understand. Further, some things that we understand do not have distinctive material characteristics and thus could not be cognized through a bodily organ, regardless of how this organ was constituted. Finally, for Aristotle, cognitive powers with bodily organs, such as perception, are always spatiotemporally limited, but the understanding is not. If our intellect had a bodily organ we would only be able to cognize the shapes of individual triangles; we could not understand what it is to be a triangle. Aristotle claims that our understanding is characterized by its universality: in understanding something we grasp its essential features, features that apply to all its instances. Given the range and characteristics of understanding, it cannot have a bodily organ. Although our intellectual activities are supported by certain bodily processes, these

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grasp things-in-themselves) or to some feature of reality (e.g. if reality is infinite in some way that precludes us from understanding it or if parts of reality turn out to be intrinsically unintelligible). If there are restrictions on the sorts of things human beings can understand, they are not evident or clearly defined in the way that the restrictions on the sorts of things our senses of smell and touch allow us to perceive are.

[6] I do not take my description of this feature to assume any particular answer about the problem of universals. Instead, it is one of the features of our understanding that any account dealing with this problem needs to incorporate and explain (or explain away). For Aristotle our understanding of things is primarily of universals and only secondarily and derivatively of particulars. Others may, of course, reverse the direction of priority or hold that universality is only an apparent feature of cognition and that understanding consists in nothing more than combinations of individual perceptions.

processes do not constitute understanding, even partially. Aristotle's own account allows him to avoid the difficulties he raises. The intellect in its nature is only "potential," it has no definite characteristics, spatiotemporal or otherwise. Thus nothing prevents it from being able to understand all things.

My interpretation presents a detailed reconstruction and defense of Aristotle's reasons, just summarized, for thinking that the intellect cannot have a bodily organ. This is in sharp contrast to most modern commentators. With few exceptions, commentators have had difficulty in even understanding Aristotle's reasons for holding that the intellect does not have a bodily organ.[7] As Charles Kahn puts it: "Aristotle's own arguments here are suprisingly weak and insubstantial, as if, surrounded by Platonists rather than materialists, he did not regard this position as controversial enough to stand in need of a real defence."[8] Commentators often find this thesis an outright embarrassment for Aristotle. Many interpreters claim that his views on the intellect are in fact inconsistent with the rest of his psychology. Some hold that Aristotle's position on the intellect stems from a gross empirical mistake, his failure to appreciate the true role of the brain, a failure that leads Aristotle away from his philosophical principles.[9] I argue below that Aristotle can account for the connection between brain activity and intellectual activity (see section 3e and Chapter VII). In brief, Aristotle thinks that understanding is always accompanied by activities of the imagination and that these activities employ a bodily organ. Thus certain material alterations in this organ (which Aristotle took to be the heart, but we would take to be the brain) would be correlated with activities of understanding without being

[7] Those who treat this argument more sympathetically include Jonathan Lear (Lear 1988, 122-6), Joseph Magee (Magee 2003), and Ronald Polansky (Polansky 2007, 434-445).

[8] Kahn [1992] 1995 in Nussbaum and Rorty [1992] 1995, 375-6.

[9] E.g. Hartman 1977; Wilkes 1978, 115f.; Sisko 1999, 253, 264-6. John Sisko explicitly claims that Aristotle's empirical mistakes about the brain lead him to go against his general scientific and metaphysical principles.

constitutive of them. In a slightly different vein, both Werner Jaeger and W.D. Ross hold that Aristotle's position on the intellect is essentially Platonic and clashes with the views developed in the rest of the *De Anima* (*DA*).[10] Some interpreters downplay Aristotle's statements, asserting that Aristotle only holds that the intellect can be conceived of without conceiving of the body, not that it actually operates apart from the body.[11] Even those who have taken Aristotle's argument seriously have found it difficult to reconstruct and make plausible.[12]

I argue that Aristotle means what he says. He thinks that the intellect does not have a bodily organ and this claim does indeed follow from his other views. Aristotle's argument is not based on empirical errors or a confused vestige of Platonism, but on views about intentionality that are central to his account of cognitive activities. I start by explicating Aristotle's account of intentionality. I then reconstruct Aristotle's argument in *DA* III 4, where he advances his no-organ thesis, and address several objections to it. My aim throughout is to interpret Aristotle carefully and charitably. I believe that the arguments I consider are of enduring interest and value.[13]

2. Aristotle's Account of Intentionality

On my interpretation, Aristotle characterizes the cognitive activities of perception and thought by introducing the notion of a special sort of change (a special sort of μεταβολή), which I will call a cognitive change.[14] In *DA* II 5 he distinguishes this sort of change from some sorts of

[10] Jaeger 1934, 332-4; Ross 1957, 65-7.

[11] E.g. Wedin 1988, chapter 5.

[12] For instance, Christopher Shields attempts to reconstruct Aristotle's argument but ultimately finds it unsatisfactory (Shields 1995, 320-30). D.W. Hamlyn also has difficulties (Hamlyn 1993, 135-6).

[13] My purpose is primarily to explicate Aristotle's own view, not to reformulate it for contemporary debate (though this is, in my view, a worthwhile task). I address concerns that the argument rests on some clearly mistaken empirical claims or on a failure to recognize certain philosophical distinctions, but I am not attempting to show the soundness of each of Aristotle's premises.

[14] Some have taken Aristotle's discussion of change in *DA* II 5 to simply introduce a particular species of material alteration, not a different, "cognitive," *kind* of change (Sorabji 1995, 2001), but I join Myles Burnyeat (Burnyeat 1995a; 1995b; 2002) and Hendrik Lorenz (Lorenz 2007) in thinking that Aristotle in *DA* II 5 is

change that are common to both living and non-living things, which I will call material changes.[15] For Aristotle these material changes are all motions of one sort or another along a range delimited by contraries: the substance or thing that changes goes from having one characteristic or accidental form to having a different accidental form at some other point in the relevant range, e.g. an apple ripens from green to red, a squirrel grows fat for the winter, a cloud darkens (*Physics* V 2, 226a23-226b9).[16] I will call this sort of possession of a form, where the substance always possesses some form from the given range, *materially* possessing a form. A *material* change is a change in which a substance goes from possessing one form materially to possessing materially another form from the same range.

In contrast, the psychological subjects of cognitive activities are not always in possession of some form belonging to a certain range, which can then be replaced by another one from the same range. Instead, before I see red or hear middle C, there is no (relevant) form which I or my power of sight or hearing must possess. I have only the potential to receive the form in question,

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introducing a fundamentally different sort of change. This new sort of change is crucial to Aristotle's account of our cognitive activities, since it is cognitive change that produces cognition. In adopting this interpretation I am not assuming from the outset that, for Aristotle, cognitive change cannot consist in or be accounted for in terms of material changes. My only claim is that in *DA* II 5 Aristotle is introducing a sort of change that, unlike most material changes, results in cognition. My interpretation of the distinction between cognitive and material change leaves open the possibility that cognitive change can be accounted for in terms of certain material changes or even consists of these changes. I will argue that Aristotle offers reasons for thinking that the cognitive change that occurs in the activity of understanding cannot be identified with or explained in terms of material change. However, I leave open the question of whether, for Aristotle, certain cognitive changes, such as those that produce perception, can be identified with or explained in terms of material changes.

[15] For Aristotle's presentation of these material sorts of change and his distinction between change (μεταβολή), which can be applied more broadly, and "motion" or process (κίνησις), which is restricted to the three categories of place, quality and quantity, see *Physics* V 1-2. For Aristotle's canonical definition of motion see *Physics* III 1-3.

[16] Changes in the other categories (substance, relation, and agent and patient) are not motions because these categories do not divide into ranges delimited by contraries (*Physics* V 2). As Hendrik Lorenz has pointed out to me, Aristotle does not seem to think that every range involved in material change or alteration consists of a strict continuum. In some cases, such as color, the range is delimited by contraries (e.g. black and white) but there is not a complete continuum between these contraries (cf. *De Sensu* 3, 439b17-440b27).

a state of receptivity that characterizes my power of perception and sense-organs.[17] Aristotle contrasts material change, including change of quality, with cognitive change:

> one sort [of being affected; i.e. material change] is a destruction of some contrary by the opposite, another sort [i.e. cognitive change] is rather the preservation of what is potential by what is actual and already like what is acted upon, as power is in relation to actuality.[18] (*DA* II 5, 417b2-5)

In material alteration one quality is always replaced by a contrary quality: sickness is replaced by health, hot by cold.[19] The subject of material alteration always actually possesses some quality from the relevant range (e.g. temperature), but it has the potential to take on any of the other qualities in the range through undergoing the destructive process of material alteration, a process in which one quality is "destroyed" as a result of the alteration. In cognitive changes, by contrast, the person cognizing goes from (only) potentially cognizing to actually cognizing something. This is not a destruction of an already existing quality but rather a power being brought to fulfillment and activity.[20] The power of sight does not become red, having previously been a different color, as the apple does in ripening. Nor does the intellect, when understanding what a horse is, become a horse, having been something else previously. The power need not possess any quality before it becomes active.

Cognition results from cognitive change. Cognitive change involves the subject of the change taking on a form cognitively. Something possesses a form cognitively when it need not

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[17] This state of preparedness also depends on the condition of the physical organ of the sense in question.

[18] ἀλλὰ τὸ μὲν φθορά τις ὑπὸ τοῦ ἐναντίου, τὸ δὲ σωτηρία μᾶλλον ὑπὸ τοῦ ἐντελεχείᾳ ὄντος τοῦ δυνάμει ὄντος καὶ ὁμοίου οὕτως ὡς δύναμις ἔχει πρὸς ἐντελέχειαν. Translations throughout are my own, except as noted; they reflect my consultation of published translations. For further discussion of this passage see Burnyeat 2002 and Lorenz 2007.

[19] The change need not be from one extreme of the range to the other in order to count as a change from one contrary to its opposite: coming to possess a lesser degree of the quality in question will be change to its contrary while coming to possess a greater degree will be change from its contrary (*Physics* V 2, 226b1-9).

[20] Of course in cases of consecutive thoughts or perceptions, one cognized form will be immediately replaced with another. This is not a problem for Aristotle, since the point of the contrast is that in material alteration it is always like this, whereas in perception and thought one often goes from being only a potential perceiver or thinker to actually perceiving and thinking.

always possess a form from the given range and the transition to possessing the form is a change from potentiality to actuality, not a destructive change. Cognitive possession of a form is sufficient for cognition. I see red in virtue of my power of sight's cognitively possessing the form of red. I understand what it is to be a horse in virtue of my intellect's cognitively possessing the form of horse. The forms that I cognize can be either substantial forms, forms that make a substance what it is, or accidental forms, forms that make a substance have certain characteristics. This distinctive cognitive way of possessing a form is an intentional state or activity. In material changes and material possession of a form, a thing is itself straightforwardly characterized by the property in question. In cognitive change and cognitive possession of a form, a subject, through its power of awareness, is, instead, actively aware of a form—either in perception or in thought. In other words, if some activity consists in possessing a form cognitively then that activity is essentially *about* the form that is possessed in this way. Aristotle's account of cognitive change allows him to account for the intentionality of cognitive activity and distinguish it from non-cognitive activity. In sum, cognitive possession of a form is intentional, material possession is not.

What is the relation between a form that is possessed materially and a form that is possessed cognitively? According to my interpretation of Aristotle, cognition of a material object consists in cognitively possessing a form (e.g. that of an apple) that is the same in species or kind as the form possessed materially by the object of cognition (e.g. the apple).[21] The form possessed

[21] In saying that the form possessed cognitively is the same as the form possessed materially Aristotle is considering the form as such and abstracting away from anything that does not belong to the form as such. In order to understand his claim we do not need to enter into the controversy over whether the primary substances that Aristotle discusses in *Metaphysics* Z, inter alia, turn out to be particular or universal. Even if primary substances turn out to be particular it is still true that individual substances such as Socrates and Plato share the form of human being. On that interpretation, their substantial forms differ in number, but they will be the same in species or kind. If the form of something can exist both as a particular and as a universal, then the form as such is neither particular nor universal. If it were part of the essence of the form that it existed in one of these ways it could not exist in the other way. Thomas Aquinas helpfully points out the importance of the form as such, what he calls the nature considered

cognitively is not numerically identical with the form that the object of cognition possesses materially. Just as there are many different apples on a tree, all of which are the same in species, so there can be two forms, one possessed materially and one possessed cognitively, that are the same in species but are not numerically identical. The form of apple possessed materially makes some composite thing to be an apple, i.e. it makes that thing possess those features that make something an apple. The form of apple possessed cognitively makes something understand what it is to be an apple, i.e. it makes that thing grasp those features that make something an apple.[22] The form in each case is the same in species or kind (it is the form of an apple, not of some other thing), but different in number.

Among cognitive activities, Aristotle sharply distinguishes perception from understanding.[23] Understanding, τὸ νοεῖν, is a special sort of cognitive activity that consists in having a cognitive grasp of *what a thing is as such*. It is to grasp in a general and universal way the essence of a thing. Fully grasping the essence of something is doubtless a rare accomplishment, but one can have *some* grasp of what something is without *fully* grasping its essence.[24] This universal understanding (e.g. of what it is to be a triangle) can then be applied to

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absolutely, *natura absolute considerata*, to understanding the sameness involved in cognition (Thomas Aquinas, *De Esse et Essentia*, 2). If, alternatively, the form is always universal then there will be no difficulty in claiming that the form possessed cognitively is the same as the form possessed materially. Thus whatever Aristotle's views on the status of primary substances, there is a sense of form according to which we can claim that the form possessed cognitively is the same in species as the form possessed materially.

[22] In the case of perception, the form possessed cognitively makes the perceiver aware of the perceptible quality in the material thing: the redness possessed cognitively makes the perceiver aware of the apple's redness. Although Aristotle uses the same model of cognitive change for both perception and understanding, it might be better to say that perception is *of* its objects, i.e. it consists in being aware of them, whereas understanding is *about* its objects i.e. it consists in understanding what they are.

[23] Aristotle divides cognitive activities into two families: the perceptual and the intellectual, with perception being fundamental to the perceptual family and understanding to the intellectual. *DA* II 5-III 3 focuses on the perceptual kind of cognition and III 4-8 on the intellectual kind. Human beings and animals share in perceptual cognition (with some animals possessing more cognitive capacities and others less), but only human beings are capable of intellectual activities. Aristotle accounts for more complex cognitive activities in terms of perception and understanding (e.g. *DA* III 3, 6; *De Memoria*; and *De Somno*).

[24] There is a dispute over precisely what sort of achievement Aristotle takes the activity of understanding, τὸ νοεῖν, to be in the *DA*: is it an excellent and perfect activity, a complete understanding of the thing in question

particular instances (e.g. the particular triangle I am employing in my mathematical demonstration) (*DA* III 4, 429b9-22). Perception, in contrast, is limited to cognizing the peculiar objects of the various senses, such as color, sound, and odor, and the objects common to multiple senses, such as the shape or size or movement of something (*DA* II 6). Aristotle does allow that we can also perceive things such as men and horses and the fearful and the pleasant, but he holds that we perceive these things "incidentally," not as proper objects of sense-perception.[25] Moreover, perceptions are always perceptions of instances of qualities and things. These perceptions do not in themselves have any universal character nor do they involve understanding what the object of perception is (*DA* II 6). For Aristotle, non-human animals can retain their perceptions in memory and can even anticipate what will happen through perceptual and imaginative associations.[26] But they cannot understand what they perceive. A sheep can see that the grass is green and associate its visual perception of grass with grass' pleasant taste, but it cannot grasp what green or grass is. This difference between perceptual and intellectual cognition is crucial for Aristotle's view that the intellect cannot have a bodily organ.

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possessed only by the wise (as in *Posterior Analytics* II 19 and *Nicomachean Ethics* VI 6-7), or is it a less demanding cognitive achievement that many human beings accomplish. On my view, in the *DA* Aristotle is usually speaking of having some grasp of the essence of a thing, even if this grasp is limited and somewhat confused. For Aristotle, an understanding of what a triangle is that is not perfect or complete still counts as understanding and is essentially different from mere perception of some individual triangle. In *DA* III 6-8 Aristotle uses understanding as the basis for other intellectual activities that most human beings typically engage in, such as making predications and putting together chains of reasoning. This suggests that when he refers to νοῦς and νοεῖν in the *DA* he is not speaking solely of completed scientific understanding but of a basic grasp of what something is.

[25] Ibid. In Aristotle's example, I see the son of Diares, but I see him incidentally, since he is not as such an object of perception: human beings, or sons, or sons of Diares, are not in their essential nature objects of perception, whereas colors and sounds are in their essential nature perceivable. I see a white thing with a certain shape and this thing is the son of Diares, so in a way I perceive the son of Diares. Even when I am recognizing him as the son of Diares my perception of him is incidental since it comes from my perception of this white thing with a certain shape. The cognitive activity of perception cannot, on its own, allow us to grasp what a man is or what a color is; for this we need the activity of understanding.

[26] For discussion see Lorenz 2006. Lorenz argues that, for Aristotle, both humans and animals can associate current perceptions with previous perceptions that are similar (or dissimilar or conjoined in some other appropriate way) through the perceptual powers of memory and imagination (Lorenz 2006, Chapter 11, "The Workings of *Phantasia*," 148-73). If I associate this combination of sense-impressions with similar ones I have had in the past, then I can see this shape as the same as that one and hence see the son of Diares.

3. Aristotle's Argument that the Intellect Cannot Have a Bodily Organ

a. Introduction

In *DA* III 4 Aristotle presents his argument that the intellect cannot have a bodily organ. He begins by noting a key similarity between understanding and perception. Both of these sorts of cognitive activity centrally involve cognitive change:

> If, then, understanding is like perceiving, it would either be a case of being affected by the intelligible object or something else of that sort. It must therefore, (1) be impassive, but receptive of the form and potentially such as it, without being it, and (2) in the way that the power of perception is related to perceptible things, so must the intellect be related to intelligible things.[27] (*DA* III 4, 429a13-18)

Aristotle seems here to be applying the model of cognitive change introduced in *DA* II 5 to the activity of understanding. Like the power of perception the intellect must be "receptive to the form and potentially such as it, without being it" as the change involved is a cognitive one, not a material alteration. When a thinker grasps a composite substance in thought the intellect cognitively receives a certain intelligible form that is possessed materially by the object of cognition.[28]

After noting the similarities between the power of perception and the intellectual power Aristotle immediately goes on to argue that there is a crucial difference between them. Unlike the power of perception, the intellect does not and could not have a bodily organ through which it operates:

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[27] εἰ δή ἐστι τὸ νοεῖν ὥσπερ τὸ αἰσθάνεσθαι, ἢ πάσχειν τι ἂν εἴη ὑπὸ τοῦ νοητοῦ ἤ τι τοιοῦτον ἕτερον. ἀπαθὲς ἄρα δεῖ εἶναι, δεκτικὸν δὲ τοῦ εἴδους καὶ δυνάμει τοιοῦτον ἀλλὰ μὴ τοῦτο, καὶ ὁμοίως ἔχειν,ὥσπερ τὸ αἰσθητικὸν πρὸς τὰ αἰσθητά, οὕτω τὸν νοῦν πρὸς τὰ νοητά.

[28] Aristotle holds that we can understand both form-matter composites, such as composite substances, and forms themselves. Aristotle claims that when the object of understanding is a form, the form of the object is the same as the form possessed cognitively by the intellect (*DA* III 4 430a2-6). Aristotle's theory of cognition also explains why he holds that matter is not intelligible in itself. The matter of something can be understood insofar as it possesses some form of its own or insofar as it plays a certain role with respect to forms (as that which underlies the form and is capable of taking on several different forms). It cannot, however, be understood in itself, since as such it has no form; it is receptive of form but intrinsically without form (cf. *Physics* I 7).

> It is necessary, therefore, since [the intellect] understands everything, that it be unmixed [with anything else], as Anaxagoras says, in order that it may master its objects, that is, know them, for by being present in it something other than it hinders and screens [some object of potential understanding]. So it has no nature of its own other than this, that it is potential. Accordingly, what is called the intellect of the soul (I mean by intellect that by which the soul thinks and judges) is actually none of the things that have being before it understands them. That is why it is reasonable for it not to be mixed with the body; this would result in its being of some quality, either cold or hot, and it would even have an organ as the power of perception does. But as it is, there is none…That the impassivity of the power of perception is different from that of the intellectual power is clear from the sense-organs and perception. Perception is incapacitated by an excessive object: thus it cannot hear sound after very loud noises, and after too powerful colors and smells it can neither see nor smell. But when the intellect has understood something extremely intelligible, it understands lesser things better, not worse. For the power of perception is not without a body, but the intellect is separate.[29] (*DA* III 4, 429a18-27, a29-b5)

On my interpretation, Aristotle's argument depends on two sorts of considerations. The first concerns Aristotle's characterization of what it takes for something to serve as the bodily organ

[29] ἀνάγκη ἄρα, ἐπεὶ πάντα νοεῖ, ἀμιγῆ εἶναι, ὥσπερ φησὶν Ἀναξαγόρας, ἵνα κρατῇ, τοῦτο δ' ἐστὶν ἵνα γνωρίζῃ, παρεμφαινόμενον γὰρ κωλύει τὸ ἀλλότριον καὶ ἀντιφράττει. ὥστε μηδ' αὐτοῦ εἶναι φύσιν μηδεμίαν ἀλλ' ἢ ταύτην, ὅτι δυνατός. ὁ ἄρα καλούμενος τῆς ψυχῆς νοῦς (λέγω δὲ νοῦν ᾧ διανοεῖται καὶ ὑπολαμβάνει ἡ ψυχή) οὐθέν ἐστιν ἐνεργείᾳ τῶν ὄντων πρὶν νοεῖν·διὸ οὐδὲ μεμῖχθαι εὔλογον αὐτὸν τῷ σώματι· ποιός τις γὰρ ἂν γίγνοιτο, ἢ ψυχρὸς ἢ θερμός, κἂν ὄργανόν τι εἴη, ὥσπερ τῷ αἰσθητικῷ·νῦν δ' οὐθὲν ἔστιν….ὅτι δ' οὐχ ὁμοία ἡ ἀπάθεια τοῦ αἰσθητικοῦ καὶ τοῦ νοητικοῦ, φανερὸν ἐπὶ τῶν αἰσθητηρίων καὶ τῆς αἰσθήσεως. ἡ μὲν γὰρ αἴσθησις οὐ δύναται αἰσθάνεσθαι ἐκ τοῦ σφόδρα αἰσθητοῦ, οἷον ψόφου ἐκ τῶν μεγάλων ψόφων, οὐδ' ἐκ τῶν ἰσχυρῶν χρωμάτων καὶ ὀσμῶν οὔτε ὁρᾶν οὔτε ὀσμᾶσθαι· ἀλλ' ὁ νοῦς ὅταν τι νοήσῃ σφόδρα νοητόν, οὐχ ἧττον νοεῖ τὰ ὑποδεέστερα, ἀλλὰ καὶ μᾶλλον· τὸ μὲν γὰρ αἰσθητικὸν οὐκ ἄνευ σώματος, ὁ δὲ χωριστός. There are two points where Aristotle's text could be translated in a significantly different way. The first concerns the sentence that I translate as "But as it is, there is none [i.e. there is no organ]." I take "organ" to be the implied predicate that is negated. Alternatively, one could take the intellect to be the implied subject of the sentence and translate "But as it is, it [i.e. the intellect] is not anything," as Burnyeat does (Burnyeat 2008, 34). These different translations do not affect the overall meaning of the text, since in either case Aristotle is picking up on an idea he had already expressed. The other difference concerns the clause I have translated as "for by being present in it something other than it hinders and screens [some object of potential understanding]." I have taken "τὸ ἀλλότριον" as the subject and taken the object as implied: some intelligible form that the intellect is prevented from understanding. One could also take the unexpressed object that is hindered and screened to be the intellect's activity, as Burnyeat does (Burnyeat 2008, 33). This seems to me to be a less attractive option. Aristotle is explaining why the intellect's activity would be hindered—because it would be prevented from understanding some of its objects—not simply stating this claim. R.D. Hicks, objecting to the lack of an expressed grammatical object, offers a different reading: "for by intruding its own form it [i.e. the intellect] hinders and obstructs that which is alien to it" (Hicks 131). He takes "τὸ ἀλλότριον" as the grammatical object and takes the subject to be implied: the intellect. He takes "παρεμφαινόμενον" with the intellect (the grammatical subject, on his reading) instead of with "τὸ ἀλλότριον," asserting that the neuter gender "is due to a 10 μόριον, with which A. started." Hick concedes, however, that "it is grammatically more natural to take παρεμφαινόμενον and τὸ ἀλλότριον together" (Hicks 479). These different readings result in the same general philosophical claim: if the intellect had a body or a bodily organ, the qualities that the body in question possessed would prevent the intellect from understanding some of its objects. For further discussion of the options for interpreting this clause see Hicks, 478-9.

of a cognitive activity. The second concerns Aristotle's characterization of the activity of understanding.

b. Aristotle's Neutrality Condition

Aristotle thinks that most cognitive powers, such as the power of sight and, more generally, the power of perception, have bodily organs. While the powers themselves are not bodily (unlike, say, the power of flesh to be cut), the activities of perception have a bodily component.[30] Aristotle offers a general neutrality condition for all those sorts of cognition that have a bodily organ (*Aristotle's Neutrality Condition*):

> *the bodily organ of a cognitive power must be neutral with respect to the objects of that cognitive power in order to allow for reception of these cognitive objects.*

If I perceive color through my eye, then my eye must be transparent in its own nature, not colored. What is the force of this condition and what are Aristotle's reasons for endorsing it? Aristotle mentions two phenomena in connection with this condition. The first is the phenomenon of cognitive blind spots: my hand can feel the heat of a warm mug or the cold of an ice-cube, but things that are the same temperature as my hand seem neither hot nor cold. Aristotle, on my view, holds that my blind spots are a consequence of the bodily nature of my organs: my hand must always have some degree of heat or cold.[31] My hand cannot, however, be

[30] There is heated dispute over the way in which, for Aristotle, the bodily organs of the sense-powers contribute to the activities of perception. Literalists, such as Richard Sorabji, interpret Aristotle as holding that in every case of perception the bodily organ must materially take on the form that is perceived: on this reading my seeing a color just *is* my eye's becoming colored with that color (Sorabji 1995 and 2001). Myles Burnyeat, on behalf of what has been called a "spiritualist" position, goes so far as to insist that the sense-organs are not materially affected at all in acts of perception: the sense-organs need to be in certain states of receptivity, which are conditions of the materials they are made of, but no material change occurs in them when there is an activity of perceiving (Burnyeat 2002). See Caston 2004 for an overview of the debate. Others such as Hendrik Lorenz take an intermediate position according to which the bodily organ is materially affected in some relevant way, but such affection is only the material component of perception, not the formal component that makes a perception the perception that it is (Lorenz 2007). I will focus my discussion of Aristotle's views on bodily organs around the intermediate position, as it strikes me as both the most plausible and the best grounded in the text. I will, at times, refer to the other interpretations and some of what I say can be applied to them.

[31] *DA* II 10, 423b30-424a15.

affected by the degree of heat that it already possesses and is thus insensitive to that degree of heat (as long as it possesses it). The second phenomenon, which Aristotle describes in the passage quoted above, concerns extreme objects of perception. Some sounds are so loud that when heard they destroy the hearer's ability to hear, some lights are so bright that when seen they destroy the viewer's ability to see. Again, this is a failure of receptivity that comes from the physical structure of our bodily organs. Our ears are sensitive to vibrations within a certain range, but cannot handle extreme vibrations that fall outside of this range. Aristotle takes these phenomena as evidence that the bodily nature of our organs of cognition places limits on our ability to perceive.[32] Our sense of touch has a limited range because the constitution of our sense-organ of touch restricts the sense-organ's receptivity to tangible objects.

These phenomena help to explain why Aristotle formulates his neutrality condition, but they do not fully determine its force or why Aristotle is committed to it. Some have claimed that Aristotle puts forward the neutrality condition because he has a literalist theory of cognition—to cognize, an organ must literally take on the qualities that are cognized. I think that there is strong evidence that the literalist reading is false (although I will not argue that claim here), so I will set aside this proposal.[33] On my reading of Aristotle, perception is not identified with any material alteration, but it does require material alteration as a necessary condition. Aristotle thinks that there are two conditions that must be met for something to serve as an organ for perception or understanding: the organ must be affected by the object of cognition (the *realist* condition) and

[32] *DA* III 4, 429a29-429b3.

[33] Here, in brief, is some of the evidence against the literalist interpretation: Aristotle repeatedly criticizes his predecessors' simplistic and literal accounts of perception (e.g. *DA* I 5, 409b24-410b15). He also contrasts the limitations of touch in comparison to sight and sound. While my hand must possess some temperature in such a way as to limit its cognitive range, my eye need not possess any color in such a way as to limit its cognitive range, nor my ear any sound (*DA* II 10, 423b30-424a15). If, however, the literalist interpretation is correct, Aristotle would be committed to maintaining that all sense-organs have a blind spot with respect to the qualities they currently possess, since in each case the sense-organ literally exemplifies some quality. Aristotle clearly rejects such a commitment. Aristotle's treatment of memory and imagination provides further evidence against the literalist interpretation (for discussion of this point see Caston 1998, 257- 279).

the material alteration that the organ undergoes must help to determine the cognitive change that the subject undergoes (the *conduit* condition). Taken together these two conditions serve as the basis for Aristotle's neutrality condition. The realist condition ensures that perception and understanding are of their objects. This condition comes from Aristotle's conviction that perception and understanding successfully take place and consist in grasping certain features of reality. I am seeing a red apple because I am being affected by the red apple (in some appropriate way). Given the realist condition, any organ of cognition must serve as an organ by being in contact with the object of cognition (again, in some appropriate way).

The second constraint is the *conduit* condition. For a certain bodily structure to count as the organ of a cognitive power it must be the means through which that cognitive power actually operates. The most plausible way for a bodily organ to mediate cognition is through its being materially affected in some relevant way by the object of cognition so as to bring about a cognitive change in the relevant cognitive power. Now the qualities that are perceived through the affection of one sense-organ differ systematically from those perceived through each of the other sense-organs. The explanation for these differences must be found in the different material affections that the organs undergo and hence in the distinctive physical structure each organ possesses. Each different organ must have a distinctive physical structure that allows it to undergo distinctive material alterations brought about by the relevant objects of perception. In order to see light through the eye, for instance, the eye must have a physical structure that enables it to undergo certain sorts of material changes in response to light. This means that the eye's physical structure must be neutrally receptive: if the eye was not transparent, but colored, it could not be affected by the full range of light that we see. If by its nature the ear vibrated at a certain frequency or was not sensitive to the appropriate range of vibrations, we could not use it

to hear. In sum, the material alteration that the organ of cognition undergoes must help to determine the cognitive change that the subject undergoes. This is the force of the neutrality condition.

If, then, the intellect were to have a bodily organ, this bodily organ would have to undergo certain material alterations in response to the objects of understanding. These material alterations would help to determine the cognitive changes that I undergo in understanding that object. If I am to understand what it is to be a horse, some material alteration must take place in my body in response, in some appropriate way, to the form of horse. Aristotle's neutrality condition does not require that this change involve literally taking on the relevant form in question at the material level: the putative organ would not have to become a horse, only be affected in some relevant way by horse.

Whether this condition seems too strong depends on one's views on the nature of cognition and intentionality. On my interpretation of Aristotle, the form possessed by me when I understand what a horse is shares the same species as the form possessed by the horse Bucephalus. For Aristotle, this sameness of form gives perception and understanding their intrinsic intentionality. Aristotle's insistence on this sameness is a major factor in his rejection of a bodily organ. In this respect, Aristotle's theory sharply diverges from the representational accounts that predominate in contemporary philosophy of mind. On these accounts my perception or understanding of something needs only to represent that thing in some appropriate way. The representations that I possess when I perceive or understand something may fail to have many of the features that are essential to the things they represent—my representation of red need not literally possess the color red, nor does my representation of a horse need to literally

possess equine characteristics. There is no longer *any* strong requirement for sameness between the representation and the thing represented.[34]

This raises the question of whether there are any restrictions on the relation between the physical properties of the representation and the physical properties of the thing represented. The flexible nature of representation has led some commentators to worry that Aristotle's commitment to his condition stems from a failure to appreciate that there are less rigidly restrictive models of cognition.[35] On the representational theory a bodily organ only needs to be able to literally take on, or exemplify, the qualities needed for it to serve as a representation: these qualities may be entirely unrelated to the qualities essentially possessed by the object that is represented. If there are no restrictions on the relationship between the characteristics that an organ exemplifies in representing and the characteristics of the thing it represents, a bodily organ need not be neutral with respect to the qualities that are cognized through it. Aristotle's neutrality condition would fail.

Contemporary scientific theories of perception and most representational theories of cognition place restrictions on this relationship similar to Aristotle's. Although contemporary scientific accounts of perception differ significantly from Aristotle's, they still hold that the connection between the way in which the bodily organs are affected and the things that we perceive is explanatory—we hear sounds or see light precisely because the relevant sense-organs are affected by sound and light.[36] In paradigmatic cases, our perceptions are produced by the

[34] Though there may still be some requirement of sameness, if any representation involves sameness of some kind either in the representation or in the representation's relation to what it represents.

[35] E.g. Christopher Shields 1995, 319-22, 327-330.

[36] On the contemporary account, seeing takes place because light waves, after passing through the transparent outer layers of the eye, affect our photoreceptors while hearing takes place because sound waves affect our inner ear. Our different sense-organs possess different physical structures that enable them to be materially altered with respect to the particular sense qualities that are perceived by their sense-powers. Our photoreceptors are extraordinarily sensitive to light—"rods are able to respond to a single photon of light"—while the hair cells in our inner ear are extraordinarily sensitive to vibrations—"a displacement of .3 [nanometers] is sufficient to give rise to

contact between our receptive sense-organs and the stimuli we perceive.[37] Many representational theories of cognition, particularly causal theories, also employ something like Aristotle's neutrality condition. This limits the options for the way in which intellectual activities could have a physical organ—either understanding needs to be built up out of perceptions in some way or we need an account of how the objects of understanding, particularly those that are markedly different from the objects of perception, produce distinctive material alterations. I consider some problems with these alternatives below (section 3 e). These restrictions suggest that even if the intellect has a bodily organ, it does not have a bodily organ in the way that perception does, a point I return to at the end of section 3 d.

Are these restrictions strong enough for Aristotle's argument? The fundamental question is whether the distinctive intentionality of cognition can be accounted for in terms of material processes. On my reading, Aristotle thinks that cognitive possession of a form is both necessary and sufficient for cognition to take place. The representational theory allows for materially realized representations and thus looks like it might allow for a materialist explanation of cognitive intentionality. However, the necessary conditions for serving as a representation are much weaker than Aristotle's conditions for cognitive possession of a form. Something can represent without having the ability to cognize. Thermometers do not cognitively grasp temperatures and written words do not understand what they signify, but both represent. A proponent of the representational theory might respond by distinguishing between cognitive or

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the perception of sound…the proportional equivalent to the top of the Sears Tower in Chicago moving about 5 cm" (Foley and Matlin 2010, 55, 253). Even if perception centrally involves transformation and representation, the bodily organs of perception are still being affected by precisely those things that they are perceiving.

[37] Although a number of contemporary philosophical theories of perception take perceptual illusions and hallucinations to be cases of perception, some theories, such as disjunctivism, reject this claim. Veridical perceptions are also more central to physiological and scientific accounts of perception, suggesting that they may reasonably be considered the paradigm cases of perception.

original intentionality and derived intentionality.[38] Cognitive states possess original intentionality: they are intrinsically about their objects. In contrast, things such as written words or thermometers possess only derivative intentionality. It is only in virtue of their relation to things with original intentionality, such as mental states, that they are about something.[39]

The effectiveness of this response depends on whether original intentionality can be accounted for in terms of material processes. If the proponent of the representational theory can present material processes that provide necessary and sufficient conditions for original intentionality and distinguish it from derivative intentionality, this would provide good reason for thinking that all cognitive states can have bodily organs. Materialists, however, have found it difficult to account for original or cognitive intentionality in terms of material processes. A number of materialists have found cognitive intentionality so problematic that instead of explaining how cognitive activities such as believing and perceiving can be both material and intrinsically about something, they have claimed that such activities are not, in fact, intrinsically about something.[40] Some have attempted to give an account of the intentionality of cognitive activities in terms of some relation that material objects can have, employing causal, information-theoretical, or teleosemantic accounts.[41] These attempts, however, have consistently failed to distinguish derivative intentionality from the cognitive intentionality of perceptions and

[38] As John Searle and John Haugeland do (Searle 1983 v-ix; Haugeland 1998, 128-30).

[39] Their intentionality will depend on use, convention etc.

[40] Cf. P.M. Churchland's eliminative physicalism (Churchland 1989) and instrumentalists about intentionality such as D.C. Dennett (Dennett 1987). Dennett denies the distinction between derived and original intentionality and claims that attributions of intentionality are only instrumental. These attributions are justified insofar as they allow us to predict behavior, but they do not describe some intrinsic property of the thing. The activities of a human being doing sums and an adding machine are equally intentional.

[41] Cf. Dretske's information-theoretic proposal (Dretske 1995), Fodor's asymmetric dependency theory (Fodor 1990), and Millikan's teleosemantic approach (Millikan 1984).

beliefs.[42] There is no consensus among materialists as to whether any of these proposals show promise or might prove correct.

I cannot evaluate the prospects for these projects here. Perhaps the materialist can account for cognitive intentionality and distinguish it from derivative intentionality in a satisfactory way. Such an account would establish the representational theory as a plausible way of explaining cognition in terms of material processes. If so, this would call into question Aristotle's argument. If Aristotle is mistaken, however, his mistake is not an elementary one, such as simply failing to recognize the possibility of a representational theory. Aristotle's argument cannot be dismissed so easily. Accounting for cognitive intentionality is still one of the chief difficulties for contemporary proponents of materialism.

c. "The Intellect Understands All Things"

I have given an account of Aristotle's neutrality condition and offered some defense of it. In order to see the role it plays in the argument we need to turn to the second key consideration that Aristotle employs: his characterization of the activity that is understanding. At *DA* III 4, 429a18, in the passage quoted above, Aristotle strikingly claims that the intellect understands all things. I understand this to mean that the intellect is capable of understanding any thing, of receiving any form there is. This is not a practical claim about the number of things that an individual human being can understand, but is instead a structural claim about the relation between the intellect in itself and the things in the world. Aristotle is saying that there is no form or structure present in the world that the intellect is incapable of grasping.

What are Aristotle's grounds for this claim? I think that Aristotle puts forward this claim because of his belief that humans can systematically understand the different ways in which all

[42] For some criticisms of these approaches see Putnam 1988, McDowell 1994, Bonjour 2010, and Plantinga, who targets Dretske and Fodor in particular (Plantinga 2006, 11-17; Plantinga 2007, 105-113, 136-141).

the things that are have being. In *Metaphysics* A Aristotle claims that knowledge of first causes and the way in which they serve as causes for everything else should be identified with wisdom. The person who comes to know the first causes of things will know all things, since everything depends on the first causes.[43] For Aristotle, understanding being involves grasping the entire structure of the universe. It requires seeing the ordered way in which different things depend on one another, with the being of accidents depending on the being of substances and the being of substances depending on the being of the eternal divine intellect.[44] Such a grasp gives us the key for understanding the being of any particular thing. If humans can achieve this knowledge and understand being as such, then it is plausible to think that we can understand all the different sorts of being that there are, both because we understand what it is to be and because we are able to understand the overall structure of being. The human intellect, in understanding being, can understand all things.

Even if we weaken Aristotle's striking premise and do not insist that the human intellect can understand all things, his argument can succeed, as long as there are some things that we can understand but that we could not cognize through a material alteration of a bodily organ. In fact, Aristotle thinks that the range of perceptible forms does not exhaust the range of intelligible forms. Understanding would not cover all intelligible forms if it operated through a bodily organ which could only make perceptible forms available for understanding. Aristotle emphasizes the difference between intelligible forms (νοητά) and perceptible forms (αἰσθητά) at a number of points in the *DA*. In his summary of his account of cognition he says that the things which have being are either perceptible or intelligible, presenting these as two contrasting options.[45] As I

[43] *Metaphysics* A (I) 2, 982a21-3 (cf. 982a8-9).
[44] Cf. *Metaphysics* Z (VII) 1 and *Metaphysics* Λ (XII) 1 and 10.
[45] *DA* III 8, 431b22-24. On my interpretation, the perceptible forms are also in a way intelligible, when they are understood universally, not perceived individually, but intelligible forms cannot be cognized by perception. For

discussed earlier, Aristotle holds in *DA* II 6 that the only forms that are perceptible in themselves are the peculiar objects of the various senses, such as color, sound, and odor, plus perceptible qualities common to multiple senses, such as the shape or size or movement of something. This means that many of the objects of our understanding fall outside the range of perceptible forms. We can understand unity, matter, being, humanity, and evil, but none of these are perceptible forms that can be cognized through our bodily organs. This inability does not come merely from deficiencies in the distinctive set of bodily organs that belongs to human beings. Things such as unity, matter, and being do not possess some characteristic bodily or material form and thus there is no material or perceptible form that a bodily organ of any kind could latch onto or transmit. There is no physical structure that an organ could possess that would allow its material alterations to result in our cognitively receiving the form of unity or plurality.

d. Aristotle's Argument and Its Conclusion

The ability of the intellect to understand all things, together with Aristotle's neutrality condition, implies that the intellect does not understand through a bodily organ. The intellect is a cognitive power that is capable of cognitively receiving all the forms in all the ranges of forms (or at least in an immense variety of ranges). Every body, however, must have some fixed and definite characteristics that it possesses in virtue of what it is. On Aristotle's account, bodies are form-matter composites. This means that any given body is composed of some matter that is able to be this sort of body (but is also able to be other things) and some form in virtue of which the body is the kind of body that it is. This form will involve the body's having certain sorts of fixed and determinate characteristics that it must retain if it is to continue to be that sort of body. As long as this body exists it must possess these characteristics and it cannot come to possess any

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further elaboration of this point, see my discussion of the distinctive characters of perception and understanding in section 3 f.

form or characteristic that is opposed to these. Fire, for example, cannot lose its heat while continuing to be fire.

Thus, if the intellect had a bodily organ, it would not be able to understand all things. If intellect had a bodily organ this bodily organ would have determinate and fixed characteristics that would make it unable to transmit the full range of things that we understand. Aristotle raises both quantitative and qualitative problems for any putative organ of thought. First, no physical structure is capable of being materially altered by all the different sizes and shapes, colors and smells, noises and tastes that human beings are capable of understanding, while retaining the properties that characterize it. There are also some things that by their nature cannot produce characteristic material alterations. No bodily organ could be materially altered to take on the forms of dogs and cats, minerals and lakes, electrons and quarks while continuing to preserve its own physical structure.[46]

Aristotle's characterization of the intellect as "having no nature of its own other than this, that it is potential," allows him to avoid the problems that would arise if it had a bodily organ. Since the intellect, before it understands, is only a certain potentiality, a capacity for understanding things, there is no form that it intrinsically possesses. Since it does not possess any form there is no form which prevents it from taking on other forms. Thus the intellect is potential in a way that no material object, no form-matter composite, could be.[47] Even when the intellect comes to cognitively possess forms, these do not become part of what it is by nature, but rather part of its developed state or character (ἕξις). The intellect's stable possession of these forms does not prevent it from understanding other, new forms. Its exercise of the forms it possesses is

[46] I will discuss this line of argument more below (section 3 e-f) in response to the objection I formulate.

[47] It is not of course a free-floating purely potential thing; the intellect depends on something that is actual, the human soul, for its potentiality, in accordance with Aristotle's insistence on the priority of the actual to the potential (*Metaphysics* Θ [IX] 8).

limited, but in an unproblematic way. The intellect can only actually be understanding or contemplating one unified form at a time. This metaphysical limitation, however, fits with our epistemological experience and with Aristotle's own views concerning our intellectual activities.

Before I consider an important objection based around the idea of combining different bodily organs, I want to note one less controversial but important point that Aristotle's argument makes: even if the intellect does have a bodily organ, it does not have one in the way that perception does. The senses are directly connected to the objects of perception through their sense-organs. In contrast, if the brain, for instance, is the organ of thought, it is not because the brain is materially altered so as to take on the characteristics of the objects of thought in some straightforward way. A number of Aristotle's predecessors, such as Empedocles and Anaxagoras, either identified thought with perception or conceived of thought as proceeding along exactly the same lines as perception.[48] Just as perception involves the sense-organ being altered and conformed to the object of perception, so too thought must consist in the organ of thought taking on the characteristics of the object of thought. Our thought of water or heat must involve our organ of thought becoming (or being) wet or hot. This view persisted to some degree in post-Aristotelian antiquity, but it has seen little revival in modern times, and for good reason.[49] The great variety and plasticity of our thought (as well as the interior location of the brain, the most plausible candidate for our organ of thought, and the brain's interconnection with the exterior sense-organs) makes it highly implausible that thinking consists in being materially altered in some direct or straightforward way by the objects of our thought. Though this view was advocated by some early philosophers, the considerations Aristotle advances against it are decisive.

[48] *DA* I 2, 404a25-405a19, I 5, 409b24-410b10, III 3.
[49] Cf. Lucretius, *De Rerum Natura*, III 350-05, 622-31.

e. Objection: Combining Bodily Organs of Cognition

How then might the intellect have a bodily organ? The most plausible account is that the organ of thought operates in a different manner from the organs of perception. We do not receive the objects of thought directly through some straightforward material alteration of the brain, but instead produce the objects of thought by combining and separating the various perceptions that we do receive.[50] The brain is the organ that carries out this combination and separation that results in—or maybe even constitutes—thought. Hence the brain serves as the organ of thought.

The objector to Aristotle could concede that the intellect does not have the sort of bodily organ that the senses do but question whether this is sufficient for truly demonstrating that the intellect cannot have a bodily organ. Why not think of the intellect not as having one particular sense-organ, but as being a cognitive power that makes use of a combination of different organs? Even if each particular organ is limited in the range of forms it receives, if the different organs have different limitations, then a combination of them could overcome their separate limitations. If we can combine cognized forms from different organs using our brain then the intellect could still be able to know all things (or at least know the full range of things that we are plausibly able to know). In *DA* III 2 and *De Sensu* 7, Aristotle himself claims that there is some sort of combination of perceptions from different sense modalities with different organs into one central organ, perhaps even suggesting that there is ultimately one unified power of perception. What if the intellect was like this: a cognitive power that unified the different specific sense-organs using a special organ? In place of the heart, Aristotle's favored candidate for such a role, we could simply substitute the brain. The brain takes in the cognitive forms from the different sense-organs and is able to combine them in such a way as to make us capable of understanding and

[50] Cf. David Hume, *Enquiry into Human Understanding*, 19.

grasping all the forms that we are able to understand. This account allows us to address Aristotle's argument while fitting better with the empirical evidence of a close connection between the brain and intellectual activity.

Before addressing this objection directly, I should briefly explicate Aristotle's views on the relationship between the intellect and the body. Although Aristotle holds that the intellect cannot have a bodily organ he thinks that the activity of understanding is preceded by an exercise of our power of imagination, φαντασία, a power that does possess a bodily organ.[51] Since we employ images in our understanding of something, we would expect a correlation between certain material changes in certain regions of the organ of imagination (which Aristotle took to be the heart, but we take to be the brain) and different sorts of cognitive activity.[52] For Aristotle this exercise of the imagination is a precondition of understanding, not part of the activity itself, since it does not enter into the account of what understanding is. Further, unlike in the case of the sense-organs, the images that we employ do not determine what we understand. The same image can be employed to aid in understanding many different things and many different images can be employed in order to aid understanding the same thing.[53] Thus Aristotle does not think that the bodily organ of imagination is, properly speaking, the organ of the intellect, even if it is indirectly used as a tool.

[51] *DA* III 7, 431a14-20, 431b2-19 and III 8 432a2-14. I discuss Aristotle's reasons for thinking this and the implications his position has for his view of the intellect and the soul in Chapter VII.

[52] For example, the sorts of imaginings that are useful for understanding what a triangle is are likely to be different from those useful for understanding what a lion or a subatomic particle is, but similar to those useful for understanding what a square or a line is, so we would expect material changes in the organ of the imagination to show certain patterns. The reliance of understanding on the imagination also allows Aristotle to account for the way in which damage to the brain can affect intellectual functions. Since certain activities of the brain are necessary conditions for understanding, understanding cannot take place when the brain is seriously damaged.

[53] In coming to understand and grasp what a lion is I might make use of the lion's roar or of a visual image of a lion attacking its prey or of the word "lion," while the same image of a triangle may help me understand both figure and triangle and incommensurable.

Why can't the brain or some combination of the brain and the sense-organs serve as the organ of thought? To answer this objection we need to go beyond the considerations already presented. Aristotle's discussion of the differences between perception and understanding offers us two lines of response. The first response picks up on the difference between perceptible and intelligible forms. If the organ of understanding just combined the various perceptible forms that we can receive through our different senses, we could only understand perceptible forms. If, however, there are intelligible forms that we understand such as being, unity, matter, being, humanity, and evil, and these are not perceptible and cannot be composed out of combinations of perceptible forms, the intellect could not cognize these forms since they are not accessible to perception. The success of this response will, of course, depend on how plausible it is to think that our understanding of these intelligible forms could result from some combination and separation of different perceptible characteristics. Aristotle has a second response that aims to show that our activities of understanding cannot result from such combinations.

f. The Universal Character of Understanding

This response makes use of the universal character of understanding. Aristotle holds that the sort of cognition we get from cognitive powers with bodily organs is always spatiotemporally limited. In contrast, understanding is universal, though it also applies to particulars. When we understand something we grasp the being and essence of the form itself, not just a particular instance of that form. Since understanding is not spatiotemporally limited, while cognition from a bodily organ or combination of bodily organs is, the intellect cannot have a bodily organ. Aristotle holds that in understanding something we grasp what it is to be a thing of this sort. Merely combining individual perceptible qualities and quantities will not result in such understanding. To understand what a triangle is involves something further beyond seeing a

bunch of shapes that happen to be triangles: it involves seeing what a triangle is and why all these shapes are triangles. If our understanding was not of triangle as such, but of triangle at a particular place and time, it would not be applicable to triangles at other places and times.

Aristotle denies that we can get this universal sort of understanding from cognitive powers with bodily organs. Aristotle repeatedly maintains that perception is necessarily of individuals: we perceive this triangularly shaped thing in this place at this time, not triangle as such.[54] His lengthiest discussion of this issue comes in a chapter of the *Posterior Analytics* where he discusses whether knowledge, ἐπιστήμη, could come from perception:

> For even if perception is of what is such and such, and not of individuals, still one necessarily perceives an individual, and one at a definite place and time. But it is impossible to perceive what is universal and holds in every case; for that is not an individual nor is it at a time; for then it would not be universal—for it is what is always and everywhere that we call universal.[55] (*APst* I 31, 87b29-33)

Aristotle begins by allowing that perception is not simply of particulars, but "of what is such and such," of color, for instance, and thus is, in a qualified sense, universal, since perception is always of some broad, non-particular range (e.g. the full range of colors). Any individual case of perception, however, will be of a particular perceptible object at a place and time. I do not just see red, I always see a particular patch of red in some definite space and at some definite time. This red patch at this time is different from that red patch at that time, even if the form of red is of the same kind in both instances. The form possessed by the power of perception shares the spatiotemporal features possessed by the object of perception. Aristotle is claiming that the particularity of perception is not just a contingent feature of perception, but a necessary one.

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[54] Cf. *DA* II 12, 424a21-4; II 6, 418a20-5; *APst* I 18, 81b5-9; I 31, 87b29-33, II 19, 100a15.

[55] εἰ γὰρ καὶ ἔστιν ἡ αἴσθησις τοῦ τοιοῦδε καὶ μὴ τοῦδέ τινος, ἀλλ' αἰσθάνεσθαί γε ἀναγκαῖον τόδε τι καὶ ποὺ καὶ νῦν. τὸ δὲ καθόλου καὶ ἐπὶ πᾶσιν ἀδύνατον αἰσθάνεσθαι· οὐ γὰρ τόδε οὐδὲ νῦν· οὐ γὰρ ἂν ἦν καθόλου· τὸ γὰρ ἀεὶ καὶ πανταχοῦ καθόλου φαμὲν εἶναι. Modification of Jonathan Barnes's translation in the Revised Oxford edition (Barnes 1984).

The reason for this lies in the fact that perception is a cognitive power with a bodily organ. We perceive as a result of our cognitive organs being affected in space and time. My cognitive organs are affected in a particular way at a particular place and time and the forms that I become aware of retain that particularity. My eyes give me the form of this red here and now and my ears give me the form of this middle C sound here and now. In general, any bodily organ contributes to cognition by being spatiotemporally affected by an individual object and the particularity of that affection is preserved in the form that is received cognitively. Thus any cognitive power with a bodily organ or combination of bodily organs will be spatiotemporally limited. Since Aristotle holds that understanding is not intrinsically spatiotemporally limited, it cannot have a bodily organ.

4. Conclusion

I have reconstructed Aristotle's argument and defended some of its key premises. Aristotle presents a theory of intentionality based around cognitive change. A cognitive activity is intrinsically about its object if and only if it consists in cognitively possessing the form of that object. This account, when combined with Aristotle's neutrality condition and his claim that the intellect understands all things, leads him to hold that the intellect does not have a bodily organ. Aristotle's account, according to which the intellect in its nature is only potential, allows him to avoid the problems that would arise if the intellect had a bodily organ. On my interpretation, Aristotle holds that intelligible forms do not have any distinctive bodily or material characteristics and thus could not be cognized through a bodily organ, regardless of how this organ was constituted or how it combined different perceptions. Further, cognitive powers with bodily organs are always spatiotemporally limited, but understanding is not. Our understanding applies to all instances of the thing understood wherever and whenever they exist. If Aristotle's

accounts of the intentionality and character of our intellectual activities are correct, then the intellect is not anything material. The intellect and its activity of understanding are independent from the body.[56]

[56] This account raises further questions: how does the intellect relate to the body and to cognitive activities that use the body? What is the precise relation between the activity of understanding and the activity of imagining? Does the independence of the intellect and the activity of understanding mean that the human soul meets the criterion for separate existence laid down at the beginning of the *DA*? If understanding is of universal intelligible forms that we cannot perceive, how do we come to understand something? To grasp Aristotle's answers to these questions we first need to look at the role of the imagination and the body in understanding, as I do in Chapter VII. I then turn to questions concerning the acquisition of understanding and the separation of the soul from the body in VIII-IX, where I discuss *DA* III 5 and its implications.

VII. Images and Understanding

1. Introduction: The Implications of *DA* III 4

In the previous chapter I discussed Aristotle's reasons for denying that the intellect (ὁ νοῦς) has a bodily organ, as presented in *De Anima* (*DA*) III 4.[1] For Aristotle, a cognitive activity is intrinsically about its object if and only if it consists in cognitively possessing the form of that object. This account, when combined with Aristotle's neutrality condition for cognitive organs and his claim that the intellect understands all things, leads him to hold that the intellect cannot have a bodily organ. If Aristotle's accounts of the intentionality and character of our intellectual activities are correct, then the activity of understanding (νόησις) has no material or bodily component. The intellect and its activity are independent from the body. Aristotle concludes his argument for the immateriality of the intellect by saying that "the power of perception is not without a body, but the intellect is separate."[2]

Both Aristotle's overall argument in the passage and this particular phrase suggest that Aristotle thinks that the human intellect and its operation of understanding are separable from the body. At the beginning of the *DA* Aristotle introduced his Separability Criterion, the condition the soul needs to meet to be able to be separated from the body:

> If, therefore, there is something proper [to the soul] among the works or affections of the soul, it is possible that the soul be separated. If, however, nothing is proper to it, it would not be separable…For [the soul] is inseparable, if it is always with some body.[3]

As I argued in Chapter II, Aristotle is here talking about whether the soul can come to exist separately from the body.[4] In *DA* I 1 Aristotle claims that the only plausible candidate for an

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[1] *DA* III 4, 429a18-b5

[2] *DA* III 4, 429b4-5. τὸ μὲν γὰρ αἰσθητικὸν οὐκ ἄνευ σώματος, ὁ δὲ [νοῦς] χωριστός.

[3] *DA* I 1, 403a10-12, 15-16. εἰ μὲν οὖν ἔστι τι τῶν τῆς ψυχῆς ἔργων ἢ παθημάτων ἴδιον, ἐνδέχοιτ' ἂν αὐτὴν χωρίζεσθαι· εἰ δὲ μηθέν ἐστιν ἴδιον αὐτῆς, οὐκ ἂν εἴη χωριστή…ἀχώριστον γάρ, εἴπερ ἀεὶ μετὰ σώματός τινος ἐστιν.

[4] Chapter II, section 6.

activity or affection that is non-bodily is understanding.[5] This passage from III 4 suggests that Aristotle thinks that understanding meets that criterion. Understanding cannot have a bodily organ and thus an act of understanding is not partially constituted by a bodily process or done with the body.

The last phrase of this passage—"the power of perception is not without a body, but the intellect is separate"—is particularly relevant as it seems to be picking up on the question raised in I 1 and answering it affirmatively.[6] The intellect and its activity of understanding are separate and can exist apart from the body and therefore the human soul can exist without a body. Someone might object that this sentence in III 4 only makes a claim about the intellect, the power of understanding, while the criterion of separability in I 1 depended on whether the activity or affection (in this case, understanding) is separable from the body. However, the context of the passage as well as Aristotle's general views on the relationship between powers and their activities suggest that Aristotle thinks that the activity of understanding is separable as well, given the nature of the comparison between intellect and perception. Aristotle does not think that the power of perception is a body or an affection of a body. Instead, he thinks that perception, the activity that the power of perception is responsible for, operates through the body, using certain bodily organs.[7] Moreover, the power of perception is, in some sense, located in these organs.[8] Although the power of perception is not a body Aristotle holds that it is not without a body because of the way that it is related to a body and because its activity uses the body.

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[5] *DA* I 1, 403a8-9.

[6] The passage from *DA* I 1, 403a15-16 asks whether the soul is always "μετὰ σώματός τινος" while the passage from III 4 claims that the perceptive power is "οὐκ ἄνευ σώματος," but the intellect is "χωριστός." I think this slight difference in wording should not undermine the strong connection between these passages, as Aristotle often uses "οὐκ ἄνευ σώματος" in discussing his separability condition. In particular, he uses this phrase in asking whether understanding is separable from the body a few lines earlier on in the I 1 passage (*DA* I 1, 403a8-10).

[7] E.g *DA* II 8, 420a3-19; II 9, 421a10-20.

[8] Cf. *DA* II 12 424a24-424b3; II 11, 423b30-424a1.

This suggests that Aristotle's contrast is based on the character of the activities of perceiving and understanding. Aristotle claims in *DA* II 4 that we learn about the various powers of living things by examining the activities these powers are responsible for (as well as the objects they are concerned with).[9] Thus the contrast between the power of perception and the intellect must be based in some way on distinctive features of their respective activities and objects. In claiming that the intellect, unlike perception, is separate, Aristotle seems to be claiming that the intellect is not located in some part of the body and that its activity is not in any way or connection bodily. One plausible interpretation is that perception is "not without a body" because its activity cannot be done without a body (and, indeed, is partially constituted by bodily processes), while intellect is separate because its activity of understanding can be done without a body and is not partially constituted by bodily processes.[10]

There is, however, a weaker reading of this text on which Aristotle's claim is only that the intellect (and its activity) are not partially constituted by any part of the body (and its activity is not partially constituted by a bodily process). On this reading, the power of perception is not without a body because perception can be treated as a hylomorphic compound, with the power of perception being the formal component and the relevant bodily organs the material. Perceptual activity can also be treated hylomorphically with the formal aspect provided by the cognitive change that the power of perception undergoes and the material aspect provided by a bodily process occurring in the relevant organ.[11] The intellect, in contrast, has no bodily organ and so neither it, nor its activity, has a hylomorphic relationship with any part of the body or with any

[9] *DA* II 4, 415a14-22.

[10] It is clear that the contrast is an ontological one and is not primarily about separation in definition or thought, since the basis for the contrast is Aristotle's claims about the lack of any bodily organ for the intellect, in contrast to perception, not a claim about the possibility of giving an account or definition of the intellect that does not refer to body.

[11] This reading, which I am sympathetic to, was suggested to me by Hendrik Lorenz and fits with the account of perception he suggests in Lorenz 2007, section 3 (though see also fn. 76).

bodily process. This is the contrast, it might be suggested, that Aristotle is drawing in this passage.

This reading may be possible, but it faces two serious challenges. To begin with, it relies on the controversial interpretative claim that the relationship between the power of perception and its bodily organs (and the activity of perception itself) can be understood in hylomorphic terms, as involving distinct but unified psychic and bodily components. Although this position fits well with Aristotle's insistence on the constitutive contributions that both body and soul make to perception, it runs contrary to two of the most prominent schools that exposit Aristotle's theory of perception, the literalists, such as Richard Sorabji, who wish to identify psychological changes with physical ones, and the spiritualists, such as Myles Burnyeat, who insist that the psychological changes of perception do not involve any bodily changes.[12] Further, even if we do adopt an intermediate position, according to which two distinct changes, one psychological, one bodily, are involved in perception, it is not clear that Aristotle thinks that bodily organs and soul powers have a hylomorphic relationship to one another. One might think that ordinary material changes and the cognitive changes involved in perception are so different in kind that they cannot "constitute unified composite items."[13]

The second, more serious, challenge to this reading is that Aristotle's language does little to suggest that he is distinguishing between constitutive and non-constitutive conditions. Aristotle claims that the power of perception is "not without body," language typically associated with necessary conditions (as we will see below in section 3), and that the intellect is separate from the body, language that typically implies that the body is not a necessary condition for the

[12] *DA* II 5 is a key text for the importance of cognitive change, while texts that suggest something like a constitutive role for the bodily organ in perception include *DA* II 10, 422a10-11, 422b2-5, and *GA* V 1, 780b29-33. For more on this interpretation see Lorenz 2007.

[13] Lorenz 2007 fn. 76. Both Everson 1997, 254-5 and Burnyeat, 2002, 82, fn. 143 raise these sorts of difficulties.

intellect.[14] Aristotle seems to be claiming that the power of perception and its activity require the body in some necessary way (i.e. by involving a bodily organ), while the intellect and its activity of understanding do not (because understanding does not involve a bodily organ). Aristotle's language does not suggest that he is formulating a distinction along the lines that this alternative reading suggests, a distinction between a power which forms a hylomorphic unity with its bodily organ (the power of perception) and a power which requires the body but does not form a hylomorphic unity with it (the intellect). Aristotle's claims here are most plausibly read as implying that the intellect, unlike the power of perception, is separate from the body and can exist and function without it.

So, is this in fact, Aristotle's definitive position? In addition to the discussion of III 4 we need to consider two other key issues. We need to look at *DA* III 5, where Aristotle speaks of an intellect that is undying and everlasting but also of an intellect that is perishable, and we need to look at the connection between understanding and images. I turn to *DA* III 5 in Chapter XIII. In this chapter, I examine the other key issue: whether Aristotle's views on the role of imagination (φαντασία) in understanding mean that he, in the end, holds that understanding cannot be done without the body. When in *DA* I 1 Aristotle introduced understanding as the most plausible candidate for a separable activity or affection he also noted that the connection between imagination and understanding might mean that understanding is not separable from the body:

> Understanding seems most to be proper [to soul]. But if this is some sort of imagination or is not without imagination, not even this could be without body.[15]

[14] When, as here, the separation at issue is ontological, not definitional. Aristotle uses the language of separation carefully. The claim that *x* is separate from *y* is much stronger than the claim that *x* is distinct from *y*. It standardly implies that *x* can be without *y* (in the relevant way).

[15] *DA* I 1, 403a8-10. μάλιστα δ' ἔοικεν ἰδίῳ τὸ νοεῖν· εἰ δ' ἐστὶ καὶ τοῦτο φαντασία τις ἢ μὴ ἄνευ φαντασίας, οὐκ ἐνδέχοιτ' ἂν οὐδὲ τοῦτ' ἄνευ σώματος εἶναι.

In *DA* III 3 Aristotle rejects the identification of understanding and imagination, but at several points in book three of the *De Anima* Aristotle claims that the activity of understanding relies upon images (φαντάσματα) in some way.[16] In this chapter I will examine whether this connection entails that understanding is not, in fact, separate from the body.

Before examining this question it will be helpful to outline Aristotle's conception of images (φαντάσματα) and the power of imagination (φαντασία) responsible for them. Aristotle discusses φαντασία in *DA* III 3 and contrasts it both with perception and with intellectual activities such as understanding and opining. He ends up characterizing φαντασία as "motion generated by actual perception."[17] Perception, for Aristotle, requires contact between the perceptible object and the perceiver. Actual perception produces certain motions that are often preserved and then can be subsequently recalled or remembered or combined with the effects of other previous perceptions in creative imaginative activities.[18] Imagination is the power responsible for these activities, for remembering and recollecting our previous perceptions and for putting them together in various combinations. It is this function of creative combining that lies behind my use of imagination to translate φαντασία. Some prefer the use of appearance or presentation to translate φαντασία and appearances or presentations to translate φαντάσματα.[19] These alternative translations do bring out an important aspect of Aristotle's conception of φαντασία, the idea that φαντασία is a power whose sphere includes that of appearances and that the φαντάσματα it produces do not command assent in the way that perceptions or thoughts, which are about the way things are, do.[20] These translations also helpfully connect up to the

[16] *DA* III 3, 428a16-18 (cf. III 3, 427a17-427b26); III 7 431a14-20, III 8, 432a3-14.
[17] *DA* III 3, 429a1-2.
[18] *DA* III 3, 428b10-429a2, 427b17-20.
[19] E.g. Burnyeat 2008, 47, fn. 15 and J.I. Beare's translation of the *De Memoria*. Bloch uses imagination in his translation of the *De Memoria* (Bloch 2008).
[20] *DA* III 3, 427b6-428b9.

Platonic background for Aristotle's conception where in a number of related texts from Plato the verb φαίνεσθαι (which φαντασία and φαντάσματα are closely related to) is appropriately translated "to appear."[21] However, it is misleading to think of φαντασία as a power of the soul responsible merely for appearances or presentations, as this neglects the vital cognitive role that that φαντασία has as the power that preserves perceptions and allows their combination for purposes of cognition and action. The language of images and imagination also brings out the connection with light and the visual sense that Aristotle thinks is present in the etymology of φαντασία.[22] I will regularly use imagination for φαντασία and images for φαντάσματα, but the full range of functions that this power is responsible for should be kept in mind.[23]

In this chapter I begin by presenting some reasons for denying that understanding's connections to images implies that it, too, is bodily. I then work to articulate the role that Aristotle thinks images do have in activities of understanding and his reasons for giving them this role, focusing on an important passage from the *De Memoria*. I contrast my interpretation with that offered by Michael Wedin in his book, *Mind and Imagination in Aristotle.* Having discussed Aristotle's reasons for connecting understanding with images, I return to the *De Anima* and consider the force of the passages in book three that tie understanding to images.

2. Images Are Not Partially Constitutive of Understanding

Even though Aristotle does argue in III 4 that the intellect cannot have a bodily organ, a number of interpreters think that once we take the role of images into account we see that the activity of understanding is not, in fact, non-bodily. Aristotle explicitly holds that understanding is not possible without images. The power of imagination is part of the sense-power, a power

[21] Cf. *Theaetetus* 152b-c. *Sophist* 264a-b.
[22] *DA* III 3, 429a2-4.
[23] For more discussion of the different cognitive roles Aristotle assigns to φαντασία see Caston 1996 and D. Frede 1995.

which does have a bodily organ. So even understanding will turn out to be bodily in a way, since it relies on, and maybe even partially consists in, employing images.[24]

The first thing to say in response to this position is that Aristotle's characterization of the intellect and its activities in *DA* III 4-6 suggests that Aristotle does not hold that images constitute understanding, even partially. For Aristotle, images contribute to our understanding, but are not properly part of the activity of understanding. As I will argue in more detail below, Aristotle does not think that the images that we use in our understanding determine what we understand. This contrasts strongly with the case of perception, where the ways in which our bodily organs are affected determine the objects of our perception.[25] If my eyes or ears are affected in a certain way I will see red or hear middle C. By contrast, having an image of a triangle does not mean that I am understanding what a triangle is. I could just be remembering a triangle I previously considered. I could also be using this image to understand a number of other things, such as figure, mathematical object, incommensurability, area, or line. This suggests that we should not think that the connection of images to understanding means that understanding, according to Aristotle's criteria, turns out to have a bodily organ or component. Instead, we should think of images as ancillary to understanding and not part of the proper activity of understanding. They are a condition on the activity in question but are not properly part of the activity itself.

The difference between the role of images in understanding and the role of sense-organs in perceiving can be brought out further by considering the differing importance of origin for the two activities. Perception, for Aristotle, requires not only cognitively taking on a perceptible form, but taking it on in response to a perceptual object in one's environment. If we somehow,

[24] Interpreters who follow this line include M. Frede 1995, 105-6; Wedin 1988 ch. 4-6; Hartman 1977, ch. 6.

[25] For further discussion of this see Chapter VI, particularly section 3 e-f.

per impossibile, received a perceptible form without employing our sense-organs this would not be an activity of perceiving. It might be an activity of remembering or imagining, but it would not be perceiving, since there would be no direct contact with the object through the sense-organ. In contrast, if we were to receive intelligible forms without some activity of imagining we would still have understood the forms in question. Again, if we activated our understanding of something without employing images there would be nothing deficient in our activity.[26] For Aristotle, understanding requires sameness between the understanding and the object it understands.[27] It does not require acquiring our initial knowledge from some particular spatio-temporally individuated thing that happens to possess the intelligible form that is the object of our understanding. It also does not require that our exercising of our knowledge be tied in any way to some particular spatio-temporally individuated thing. There needs to be an appropriate cause for our acquisition of knowledge to ensure sameness between understanding and its object, but since the object of understanding is universal, there is no connection to any given particular thing that might be intelligible. This is the opposite of perception, which for Aristotle is of particulars, and must be governed by these particulars and the sense-organs through which we perceive them.[28]

It is also worth noting that Aristotle does not mention images (φαντάσματα) at all in III 4-6 when he gives his account of what understanding is and how it is brought about, indicating that he does not think that images are constitutive of understanding. This contrasts with Aristotle's treatment of cognitive activities that involve a bodily organ, such as perception. In his discussion of perception in *DA* II 5-III 2 he focuses on the objects of perception and the powers of perception, but he also discusses the sorts of bodily organs required for perception and the

[26] There is, of course, the question of whether this is possible, a question I address below.
[27] *DA* III 4, 429a15-18; 429b29-430a9; III 5, 430a19-20; III 7, 431a1-1; III 8, 431b20-432a3.
[28] For further discussion of these issue see Chapter VI, section 3 f.

way in which these organs are affected in perceiving.[29] In *DA* III 4-8, where Aristotle discusses intellectual activities, bodily organs and processes are not mentioned at all in connection with these activities (except, by implication, in Aristotle's claims in III 7 and 8 that understanding requires images). Aristotle does not seem to think that any discussion of bodily conditions or processes is needed for us to grasp what understanding is.

Indeed, as I argued in the previous chapter, it is the notion of cognitively taking on a form that is crucial to Aristotle's account of understanding. In *DA* III 4 Aristotle employs this account of taking on a form cognitively together with his claims about the universal character of understanding and the unlimited range of his objects in order to make clear what understanding is and how it differs from perception. He then discusses more complex theoretical intellectual activities in *DA* III 6, understanding them as cases of putting together and separating understanding of different intelligible forms. Aristotle's account of human theoretical intellectual activities portrays these activities as those of a human being using his soul and the intellectual powers it includes. The body and its employment are not discussed. Indeed, Aristotle's characterization of understanding, in its avoidance of any (positive) reference to the body and in its insistence on sameness of form between the intellect and its object, seems to be emphasizing the similarity between human theoretical understanding and the divine understanding. In *Metaphysics* Λ Aristotle argues that the divine intellect and its object are the same (though there the sameness is much stronger, as thinker, thinking, and thought are all identical).[30] *DA* III 4-6 lays out the human version of this claim and presents the psychological and metaphysical foundation for Aristotle's claim in the *Nicomachean Ethics* (*NE*) that the activity of

[29] E.g. *DA* II 7, 418b4-17, 419a11-b2; II 8, 420a3-19, 420b13-421a5; II 9, 421b13-422a7; II 10, 400a17-19, 422b2-10; II 11.

[30] *Metaphysics* Λ 9. For more on the argument of this chapter see Jonathan Beere, "Thinking Thinking Thinking: On God's Self-thinking in Aristotle's Metaphysics Λ 9," forthcoming.

understanding is the most divine one, the human activity in which we most resemble and imitate the divine.[31] Thus Aristotle thinks that we can grasp what understanding is without bringing in images.

3. The Separability Requirement

I have argued that, for Aristotle, understanding is not partially constituted by images. Aristotle thinks we can give a full account of what understanding is, as such, without bringing in images.[32] The role they play in understanding is not analogous to the role played in perception by the sense-organs and their affections. The fact that understanding is not partially constituted by images does not, however, fully resolve the question of whether understanding meets Aristotle's requirement for separability. If every actual exercise of human understanding requires an exercise of imagination which involves the body and some bodily movement, then understanding might still seem to fail the separability criterion. The key question here is what Aristotle thinks it takes for understanding to be proper to the soul and non-bodily, in the sense outlined in *DA* I 1.[33] Understanding is not partially constituted by a bodily process, so it is non-bodily in that sense. When discussing the separability of understanding in *DA* I 1, however, Aristotle claims that if understanding "is not without imagination, not even this could be without body."[34] This suggests that the requirements for being non-bodily may be stronger than simply not being constituted (even partially) by bodily processes. Understanding will be proper to the soul only if its activity is fully separable from the body, a test which Aristotle suggests it would fail were it done "not without imagination."

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[31] *NE*, X 7, 1177b34-1178a5; X 8, 1178b7-32; cf. *NE*, IX 4, 1166a14-23, *Metaphysics* Λ 7, 1077b13-29.

[32] Images are necessary for employing understanding and explain how we come to understand, but they are not part of the activity itself.

[33] *DA* I 1, 403a10-12, 15-16.

[34] *DA* I 1, 403a8-10.

What would the relationship between understanding and the imagination need to be for it to be true that understanding is "not without imagination?" Aristotle frequently employs this sort of phrase—"*x* is not without *y*"—in his corpus. It is found more than sixty times throughout his writings, in his logical works, works of natural philosophy, metaphysics, and ethics.[35] He standardly contrasts the claim that "*x* is not without *y*" with the stronger claim that "*x* is the same as *y*," the passage from *DA* I 1 being only one of many in which this contrast is drawn.[36] When Aristotle uses this phrase he is indicating that *x* is not the same as *y*, but that *x* depends in some way on *y*.

In general, the relationship of dependence can be understood as that of a necessary condition: *x* is not without *y* means that *x* cannot occur without *y*. A passage from *Politics* VII clearly illustrates this:

> Since just as with all other natural compounds those things without which the whole would not exist are not the same as the parts of the whole compound, it is also clear that not all the things that are necessary for city-states to possess are to be counted as parts of a city-state (πόλις).[37]

Here Aristotle is distinguishing between the parts of some compound and the necessary conditions of a compound, claiming that not all necessary conditions are parts. Aristotle goes on to give the example of property as something that is necessary for the existence of a city-state, but is not part of a city-state. Without property a city-state would not exist, since the people who form the city-state require property in order to pursue the good life that is the end of the city. This does not, however, mean that property is part of what a city-state is.

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[35] Including cases where *x* is said to be οὐκ ἄνευ *y* and cases where *x* is said to be μὴ ἄνευ *y*.

[36] *DA* I 1, 403a8-10; other examples include *DA* III 10, 432a13-14 and *NE* VI 12, 1144a28-9; VI 13, 1144b19-21.

[37] *Politics* VII 8, 1328a21-5, Ἐπεὶ δ' ὥσπερ τῶν ἄλλων τῶν κατὰ φύσιν συνεστώτων οὐ ταὐτά ἐστι μόρια τῆς ὅλης συστάσεως ὧν ἄνευ τὸ ὅλον οὐκ ἂν εἴη, δῆλον ὡς οὐδὲ πόλεως μέρη θετέον ὅσα ταῖς πόλεσιν ἀναγκαῖον ὑπάρχειν.

Although the claim that *x* is not without *y* typically implies only that *y* is a necessary condition for *x*, Aristotle sometimes uses the claim that *x* is not without *y* as a placeholder for a stronger claim. In *DA* III 4, for example, Aristotle claims that "flesh is not without matter, but, like the snub, is a *this* in a *this*."[38] Aristotle is here comparing flesh to the snub, in that both cannot be understood without matter, as opposed to the curved, which can be conceived of apart from matter. Flesh is not the same as its matter, but matter is an essential part of what it is, just as it is part of what the snub is. In contrast, the matter is not a part of the essence of the curved, although curved things, for Aristotle, do require matter as a necessary condition. So this passage provides us with an instance in which Aristotle employs the phrase "*x* is not without *y*" but means to indicate a stronger relationship than that of being a necessary condition.

Nicomachean Ethics VI 12 offers a similar example. There Aristotle discusses the power of cleverness (δεινότης), the ability to easily and accurately figure out which means are conducive to a given end. He argues that cleverness is not the same as practical wisdom (φρόνησις), since cleverness, unlike practical wisdom, does not concern itself over whether the end is base or noble. Aristotle claims that "practical wisdom is not this power [i.e. cleverness], but it is not without this power."[39] In context the force of this phrase seems to be equivalent to the claim that practical wisdom partially consists in having the power of cleverness. One could not be practically wise and fail to be clever, since practical wisdom requires the ability to easily and accurately figure out which means are conducive to a given end.[40] Aristotle wants to indicate that these two abilities are not the same, but are closely related, and he uses the claim that

[38] *DA* III 4, 429b13-14. ἡ γὰρ σὰρξ οὐκ ἄνευ τῆς ὕλης, ἀλλ' ὥσπερ τὸ σιμόν, τόδε ἐν τῷδε.
[39] *NE* VI 12, 1144a28-9. ἔστι δ' ἡ φρόνησις οὐχ ἡ δύναμις, ἀλλ' οὐκ ἄνευ τῆς δυνάμεως ταύτης.
[40] A similar case occurs in the *Magna Moralia*. There the author states: "Intelligence (σύνεσις) and the intelligent person (συνετός) are a part of practical wisdom and the practically wise person, and cannot be without these; for you cannot separate the intelligent person from the practically wise one" *MM* I 34, 1197b15-17.

practical wisdom is "not without" cleverness to indicate this close connection. Practical wisdom includes more than mere cleverness.

So the phrase *x* is not without *y* typically implies only that *y* is a necessary condition for *x*, but Aristotle sometimes uses this phrase as a placeholder for a stronger relationship. This suggests that we should examine whether imagination is a necessary condition for understanding, but that we should not rely just on this phrase to determine whether the connection between understanding and imagination claimed by Aristotle means that understanding is, in some sense, bodily. We need to carefully consider which conditions Aristotle requires for the soul to be separable and then, in light of those conditions, what sort of relationship between imagination and understanding would violate those conditions. As I argued in Chapter II, the question of separability hinges on whether the activity of understanding belongs to the human being just in virtue of the soul and certain actualities of the soul or whether something must also happen to the body in occurrences of understanding.[41] This is the question of whether understanding, as such, is a non-bodily activity. There is also the necessary condition question, the question of whether understanding can be performed without images and hence without the body. A negative answer to this question might suggest that understanding is "not without imagination." These two questions—the non-bodily question and the necessary condition question—will provide the backdrop for my discussion of imagination and understanding. I will return to them after we examine all the evidence about the role of images in understanding.

4. The Role of Images in Understanding: Introduction

So, why does Aristotle, in the *DA*, connect the exercise of understanding to the use of images? Does this connection mean that understanding cannot be done without the body? I will

[41] Chapter II, section 6.

now lay out my reconstruction of Aristotle's reasons for connecting understanding with images. I begin by noting two important and uncontroversial roles that imagination has in relation to understanding. First of all, understanding's connection to imagination is vital for Aristotle's empiricist epistemology. Secondly, images are necessary for remembering and recollecting objects of understanding. I then turn to a consideration of an important passage about images and understanding found in the *De Memoria*. I contrast my reading of it with that given by Michael Wedin, before considering the relevant passages from the *DA*.

Commentators generally agree that images are important to Aristotle's understanding of thought because they allow him to maintain his broadly empiricist account of knowledge.[42] They help to connect our intellectual powers to our perceptual powers. For Aristotle, the human intellect (like all our cognitive powers) starts out as a blank slate.[43] Contrary to Platonist views, Aristotle holds that we do not innately possess intelligible forms. Our soul is not already thinking about things nor can it begin thinking about things as soon as it recollects innately possessed knowledge. Instead, we need to first acquire intelligible forms from the world around us in order to be able to actively understand things. We need an explanation of how we first come to understand things and images, for Aristotle, will play an important role in that explanation. For Aristotle, human beings first perceive the world around us, then form experiences and memories from these sensations, and only after all this do we begin to understand things and grasp what the being of each thing is. Aristotle's presentations of how this process works are quite concise and somewhat sketchy and interpretation of the details is quite controversial. Nevertheless, Aristotle clearly thinks that imagination is the key intermediary between perceptual cognitive activities and intellectual cognitive activities. Imagination is what allows us to preserve our memory and

[42] E.g. M. Frede 1995, 106-7, Polansky 2007, 498-9.
[43] *DA* III 4, 429b29-430a2.

experience of the world around us and begin to form generalizations and universals based on our experience of particulars. Imagination gives us the foundation to move towards actually understanding something.[44]

Aristotle also clearly thinks that in certain cases images help us to activate our understanding of things. In the *De Memoria* (*DM*) Aristotle argues that both memory and the extended process of recollection use images (and the connections between images) to allow us to remember or recollect something. Even when the object of our memory or recollection is an object of understanding, the process of remembering or recollecting still takes place through imagination, a cognitive power with a bodily organ.[45] So, uncontroversially, images are of vital importance for our first acquisition of intelligible forms and are also necessary for activities of remembering and recollecting that help us come to exercise our understanding.

5. The *De Memoria* Passage

Are, however, images required for every exercise of understanding and, if so, why? There are a couple of texts in the *DA* that suggest that every exercise of understanding requires images (I return to them later) but perhaps the most important passage for addressing this question comes from the beginning of Aristotle's *De Memoria*. Here Aristotle presents the connection between images and understanding and offers some account of this connection:

> The subject of imagination (φαντασία) has already been considered in our work *On the Soul*. Without an image there is no understanding (νοεῖν). For the same affection occurs in understanding as in geometrical demonstrations. For there, though we make no use of the determinate quantity that the triangle has, we nevertheless draw it as determinate in quantity. So likewise when one understands, although what one understands may not be quantitative, one envisages it as quantitative, though one does not understand it as quantitative; while, on the other hand, if by nature it is quantitative, but indeterminate, one envisages it as if it had determinate quantity, but understands it only as a quantity.

[44] Key texts include *Posterior Analytics* I 18, 81a38-b9, II 19, 100a10-b3 and *Metaphysics* A 1. For discussion of II 19 see Bronstein 2012. For a general discussion of some relevant topics see Irwin 1988, Charles 2000.

[45] *DM* 1, 450a10-14, 21-5; 2, 453a14-31.

> Why we are not able to understand anything without the continuous, or the things that are not in time without time, is another question. Now, one must cognize (γνωρίζειν) magnitude and motion by the same power by which one cognizes time. Thus it is clear that the cognition of these objects is by the primary power of perception. Accordingly, memory, even of intellectual objects, does not occur without an image and the image is an affection of the common sense. Thus memory belongs to the intellect incidentally, while it belongs in itself (καθ' αὐτό) to the primary faculty of sense-perception.[46] (*De Memoria* 1, 449b30-450a14)

In this passage Aristotle compares the use of images (φαντάσματα) in understanding to the use of diagrams in geometry. The geometer uses a determinate drawn out triangle for his demonstration, but he makes no use of the determinateness of this triangle in his demonstration. The demonstration is about the universal, about triangle as such, not this particular triangle. The distinction Aristotle makes here between the image and the intelligible object cognized through it is strongly reminiscent of Plato's discussion of mathematics in *Republic* VII and obviously draws heavily on it.[47] Aristotle uses the distinction between the diagram and the mathematical object as the basis for an analogous distinction between the internal phantasm or image and the intelligible object that the image allows us to understand. The images that we have of things have certain determinate characteristics but we do not make use of them insofar as they are individual and determinate, but insofar as they allow us to think about and grasp the universal. If I think about human being using an image of Socrates I will not pay attention to his snub-nosedness. I will instead abstract from such particular features (except insofar as they reveal something about

[46] ἐπεὶ δὲ περὶ φαντασίας εἴρηται πρότερον ἐν τοῖς περὶ ψυχῆς, καὶ νοεῖν οὐκ ἔστιν ἄνευ φαντάσματος—συμβαίνει γὰρ τὸ αὐτὸ πάθος ἐν τῷ νοεῖν ὅπερ καὶ ἐν τῷ διαγράφειν· ἐκεῖ τε γὰρ οὐθὲν προσχρώμενοι τῷ τὸ ποσὸν ὡρισμένον εἶναι τοῦ τριγώνου, ὅμως γράφομεν ὡρισμένον κατὰ τὸ ποσόν, καὶ ὁ νοῶν ὡσαύτως, κἂν μὴ ποσὸν νοῇ, τίθεται πρὸ ὀμμάτων ποσόν, νοεῖ δ' οὐχ ᾗ ποσόν· ἂν δ' ἡ φύσις ᾗ τῶν ποσῶν, ἀορίστων δέ, τίθεται μὲν ποσὸν ὡρισμένον, νοεῖ δ' ᾗ ποσὸν μόνον—διὰ τίνα μὲν οὖν αἰτίαν οὐκ ἐνδέχεται νοεῖν οὐδὲν ἄνευ συνεχοῦς, οὐδ' ἄνευ χρόνου τὰ μὴ ἐν χρόνῳ ὄντα, ἄλλος λόγος· μέγεθος δ' ἀναγκαῖον γνωρίζειν καὶ κίνησιν ᾧ καὶ χρόνον· [καὶ τὸ φάντασμα τῆς κοινῆς αἰσθήσεως πάθος ἐστίν] ὥστε φανερὸν ὅτι τῷ πρώτῳ αἰσθητικῷ τούτων ἡ γνῶσίς ἐστιν· ἡ δὲ μνήμη, καὶ ἡ τῶν νοητῶν, οὐκ ἄνευ φαντάσματός ἐστιν, <καὶ τὸ φάντασμα τῆς κοινῆς αἰσθήσεως πάθος ἐστίν>· ὥστε τοῦ νοῦ μὲν κατὰ συμβεβηκὸς ἂν εἴη, καθ' αὐτὸ δὲ τοῦ πρώτου αἰσθητικοῦ (OCT text, ed. W.D. Ross).

[47] *Republic* VII 525d-527c. For a helpful discussion of Plato's views on mathematics and the distinction between the visible and the intelligible see Burnyeat 2000.

man as such, that he can have a snub nose, for instance) and use the image to think about human beings universally, about human beings as such.

6. Explanations of Images and Understanding

a. Wedin's Account

Aristotle's claim here seems to be not just that images are a useful aid for understanding, an extra help for grasping what something is, but that the exercise of understanding cannot take place without employing a spatiotemporally individuated image. Why does Aristotle take such a position? Michael Wedin offers an answer to this question, an answer that relies on blurring the distinction between images and the objects of understanding. He claims that:

> A thought is like an image in the sense that the properties in virtue of which the image exemplifies the thought are those that tell us what it is to be, say, a triangle. So we may say that the image exemplifies its form. Or, with 431b2, we may say that the mind thinks the forms in the images….Thus, while [the image] cannot exemplify independently of something like a material aspect, what it exemplifies can be something immaterial. As universals, precisely this is required for exemplification of objects of thought. It would be a mistake to suppose that images merely prompt the mind to entertain an independently existing object of thought. Aristotle's point is much deeper and much more anti-Platonist. There simply is no such thought to be intuited, grasped, or touched apart from the image. Thus, images really are essential for thought. (Wedin, 140-1)

Wedin's view seems to be that there aren't really any universal objects of understanding that the soul acquires and exercises in its understanding. There are images which exemplify the objects of thought, but which are themselves spatiotemporally individuated and limited. We can only think about things insofar as we have images that exemplify them. As Wedin puts it:

> [Images] are crucial to [Aristotle's] mechanical account. They explain how a particular, perhaps thoroughly idiosyncratic, system can (re)present objects of thought in an intersubjective and publicly available way. They do so by exemplifying the thought…, thus enabling thought to occur as affections of the soul and as the proper significations of symbols. (Wedin 151)

On Wedin's interpretation there are no universals or objects of thought in the soul. Instead, different human beings have different images as a result of the impressions made on them

through perception. These images exemplify certain features, which can then become objects of thought. The different images of different human beings resemble each other because they were produced in a similar way and this is what allows human thought (and words) to be intersubjective and publicly available.

Although Wedin's account would certainly explain the strong connection between images and thought, it is an implausible interpretation of Aristotle. As I argued in the previous chapter, for Aristotle, the central difference between perception and understanding is that understanding is about universal non-spatiotemporal entities, whereas the objects of perception are particular and spatiotemporally limited. Wedin's account does not do justice to Aristotle's insistence on the universal character of understanding. The objects of understanding are not particular things that seem similar when looked at fuzzily. Aristotle is very clear that my understanding of a triangle is the same as your understanding of a triangle (in species: our understandings are not numerically identical)—provided of course we both do really understand what a triangle is. Understanding and its object are the same, not vaguely similar, which is why my understanding (once achieved) will be the same as yours. In the previous chapter I also argued that Aristotle recognizes a whole range of intelligible forms that are not, as such, perceptible, things such as unity, evil, and wisdom. It's unclear how Wedin thinks that such intelligible objects could be exemplified, strictly speaking, by perceptual images. On his account it also seems impossible to explain how we could be able to understand (as Aristotle thinks we are) the first mover or other non-perceptible entities.

b. The Triggering Theory

If, then, this is not Aristotle's reason for connecting understanding to images, what is his motivation? A position akin to Wedin's, but less extreme, holds that images are necessary to

trigger someone's understanding. This position concedes that once I have achieved an understanding of some intelligible object such as triangle, this object of understanding will, in some sense, remain in my soul, even when I am not exercising my understanding. The triggering position acknowledges that the objects of understanding are distinct from images, but holds that we need some sort of image to prompt our thought, to get us to exercise the understanding we have achieved. Polansky seems to put forward a position along these lines.[48] If I am to think about a triangle, or a horse, or goodness I need some perceptible image to prompt me to start thinking about it.

There are two ways of construing the Triggering Theory. Only one of these ways is compatible with Aristotle's psychological theory. On the stronger and incompatible version of the Triggering Theory, I only think about something as a consequence of some perceptual or imaginative trigger. Any actual occurrence of understanding is explained by some prior occurrence of perception or imagination: I cannot think about goodness unless some external perceptual or imaginative stimulates me to think of goodness.

This version of the Triggering Theory does not fit with Aristotle's psychology. Aristotle holds in *DA* II 5 and III 4 that, once achieved, understanding can be exercised whenever I please.[49] This is one of the features that distinguish understanding from perception. As Aristotle puts it in *DA* II 5:

> Actual [perception] corresponds to contemplating. There is this difference, however, that in the one case the things that bring about the activity—the object of sight, the object of hearing and likewise for the other senses—are external. The explanation is that actual perception is of particulars, while knowledge is of universals. These universals are, in a way, in the soul itself. Hence it is up to someone to understand whenever he wants, but

[48] Polansky 2007says "We think the forms *in* the *phantasmata* just because of some intermediary connection that stimulates us to think, as when picturing a lyre we think of a person" (491). He also speaks of *phantasmata* as giving rise to thought, leading us to think, and getting us to think (493). For his discussion see Polansky 2007, 489-493, 498-500

[49] *DA* II 5, 417b16-28, III 4, 429b5-9 cf. II 5, 417a27-417b2.

perception is not up to him; for the presence of the perceptible object is necessary.[50] (*DA* II 5, 417b18-25)

I can only perceive when there are perceptible things present to act on me. In contrast, once I have achieved understanding, I can exercise this understanding whenever I want. I can start thinking, with full understanding, about a triangle or human being or gold without needing some image to trigger my thought. Aristotle's claim does not imply that there are no limits to exercising my ability of understanding. If someone is drunk or really angry or in some other inhibiting condition his ability to exercise his understanding can be impaired.[51] The point is just that there are no external causes needed for exercising understanding of something one has previously understood. There may be internal conditions that would prevent someone from exercising her understanding, but this is a case of disruption from performing what would normally be in her power to do, not a case of lacking a necessary external cause, as it is in the case of perception.

While the strong version of the Triggering Theory does not fit with Aristotle's psychological theory, there is a weaker version of this theory that is compatible with Aristotle's claims about understanding. On this version, I can initiate intellectual activity on my own, but I will employ images as part of the process of activating my understanding. Images are part of the trigger for exercising my understanding, but the intellect has control over when and how to use images. I will discuss this version of the theory and incorporate it into my own account in what follows.

[50] τὸ κατ' ἐνέργειαν δὲ ὁμοίως λέγεται τῷ θεωρεῖν· διαφέρει δέ, ὅτι τοῦ μὲν τὰ ποιητικὰ τῆς ἐνεργείας ἔξωθεν, τὸ ὁρατὸν καὶ τὸ ἀκουστόν, ὁμοίως δὲ καὶ τὰ λοιπὰ τῶν αἰσθητῶν. αἴτιον δ'ὅτι τῶν καθ' ἕκαστον ἡ κατ' ἐνέργειαν αἴσθησις, ἡ δ' ἐπιστήμη τῶν καθόλου· ταῦτα δ' ἐν αὐτῇ πώς ἐστι τῇ ψυχῇ. διὸ νοῆσαι μὲν ἐπ' αὐτῷ, ὁπόταν βούληται, αἰσθάνεσθαι δ' οὐκ ἐπ'αὐτῷ· ἀναγκαῖον γὰρ ὑπάρχειν τὸ αἰσθητόν.

[51] Cf. *NE* VII 1147a10-23.

c. The Phenomenological Theory

Another evident and plausible motivation for Aristotle's connection between images and understanding seems to be a phenomenological one. It is hard to exercise one's understanding and think about triangles and their properties without mentally employing some sort of image of a triangle. It is even harder to think of vivid perceptible objects such as colors (e.g. the clear blue of a lake, or the green of growing grass) or smells and tastes (e.g. the bite of balsamic vinegar or the zest of an orange peel) or physical objects that possess strikingly perceptible properties (e.g. lions or rubies) without mentally employing images of some kind. This sort of experience may suggest that our thoughts are always accompanied by images. Sometimes, as in these cases, the images may be vivid, but maybe they are present even in more abstract cases of thought, perhaps simply by picturing or hearing the word used for the object of thought or perhaps by imagining some perceptible thing to which the object of thought is connected (e.g. the perceptible outer sphere that the imperceptible first mover moves).

The strength and character of the claims from the *De Memoria* passage suggest that a phenomenological motivation does not give us a complete account of Aristotle's reasons for connecting imagining and thinking. As noted above, this passage claims that every case of understanding, no matter what its object, requires a spatiotemporal image. Even if the object of understanding is not spatial or temporal, as in the case of thinking about a theorem of logic or about Aristotle's divine being, thought thinking thought, Aristotle holds that one must still employ a spatiotemporal image. If the primary evidence for this claim is phenomenological, it is not clear why Aristotle would insist so strongly that the claim extends to all objects of human thought, including non-spatiotemporal ones. If Aristotle's universal claim rests only on phenomenology, he needs strong psychological evidence, since his claim is supposed to apply to

all human beings in all cases of understanding. Presumably Aristotle would make some use of the sort of empirical experience we have been discussing for his claim, but the structure of the passage suggests that Aristotle's claims do not rest entirely on the phenomenology of understanding.

d. The Need for Coordination

There are several other reasons Aristotle has for connecting understanding with images, reasons that involve coordination of various kinds. To begin with, understanding needs to operate in coordination with our other cognitive powers. If human beings are constituted so that we cannot understand something when our perceptual powers are focused elsewhere (and thus incapable of imaginative activity), our intellectual activity will not conflict with or take attention away from more immediately necessary concerns related to perception and movement. Such activity will thus necessarily be reserved for times when we can engage in it without danger to the immediate needs for our attention.

e. Explaining Error and Variation in Understanding

There are also several features of understanding that are difficult for Aristotle to explain without bringing in the connection between understanding and imagination. First of all, there is the apparent fact that some people grasp the objects of their understanding to a higher degree than others. Even when considering only experts in a given discipline, some of these experts will have a greater degree of understanding about the objects of this discipline and more easily grasp its truths. Aristotle can easily explain cases where someone displays a fundamental failure to understand a given object as cases of failing to make contact with or grasp that object.[52] His theory cannot so easily explain cases in which someone evidently understands a given object, at

[52] Cf. *Metaphysics* Θ 10, 1051b18-33; *DA* III 6, 430a26-b6.

least to a certain degree, but fails to understand it as fully as someone else and is even mistaken about what it is to some extent. As I discussed in the previous chapter, Aristotle's theory of understanding is based around sameness of form. The person who understands something cognitively possesses a form that is the same in kind as that possessed by the object of her understanding. This account allows Aristotle to explain what understanding consists in and how it connects us to the world in a very strong way. It also explains how my understanding can be of the same kind as yours.

Aristotle's account of understanding leaves little room for explaining error, however. It seems plausible that someone could be said to understand what a square is and grasp many of its properties without grasping them all. He might even give the wrong answers when asked whether there is a common measure of a square's diagonal and its sides. Can Aristotle allow that such people understand what squares are without understanding them fully? How can he account for this error? One way of responding could be to claim that although the person in question understood what a square is, he failed to understand what incommensurability (or whatever the other relevant intelligible form) is. This response might work in some cases, but not in all. Sometimes someone can clearly understand what something is, such as incommensurability (when two things lack a common measure) without knowing all the classes of objects for which it holds true. I can know what incommensurability is without knowing that the diagonal of a square is incommensurable with its side. Denying that, in such cases, I understand what incommensurability is (or what square or diagonal are) would make the requirements for understanding far too high. If I cannot understand something unless I know all the sorts of things to which it applies and all the implications it has, then very few will understand anything. This is particularly problematic since Aristotle treats understanding (νόησις) in the *DA* as the

foundation for more complex knowledge that involves combining and separating different intelligible objects, such as the claim that the diagonal is incommensurable, with its putting together of diagonal and incommensurable.[53]

If images always play a role in both our acquisition of understanding and in our exercise of understanding then variation between the powers of imagination of different people could explain cases of error as well as differing degrees of understanding. In understanding perceptible things some people might err by confusing the image with the intelligible object, as, in the *Republic,* Plato accuses many mathematicians of doing.[54] By treating an image as if it were the intelligible object they would be in danger of failing to appreciate the universality of the object of understanding. They might also think that attributes of a particular triangle or a particular human being belong to triangle or human being as such, leading to error and confusion. Different people might also be more or less acute at finding and using appropriate images, both at the level of acquisition and exercise. Some might be adept at deploying images or patterns that will help them recall a chemical formula. Others might be skilled at picturing the rotation of the spheres so as to develop their astronomical understanding or good at recalling and comparing auditory images to enable them to understand the ratios between different musical tones. Others, in contrast, might have difficulty swiftly finding appropriate and helpful images to call to mind the geometrical properties of a square, or the characteristic behavior of ants, or the different kinds of unity that different beings exhibit.

In a similar way, the role of images can also explain the variance of our intellectual abilities with age and condition, a variance that Aristotle himself notes in a number of texts.[55] The power of imagination has a bodily organ and relies on bodily processes. If this organ is

[53] *DA* III 6.
[54] *Republic* VII 525d-527c.
[55] *DA* I 4 408b18-28 , *NE* VII 1147a10-23, *Politics* II 9, 1270b36-9.

damaged or its processes disrupted, and these are, in some way, required for exercising our understanding, then Aristotle will have the resources to explain defects and variances in understanding. Aristotle could also explain variances in different people's ability to understand different subject matters. Since we always employ images in our understanding of something, we would expect a correlation between certain material changes in certain regions of the organ of imagination (which Aristotle took to be the heart, but we take to be the brain) and different sorts of cognitive activity. For example, the sorts of imaginings that are useful for understanding what a triangle is are likely to be different from those useful for understanding what a lion or a subatomic particle is, but similar to those useful for understanding what a square or a line is, so we would expect material changes in the organ of the imagination to show certain patterns. Some people could be good at producing helpful images in one sphere of understanding, but poor in another. The reliance of understanding on the imagination also allows Aristotle to account for the way in which damage to the organ of imagination can affect intellectual functions. If certain activities of this organ are necessary conditions for the exercise of understanding, the exercise of understanding will be hampered when this organ is seriously damaged. Again, the exercise of understanding could either be hampered almost entirely or just in certain domains, depending on the way in which the power of imagination is affected. Thus although Aristotle does not think that the bodily organ of imagination is, properly speaking, the organ of the intellect, he may well hold that it is used as a tool.[56]

f. Explaining the Limits of Understanding

The connection between images and understanding can also explain a further puzzle that Aristotle's theory raises: why, after acquiring understanding, do we not always exercise

[56] Conceding that the bodily organ of imagination serves as a tool does not imply that understanding has a bodily organ. A telescope or binoculars can serve as a tool for my vision, but that does not make them part of my bodily organ of sight.

understanding? Aristotle thinks that the human intellect starts out without any actual understanding, so he can explain why we do not initially understand anything. Once we have acquired understanding of different things, it is not clear why our exercise of this understanding should be limited. Why, on Aristotle's theory, can't we exercise our understanding of everything we know all at once? In the case of psychic powers that have bodily organs, the limits of these organs explain why we can only see a certain visual range or only digest so much food at once. These activities involve the body and bodily processes and are thereby limited. Since the intellect, by contrast, is non-bodily on Aristotle's theory, it is not clear why we should be limited at all in exercising the understanding that we have already acquired. If, however, the exercise of understanding requires images and images require the use of a bodily organ and bodily processes, then Aristotle's theory can explain the limitations that human beings experience in exercising their understanding. We can only understand one thing (or one unified collection of intelligible objects) at a time because we can only employ one set of images at a time.

The question of the limits of the exercise of understanding relates to a more general concern about the spatiotemporality of understanding. Aristotle thinks that we are spatiotemporal beings who are also capable of transcending space and time. He needs some account for how temporal cognitive processes such as perceiving and our temporal life more generally are connected to intellectual activities such as understanding and knowing, activities that Aristotle holds are non-temporal. The role of images can help to bridge the gap between intellectual activities and the rest of human life. They coordinate the exercise of understanding with our spatiotemporal cognitive activities and connect it to the spatiotemporal environment we inhabit and in which we perceive, plan, and act. Aristotle thinks that our practical understanding of the world, of what is good and bad, can serve as the source of human movement and action and, in

DA III 7, a passage I discuss below, he emphasizes the role of images in this process.[57] He also thinks that theoretical understanding can have implications for practical action. My understanding of what a human being is affects my conception of the human good, just as my understanding of geometrical figures and their proportions affects my practice of the art of carpentry. Images help to connect our universal and non-spatiotemporal understanding of things to the spatiotemporal world we inhabit.

g. Images as Aids to Understanding

Where, then, are we? I have been discussing some of the reasons that images play an important role in Aristotle's views on understanding. I have shown that Aristotle has a number of reasons for connecting understanding with images, including the need to explain error, the phenomenology of understanding, the need to address the limits of understanding, and the need for coordination with other cognitive powers. To further understand the role of images I will now examine the mechanics of their connection to understanding. How does understanding employ images in its activities? I suggested earlier that the weaker version of the Triggering Theory may be appropriate: although we can exercise our understanding when we please (once we have achieved understanding of some form), the way we do so is by activating an appropriate image through an exercise of the imagination. When I want to exercise my understanding of a triangle or a lion I need to employ some sort of image with an appropriate relation to these entities.

How does this process take place? One option would be to hold that my imagination activates a process of memory or recollection that then provides access to the image needed. This is not the best account of the mechanics of the exercise of understanding, given Aristotle's views on memory and recollection. Aristotle has very definite requirements for what a memory or

[57] Cf. *DA* III 9-10.

process of recollection is and these requirements clearly imply that not all occasions of exercising understanding will involve memory or recollection. In the *De Memoria* Aristotle contrasts the requirements for being a memory with that for being an image or an object of understanding:

> A picture painted on a panel is both a picture and a likeness: this, while one and the same, is both, although the being for both is not the same, and one may contemplate (θεωρεῖν) it both as a picture and as a likeness. In the same way it is necessary to take the image in us both as something in itself and as [an image] of something else. Insofar as it is taken in itself it is an object of contemplation (θεώρημα) or an image, but insofar as it is taken as of something else, as a likeness, it is a memory. Hence, whenever its movement is actual, if the soul perceives this in its own right, it appears to occur as an object of understanding (νόημα) or an image. But if the soul perceives it as of something else, then — just as when one contemplates [the picture] in the painting as a likeness, and without having seen Coriscus, contemplates it as of Coriscus, there the affection from this contemplation is different from when one contemplates it just as a painted picture —[so similarly] of the objects in the soul, the one becomes simply an object of understanding, but the other, just because, as in the painting, it is a likeness, becomes a memory.[58] (*De Memoria* 1, 450b20-451a2)

Aristotle is here arguing that it is not sufficient for something to be a memory that it be a thought or image that I have retained. For me to remember something I must take the image I have to be a memory. It is not sufficient that I cognize a likeness of the object of memory, I need to consciously use this likeness as a likeness of the thing I previously experienced. Reoccurrences of some previous thought or image do not count as memories unless they meet this standard. Recollection, for Aristotle, is an even more involved and distinctive process. Recollection comes into play when I cannot directly recall some previously experienced thing, but need to engage in

[58] οἷον γὰρ τὸ ἐν πίνακι γεγραμμένον ζῷον καὶ ζῷόν ἐστι καὶ εἰκών, καὶ τὸ αὐτὸ καὶ ἓν τοῦτ' ἐστὶν ἄμφω, τὸ μέντοι εἶναι οὐ ταὐτὸν ἀμφοῖν, καὶ ἔστι θεωρεῖν καὶ ὡς ζῷον καὶ ὡς εἰκόνα, οὕτω καὶ τὸ ἐν ἡμῖν φάντασμα δεῖ ὑπολαβεῖν καὶ αὐτό τι καθ' αὐτὸ εἶναι καὶ ἄλλου [φάντασμα]. ᾗ μὲν οὖν καθ' αὐτό, θεώρημα ἢ φάντασμά ἐστιν, ᾗ δ' ἄλλου, οἷον εἰκὼν καὶ μνημόνευμα. ὥστε καὶ ὅταν ἐνεργῇ ἡ κίνησις αὐτοῦ, ἂν μὲν ᾗ καθ' αὐτό ἐστι, ταύτῃ αἰσθάνηται ἡ ψυχὴ αὐτοῦ, οἷον νόημά τι ἢ φάντασμα φαίνεται ἐπελθεῖν· ἂν δ'ᾗ ἄλλου καὶ ὥσπερ ἐν τῇ γραφῇ ὡς εἰκόνα θεωρεῖ καί, μὴ ἑωρακὼς τὸν Κορίσκον, ὡς Κορίσκου, ἐνταῦθά τε ἄλλο τὸ πάθος τῆς θεωρίας ταύτης καὶ ὅταν ὡς ζῷον γεγραμμένον θεωρῇ, ἔν τε τῇ ψυχῇ τὸ μὲν γίγνεται ὥσπερ νόημα μόνον, τὸ δ' ὡς ἐκεῖ ὅτι εἰκών, μνημόνευμα.

a process involving chains of connected images in order to reach the object of my recollection.[59] There are, no doubt, cases in which some object of understanding is the object of my memory or recollection, but it is clear that not all exercises of understanding involve memory or recollection in this strict sense.

So if this is not how images are required for exercising understanding, how does Aristotle think this connection works? Let us return to the analogy with the use of diagrams in geometry that he draws. It is clear how the diagram is necessary for the initial acquisition of geometrical knowledge. I learn, for instance, that triangles have interior angles adding up to two right angles by seeing a proof of this, a proof that crucially involves a diagram. So far, so good. Now what happens when, having mastered the proof, I want to exercise my knowledge? If I am really exercising my knowledge, and not just repeating something that I have heard, I may still need to employ the diagram to make clear why this property holds good of triangle. This certainly holds true if I am explaining this truth to someone else, but even if I am just reflecting on my own knowledge of triangles and their properties, a mental diagram may prove crucial for understanding why triangles have this property and for considering what else might be true about triangles based on this property. Similarly, picturing the rotation of the spheres will help me exercise my understanding of their motions and recalling the sounds of different intervals will help me understand the ratios between different musical tones.

These uses of images also help me to fit my exercises of understanding with the other human activities that I perform, since I am employing my perceptual cognitive faculties in service of my intellectual ones. My use of images can help to enhance my exercise of understanding while also tying my understanding to the perceptible objects found in the

[59] *De Memoria* 2.

spatiotemporal world of my experience. In general, exercising my understanding and knowledge involves returning to and reconsidering some relevant images in order to effectively exercise my grasp on the universal in question. Further, as I discussed above, the excellence of my exercise of understanding or knowledge may depend on how well I am able to employ images to assist me in my intellectual activities. This line of interpretation emphasizes the way in which, for human beings, even understanding involves the body. Although, on Aristotle's view, human beings can come to stably possess an understanding of certain objects, even those who have such understanding employ the assistance of images to effectively exercise their understanding. As Aristotle puts it in *DA* III 7, "the power of understanding (τὸ νοητικόν) understands the forms in images."[60]

7. The *DA* on Images and Understanding

This striking claim is taken from a discussion in which Aristotle emphasizes the importance of images for practical understanding and action. In this chapter Aristotle compares and contrasts perception and understanding. He focuses on the role of perception in seeing things as painful or pleasurable and the role of understanding in seeing things as good or bad, and thus as to be pursued or avoided. It is in this context that Aristotle initially claims that "to the thinking soul (ἡ διανοητικὴ ψυχή) images serve as the objects of perception (αἰσθήματα) [do to perception] and when it affirms or denies them as good or bad, it avoids or pursues them. That is why the soul never understands without an image."[61] Aristotle here claims that we cannot understand something as good or bad, and hence pursue it or avoid it, without employing an image. The reason Aristotle presents for connecting images and understanding is based on the particularity of action. I can understand whether some object or class of things is the sort of thing

[60] *DA* III 7, 431b2. τὰ μὲν οὖν εἴδη τὸ νοητικὸν ἐν τοῖς φαντάσμασι νοεῖ.

[61] *DA* III 7, 431a14-17. τῇ δὲ διανοητικῇ ψυχῇ τὰ φαντάσματα οἷον αἰσθήματα ὑπάρχει, ὅταν δὲ ἀγαθὸν ἢ κακὸν φήσῃ ἢ ἀποφήσῃ, φεύγει ἢ διώκει· διὸ οὐδέποτε νοεῖ ἄνευ φαντάσματος ἡ ψυχή.

I should in general pursue or avoid. When it comes to some individual case, however, I cannot just use my general understanding, since action is concerned with particulars. The goodness of a given object depends on its particular features and on my particular situation, not just on universal features that I can understand apart from particulars. Employing the image of something allows me to consider it in the appropriate spatiotemporal context so that I can understand whether it would be good for me now, in this place, and in these circumstances, to pursue it or avoid it.[62] The exercise of practical understanding cannot take place without employing images that connect my universal understanding of what is good and bad to the particulars of the situation.[63]

This more particular reason for connecting images to understanding seems to reflect Aristotle's broader views on the connection between particular, spatiotemporal images and universal understanding. Given his insistence in the *De Memoria* on the need for images no matter what the object of thought, it seems that Aristotle wants to connect the spatiotemporal particularity of my actions and life to the universality of my understanding even in non-practical cases. This connection is not, however, a constitutive one. We should not read Aristotle's claim later in that chapter that "the power of understanding (τὸ νοητικόν) understands the forms in images," as suggesting that images, as such, are partially constitutive of understanding.[64] The claim, as I read it, is that the intelligible forms that come to reside in the understanding are present in images and that images are our source for these forms. This does not imply that images are part of what understanding is. They enable understanding, but they are, by their nature, not universal and thus cannot, as such, be the objects of understanding.

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[62] One can also deliberate about the future or about slightly different circumstances, while using appropriate images that present these situations as one conceives them (*DA* III 7, 431b6-10).

[63] For further discussion of the particularity of practical wisdom see *NE* VI 7, 1141b8-23; VI 8, VI 11, 1143a35-1143b17.

[64] *DA* III 7, 431b2. τὰ μὲν οὖν εἴδη τὸ νοητικὸν ἐν τοῖς φαντάσμασι νοεῖ.

The other important passage from the *DA* concerning the connection between images and understanding is found at the end of III 8 where Aristotle is summing up his account of perception and understanding:

> But, since, as it seems, no thing (πρᾶγμα) exists separately and apart from perceptible magnitudes, the intelligible forms (τὰ νοητά) are in the perceptible forms, both the things spoken of in abstraction and as many as are states and affections of perceptible things. And on account of this, without perception no one can learn or comprehend and when he contemplates, he must at that very time contemplate with an image. For images are like the objects of perception, except without matter.
>
> Imagination is different from assertion and denial, for the true and the false involve a combination of concepts (νοημάτων). In what way will the first concepts differ from images (τὰ πρῶτα νοήματα)? Or [should we say] that these are not images, but are not without images?[65]

Here we find the assertion that the intelligible forms are in the perceptible forms, an assertion similar to the one made about intelligible forms and images in III 7. Again, I do not think that we should interpret this to mean that the perceptible forms are the same as intelligible forms or constitutive of them, especially given the sharp distinction between the intelligible and the perceptible that Aristotle lays out the beginning of III 8. In this passage Aristotle's argument for connecting perception with understanding depends on what seems to be an ontological claim about the structure of reality.

The assumption that there is nothing that exists separately and apart from magnitude appears strange in light of Aristotle's insistence elsewhere (particularly in *Metaphysics* Λ) that all of reality depends on a separately existing, non-perceptible divine being that does not have

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[65] *DA* III 8, 432a3-14. ἐπεὶ δὲ οὐδὲ πρᾶγμα οὐθὲν ἔστι παρὰ τὰ μεγέθη, ὡς δοκεῖ, τὰ αἰσθητὰ κεχωρισμένον, ἐν τοῖς εἴδεσι τοῖς αἰσθητοῖς τὰ νοητά ἐστι, τά τε ἐν ἀφαιρέσει λεγόμενα καὶ ὅσα τῶν αἰσθητῶν ἕξεις καὶ πάθη. καὶ διὰ τοῦτο οὔτε μὴ αἰσθανόμενος μηθὲν οὐθὲν ἂν μάθοι οὐδὲ ξυνείη, ὅταν τε θεωρῇ, ἀνάγκη ἅμα φάντασμά τι θεωρεῖν· τὰ γὰρ φαντάσματα ὥσπερ αἰσθήματά ἐστι, πλὴν ἄνευ ὕλης. ἔστι δ' ἡ φαντασία ἕτερον φάσεως καὶ ἀποφάσεως· συμπλοκὴ γὰρ νοημάτων ἐστὶ τὸ ἀληθὲς ἢ ψεῦδος. τὰ δὲ πρῶτα νοήματα τί διοίσει τοῦ μὴ φαντάσματα εἶναι; ἢ οὐδὲ ταῦτα φαντάσματα, ἀλλ' οὐκ ἄνευ φαντασμάτων. At line 13 I follow Jannone, Ross (1961), and Themistius in reading ταῦτα, which is found in H^a, instead of τἆλλα which is found in the other manuscripts. If one wishes to retain τἆλλα the sentence could be translated, along the lines suggested by J.A. Smith: "neither these [first concepts] nor even our other concepts are images," which would give a similar meaning to my reading, though it would clearly extend Aristotle's claims to all νοήματα.

any magnitude. This assumption may reflect the perspective of natural philosophy from which Aristotle is operating in this treatise, with his qualifying remark indicating the limits of this perspective.[66] This passage also fits with Aristotle's very cautious allusion in III 7 to the possibility of understanding non-spatial entities: "whether it is possible for [the intellect], while not itself being separate from magnitude, to understand anything that is separate, or not, is to be examined later."[67] This passage is perhaps best understood as a reflection of Aristotle's views on the order and character of human learning, which, for him, starts from perceptible particulars and cannot grasp universals apart from such particulars.[68] Aristotle is claiming that perceptible forms are our source for these forms and that we have no direct access to any non-perceptible entities.

Again, Aristotle's reasons for moving from the claim that perception is necessary for the acquisition of forms to the claim that it is necessary for exercising our grasp on these forms in the activity of contemplation is not entirely clear. I think the best explanation for this connection is the sort of explanation I gave of the previous passages: images aid us in effectively exercising our understanding and help us to coordinate our activities of contemplation with our other human activities.

The current passage ends with a discussion of the relationship between concepts (νοήματα) and images. Aristotle argues that the two are not the same, but that concepts depend in some way on images. As I interpret him, his first step is to deny that images are the same as judgments or complex concepts, because judging and putting concepts together involves

[66] I owe this suggestion to Hendrik Lorenz. It is worth noting, however, that Aristotle argues in the *Physics* that careful consideration of moveable being uncovers the need for an immobile first mover that has no magnitude and is thus imperceptible (*Physics* VIII 10), so natural philosophy must, for Aristotle, in some way acknowledge the possibility of a non-perceptible entity without magnitude.

[67] *DA* III 7, 431b17-9.

[68] See *Posterior Analytics* I 18, 81a38-b9, II 19, 100a10-b3 and *Metaphysics* A 1.

affirming or denying, whereas the use of images, as he has argued earlier, does not.[69] He then claims that the first concepts are not images but are not without images. I take the first concepts (τὰ πρῶτα νοήματα) that he discusses to be the indivisible and simple conceptions of things that are discussed in III 4-5 and taken as the basis for combined thought in III 6. Others, drawing in particular on *Posterior Analytics* II 19, have taken this phrase to refer to a special class of concepts, either those first in our experience and thus most closely related to perceptible things or those first in the order of things and thus most universal and generic.[70] However, this sort of distinction is not found elsewhere in the *DA* and the context seems to best support a contrast between first, simple concepts and second, complex concepts that occur due to the combination and separation of first concepts.

On my reading Aristotle would be making much the same point that he makes elsewhere: we require images for our first, simple concepts (and thus for our complex concepts) but these concepts are not to be identified with the images we employ in understanding them. If, instead, Aristotle is speaking of universal and generic concepts he would be making a point similar to that of the *De Memoria* passage: even the most universal concepts require images, but are not the same as these images. If, however, Aristotle is speaking of concepts that are first in our experience and order of knowing, then he might be claiming only that these sorts of concepts require images. However, even if we adopt this more restricted reading of this passage, it would not change the overall interpretation of Aristotle's views given his strong commitment in the *De Memoria* to thinking that all concepts require images in some way.

The relevant passages from the *De Anima* present a view that fits well with the passage from the *De Memoria*. As in the *De Memoria*, Aristotle claims that images aid us in effectively

[69] *DA* III 3, 428a16-b9.

[70] See Hicks 547-8 for a discussion of various views on this question. Hicks himself (and Freudenthal) agree with the interpretation I am presenting.

exercising our understanding (particularly in its practical use) and help us to coordinate our activities of contemplation with our other human activities. Aristotle also indicates his commitment to thinking that images are in some way required for both the acquisition and exercise of understanding. I will now sketch what I take the character of images to be and their role in thought before returning to the question of whether the role of images means that understanding is not separate from the body.

8. The Character and Role of Images in Understanding

Despite the importance of images for understanding, they do not serve to determine our activities of understanding in the way that the sense-organs determine our activities of sensation. First of all, our power of imagination is often active when we are not thinking. For Aristotle, the power of imagination is not just used for understanding. Indeed, it is primarily used in memory and for a variety of other cognitive functions at the perceptual level. In contrast, if our sense-organs are affected by appropriate perceptibles, we sense.[71] Aristotle also gives no indication that there is one and only one determinate image for each thing that we understand. In coming to understand and grasp what a lion is I might make use of the lion's roar or of a visual image of a lion attacking its prey or of the word lion. Thus there need not be one image for each thing understood. It is also important to note that Aristotle leaves the precise character of the images one employs quite indeterminate. Although Aristotle uses a word for imagination that is (he thinks) derived for light and thus associated with sight, this is because sight is the principal sense-power and hence the principal source of images, not because Aristotle thinks that all

[71] This holds true whichever view one takes of the role of sense-organ and material changes in perception. The point is obvious on a literalist or intermediate view, where material changes in the organ play an explanatory role in perception, but it holds even on the spiritualist view, where the sense-organ is just an unaffected medium for the perceptible object. Even on this view, I will perceive precisely those perceptibles that pass through the relevant sense-organ.

images are visual.[72] Visual images are some of the most common and striking ones, but images can also be auditory, tactile, olfactory, gustatory or any combination of these.

Images must, however, be spatiotemporally individuated. I can use the word "lion" as an image for thinking about lion or the symbol for the number "5" to think about prime number only if the "lion" and "5" I am employing are some particular instances of the word or the symbol, with particular spatial properties and imagined at a particular time. The images employed in understanding cannot be general or abstract types: they must be particulars. They may, however, be vague and lack fully definite characteristics: I don't have to be imagining the word "lion" in yellow 14 point Comic Sans font or hear "five" spoken in the distinctive way of Count von Count from Sesame Street, for instance, in order to be employing an image. There is also no indication that I need to continue to employ the same image, even within the same episode of understanding. I could, for instance, use a sequence of fleeting (but connected) images to think about the life-cycle of trees. The images I employ can be vague or sequential as long as there is always some image that I am employing and this image is spatiotemporally individuated.

I may also use the same image to understand different things: the same image of a triangle may help me understand both figure and triangle and incommensurable. This contrasts, again, with the determinate relation between the sense-organ and sense-power, where, for Aristotle, there is a one to one relationship between what is happening to the sense-organ and what I perceive.[73] Since images do not determine the activity of understanding Aristotle can consistently deny that understanding is a bodily activity. The activity that is perception cannot be understood apart from the sense-organs involved. Understanding, by contrast, can be understood without bringing in images. Although images are helpful for human thought, they are not part of

[72] *DA* III 3, 429a2-9.

[73] Again, this holds true whichever view one takes of the role of sense-organ and material changes in perception. See fn. 71 above.

the proper activity of understanding itself. Indeed, the understanding that belongs to the divine intellect, Aristotle's God, does not involve phantasms or images at all.[74] Both divine and human understanding involve intentionally possessing the form of the thing understood. This, for Aristotle, is what is essential to understanding, to grasping the essence of something. We understand something by in a way becoming it, by grasping its form with the power of our understanding.

9. Is Understanding Non-bodily and Separate?

Now that we have examined the role of images in understanding it is time to return to the central question of this chapter: does the connection between images and understanding entail that understanding is inseparable from the body? On my view, Aristotle thinks that understanding is, in fact, separable from the body. Aristotle holds that, in general, understanding requires images, but the role that images play in understanding leaves open the possibility that under certain conditions understanding could be exercised without imagination.

At the end of section 3 I laid out two key questions for determining Aristotle's position: the question of whether understanding, as such, is a non-bodily activity and the question of whether understanding can be performed without images and hence without the body. With respect to the first question, the role that images play in understanding gives us no reason to reconsider Aristotle's commitment to the non-bodily character of understanding. As I have shown, images help with the exercise of understanding but they are not constitutive of it. Their role in aiding intellectual activity and integrating it with other cognitive activities and with human life more generally does not affect Aristotle's assessment that the activity of understanding is, as such, non-bodily. In *DA* III 4 Aristotle argues that the activity of

[74] *Metaphysics* Λ 9. Cf. Beere, 2010.

understanding belongs to the human being just in virtue of the soul and certain actualities of the soul (in this case, the forms that the intellect takes on when it comes to understand something). The body and bodily processes do not make understanding what it is or partially constitute it. The fact that images play an important role in bringing about understanding in the first place or in enabling its later exercise does not affect the non-bodily character of understanding any more than the fact that the perceptibles from which intelligible forms are derived are bodily does. Even if something must also happen to the body in order for understanding to take place, this occurrence will not be part of the activity of understanding as such and will not affect the non-bodily character of understanding.

What about the second question? In what sense are images necessary to understanding and does this mean that understanding cannot be performed without images and hence is "not without the body?" The answer we give to this question depends on the relationship we see between two different sets of claims: Aristotle's claims that understanding is non-bodily and Aristotle's claims that connect understanding with images. I think we should treat the claims about the non-bodily character of understanding as more authoritative on this question because they occur within the context of discussing the separability of the intellect. In contrast, the passages in which Aristotle emphasizes the connection between images and understanding are not directly concerned with whether understanding or the intellect can be apart from the body. Further, the reasons I have laid out for connecting images with understanding are all based on our current spatiotemporal condition. The need to fit understanding with the rest of our human activities, the need to address the phenomenology of thought, and the need to explain the limits and errors of understanding are all based on observations about the embodied condition of human beings and the way that their bodily life is connected to their intellectual life. These

connections are compatible with thinking that the activity of understanding as such does not require the body, since it does not consist, even partially, in bodily activity. This leaves open the possibility that, when separated from the body, the intellect can exercise its understanding without employing images.

The texts connecting the exercise of understanding with images do provide some support for the Divine Intellect interpretation or other interpretations that deny that the understanding of individual human beings can persist after the destruction of the body. However, in *DA* III Aristotle never brings up the connection between images and understanding when addressing the question of whether intellect is separable, leaving open the possibility that their interconnection may not be decisive in determining the separability question. I think Aristotle's comments on images and understanding do not rule out the Human Intellect interpretation I have developed, particularly if the undying intellect in *DA* III 5 turns out to be the intellect of an individual human being. As I have noted, the reasons Aristotle has for connecting understanding with images come from the need for coordinating understanding with other cognitive powers and with our lives more generally. Given this and given Aristotle's insistence that understanding, as such, is non-bodily, Aristotle might think that if the soul is separated from the body understanding would no longer need to be coordinated with other soul powers or with the body and thus could take place on its own, apart from the body and apart from any other human activity.

This sort of view would in some respects resemble the picture of the soul put forward in the *Timaeus*, where only divine rational activity persists after the destruction of the body. There Timaeus distinguishes between the immortal rational part of the soul, which is not corruptible and persists after the destruction of the body, and the mortal parts of the soul, the spirited and

appetitive parts, which do not survive the destruction of the body.[75] If Aristotle does think that the intellect survives the destruction of the body, the similarity between his views and those expressed in the *Timaeus* would depend on his precise view on the relationship between the human being, the soul, and the psychic powers.

As I laid out in Chapter V, there are a number of options for interpreting Aristotle's position on these questions. Of the two most plausible and relevant options, one would closely resemble the picture of the *Timaeus*: the intellect, but only the intellect, persists. On the other option Aristotle holds that the whole human being persists in virtue of the persistence of intellectual activity. On this scenario the intellect is the only part of the soul that is proximately able to perform its activity, but the whole human being persists, since its persistence only requires the persistence of some human activity. Thus if Aristotle does think that understanding is separable, there are options available to him for articulating in a coherent and motivated way what that would imply.

In summary, Aristotle claims that there is a necessary connection between understanding and images. The need for coordinating understanding with the rest of human life gives him good grounds for doing so. Nevertheless, there still seems room for him to think that the destruction of the body would remove this need for coordination and allow the intellect's operation, which is never constituted by any bodily movement (even partially), to dispense with the need for the body at all. On this scenario, the separated intellect would be able to exercise its understanding of any intelligible form it had acquired when with the body. It would not be able to acquire any new intelligible forms, given the lack of bodily organs for perception and imagination, but it would be able to reflect on those forms that it possesses and perhaps even draw out implications

[75] *Timaeus* 69c5-71e2.

and interconnections between them. Whether Aristotle does hold that the intellect persists and is able to be active without the body depends in large part on our interpretation of III 5, where Aristotle speaks of an intellect that is undying and eternal but also of an intellect that is perishable. It is to this chapter that I will turn next.

VIII. The Productive Intellect: *De Anima* III 5

1. Introduction

De Anima III 5 is one of the most disputed texts in the Aristotelian corpus, with commentators offering opposing views concerning both the meaning of the text and the text's relation to the larger project of the *De Anima*. Henry Blumenthal claims that it "has caused more controversy than any other single chapter of Aristotle."[1] There are serious disagreements about the identity of the productive intellect (νοῦς ποιητικός) discussed in this chapter (is it a power of the human soul or an extrahuman intellect?) and about the role that this intellect plays: is it a final cause or an efficient cause? Does it explain human knowing or the overall intelligibility of the universe? Commentators also disagree when it comes to the question of how this chapter fits into the *De Anima*: is it an integral part of Aristotle's theory of the intellect or a digression into first philosophy and theology? I will approach this chapter by first laying out the criteria I will use to evaluate the competing interpretations of this passage. I will then present my overall interpretation of the role of the chapter, based on the Human Intellect view, and contrast it with rival interpretations given by proponents of the Divine Intellect and Platonist Intellect views. Following this, I will go through the chapter line by line and examine how each interpretation deals with the text before offering a final summary of the merits of the competing interpretations.

I will evaluate interpretations based on whether they give a plausible account of the role of the intellect in this passage, how well they incorporate the chapter into the whole work and, finally, how well they fit the text. One of the first questions to ask is whether a given interpretation gives a good account of why this chapter is part of the *De Anima*. The chapter seems to be an integral part of the text of the *De Anima*. There are no indications that it was

[1] Blumenthal 1996, 152.

added to the text or was at some point part of some other work. Theophrastus, Aristotle's pupil and successor, seems to refer to the ideas contained in it as being part of Aristotle's psychology.[2] Given this, we should expect that it would make some important contribution to the *De Anima*'s aim of giving an account of the soul and its powers. The second question is whether an interpretation gives a good account of what this chapter accomplishes. Does it show how this chapter is supposed to give us a clearer idea of the intellect and its operations? Aristotle evidently is attempting to show us something important about the intellect here, so any good interpretation should give a plausible account of what this is. Finally, interpretations have to be ultimately judged on how well they fit the text. Do they explain Aristotle's various claims in a satisfactory way? Are the difficulties they face more or less serious than those of their rivals?

I will argue that my interpretation, coming out of the Human Intellect view, does a better job of explaining why this text is part of the *De Anima* and giving an account of the role that the material in this passage plays in Aristotle's overall account of the intellect. I will also argue that my interpretation fits better with the text itself, although it does face some difficulties. On my account, this chapter helps to solve a problem that arises in *DA* III 4. In III 4 Aristotle argues that the human intellect is unaffected and is, before it understands, nothing beyond a potential for understanding. Aristotle's claim that the intellect is potentially all things helps him to explain how it is able to actually become them (in a way) and thus how human beings can come to understand all things.[3] His account, however, raises the problem of how we can come to understand in the first place. How can our intellect, which is not subject to affection, come to

[2] Theophrastus is quoted in Themistius, *In Aristotelis Libros De Anima Paraphrasis*, *CAG*, 108.22-8, a quotation I discuss further below. Ross 1961 wants to delete 430a19-22 because they are repeated in III 7, but this concerns only a small piece of the passage and few scholars have followed him in thinking that this material belongs in III 7 but not in III 5.

[3] For my full discussion of this part of III 4 see Chapter VI, section 3.

actually receive the intelligible forms that will allow us to understand? This is one of two problems Aristotle raises in the last section of the chapter. As he puts the issue:

> The problem might arise: if the intellect is simple and not subject to affection (ἀπαθές) and has nothing in common with anything else, just as Anaxagoras says, how will it understand, if understanding is to be affected in some way?[4]

Aristotle is here pointing out that his own view faces a difficulty. Since he holds that the intellect and its activity are entirely immaterial and thus seemingly cannot be directly affected by bodies or their qualities and he also thinks that the intellect starts out without possessing any forms or actuality, he needs an account of how our intellect can first take on some form. In the remainder of the chapter Aristotle goes on to raise a second problem, whether the intellect can be its own object, and provides an answer to this second problem. His remarks do not, however, indicate that he takes himself to have answered this first problem.

On my Human Intellect interpretation, in *DA* III 5 Aristotle attempts to solve that problem by introducing the productive intellect (νοῦς ποιητικός), a power which is to explain how the receptive or potential intellect discussed in *DA* III 4 comes to understand. On my view the productive intellect makes potential objects of understanding into actual objects of understanding by drawing out their intelligible forms from the images (φαντάσματα) that the soul possesses. At the end of III 4 Aristotle states that "in those things which have matter each of the intelligibles (τῶν νοητῶν) exists potentially." I take his claim here to be that enmattered things are only potentially intelligible: they need to be separated from matter in order to be understood, in order to actually give us an intelligible form.[5] Since they are not, insofar as they

[4] *DA* III 4, 429b22-25.

[5] *De Anima*, III 4, 430a5-9. My construal here follows that of Alexander of Aphrodisias, along with a number of other commentators including Ross, Thomas Aquinas, and Lloyd Gerson. Stephen Menn offers a strikingly different reading of this passage and its connection to III 5 in an unpublished paper, "From *De Anima* III 4 to *De Anima* III 5" (Menn 2002b). He thinks that here Aristotle is claiming that our knowledge of a material thing is only potentially the material substance which is its object, as opposed to our knowledge of immaterial things which

are enmattered, actually intelligible they cannot directly act on the intellect in the way that perceptibles act on the sense-powers. On my interpretation, Aristotle introduces the productive intellect to explain how we can come to actually understand and grasp the intelligible forms of material things. My position is that the productive intellect is an internal power of the human soul that uses the images of enmattered things that are in the soul as a result of perception and memory. The productive intellect draws out the intelligible forms contained in these images and places these intelligible forms in the receptive intellect. When this happens, the activity of understanding, νοεῖν, occurs on the part of the person whose soul and receptive intellect is involved.[6]

2. Interpretive Options

This understanding of the productive intellect is not the only possible one, given the brief and somewhat cryptic character of III 5. A number of different roles have been suggested for the productive intellect by Aristotelian commentators over the centuries. One of the most prominent alternatives is to claim that the productive intellect is not a power of the human soul but is instead an extrahuman divine intellect. Proponents of this Divine Intellect view often claim that the productive intellect Aristotle speaks of in III 5 is the same as the divine intellect spoken of in *Metaphysics* Λ. Myles Burnyeat, Victor Caston, and Michael Frede have all recently argued for

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actually is its object. His different reading of this particular sentence fits into his very different account of the relation between III 4 and III 5. On Menn's account III 5 address the problem raised at 429b27ff: if the intellect is specifically identical with its objects then every object of understanding will itself understand. On Menn's reading of III 5 Aristotle is arguing that this is in fact true in the case of immaterial objects of understanding but not true in the case of material objects, since understanding does not include the matter but is only the form and thus is not specifically identical with the material object. In interpreting III 5 Menn subscribes to a version of the Divine Intellect view. In my view, although Menn does a better job of connecting *DA* III 4 and 5 than most Divine Intellect interpreters, his proposals — that Aristotle is specifically addressing the question of immaterial forms and that these forms do themselves possess understanding — are less plausible than the interpretation I offer. Since, however, his work on this question is unpublished and subject to revision I will not offer a detailed discussion or critique of it here.

[6] I argued in Chapter V that for Aristotle the composite human is the proper subject of understanding, not his soul or intellect.

this position.[7] On this view, the productive intellect makes things intelligible by being the first intelligible, giving structure and intelligibility to the entire universe. It is not a power integral to the human soul, but an extrahuman divine entity, although on some versions of this view the divine intellect comes to be in us for a time.

I will consider three significantly different versions of the Divine Intellect interpretation of this chapter. On the first version, proposed by Caston, the productive intellect is to be understood not as an efficient cause, but as a final cause or background condition. It is because there is a divine intellect that there are intelligible things. This is all that Aristotle's claims about the productive intellect amount to. The productive intellect does not play any particular causal role in individual episodes of human thinking. Alexander of Aphrodisias, in contrast, holds that the divine intellect is the efficient cause that explains how human beings are first able to achieve understanding.[8] His account of how this chapter relates to the broader context is similar to mine, but he thinks the productive intellect plays a very different role. For him, since all sensible things are only potentially intelligible, it falls to the only thing which is always actually being understood (as well as actually understanding), the divine intellect, to act on our receptive intellect to transform it into an intellect which actually possesses understanding. Michael Frede offers a third sort of interpretation on which the divine intellect is an efficient cause of understanding for every object we come to understand. Frede thinks that Aristotle's divine being is both the source of all intelligibility and the ultimate object of understanding.[9] To understand

[7] Burnyeat 2008; Caston 1999; M. Frede 1996. Some argue that the intellect of III 5, while everlasting and divine and separate from individual human beings, is not the first mover of *Metaphysics* Λ, e.g. Avicenna and Averroes (Averroes 1982, 2002; Avicenna, 1956, 1959, 2005). See Davidson 1992 for commentary on these authors understanding of the intellect.

[8] Alexander of Aphrodisias, *De Anima* (*ADA*) III 12, 25, 26; *De Anima Mantissa* (*DAM*) 5, 8, 14-16 (found in Sharples 2008). For more on interpretations of the productive intellect in late antiquity see Blumenthal 1991 and Huby 1991.

[9] M. Frede 1996, 386-390. Frede does claim that the divine intellect explains the general possibility of knowledge and understanding rather than explaining why I currently understand the forms that I do, but this is

anything, we need to understand it as part of the system of concepts, a system that leads back to God, the first principle of everything. Frede is not entirely explicit about what he takes the relationship between Aristotle's God and other concepts to be. In this chapter I will develop a version of Frede's position according to which the divine intellect is the same as the integrated and unified system of essences which describe reality. Like Alexander, Frede holds that we must understand God to understand anything. For Alexander, this is because God is the first distinct object understood, but for Frede's position, as I develop it, this is because God is the same as the integrated system of essences.[10]

All these versions of the Divine Intellect position avoid some of the challenges which come with taking the productive intellect to be a power of the human soul. Proponents no longer have to consider whether the human soul or human intellect persists through the destruction of the composite human being or fit the separability of the intellect with Aristotle's claim that the soul is the form of the body. Nevertheless, I think that all three versions of the Divine Intellect position leave us with incomplete and impoverished accounts of the human intellect, accounts which fail fully to solve the problem Aristotle raises in III 4 and fail to satisfactorily explain why this chapter is crucial to Aristotle's psychology and understanding of the intellect. While some of these versions may explain how we can come to know God, none of them give us a satisfactory account of how we can initially come to acquire the forms we need to understand other things. My interpretation, on which the productive intellect is a power proper to us which acts to make

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because of his general views on what efficient causes are for Aristotle, not because he thinks the divine intellect fails to count as an efficient cause (379-380). In developing this third view I will use my own interpretation of Aristotle's views on efficient causes, not Frede's.

[10] Burnyeat holds that the divine being and the correct system of concepts are the same (Burnyeat 2008, 40-43). His remarks on this passage sometimes suggest Frede's view according to which the divine being is the active and efficient cause of our reaching understanding. However, his description of this passage as an "excursion into theology" and his claim that the chapter is "wholly focused on God" (39) suggest that he holds something more like Caston's view, according to which this chapter is not important to Aristotle's psychology as such. In any case, his interpretation falls under some combination of the first and third views I will discuss, so I will simply address those two views.

things that are potentially understood actually understood, fits better with the claims about the intellect made in III 4-5 and elsewhere in the *De Anima*. It also gives Aristotle a more attractive and intelligible overall theory of understanding and other intellectual activities.

The Platonist Intellect view represents the other main alternative to my Human Intellect interpretation. In this chapter I will consider Lloyd Gerson's version of this interpretation. Gerson distinguishes between "the part of the soul that is called intellect" and "intellect itself."[11] The former is intellect "as it exists in the composite individual" and is the part of the composite human being responsible for our embodied thinking.[12] Intellect itself, however, is not a part of the human soul or the composite human being. It is a separate subject of intellectual activity. Gerson suggests that Aristotle's view of the separated intellect is similar to that put forward in the *Timaeus*: the separated intellect exists on its own, actively and ceaselessly thinking and unencumbered by the body.[13] This intellect is not the same as the divine intellect because there is still in it a distinction between potentiality and activity and because it is essentially related to human thought. On Gerson's account, there are two sorts of human intellectual activity. There is first of all the ongoing and unchanging activity of (human) intellect itself, which unceasingly understands everything. Secondly, there is the intermittent intellectual activity of composite human beings. This comes about as a result of our access to and use of intellect itself, but this activity belongs to us and to our souls, not to intellect itself. On Gerson's account, in *DA* III 5 Aristotle is explaining how we come to be connected to intellect itself. Intellect enters into us and produces the "passive intellect," the intellect that is part of our soul and that we think with as composite beings.

[11] Gerson 2004, 356.
[12] Ibid.
[13] Ibid. 371.

Gerson's interpretation offers an explanation for how III 5 fits with and completes the account of the intellect that Aristotle began in III 4. He also gives an account that would make the productive intellect a central and important part of Aristotle's account of intellectual activities. There are, however, several difficulties with his interpretation. To begin with, Gerson's interpretation relies on the idea that different human activities have different subjects: sometimes my body is the subject, sometimes the whole composite, sometimes my soul, sometimes my intellect. He argues that I can identify with any of these aspects but that I am "ideally" the same as intellect itself.[14] Thus, Gerson's view rejects what I have argued is the best interpretation of Aristotle's views on the relationship between the human being and the soul: that the human being is the proper subject of all human activities, in virtue of the soul and its powers.[15] Gerson also does not fully explain what intellect itself is or how it works. He also gives us little evidence for thinking that Aristotle ever envisages the existence of some (human) intellect that is not a human soul or a part of human soul, particularly if we reject Gerson's interpretation of I 4, 408b18-31, as I have argued we should.[16]

3. The Context of *DA* III 5

I will more fully exposit and examine these views as we move through this chapter. For now, I want to return to my understanding of the context for this text. As I discussed above, in III 4 Aristotle introduced the receptive or passive intellect, but noted that it is purely potential prior to understanding. It is nothing in actuality beyond its potentiality for understanding.[17] On my interpretation, he now needs to explain how it comes to receive its objects of understanding and actually understands things. Although Aristotle draws heavily on the analogy with perception in

[14] Gerson 2004, 366-7.
[15] See Chapter IV for a defense of this view.
[16] Chapter III, section 2.
[17] *DA*, III 4, 429a23-5; cf. III 4, 4429b24-27, 429b29-430a3.

explaining understanding, there is an important difference here between the two modes of cognition. In the case of perception, perceptible qualities are transmitted from the perceptible thing through the relevant medium to our sense organs, which they then act on. A bird makes a sound which is transmitted through the air to my ear. The sound acts on my ear, altering it and resulting in my hearing the bird's sound. In the case of intelligible things, however, Aristotle denies the Platonist contention that there are free-floating intelligible forms that exist apart from perceptible things and can act on us. Instead, the things we first understand are things in matter, and these things are not intelligible as they exist in matter, with all the particular characteristics they have. They are only intelligible as universals, but there are no separated universals among things, only universals in enmattered particulars.[18]

The productive intellect allows Aristotle to explain how we come to actually understand things, through the productive intellect abstracting or drawing out the intelligible characteristics of images so as to make what is intelligible actually understood by the receptive or passive intellect. The functioning of the productive intellect is fundamental to all our thinking since without it the receptive intellect cannot receive any of the intelligibles and thus cannot understand anything. Understanding, in turn, is fundamental to all our other intellectual activities. We cannot think or reason unless we actually understand, even if only partially, the things we are thinking and reasoning about. Understanding is required for any more complex

[18] For Aristotle, even our understanding of the immaterial divine being comes from understanding the causes of the perceptible things around us, not from some immediate grasp of the divine nature. It is only when we understand that the enmattered and perceptible world around us requires a first unmoved mover and a first object of desire that we come to understand the divine. In his *Metaphysics* Aristotle repeatedly raises the question of whether there is anything non-perceptible, but holds back from definitively answering this question until in *Metaphysics* Λ he offers an argument for an unmoved mover which takes as its starting point the motion of enmattered things.

intellectual activity, whether we are putting together our understanding of different things, separating different things, or inferring from one thing to another.[19]

In contrast, many of those who take the productive intellect to be the divine intellect tend to take the understanding or νοεῖν at issue in III 4-5 to be not only a grasp of the essence of something, but the highest theoretical understanding, a completed understanding of the essence of something which few of us ever achieve.[20] Alexander of Aphrodisias is an exception in this regard, and I will turn to his position later. For those who hold that Aristotle is speaking here of completed and perfected understanding there are two options for relating the discussion of III 4-5 to that of III 6-8. Either Aristotle should be taken to also be speaking about perfected intellectual states in III 6-8, so that the discussion there concerns the sort of complete scientific knowledge that follows from perfected understanding of the relevant terms, or his discussion in III 6-8 concerns lesser, imperfect intellectual activities.

Burnyeat advocates the second position as he wants to read III 4-5 as claiming that the human activity of perfected understanding involves grasping the complete system of absolutely correct concepts that is identical with the divine understanding itself. Since the other intellectual activities we engage in are not identical with the divine activity, Burnyeat wants to sharply separate these human intellectual activities from the divine activity of perfected understanding. On this position, Aristotle is not trying to give a theory of the understanding which will help to explain our ordinary thinking. Instead, he is only interested in explaining the highest level of

[19] Cf. III 6.

[20] Burnyeat 2008, 24-8, 35-6. cf. M. Frede 1996, 388-390. Burnyeat explicitly separates off understanding from ordinary human intellectual activities and claims that Aristotle is not interested in explaining such activities. Frede is less clear. He claims that Aristotle is saying we need to know God as first intelligible to understand anything, but whether this holds true of all our thinking or just the special high level thinking that is understanding is unclear to me. At least some of Frede's claims suggest that Aristotle is not trying to explain our ordinary thinking, but our highest intellectual understanding of things.

intellectual understanding, the level at which our understanding is the same as the divine understanding.[21]

Against Burnyeat's position is the fact that Aristotle does go on to discuss and explain a variety of theoretical intellectual activities while continuing to use the vocabulary of understanding and building on the discussion of III 4-5. We have already seen that the earlier passages of the *De Anima* which Burnyeat adduces in support of his division between understanding and the other intellectual activities in fact suggest a close connection between them. Chapters six to eight of book three provide further evidence that understanding and other intellectual activities are closely connected. Chapter six of book three discusses the *understanding* of indivisibles, τῶν ἀδιαιρέτων νόησις, and the combination of *intelligibles,* σύνθεσίς νοημάτων.[22] Aristotle claims that the intellect, ὁ νοῦς, is the power responsible for combining intelligibles as well as for the understanding of indivisibles.[23]

If the account given in III 4-5 is an account of how we first come to understand anything, it would prepare us for this further discussion of how our understandings of different things can be combined and separated, laying the foundation for a full theory of thought. The structure of Aristotle's treatment of thought, in which he begins with understanding, the simplest and most basic intellectual activity and the one most proper to intellect, would also parallel his treatment of perception which focuses on the proper objects of perception (such as color, sound, and smell), which are simplest and most proper to their senses. Aristotle says much less about the common and the incidental objects of perception (common perceptibles include motion, shape, and magnitude while the son of Diares is an example of something which is incidentally

[21] Burnyeat 2008, 40-41.
[22] *DA*, III 6, 430a26-8.
[23] *DA*, III 6, 430b5-10.

perceptible).[24] The theory of intellect and understanding given in III 4-5 is clearly presupposed in III 6-8. Aristotle is building on the account of understanding and the intellect which he has given in order to give a broader account of different intellectual activities.

The other option, which fits with Frede's interpretation, would take III 6-8, like III 4-5, to speak only of perfected intellectual activities, such as completed scientific knowledge concerning some domain. This interpretation also faces difficulties. Aristotle's examples suggest he is speaking of the sorts of intellectual achievement open to reasonably intelligent and educated human beings, not the completed scientific knowledge available only to the wisest after long years of arduous study. In these chapters Aristotle does not discuss any of the requirements for perfected knowledge that are laid out in his *Posterior Analytics*. His example of the combination of intelligibles, thinking that the diagonal of a square is incommensurable, is a good instance of an intellectual activity that involves some grasp of an essence and some degree of knowledge, but need not involve completed knowledge of geometry.[25] To truly see that the diagonal of a square is incommensurable is certainly a significant intellectual achievement, but it does not require a completed and perfected understanding of either what a square is or what it is to be incommensurable, much less a perfected understanding of all essences in light of the divine intellect.

One could fail to know many things about the essence of square (such as whether the square constructed on the diagonal of a square will be commensurable with the first square) and the incommensurable (such as whether the circumference of a circle is incommensurable with its diameter) but still know that the diagonal of a square is incommensurable with the sides of the square. We are speaking here not just of true belief but of knowledge, ἐπιστήμη, according to

[24] *DA*, II 6-12.
[25] *DA*, III 6, 430a30-3.

the strict requirements which Aristotle lays out in his *Posterior Analytics*.[26] The demonstration of the incommensurability of the diagonal which Aristotle alludes to in *Prior Analytics* I 23 is not particularly complex.[27] It requires knowing certain basic principles of mathematics, for instance, that a number cannot be both odd and even, and certain mathematical propositions concerning the relationship between a line and a square constructed on that line, but these principles and propositions can be grasped without knowing all of geometry, or even very much.[28] There are many more complex proofs about commensurability and squares which one could be entirely unaware of while still seeing how the incommensurability of the square follows from first principles of geometry.

I have given evidence to suggest that in III 4-8 Aristotle is giving his account of theoretical intellectual activities, or at least the outlines and basis for his account, in much the same way as he gives an account of perception in II 5-III 2. I have also argued that this account looks as if it includes, or will at least allow us to account for, all the various human theoretical intellectual activities. Given this, we should prefer an interpretation of III 5 on which it makes an important contribution to Aristotle's understanding of intellectual activities to one on which III 5 is irrelevant or peripheral to Aristotle's overall theory of intellectual activities, other things being equal. My Human Intellect interpretation gives this chapter a vital role in explaining how we acquire understanding and also sees understanding as the foundation for the other intellectual activities discussed in subsequent chapters. Thus I believe it does a better job of situating this chapter within Aristotle's overall theory of the intellect and soul than the sort of Divine Intellect interpretation put

[26] E.g. in *Posterior Analytics* I 2-4. The knowledge in question would be knowledge of the geometrical proposition in question, not necessarily knowledge of all of geometry, as this sort of complete knowledge of a science would require knowing fully the essence of square and commensurability.

[27] *Prior Analytics* I 23, 41a21-37.

[28] Heath takes this proof to require the Pythagorean theorem, Proposition 47 of book I of Euclid's *Elements*, but it can also be proved using the diagram laid out in the *Meno*. It is, as it were, the sort of geometry even uneducated servants can do.

forward by Burnyeat and Caston. I think the interpretations of Frede, Alexander of Aphrodisias, and Gerson offer some more plausible ways of connecting this chapter with the rest of Aristotle's discussion of the intellect, but I will argue that their explanations of the role of the productive intellect are not as plausible as the one I will offer.

I have offered an overview of the interpretative options and the ways they connect the text of III 5 to the rest of the *DA*. I will now go through the text section by section, laying out the different readings each interpretation gives to that section and evaluating their strengths and weaknesses. I will then conclude by giving an overall evaluation of the interpretations I have discussed.

4. The Text of *DA* III 5

a. The Productive Intellect

Let us turn now to the text itself and the beginning of III 5:

> Since, as in every nature there is something which is the matter for each kind (this is what is potentially all those [in the kind]), and there is something else, the cause and the producer which makes them all, like the art in relation to the affected matter, it is also necessary that these differences be found in the soul. Thus there is the sort of understanding which has being by becoming all things and the sort which has being by producing all things, as a sort of state, like light. For in a way light makes potential colors actual colors.[29]

> Ἐπεὶ δ' ὥσπερ ἐν ἁπάσῃ τῇ φύσει ἐστὶ τι τὸ μὲν ὕλη [10]
> ἑκάστῳ γένει (τοῦτο δὲ ὃ πάντα δυνάμει ἐκεῖνα), ἕτερον δὲ
> τὸ αἴτιον καὶ ποιητικόν, ὅτῳ ποιεῖν πάντα, οἷον ἡ τέχνη
> πρὸς τὴν ὕλην πέπονθεν, ἀνάγκη καὶ ἐν τῇ ψυχῇ ὑπάρχειν
> ταύτας τὰς διαφοράς· καὶ ἔστιν ὁ μὲν τοιοῦτος νοῦς τῷ πάντα
> γίνεσθαι, ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἕξις τις, οἷον τὸ φῶς· [15]
> τρόπον γάρ τινα καὶ τὸ φῶς ποιεῖ τὰ δυνάμει ὄντα χρώ-
> ματα ἐνεργείᾳ χρώματα.[30]

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[29] *DA*, III 5, 430a10-17. The translations throughout are my own but reflect my consultation of existing English translations including Sisko, Burnyeat, and Hicks.

[30] *DA*, III 5, 430a10-17. I give my own version of the Greek text, based on the editions of Jannone, Ross, and Siwek. For each section of the Greek text, I will list in the footnote all the textual variants in the manuscripts as well as any important variants in commentaries, lemmata etc. and I will indicate my reasons for certain readings as appropriate, particularly when I depart from Ross's OCT.
Line 10: ὥσπερ codd. $P^{cp}\Sigma$: om. T^{p} || ἐπειδή $WH^{c}m^{1}$|| πάσῃ in σ$WD^{c}H^{c}$TmySim^{1} || ἐστίν, ἔστι *v* || τι om. $F^{c}W^{c}Z^{c}$*So* ||

Aristotle begins the chapter by claiming that just as in every nature we find both some matter able to become all the varieties of the nature it is matter for and some acting productive cause which makes the matter into all these varieties, we must also find these two sorts of thing in the soul. First, there is something which serves as matter for each kind of thing and is potentially all things of that kind, as clay is receptive of every shape and is potentially all the shapes the potter makes. On the other hand, there is something productive which makes all things, as art gives form to the receptive matter on which it works. The potter's art can shape the clay into all the different shapes and accounts for the shape the clay takes on. These differences must also be found in the soul which is capable of understanding. We have seen in III 4 that there is a receptive or potential intellect which is able to understand and become all things. There must also be a productive or active intellect which makes the potential intellect understand all things.

The claim that these differences are found in the soul naturally suggests that Aristotle is speaking of two powers within the soul, not of two different kinds of soul. Burnyeat and Caston dispute this, claiming that Aristotle is making a taxonomic claim here: just as different species or kinds are found in the whole of nature, so different species or kinds must be found within the

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I retain ὥσπερ and τι, contra Ross, but along with Jannone, Siwek, Caston, and Burnyeat. I agree with Burnyeat (2008, fn. 46) and Caston (1999) that the καὶ at 13 picks up the ὥσπερ and I take the τι as indefinite, used as part of Aristotle's generalizing claim. For his seclusions, Ross cites only the absence of ὥσπερ from Themistius's paraphrase and the absence of τι from Sophonia's *Paraphrasis,* but this gives us no good reason to exclude them. Siwek records some mss. where τι is omitted, but these are not the most authoritative ones

Line 11: ἐν ἑκάστῳ *So* || {Siwek ὃ] τὸ $C^{1}X$ E^{c}, τὸ ὁ y, om. ρ (praeter i), ὅτι L^{c}} {Jannone ὃ EL (e τὸ fecit) $H^{a}UV$: τὸ CX τὸ ὁ y } {Ross ὃ ELUP^{c}Σ : τὸ CX: ὃ τε P^{c}} || δυνάμει] νοεῖν D^{c} || ἐκεῖνο E^{1}

Line 12: ποιητικόν] τὸ ποιητικόν $LWF^{c}H^{c}Pm^{1}$, τὸ αἰτίατον R^{c1} || τῷ] ὅ τῷ in ξLX (ὅτω), οὕτω F^{c}, τὸ C^{c1} || ποιῇ F^{c} || οἷον] ὥσπερ F^{c1} || ἡ om. V ||

I have again followed Jannone and read ὅτῳ, in accordance with H^{a}, Jannone's preferred manuscript, and instead of Ross's τῷ which is not found in any manuscripts (according to Ross and Jannone the other manuscripts report either ὅ τῷ or ὅτω). The variation in readings does not make a substantive difference here, however.

Line 13: πέπονθε πρός τήν ὑλην S || ὑλην om. D^{c1}, τέχνην U^{d1} ||

Line 14: νοῦς ὁ μὲν τοιοῦτος v || νοῦς om. mH^{c1} || τῷ] τὸ in π$H^{a1}F^{c}$ ||

Line 15: τὸ φῶς…16. τινα om. D^{c} ||

Line 16: γάρ om. $C^{c}P^{c}$i || καὶ om. V || καὶ τὸ φῶς om. $C^{c}P^{c}$i || τὰ om. F^{c} || ὄντα om. vThem. ||

Line 17: ἐνεργείᾳ χρώματα om. G^{c1} || ἐνεργείᾳ + ὄντα in σ$WH^{c}J^{c}N^{c}$ || ἐνεργείᾳ] ἐντελεχείᾳ F^{c} ||

genus of soul. There must be one species of soul which is receptive and becomes all things and another species of soul which is productive and makes all things.[31] On their interpretation, Aristotle's claim here is supporting the Divine Intellect interpretation, not going against it.

Caston initially claims that Aristotle's phrasing rules out taking him as speaking of two powers of the soul instead of two different species of soul. According to Caston Aristotle claims that there are two different sorts of soul, not two different sorts of capacities of the soul. This suggests that he cannot be talking about differences within an individual soul. Although Caston makes this initial claim, he quickly concedes that Aristotle sometime speaks of different souls or understandings when he is only postulating different powers, as in the contrast between the contemplative understanding, ὁ θεωρητικὸς νοῦς, and the practical understanding, ὁ πρακτικὸς νοῦς. Thus even Caston concedes there is nothing intrinsically implausible in taking Aristotle to be speaking of two different sorts of intellect within one soul.[32]

Burnyeat refuses to acknowledge that when Aristotle says that these differences must be found in the soul, ἐν τῇ ψυχῇ, he means that these differences are found within the individual human soul. On the contrary, Burnyeat claims that this cannot be Aristotle's meaning. He maintains that since ἐν τῇ ψυχῇ parallels ἐν ἁπάσῃ τῇ φύσει, in every nature, (or, as Burnyeat prefers, "in the whole of nature") it must be similarly general, so that Aristotle must be speaking of all the different kinds of soul. Aristotle is speaking of differences "in the sphere of soul," as Burnyeat translates it.[33]

[31] Burnyeat 2008, fn. 48; Caston 1999, 205-6.
[32] Caston 1999, 202-3.
[33] Burnyeat 2008, 39; fn. 48.

Burnyeat's claim is wrong. In almost all of the 45 other occurrences of ἐν τῇ ψυχῇ in the corpus Aristotle is speaking of the individual human soul.[34] None of them seem to be referring to the sphere of soul or to different species of soul. There is also a similar construction in the *Eudemian Ethics* (*EE*) which clearly does refer to the individual soul. Aristotle claims that:

> The thing looked for is this, some principle of motion in the soul. It is clear that just as god [is this principle] in the whole, so also for this.
>
> τὸ δὲ ζητούμενον τοῦτ' ἐστί, τίς ἡ τῆς κινήσεως ἀρχὴ ἐν τῇ ψυχῇ. δῆλον δὴ ὥσπερ ἐν τῷ ὅλῳ θεός, [καὶ] κἀν ἐκείνῳ.[35]

Aristotle here makes a transition from what holds true ἐν τῷ ὅλῳ, on the whole (or, alternatively, in the universe), to what is true of the individual soul. On my reading Aristotle is making exactly the same sort of transition at the beginning of III 5. He makes a general claim about what is the case in every nature and then applies this claim in the particular case of the individual soul. Since in every nature there is something which serves as matter and something which makes everything of that kind, these differences must also be found in human nature, in the individual soul. The *EE* passage, in strikingly similar language, offers precisely this sort of inference. We can easily read Aristotle as moving from a claim about what holds good of every nature to a claim about the individual soul.

There is also excellent evidence that Aristotle's own pupil and successor, Theophrastus, thought that both the receptive and the productive intellect are found in the individual human

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[34] A search of the *Thesaurus Linguae Graecae* yields 46 results for the phrase. Within the works on natural philosophy: *De Anima*, 410a7, 11, 430a13, 431b7, 431b29; *De sensu*, 448b27; *De memoria*, 449b23, 450a28, 450b11, 451a3; *De Insomnis*, 462a6; *Physics* 219a6. In all of these passages Aristotle is talking about items which are present within individual souls: perception, memories, forms etc. The same holds true for other occurrences in the canon: *Posterior Analytics*, 76b25, 100a1, 7, (this passage may refer to a plural number of souls, but the reference is still to definite, individual souls) 16; *Eudemian Ethics*, 1218b33, 1247b18, 1248a25; *Nicomachean Ethics*, 1102b23, 1105b20, 1138a17; *De interpretatione*, 16a3, 9, 24b2; *Magna Moralia*, 1.7.1.3, 1.17.5.2, 1.34.30.1, 2.3.10.8, 2.4.3.1; *Metaphysics*, 1032b1, 5, 23; 1040a4, 1050b1; *Protrepticus* fragment 21.2; *Politics*, 1323a26; *Problemata*, 902a20; *Rhetoric*, 1411b13;; *De virtutibus* 1250a43; *Divisiones* 1col2 line 11, 54line13, 55line1, 61.18; *Various fragments*: 1.13.87.2; 2.21.122/3.30.

[35] *Eudemian Ethics*, VII 14, 1248a16, 24-27.

soul. The ancient commentator Themistius offers a quotation from Theophrastus in which he speaks of intellect, νοῦς, as being mixed from productive νοῦς and the potential νοῦς of III 4 and then raises the question of how it comes to be in the individual human soul.[36] This clearly suggests that he thought the productive intellect is present in individual human souls. Theophrastus' interpretation and understanding of this chapter has considerable weight. Theophrastus was one of Aristotle's closest students and collaborators. He may well have had more evidence about Aristotle's views on intellect than we do and he is also someone who is very unlikely to have misunderstood Aristotle's Greek. Theophrastus' claim does not in itself decisively support the Human Intellect view over the Divine Intellect or Platonist Intellect views, since some proponents of these views, such as Frede, Alexander of Aphrodisias, and Gerson, offer accounts of how the productive intellect could enter into the human soul, even if it is not essentially a part or power of that soul.

Given Aristotle's regular usage of ἐν τῇ ψυχῇ to mean in the individual soul and Theophrastus's interpretation of Aristotle, we have good reasons for reading this passage as claiming that there are two kinds of intellect found in the soul. The taxonomic reading offered by Burnyeat and Caston is also inherently implausible. Caston claims that, "[t]he opening clause states that a certain distinction can be found in any kind or type…found in nature."[37] Aristotle then applies this general claim to psychological kinds. If the general claim is a taxonomic one about every natural kind then it is wildly implausible. Aristotle would be claiming that in every sort of natural kind there is both an active species of that kind and a passive species of that kind.

[36] Themistius, *In Aristotelis Libros De Anima Paraphrasis*, *CAG*, 108.22-8: "'τίνε οὖν αὗται αἱ δύο φύσεις; καὶ τί πάλιν τὸ ὑποκείμενον ἢ συνηρτημένον τῷ ποιητικῷ; μικτὸν γάρ πως ὁ νοῦς ἔκ τε τοῦ ποιητικοῦ καὶ τοῦ δυνάμει. εἰ μὲν οὖν σύμφυτος ὁ κινῶν, καὶ εὐθὺς ἐχρῆν καὶ ἀεί· εἰ δὲ ὕστερον, μετὰ τίνος καὶ πῶς ἡ γένεσις; ἔοικε δ' οὖν ὡς ἀγένητος, εἴπερ καὶ ἄφθαρτος. ἐνυπάρχων δ' οὖν διὰ τί οὐκ ἀεί; ἢ διὰ τί λήθη καὶ ἀπάτη καὶ ψεῦδος; ἢ διὰ τὴν μῖξιν.'" For more on Theophrastus' view see Devereux 1991.

[37] Caston 1999, 206.

There must, for instance, be both an active species of zebra and a passive species of zebra, as Michael Pakaluk has pointed out.[38] Why attribute such an outrageous claim, one which runs against both common sense and Aristotle's biology, to Aristotle? If we read Aristotle as claiming that there are two different kinds of species found in every kind, one active and one passive, we end up attributing a ridiculous view to him.

The interpretations of Burnyeat and Caston require taking the divine intellect to be a sort of soul. I have already discussed the many problems facing this position when we examined the earlier passages about intellect.[39] For Aristotle the soul is always the soul of some sort of body, as his definition of soul as the first actuality of a naturally organized body implies. The soul as form organizes and directs the body that it informs. Aristotle is careful not to ascribe soul to living beings that are non-bodily. The interpretation advanced by Burnyeat and Caston does not fit with Aristotle's views on the soul. Other advocates of the Divine Intellect interpretation, such as Frede and Alexander of Aphrodisias, avoid this difficulty by claiming that Aristotle is here speaking about the divine intellect insofar as it comes to be in us. Similarly, on Gerson's version of the Platonist Intellect interpretation Aristotle is speaking here about how intellect itself comes to be in the composite human being. I will postpone consideration of their accounts of how the productive intellect enters into us until my general examination of their views on the relationship between receptive and productive intellect.

On my view, Aristotle is claiming that in the human soul there are two sorts of intellects or two principles of understanding. What are these intellects and why are there two of them? The first sort of understanding, "the sort of understanding in which all things come to be," is the potential intellect that was the main subject of III 4. Aristotle described the potential intellect as

[38] Michael Pakaluk, 'Commentary on Sisko.' *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 16, 2000, 204.

[39] Chapter V, section 3.

understanding all things but not being any of them in actuality and also said that the potential intellect becomes each thing.[40] The potential intellect thus fits Aristotle's characterization of the first sort of intellect as that which can take on all the different forms. In accordance with the general opening claim of chapter five the potential intellect of III 4 is the sort of intellect that serves as matter, since the potential intellect is potentially all intelligible things. It is also the intellect in which all things come to be.

What, then, is the sort of understanding by which all things are made? Before discussing Aristotle's much disputed comparison to light we can note some general characteristics that the productive understanding will have, given its role as maker. As the sort of intellect by which all things are made, the productive intellect should account for the way in which all intelligible things come to be in the receptive or potential intellect. This can be seen from the comparison in Aristotle's first sentence to art and its relation to the matter of art. The art of sculpture accounts for the matter (the bronze say) taking on the form it does by being what makes the bronze take on a certain shape. The art or craft is an efficient cause that acts on a certain matter to produce one of the forms belonging to the range of forms that can be produced by that art.

On my interpretation the productive intellect is similarly an efficient cause, an agent which accounts for the potential intellect receiving the forms and understanding the intelligibles that it does. Just as the art selects one of the forms it can produce and produces this in the matter, the productive intellect selects a certain image, draws out some intelligible from this image, and then produces this intelligible in the potential intellect, resulting in understanding. This interpretation has the virtue of giving the productive or active intellect a clear role in relation to the receptive or potential intellect which is analogous to the role that art has in relation to the

[40] *DA* III 4, 429a18-24, 429b5-9.

matter of art. It also allows us to see the productive intellect as a power of the human soul, in accordance with the most straightforward way of construing Aristotle's claim that these differences are found in the soul.

The Divine Intellect interpretations have considerable difficulty in giving an appropriate role to the productive intellect. On Caston's version of the Divine Intellect view, the productive intellect is taken not as an efficient cause, but as a final cause or background condition. It is because there is a divine intellect that there are intelligible things. This is all that Aristotle's claims about the productive intellect amount to. The productive intellect does not play any particular causal role in individual episodes of human thinking. This option is unattractive. As its proponents explicitly acknowledge, their interpretation makes III 5 irrelevant to Aristotle's psychology and theories of understanding as such. On Burnyeat's view, III 5 is an incursion into first philosophy, not an exposition of certain views that are properly part of Aristotle's psychological theory of understanding. Such an interpretation has several difficulties. First of all, Aristotle is usually very careful about distinguishing between claims that belong to first philosophy and those that belong to some other science, as we see for instance in his discussion of the arguments of Parmenides and Melissus in *Physics* I 2. An unacknowledged jump into a different sort of theoretical inquiry would be rather surprising. Further, for the purposes of Aristotle's inquiry into soul there is no reason for him to make such an excursus. Indeed, there are indications that Aristotle is being careful to address only the questions necessary for this particular inquiry. Aristotle ends III 7 by postponing discussion of whether intellect, while not being separated from magnitude itself, can understand things that are separated. The *DA* does not attempt to answer every question about thought and its objects. Instead Aristotle is giving an account of what the basic intellectual activities and powers of the soul are. The postponement of

discussion about our ability to understand separated things would be particularly odd if his discussion in III 5 argues or assumes that any understanding of things is dependent on understanding the separated divine substance, as on many of the Divine Intellect readings.[41]

Alexander of Aphrodisias offers a significantly different role for the productive or active intellect while still putting forward a Divine Intellect interpretation. On his interpretation the active intellect is the intellect that understands itself, the divine intellect. The divine intellect is both a subject and an object of thought: it actually understands itself and is therefore actually understood.[42] Our potential or material intellect only understands potentially and needs to be brought into act by some actual intelligible.[43] Since all sensible things are only potentially intelligible, it falls to the only thing which is always actually being understood, the divine intellect, to act on our material intellect to transform it into an intellect which actually possesses understanding.[44] On Alexander's position the role of the divine intellect is primarily to bring about our first acquisition of understanding. After our potential intellect is informed and is in a state of understanding our intellect is able to be active in separating and abstracting sensible things from their particular conditions so that they can be actually grasped and understood.[45] Alexander now describes our intellect as cooperating with the divine intellect, but it has abstractive powers of its own which it employs.[46]

Alexander's position, like my own, sees III 5 as addressing the problem of III 4 about how we come to understand, given that the initial condition of our intellect is purely potential. He also agrees with me in thinking that the active intellect produces actual understanding in the

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[41] Cf. Burnyeat 2008, M. Frede 1995 and 1996.

[42] Alexander of Aphrodisias, *De Anima* (*ADA*) III 26, 88.24-89.11, *De Anima Mantissa* (*DAM*) 5, 107.29-108.7.

[43] *ADA* III 12, 25; *DAM* 5, 8, 14-15.

[44] *DAM* 14-15.

[45] *ADA* III 22; *DAM* 19-20.

[46] *DAM* 20.

potential or receptive intellect. Further, like me, he sees abstraction or separating out the form from the matter as vital to the process of coming to understand. However, Alexander's position makes the divine being the first object of understanding, a position which is not supported anywhere in Aristotle's works. For Aristotle, even our understanding of the immaterial divine being comes from understanding the causes of the perceptible things around us, not from some immediate grasp of the divine nature. It is only when we understand that the enmattered and perceptible world around us requires a first unmoved mover and a first object of desire that we come to understand the divine. In his *Metaphysics* Aristotle repeatedly raises the question of whether there is anything non-perceptible, but holds back from definitively answering this question until in *Metaphysics* Λ he offers an argument for an unmoved mover which takes as its starting point the motion of enmattered things. My interpretation, like Alexander's, sees the human intellect as having a power of abstraction or separating out the intelligible form from the matter that contains it, but on my reading Aristotle is here distinguishing that power from the receptive or passive aspect of the intellect, not bringing in the divine being. In III 5 Aristotle is laying out an additional intellectual power that is necessary for us to achieve understanding of something. The first object of our understanding does not need to be the divine being.

Alternatively, proponents of the Divine Intellect or Platonist Intellect interpretations can understand the productive intellect as having some role in bringing about particular dispositions and episodes of human understanding. Frede, on behalf of the Divine Intellect interpretation, and Gerson, on behalf of the Platonist Intellect interpretation, put forward such views.[47] The challenge for this sort of interpretative option is to explain how our human understanding is coordinated with the always active productive intellect that exists in separation from the soul. If

[47] M. Frede 1996, 388; Gerson 2004.

the action of the productive intellect on the potential intellect produces understanding and the productive intellect is a separated being, how can we give a satisfactory account of why we understand certain things at some times and not others? The productive intellect could act on our potential intellects to produce understanding always or sometimes or never. Given the powers of this intellect (whether taken to be the divine intellect, as on Frede's view, or (human) intellect itself, as on Gerson's view), there seems to be no explanation for why it makes us understand the things that we do when we do.

The defender of this option might respond that the productive intellect acts on us whenever we are in a receptive state. This raises the question of what is required for being in a receptive state and what sort of achievement such receptivity represents. If being in a receptive state is a crucial condition for understanding as well as a significant intellectual achievement we would expect Aristotle to at least say something about this requirement, particularly if it is more explanatory of our understanding or lack thereof than the eternally ongoing activity of the productive intellect. There is a further issue if we take Aristotle's claims in III 5 to concern the exercise of our understanding as well as our acquisition of dispositional or first actuality understanding. Aristotle claims in *DA* II 5 that once we possess understanding as a first actuality and disposition we can exercise this understanding whenever we want.[48] This is because the intelligible objects of our understanding are already present in a way in our soul. There are no external factors needed to go from potentially understanding to actually understanding, unlike in the case of sensation where external perceptible things are needed for this transition to take place. Defenders of an external intellect need to explain what role the productive intellect plays

[48] *DA* II 5, 417b22-27.

in the transition from possessing understanding to exercising understanding and how the productive intellect's role allows for the exercise of understanding whenever we want.

The most promising line of reply for defenders is to point to the role Aristotle believes images, φαντάσματα, have in understanding. The presence or absence of appropriate images can determine whether we are receptive to the productive intellect and able to understand something. This claim offers limited help. As I argued in the previous chapter, the same image may be used to understand different things, so a given image cannot in itself fully account for why an individual is understanding a particular thing.[49] Understanding the productive intellect as an external agent that already possesses all intelligible forms also makes it unclear why images are necessary at all. Frede's divine productive intellect actually understands everything without making use of images, as does Gerson's intellect itself. Given this, it seems that the productive intellect could avoid making any use of images and directly transfer intelligible forms from itself to our potential intellects. My account avoids this difficulty since I take the productive intellect not as the object of understanding but as a power by which objects of understanding are made to be actually understood. As I understand it, the power of the productive or active intellect is limited, unlike the power of Frede's divine intellect or Gerson's intellect itself. The effectiveness of the productive intellect will therefore depend not just on the intellect itself but also on the images available, the disposition of our sensory powers, and our experience of understanding.[50]

I will now examine the specifics of Frede's and Gerson's accounts to see whether their interpretations can effectively address these difficulties. Frede takes the productive intellect to be the divine intellect of *Metaphysics* Λ.[51] According to my articulation of Frede's position, the

[49] Chapter VII, section 8 (cf. sections 6-7).

[50] Cf. Chapter VII, section 6 and Thomas Aquinas, *Summa Theologiae* (*ST*), Quaestio 79 (Q.79), Articulus 4 (A.4), Ad Tertium.

[51] M. Frede 1996, 386-390.

divine intellect is the same as the integrated and unified system of essences which describes reality. This means that Frede can hold that the productive divine intellect is, in a way, always the object of our understanding, no matter what we are thinking about. He is not forced to say, as Alexander does, that God, as such, is the first object of our understanding. Since, for Aristotle, understanding something requires understanding it as part of reality as a whole, understanding something requires understanding it as part of the integrated and unified system of essences which describe reality. This means that when we understand something we are in fact seeing it as part of the divine intellect, so that the divine intellect can appropriately be described as the object and cause of our thought. The divine intellect is the cause or producer of understanding in the sense that the person being painted or the object being seen is the cause of the painting or the seeing.

Although this view avoids the major difficulty with Alexander's interpretation, it faces serious problems of its own. To begin with, if the divine intellect is a system of essences, it would presumably make more sense for Aristotle to speak of this system of essences as being the object of understanding, as opposed to just speaking of a singular productive intellect. This seems especially relevant given the context of the *DA* where the object is not, as in the *Metaphysics*, to find and identify the most primary substance, but to lay out the critical components necessary for human understanding. Even if the completed system of essences is the same as the divine intellect, speaking in terms of essences or forms would surely be more perspicacious. Aristotle also does nothing in the rest of the *DA* to prepare us for the idea that understanding consists in grasping something as part of a unified divine system of essences, nor does he anywhere in it indicate that he thinks that the divine intellect is, in fact, just a system of essences.

It is also far from clear that such a system of essences would have the sort of unity and agency ascribed to the intellect which makes all things. A defender of this view needs to offer a further account of why we should think there is one unified system of essences that can appropriately be called νοῦς. Frede and other scholars have argued that Aristotle's understanding of God in *Metaphysics* Λ is compatible with the idea that God is identical with such a unified system of essences, but no one has convincingly argued that Aristotle's texts require us to take this view of the divine intellect.[52] This view thus relies on a number of conjectures about how to construe understanding and the divine intellect, conjectures with only slender textual support. It can claim to be broadly compatible with the text, but it is hard to think that the text as it stands would be what Aristotle had written if he in fact held such a view and was attempting to transmit it.

Frede's interpretation also does not fit as well with the wider context as the Human Intellect interpretation does. On Frede's view it looks like our understanding of things should always result in correct opinion and knowledge, when, in fact, Aristotle seems to assume in his discussion in III 6-7 that there can be errors in separating and combining one's understanding of different objects, even when one does in fact understand these objects. It is hard to see how Frede's account of understanding can allow for such error. If in understanding what a horse is, I grasp the form of horse in relation to all other forms and to God, how could I then go wrong when I try to combine or separation this understanding with my (similarly integrated and perfected) understanding of other forms?

Finally, this view does little to explain how I can initially acquire intelligible forms. Since the divine intellect and the system of essences of which it is comprised are always understanding

[52] M. Frede and Charles 2001, 42-47.

and always there to be understood, it is hard to see how they can be the crucial explanatory factors that account for my transition from not possessing understanding to possessing it. Frede's account of the role of this system of essences amounts to little more than saying that I understand triangle or horse when the form of triangle or horse causes me to take on these forms and start understanding. This is, indeed, a crucial part of Aristotle's theory of cognition, as exposited in *DA* II 5 and III 4, but it does nothing to address the problem Aristotle raises towards the end of III 4 about how my intellect, which is not subject to affection, can come to initially understand something. Adding, as Frede's account does, that the forms I understand are part of a larger integrated system of essences does not solve this problem. Frede's view could address this problem by claiming that something like direct divine action is what produces my initial acquisition of understanding. Then, however, the view would then be vulnerable to the difficulty I raised above: there would be no sufficient explanation for why God acts on me at this time in these ways to introduce these objects as the objects of my thought, since God could produce understanding with or without images.

Gerson offers a more definite role for the productive intellect to play. On his understanding we need to gain access to intellect itself because intellect itself is self-reflexive. Gerson holds that in order to actually engage in understanding, we need not only to come to possess an intelligible form (this can only bring us to the state of first actuality), but to become aware of and reflect on our possession of this form.[53] Merely possessing an intelligible form, in the way that Aristotle discusses in III 4, does not allow us to actually understand. For Gerson, the productive intellect is introduced in III 5 to explain how we become able to reflect on our

[53] Gerson 2004, 357-9.

possession of forms and thus actually understand them. This is the attribute we gain when intellect itself comes to be present in us. As Gerson puts it:

> [Understanding] is, roughly, a type of mental "seeing" which, in potency, is equivalent to the presence of the form in the intellect and, in actuality, is the awareness or accessing of that presence. Without intellect, the psychical subject could retain images but could not access the forms whose actualizations the images represent. Without soul's imagistic activity, intellect would be unusable by the soul or the composite.[54]

Gerson's account has some important advantages. It gives the productive intellect a comprehensible and crucially important rule in human understanding and it accounts for the relation between III 4 and III 5.

Although I think Gerson's view is compatible with the text, I think it still faces some serious problems. First of all, I do not think that reflexivity is as central to Aristotle's account of understanding as Gerson does. On my reading, intelligible forms are possessed in one way at the level of first actuality, when acquired, and in another way, when being exercised. I think the difference between these two stages of possessing a form, between having a form and accessing it, can be explained in terms of the role of images, without the need to introduce an additional and separate self-reflective intellect. When I am using an image in an appropriate way I am able to access the intelligible form that I possess. Aristotle does speak of intellect knowing itself, but I do not see any decisive evidence for thinking that reflexivity is, in general, a formal part of the activity of understanding. Reflexivity does not seem to be any part of his account of the cognitive activity of perceiving, which Aristotle thinks is sufficiently accounted for in terms of the cognitive possession of form.[55] Aristotle then uses this account as the model for his account of understanding in III 4. I see no reason to think that reflexivity as such is as integral to understanding as Gerson holds it to be.

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[54] Gerson 2004, 367.
[55] See Chapter VI, section 2.

My most serious difficulty with Gerson's interpretation is its reliance on the idea that different human activities have different subjects: sometimes my body is the subject, sometimes the whole composite, sometimes my soul, sometimes my intellect. He argues that I can identify with any of these aspects but that I am "ideally" the same as intellect itself.[56] Thus, Gerson's view rejects what I have argued is the best interpretation of Aristotle's views on the relationship between the human being and the soul: that the human being is the proper subject of all human activities, in virtue of the soul and its powers.[57] Not only does Gerson deny that the human being, as such, is always the subject he also thinks that there are multiple intellectual activities with multiple subjects. The composite is in one way the subject of understanding, but the soul and the intellect are also the subjects of their own activities of understanding, even if they are also used instrumentally by the composite.[58] Gerson's view thus needs to explain what the relations of priority are among them. Does Aristotle think that the composite human being is the primary subject of understanding or does understanding belong primarily to the soul or the intellect? I have argued in Chapter V that Aristotle's insistence on the unity of the soul and the human being is endangered by any conception according to which the intellect or the soul is primarily what understands.[59] This, however, seems to be the most obvious way of understanding Gerson's view. His view also faces the problem of coordination: how do these different activities with different subjects relate to one another? Do I understand whenever my intellect understands or hear something whenever my soul hears or are the conditions for serving as a psychological subject different in each case?[60]

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[56] Gerson 2004, 366-7.
[57] See Chapter IV for a defense of this view.
[58] Gerson 2004, 366.
[59] Chapter V, section 3.
[60] For further discussion see Chapter IV, section 6 (cf. sections 3-4).

Gerson also does not fully explain what intellect itself is or how it works. His conception of intellect itself is in danger of either being insufficiently distinct from the divine intellect or insufficiently actual to explain all cases of human understanding. Gerson needs to hold either that intellect itself always understands all things or that its exercise of understanding is more limited, either in range or by understanding things only successively. If the understanding of intellect itself is unlimited and always actual, it becomes hard to distinguish from the divine intellect. In what sense does it have a potential to be exercised if it is always actual in the same way? If, however, the understanding of intellect is limited and is not always being exercised in relation to every object, gaining access to the activity of (human) intellect itself will not always be sufficient for understanding, since sometimes intellect itself will not be actually understanding the object I want to understand.

Finally, it's worth noting that Aristotle does not give any indication that he thinks that there might be some (human) intellect that is not a human soul or a part of human soul and is also distinct from the divine intellect and unmoved movers of *Metaphysics* Λ. I have argued that Aristotle does clearly indicate his interest in whether the form of the human being, the soul or some part of it, persists. He raises this question throughout the earlier parts of the *DA* and in an important passage from *Metaphysics* Λ.[61] I believe that this is the question that he is addressing in this chapter. Aristotle, however, never shows any indication of interest in the possible existence of the kind of intellect that Gerson thinks is at issue here anywhere else in the corpus.

I have argued that the productive or active intellect referred to in this text is a power of the soul which makes potential objects of understanding into actual objects of understanding in the receptive or passive intellect. I then discussed some of the numerous other suggestions as to

[61] See Chapter II, sections 5-6 for further discussion.

what the role of the productive intellect is. Some of these do not fit well with either the text or Aristotle's other commitments, like Caston's insistence that the productive intellect is only a final cause or Alexander's insistence that God, as such, is the first object of my understanding. Other views, like those of Frede and Gerson, are more defensible but still face serious difficulties. Frede's view does not fully explain why Aristotle needs to talk about the divine intellect as such and his interpretation does not fit as well with the broader context as mine does. Gerson offers a coherent view that places III 5 within the larger context, but his interpretation relies on views about the relationship between the composite, the soul, and the intellect that I have argued are wrong.

I will now proceed to discuss the rest of this passage. To further understand the nature of the productive intellect we need to consider Aristotle's comparison to light. Aristotle claims that just as light in a way makes things that are potentially colored actually colored, so the productive intellect makes things that are potentially intelligible actually intelligible. I agree with Frede's claim that we should interpret this comparison in light of chapter two of book three where Aristotle discusses the correlative nature of agent and patient.[62] There Aristotle claims that the act of the sensible and the act of the sense are the same: the actual sounding of some sound and the actual hearing of that sound are the same and one, although their being is not the same.[63] Similarly, something is actually an object of understanding only if someone is actually understanding it. Aristotle is therefore claiming not just that the productive intellect makes intelligible things actually *able* to be understood, he is claiming it makes them to actually *be* understood.

[62] M. Frede 1996, 385-6.
[63] *DA* III 2, 425b25-426a19.

Burnyeat interprets light and the intellect as providing background conditions for seeing and understanding, respectively, without necessarily bringing seeing or understanding about. On Burnyeat's interpretation light makes colors actually visible by making the medium transparent, but it does not necessarily make colors actually be seen. Similarly, the divine productive intellect makes everything capable of being understood, but it does not take an active role in bringing about acts of understanding. As Burnyeat puts it,

> the deity does not need to act on us from up high, but merely to illuminate the intelligible forms, somewhat in the way light, simply in virtue of being what it is, illuminates colours and makes them actually visible to us.[64]

In claiming that the productive intellect is a state (ἕξις) Burnyeat understands Aristotle to be asserting that the productive intellect, like light, is not a process, but a fixed state of things. He pushes this comparison to light claiming that:

> as light is a state of a material medium which makes the visible forms (colours) actually visible to sight, so the divine intellect is cast as a non-material medium through which the intelligible forms become apparent to the human intellect.[65]

The divine productive intellect is the constant unchanging system of absolutely correct concepts. This intellect acts as a medium for us as we achieve some completed state of understanding.[66]

There are numerous difficulties with this interpretation. To begin with, it is unclear what it means for the divine intellect to be a state, much less "a non-material medium." For Aristotle, states are always states of something. A state is something in the category of quality, it needs to belong to some substance.[67] Light is a state of a transparent substance, usually air or water.[68] The divine intellect cannot be the state of some other substance and it does not make sense to speak of it as a state of itself. The completely actual nature of the divine intellect is a serious difficulty

[64] Burnyeat 2008, 41.
[65] Ibid.,
[66] Ibid., 40-41.
[67] *Categories* 8.
[68] Cf. *DA* II 7.

for the Divine Intellect interpretation. Given Aristotle's repeated insistence that the divine intellect cannot be potential in any way, it would be quite surprising if he were speaking of it here as a state. Alexander of Aphrodisias seems to have been aware of this difficulty. In a passage of Alexander's *De Anima* that is otherwise virtually a paraphrase of the opening of III 5 he claims, not that the productive intellect is a state, but rather that it is the cause of a state in the receptive (or, in his terminology, material) intellect.[69] This makes better sense, but it does not fit the actual text very well. Burnyeat's claim that the divine intellect is a non-material medium is even more difficult to make sense of. If the divine intellect is the correct system of concepts then why regard it as a medium and not as the object of thought? What does it mean for it to be a medium? Regarding the divine intellect as the object of thought, as Frede does, does nothing to address the inappropriateness of referring to this intellect as a state.

Given Aristotle's insistence on the unity of the patient and agent in act, Burnyeat's interpretation is less than satisfactory. Aristotle here claims that light makes potential colors to actually be colors, that is, to actually be seen, not just to actually be capable of being seen. This suggests that the productive intellect should bring about understanding and act on the receptive intellect, not just bring about intelligibility. Burnyeat interprets the productive intellect not as acting on and being unified with the receptive intellect, but as an odd sort of medium. Burnyeat's interpretation also renews the challenge of explaining why III 5 is a necessary part of Aristotle's inquiry into the soul. If the divine intellect is just a background condition which enables things to be understood, why does Aristotle have to mention it in the *DA*? Why not wait for the *Metaphysics*? Aristotle only explicitly talks about mathematical and physical objects of

[69] *ADA* , III 25, 88, 24. "ὃς αἴτιος τῆς ἕξεως τῆς τοῦ ὑλικοῦ νοῦ γίνεται"

knowledge in the *DA*. As we have noted, he postpones the question of whether we can know separated substances, suggesting that such questions are not vital for his present purposes.

Burnyeat's interpretation does raise the important issue of what the precise role of light is in relation to color and what this suggests for the productive intellect. Aristotle claims that colors are visible in themselves and have the power of moving what is actually transparent.[70] Given this, we might think that light does not actually make colors visible, but simply assists by actuating the medium. Does this imply that the productive intellect has a similarly limited role?

In my view, Aristotle's comparison between the productive intellect and light is a qualified one, as the two cases are not exactly parallel. Nevertheless, the case of light brings out a number of the central features of the productive intellect. In both the case of colors and of intelligibles something further is needed in addition to the objects and the subject. The cases are not exactly the same, however, since for Aristotle colors are visible in their own right while sensible things are only potentially intelligible and need to be made intelligible.[71] Both light and the productive intellect are necessary for and contribute to the activities of seeing and understanding, respectively. Aristotle's use of τινα, in a way (430a16), is an important qualification on the comparison. The source of light only makes potential colors to be actual colors in a way, by making the transparent medium actually transparent. Colors have the power to move the medium and the eye in their own right and light is needed only to make the medium actually transparent. The productive intellect, in contrast, is needed in order for the intelligibles to become actual and to be able to affect the receptive intellect. The limited nature of the comparison is to be expected since the objects of thought differ from the objects of perception precisely in their potentiality. Thus the productive intellect has to do more to contribute to

[70] *DA* II 7, 418a31-418b2.
[71] *DA* III 4 430a6-7; II 7, 418a31-418b2.

understanding than light has to do to contribute to seeing. Aristotle is simply using the closest perceptual analogue to the productive intellect.

There is also a way of reading the comparison between light and the productive intellect more closely. Although color is visible in itself, it needs light to be actually seen. This is not just true in the outside medium but in the eye as well, as Aristotle points out in his *De Sensu*.[72] If we take the light in the comparison as the light in the interior medium, then light will produce actual colors as the productive intellect produces actual understanding. Light in the external medium does not guarantee that colors will be actually seen, as there may be no perceiver present, but light in the interior medium means that the colors will be seen by the perceiver and will be actual, since all the conditions for seeing are fulfilled. Light's role is still more limited than that of the productive intellect, but there will be actual seeing whenever light is present just as there will be actual understanding whenever the productive intellect is operative.

The light comparison is also helpful since it shows us that we need not take the productive intellect as a subject of understanding separate from the subject of understanding that is the receptive intellect. Light is not a subject of seeing but instead helps to bring seeing about. Similarly, the productive intellect, on my interpretation, is not a subject of understanding in addition to the receptive intellect but is instead an agent or maker which brings about understanding in the receptive intellect by making sensible things actually intelligible by a process of abstraction. The productive intellect can bring about understanding without itself being a subject of understanding, just as light brings about actual color without actually being colored itself.

[72] *De Sensu* 2, 438b5-16

Aristotle's claim that the productive intellect is a sort of state (ἕξις) distinguishes it from the receptive intellect which is not a state, but is instead a potentiality for receiving intelligible forms. Describing the productive intellect as a state also reinforces the idea that it is a power of the human soul: it is a certain actual state that our souls are in which allows us to achieve understanding. Some have taken Aristotle's use of ἕξις to suggest that he is claiming that the productive intellect is simply our settled knowledge of first principles.[73] This interpretation does not fit well with the text or offer a plausible theory of thought. In order to come to a settled understanding of first principles we need to understand the terms used in these first principles and thus we need an account of how we come to such an understanding. The productive intellect could then not be used for such an account. But for Aristotle the productive intellect is supposed to bring all the objects of our understanding into actuality. Further, Aristotle clearly intends to give an account of understanding that covers both our understanding of simple terms and our understanding of complex thought, as III 6 indicates, so this proposal is unattractive.[74]

Burnyeat and Frede both attempt to use another feature of the comparison with light to further the Divine Intellect interpretation. In interpreting this comparison both Frede and Burnyeat mention the *Republic*'s analogy of the sun and the good: just as the sun is the source of all light and makes all things visible, the Good is the source of all being and makes all things intelligible.[75] They take Aristotle to be making much the same point in this passage and argue that the similarity with the *Republic* suggests that Aristotle is also putting forward the divine intellect as the source of all intelligibility.

[73] E.g. Polansky 2007, 460-472.
[74] Cf. *SLDA*, III 10, 24-42.
[75] Burnyeat 2008, 41-2; M. Frede 1996, 386-7.

In fact, the comparison to the *Republic* suggests the opposite. The analogy is to light, not the sun, as Themistius notes.[76] Aristotle does think that the sun is the ultimate source of all light on earth and that it explains the generation of living things, so he certainly could make a comparison to the sun if he wanted to suggest that the productive intellect was some one separated divine intellect. His choice of light instead of the sun may well be a carefully chosen contrast to the Platonic position. Just as light is found in the eyes of all who see, each individual human being has the intellectual power necessary for understanding in his soul. The position advocated by Burnyeat and Frede obscures the distinction between our order of understanding and the order of understanding that things have in themselves, a distinction Aristotle repeatedly insists on.[77] We can understand things, albeit not perfectly, without understanding God or their relation to God. We may not be able to have complete and perfect understanding of them without understanding them in relation to the divine, but there is good reason to think that Aristotle is here giving an account of all cases of human understanding, not just perfect and complete ones.

b. Properties of the Productive Intellect

Aristotle now makes several claims about the productive intellect he has introduced:

> And this intellect is separable and impassible and unmixed, being actual in substance. For that which acts is always more valuable than that which is acted upon and the originating principle [is always more valuable than] the matter.[78]

καὶ οὗτος ὁ νοῦς χωριστὸς καὶ [17]
ἀπαθὴς καὶ ἀμιγής, τῇ οὐσίᾳ ὢν ἐνέργεια· ἀεὶ γὰρ τιμιώτε-
ρον τὸ ποιοῦν τοῦ πάσχοντος καὶ ἡ ἀρχὴ τῆς ὕλης.[79]

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[76] Themistius, *In Aristotelis Libros De Anima Paraphrasis*, *CAG*, 103.20-38.
[77] E.g. *Physics* I 1, *Metaphysics* A 1.
[78] *DA* III 5, 230a17-19.
[79] *DA* III 5, 230a17-19.

Line 17: οὗτος] οὐχ ὡς S, οὕτως om. $C^{c1}K^{c}L^{c}P^{c}$ ||
Line 18: ἀμιγής καὶ ἀπαθὴς omnes codd. praeter ELPSim^{lp}Them. || ὢν] ὡς ὢν yi || ἐνεργείᾳ omnes codd. praeter $H^{a}UC^{c}E^{c}F^{c}N^{c}$ySim^{clp}So, ἐνέργειαν L^{c} ||

Aristotle is here laying out the attributes of productive intellect. On my reading, productive intellect shares its first three attributes, being separable, impassible, and unmixed, with receptive intellect. The productive intellect is, however, impassible in a stronger sense than the receptive intellect since it cannot be acted on at all, whereas the receptive intellect, while not subject to motion or any destructive change, is affected in a cognitive way when it acquires intelligible forms.[80] The fourth attribute, being actual in substance, comes from its role as the active maker. As the agent that brings the receptive intellect from potentiality to actuality it must be actual itself, or it will be in need of something further to make it actual and to allow it to function. The second sentence explains why Aristotle gives the productive intellect the attributes assigned to it in the first sentence. Since it is superior to the receptive intellect it must have all of the positive attributes of receptive intellect to at least as great a degree. Further, since it stands to the receptive intellect as an agent to a patient or as an originating principle to matter it must be actual in its substance, in contrast to the potential being of receptive intellect.

The proponents of the Divine Intellect interpretation take this passage as crucial to their case. They argue that the listed attributes could only belong to the divine intellect. Although there are some similarities of language with Aristotle's discussion of the divine beings in *Metaphysics* Λ this passage makes much more sense when taken together with Aristotle's discussion of the receptive intellect in III 4. The first claims made here use the same language as the claims made about the potential intellect in III 4, while the divine intellect of *Metaphysics* Λ is not explicitly called separate, χωριστός, or unmixed, ἀμιγής.[81] The potential intellect of III 4

[80] For the impassivity of the receptive intellect see *DA* III 4, 429a15-17, 429a29-429b5.

[81] The divine intellect is, of course, separated from any sort of body and unmixed with anything else, so these claims could be made about it, but there is still not the same connection of language and phrasing between *Metaphysics* Λ and III 5 that there is between III 4 and 5.

is said to be separate from the body.[82] It is described as being unaffected and impassible in a stronger sense than the sense powers and as unmixed with the body and without a bodily organ.[83] Each of these characteristics are applied to potential intellect and explained in III 4 and each of them would reasonably belong to productive intellect, given its status as an intellectual power of the soul of even greater worth than the potential or receptive intellect.

In particular, the claim that the productive intellect is unmixed, ἀμιγής, does not fit well with the Divine Intellect interpretation. If the productive intellect is the divine intellect then surely it would be obvious that it is not a body or mixed with bodies and there would be no reason to mention such an attribute. An advocate of the Divine Intellect interpretation might maintain that Aristotle means something more like unmixed with potentiality or matter. Aristotle, however, when speaking on his own behalf, does not usually employ such metaphorical language. The only place in the *Metaphysics* where he speaks of something as unmixed is in the first book when talking about Anaxagoras's theory according to which all things are mixed together. Aristotle quotes Anaxagoras as exempting νοῦς from the universal mixture and then claims, on the basis of this, that Anaxagoras recognizes two elemental principles, the One, which is simple and unmixed, and the Other or Indeterminate.[84] Aristotle does not appropriate any of this language of mixture in his own account of νοῦς in *Metaphysics* Λ.

If the first three attributes given here are supposed to be different than those ascribed to the receptive intellect, we are left with no indication of what this difference consists in, as Aristotle gives us a list without any further explanation. This brief treatment makes sense if Aristotle is simply picking up on his characterization of these qualities in III 4, but it makes little sense if he wants to draw attention to the difference between the way in which these attributes

[82] *DA* III 4, 429b3-5
[83] *DA* III 4, 429a15-429b5.
[84] *Metaphysics* A, 989b15-17.

are said of the two different sorts of intellect. Proponents of the Divine Intellect interpretation also have a much harder time relating the second sentence to the first. As Burnyeat says, "it is hard to read 430 18's γάρ as a reason why this *nous* has the characteristic just listed." [85] He cites Denniston to suggest that "it could instead give the author's reason for telling us about the characteristics it has," but this is an unlikely reading.[86] Since the productive intellect is the subject of this section, we hardly require some additional reason for learning about the characteristics and according to the Divine Intellect interpretation Aristotle tells us very little about what these attributes mean in the case of the productive intellect.

The proponents of the Divine Intellect interpretation take the fourth characteristic of productive intellect, that it is actual with respect to its substance or being, τῇ οὐσίᾳ ὢν ἐνέργεια, as decisive evidence that Aristotle is speaking of the divine intellect. Although the dative employed in this phrase could be taken as a dative of respect most of the Divine Intellect interpreters take the dative construction employed here to specify that in virtue of which the intellect is actual: it is actual in virtue of its being or substance. As Burnyeat translates this phrase, "its very being is actuality."[87] Thus understood the phrase echoes Aristotle's discussion of the divine intellect in *Metaphysics* Λ. There Aristotle argues that the divine intellect, unlike other beings, including human beings and human intellects, simply is actuality, with no potentiality or ability to change.[88] If Aristotle is making the same claim here then the productive intellect must be the divine intellect.

While the phrasing used here is similar to that found in *Metaphysics* Λ, it is not identical. In *Metaphysics* Λ we get the claim that the being of God is activity or actuality, where this is

[85] Burnyeat 2008, fn. 50, 52.
[86] Ibid.
[87] Burnyeat 2008, 39.
[88] *Metaphysics* Λ, 1071b17-20, 1072b25-8.

expressed using a predicate nominative. Aristotle says: "Therefore it is necessary that there be a principle of this sort whose being is activity (ἡ οὐσία ἐνέργεια)."[89] There is no comparable passage that uses the dative construction found in our text. So while our text could clearly be an echo of *Metaphysics* Λ, it is not a direct quotation. In fact, there is a plausible way of reading this text that does not require that the productive intellect be identical to the actuality that is the divine intellect.

When Aristotle claims that something is actual in substance we can understand this claim as a contrast to the claim that something is potential in substance. To say that something is actual in substance is not to say that its substance is nothing but actuality or that is identical with actuality itself. On my interpretation (and on Gerson's), Aristotle is drawing attention to a distinction between the productive intellect and the receptive intellect. The receptive intellect was characterized in III 4 as potential in being: before it understands it is nothing in actuality.[90]As Aristotle puts it:

> Accordingly, what is called the intellect of the soul (I mean by intellect that by which the soul thinks and judges) is actually none of the things that have being before it understands them. (*DA* III 4, 429a22-24)
>
> ὁ ἄρα καλούμενος τῆς ψυχῆς νοῦς (λέγω δὲ νοῦν ᾧ διανοεῖται καὶ ὑπολαμβάνει ἡ ψυχή) οὐθέν ἐστιν ἐνεργείᾳ τῶν ὄντων πρὶν νοεῖν·

Here Aristotle claims that before the intellect understands it is no sort of being or substance in actuality. This suggests that once the intellect understands it can then said to be a being or a substance in actuality, ἐνεργείᾳ. This is true not because the intellect that understands is actuality itself, but just because it is actual in some significant and substance defining way.

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[89] *Metaphysics* Λ 6, 1071b18-19. δεῖ ἄρα εἶναι ἀρχὴν τοιαύτην ἧς ἡ οὐσία ἐνέργεια. A similar passage from chapter seven uses the same sort of construction: "For the life of intellect is activity, and [God] is that activity (ἐκεῖνος δὲ ἡ ἐνέργεια); and this activity in itself is the best and most eternal life." *Metaphysics* Λ, 1072b26-8. ἡ γὰρ νοῦ ἐνέργεια ζωή, ἐκεῖνος δὲ ἡ ἐνέργεια· ἐνέργεια δὲ ἡ καθ' αὐτὴν ἐκείνου ζωὴ ἀρίστη καὶ ἀΐδιος.

[90] *DA* III 4, 429a21-24.

On Gerson's version of the Platonist Intellect interpretation, intellect itself is actual in substance because it is always self-reflexively understanding. Intellect itself is not the same as the unique and absolutely actual divine intellect, but it can appropriately be said to be actual in substance. On my Human Intellect interpretation the productive intellect's status as a first producer of understanding, something with no need for anything to act on it and make it a producer, makes it actual in being.

Given that the receptive intellect is initially purely potential, there must be something which moves the receptive intellect from potentiality to act, to a state of having understanding of something. The productive intellect helps bring this about. The second sentence of this passage supports Aristotle's claim that the productive intellect is actual in substance. Since it is the originating principle and maker which acts on the matter of the receptive intellect, it is something that is more valuable, and thus in addition to the three positive characteristics it shares with receptive intellect it should be actual in substance, not potential. Further, if the productive intellect is not actual in its being it will need some further entity to make it actual so that it can carry out its activities. This chain will then continue until we come to something that is actual in its substance. If the productive intellect is actual in its being we have no need for further entities to account for the coming about of understanding. This interpretation is compatible with reading the dative either as a dative of respect or as specifying that in virtue of which the productive intellect is actual: it is actual because that is the sort of being that it has, unlike the potential being that characterizes the receptive intellect.

My Human Intellect interpretation is not as obviously compatible with the text as the Divine or Platonist Intellect interpretations. On both of these interpretations the productive intellect is always active and always understanding. On my interpretation, in contrast, the

productive intellect, while always able to produce understanding, is only actually producing understanding some of the time. Would Aristotle in fact claim that such an entity is actual in its being (τῇ οὐσίᾳ ὢν ἐνέργεια)? I think that there is evidence that ἐνέργεια is not always the same as activity. Aristotle is willing to describe entities that are in some state of actuality (in contrast to those that are just potential) as actual in their being, even when these entities are not activities or second actualities.

We see such usage in the *DA*. In *DA* II 7 Aristotle defines light as the ἐνέργεια of the transparent as such (418b9-10). In *DA* III 5, as we have just seen, he compares the productive intellect to light, which seems to serve as an example of a state (ἕξις): "[there is] the sort which has being by producing all things, as a sort of state (ὡς ἕξις τις), like light. For in a way light makes potential colors actual colors."[91] This passage suggests that Aristotle thinks light is more like a state in which something either is or isn't (remember that the transition between being dark and light is instantaneous for Aristotle) than it is like an ongoing activity. Aristotle can describe light as an ἐνέργεια in one passage and an ἕξις in another.

I also think that since Aristotle's claims in III 4 about receptive intellect being nothing actual in its being are about this intellect insofar as it's purely potential, any level of actuality, either first or second, would be sufficient to make the productive intellect actual in its being. Once the intellect has understood something at the level of first actuality it will retain this intelligible object and thus it will no longer be true that it is actually none of the things that have

[91] *DA* III 5, 430a14-17. ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἕξις τις, οἷον τὸ φῶς· τρόπον γάρ τινα καὶ τὸ φῶς ποιεῖ τὰ δυνάμει ὄντα χρώματα ἐνεργείᾳ χρώματα. There is also a passage in *DA* II 2 where Aristotle describes knowledge and health (first actualities) as "a form, an account and, so to speak, an actuality" (μορφὴ καὶ εἶδός τι καὶ λόγος καὶ οἷον ἐνέργεια) (*DA* II 2, 414a8-9). This passage is less decisive since, as Hendrik Lorenz pointed out, the οἷον could easily be taken as an *alienans* qualifier, meaning that knowledge and health do not really count as actualities in the sense of ἐνέργεια.

being. On my interpretation achieving the first actuality of understanding is sufficient to give the intellect actual being, to give it being ἐνεργείᾳ.

It's also worth noting that when Aristotle restates this claim at 429b30-31 he uses ἐντελεχεία as a synonym for ἐνέργεια: "ὅτι δυνάμει πώς ἐστι τὰ νοητὰ ὁ νοῦς, ἀλλ' ἐντελεχείᾳ οὐδέν, πρὶν ἂν νοῇ." Of course, ἐντελεχεία can be used for both first and second actualities as we see from Aristotle's discussion in *DA* II 1. To me, this use of a synonym further supports my contention that the contrast Aristotle is drawing in these two passages is between something that is entirely potential (the intellect before it receives any intelligible forms) and something that is actual in some way or other, whether at the level of first or second actuality (so that both possessing knowledge and exercising knowledge would count as actual).

If my reading of this passage is correct, then Aristotle could appropriately claim that the productive intellect is actual in its being, since it is, on my interpretation, being compared with the receptive intellect being talked about in III 4. If the being of the receptive intellect is entirely potential and not actual at all, then the active intellect only needs to be, in some appropriate and contrastable way, a being in actuality. This, in my view, could be satisfied by its always being at the level of first actuality (and sometimes at the level of second actuality) since this would be sufficient for its being not to be entirely potential. It does not need to be some continuous activity for its being to be actual.

An opponent of the Human Intellect interpretation could object to my reading of this III 4 passage since my reading relies on thinking that Aristotle sometimes uses νοεῖν to refer to the first actuality of coming to possess knowledge, when, in fact, it's standardly used to refer to the second actuality of actually exercising knowledge. To begin with, it's worth noting that at least some Divine Intellect interpreters, such as Burnyeat, read the III 4 passage in the same way that I

do.[92] There are also some passages in the *DA* where νοεῖν is used in such a way. *DA* III 3, 427b8-11, for instance, groups under the heading of νοεῖν a number of different intellectual activities including, inter alia, practical wisdom (φρόνησις), knowledge (ἐπιστήμη), and true belief (δόξα ἀληθής), all first actualities. I think the context of the III 4 passage gives us good reason to think that Aristotle is speaking of acquiring a first actuality. Aristotle seems to clearly be explaining the transition to first actuality (after the intellect has achieved this transition it is, in fact, something in actuality, even when not at the level of second actuality). Before the receptive intellect acquires any intelligible forms it is nothing in actuality. After it has acquired an intelligible form (and thus, in a sense, acquired understanding) it is something in actuality, even if it is not actively exercising its understanding.[93]

Thus, Aristotle's characterization of the productive intellect is compatible with my Human Intellect view. On my position the productive intellect is a human intellectual power with a number of similarities to the receptive intellect, but actual in its being and of greater worth since it is the maker and agent, not the recipient and matter. I have provided evidence that Aristotle could claim that the productive intellect, as I understand it, is actual in its being. The Divine and Platonist Intellect interpretations can also make sense of this part of the text, though Aristotle's claim that the productive intellect is unmixed does not fit entirely smoothly with the Divine Intellect interpretation.

[92] Burnyeat 2008, 34-7.

[93] The text printed by Ross in the OCT at 429b9 (he prints διʼαὐτοῦ instead of δέ αὐτον) suggests that Aristotle is claiming that νοεῖν happens only after the first actuality has already been achieved, contrary to my interpretation, but there is no reason to adopt Ross's reading. It has no manuscript support and is only adopted by Ross because he does not think one can make good sense of what the manuscripts actually read: that the intellect is now able to understand itself. Jannone and Siwek print δέ αὐτον. Gerson (among many other commentators) has shown that we can in fact make good sense of this claim.

c. Knowledge

> Now actual knowledge is the same as the thing known. Potential knowledge is prior in time in any one [individual], yet universally it is not prior in time. But [it] does not sometimes understand and sometimes not understand.[94]

τὸ δ' [19]
αὐτό ἐστιν ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι· ἡ δὲ [20]
κατὰ δύναμιν χρόνῳ προτέρα ἐν τῷ ἑνί, ὅλως δὲ οὐδὲ χρόνῳ,
ἀλλ' οὐχ ὁτὲ μὲν νοεῖ ὁτὲ δ' οὐ νοεῖ.[95]

Having considered both of the basic intellectual powers, the receptive intellect and the productive intellect, Aristotle now characterizes the state of the intellect once knowledge has been achieved, contrasting it with the characteristics of the receptive and productive intellects. He notes that actual knowledge is the same as the thing known. This is a point of contrast between the receptive or potential intellect and the intellect which has been actualized and has received knowledge. Actual knowledge is identical with the actual object of knowledge but the receptive intellect, when potential, is not identical with the potential objects of understanding. Potential knowledge is prior in any given individual, since we are first potential knowers and then come to actual knowledge. Universally, however, Aristotle holds that actual knowledge is prior to potential knowledge even in time. The claim here is a particular instance of the general characterization of the priority of actuality to potentiality in time that Aristotle offers in *Metaphysics* Θ.[96] It is only because actual knowledge already exists that we can now come to actually know something from potentially knowing that thing. If there were no actual knowledge

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[94] *DA* III 5, 430a19-22.
[95] *DA* III 5, 430a19-22.
Line 19: τὸ δ' αὐτό… 22. οὐ νοεῖ secl. W. D. Ross || τὸ δ' αὐτὸ] τὸ αὐτὸ δὲ omnes codd. (S om. τὸ) praeter ELPF^{c}So ||
Line 21: ἐν τῷ] ὡς τὸ m. WH^{c1}N^{c}m^{1}R^{c}iySim^{clp}So Plut. ap. Phil. || οὐδὲ] οὐ ELW^{1}P^{c1}H^{c1}Phil^{c} ||
Line 22: οὐχ om. WH^{c1}N^{c}m^{1}R^{c}iySim^{clp}So Plut. ap. Phil. || ὁτὲ δ' οὐ om. W^{1}, ἀλλ' ὁτὲ μὲν οὐ νοεῖ, ὁτὲ δὲ νοεῖ W^{2} ||
I discuss whether we should retain the οὐχ in my interpretation of III 5. Given that it is in the majority of mss., I follow Jannone and Ross in leaving it in the text.
[96] *Metaphysics* Θ, 1049b18-1050a3.

we could not come to actual knowledge and thus we would not be potential knowers. It is reasonable that a discussion of the condition of the actualized intellect would follow after Aristotle had characterized the two intellectual powers necessary for knowledge and so, contra W. D. Ross, I think that nothing requires us to excise this passage from III 5.[97]

We now come to a difficult sentence: "[it] does not sometimes understand and sometimes not understand."[98] Our interpretative difficulty is compounded by the fact that some manuscripts and ancient commentators omit the οὐχ leaving a sentence that reads "[it] sometimes understands and sometimes does not understand."[99] I actually favor this reading of the text since it makes straightforward sense as a claim about potential knowledge, which seems to be the grammatical subject of this clause. Since, however, the Divine and Platonist Intellect interpreters will want to preserve the οὐχ, as both Ross and Jannone do, I will first consider how to interpret this sentence on that manuscript reading. I will then consider how we should read this sentence if the οὐχ is omitted.

The first major question is what we should understand the subject of this sentence to be. Grammatically the best candidate is potential knowledge (ἡ [ἐπιστήμη] κατὰ δύναμιν). If, however, we retain the οὐχ then Aristotle's claim no longer plausibly applies to potential knowledge, as it is implausible to think that it is something that does *not* sometimes understand and sometimes not. Many interpretations, then, take the subject to shift. There are two alternative candidates: actual knowledge (or perhaps the actualized intellect that is the subject of this knowledge) or the productive intellect. If we take the first option, which is compatible with the Human Intellect view, Aristotle will simply be concluding this passage by pointing out another

[97] Cf. *SLDA* III 10, 173-191.
[98] *DA* III 5, 430a22.
[99] οὐχ om. WH^{c1}N^{c}m^{1}R^{c}iySim^{clp}So Plut. ap. Phil. In his editions, Siwek prints the sentence without the οὐχ.

contrast between actual knowledge (or the actualized intellect) and the receptive and productive intellects. Whereas the receptive intellect sometimes understands and sometimes does not and productive intellect sometimes is active in producing understanding and sometimes is not, actual knowledge consists in understanding. The claim that actual knowledge does not sometimes understand and sometimes not understand may sound somewhat odd, but there are several places in Aristotle's works of natural philosophy where he uses similar phrasing to make a claim about an essential property of something. For example, in *Physics* VIII 1 Aristotle claims that one of the ways in which something can possess some characteristic by nature is if it does not sometimes have that characteristic and sometimes not have it.[100] He illustrates this with the case of fire: fire goes up by nature, it does not sometimes go up and sometimes not. Thus the claim Aristotle is making in this passage could be a claim about the nature of knowledge: knowledge always consists in understanding just as fire always goes up. This interpretation is more natural if we take the understanding in question to be first actuality or dispositional understanding, not as the exercise of understanding, the second actuality of understanding, so this reading faces the same sort of challenge as my reading of the passage in III 4 about the intellect being nothing in actuality before it understands.[101]

If, in contrast, we take the productive intellect as the subject then Aristotle's claim seems to support the Divine Intellect or Platonist Intellect interpretations on which the productive intellect is a subject of understanding, a freestanding intellect which always understands. On the Human Intellect view it would be odd to say that the productive intellect "does not sometimes understand and sometimes not understand." This reading favors the alternative interpretations.

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[100] *Physics* VIII 1, 252a17-19. Cf. *Physics* 252a4, *Metaphysics* 1063a16, *Meteorology* 343b27.

[101] As noted above, *DA* III 3, 427b8-11 offers an example of τὸ νοεῖν used in this sense as there it includes practical wisdom, knowledge, and true belief, which are typically first actualities. ἀλλ' οὐδὲ τὸ νοεῖν, ἐν ᾧ ἐστι τὸ ὀρθῶς καὶ τὸ μὴ ὀρθῶς, τὸ μὲν ὀρθῶς φρόνησις καὶ ἐπιστήμη καὶ δόξα ἀληθής, τὸ δὲ μὴ ὀρθῶς τἀναντία τούτων.

Burnyeat reads this sentence as providing a reason for the priority of actual knowledge to potential knowledge. It is "because the intellect under discussion is not a thing that exercises its understanding at some times while at other times it does not," that actual knowledge is universally prior in time to potential knowledge.[102] While this is an ingenious reading it undercuts Aristotle's concession that potential knowledge is prior in each individual and ruins the parallel with *Metaphysics* Θ. Aristotle is conceding here that in each individual potential knowledge is prior in time to actual knowledge, suggesting once again that he is speaking in this chapter of human knowers and human intellects. It is only when we consider things on the whole that we see that there is a sense in which actual knowledge is prior in time to potential knowledge. Aristotle's argument in *Metaphysics* Θ for the priority in time of actuality to potentiality does not require some particular individual that has always actually possessed the form in question and there is no reason to think that Aristotle needs such a claim here. Given the concession that potential knowledge is prior in the individual, it makes better sense to read his argument as being the same one he gives in *Metaphysics* Θ. It is only because actual knowledge preexists in someone (whether that is god or another human being) that we can now come to actually know something from potentially knowing that thing.

If, then, the οὐχ is retained, it is not obvious what the subject of the sentence should be. If we do take it to be the productive intellect, the views expressed fit well with the Divine and Platonist Intellect views, but not with the Human Intellect view. We may also take the subject to be actual knowledge in which case Aristotle's claim fits perfectly well with the Human Intellect view.

[102] Burnyeat 2008, 39.

The easiest and most attractive option for the Human Intellect interpretation is simply to excise the οὐχ. There are some grounds for doing so. In fact, some scholars, notably Siwek and Torstrik, have argued that it should be excised. Siwek notes that 17 of the 65 manuscripts that he examined omit οὐχ. Although it is a minority of manuscripts they come from a wide variety of families and several of the most important ancient commentators omit it.[103] Torstrik argues that it is a Neoplatonic interpolation.[104] Further, the reading without the οὐχ also gains some credence from the fact that it is the only one on which potential knowledge, the most natural grammatical subject, can plausibly be retained as the subject. However, all of the oldest and most authoritative manuscripts include the οὐχ.

The testimony of ancient commentators is also somewhat mixed. The author of the Simplicius commentary on this passage clearly reads the text without the οὐχ and gives no indication of being aware of any textual variation.[105] Themistius, however, reads the οὐχ and gives no indication of being aware of any version without it.[106] Pseudo-Philoponus also reads the οὐχ without any indication of alternative readings.[107] Philoponus's own commentary on book three, which survives in a Latin translation by William Moerbeke, notes that there are two variant readings of this passage, one with two negatives and one with only one.[108] He speaks of some who accept two negatives as compared to those who delete one negative, suggesting that the dominant or most authoritative texts at that time had two negatives.[109]

There is, therefore, evidence that some ancient manuscripts did not have the οὐχ, but versions including it seem likely to have been predominant. One can also imagine scribes

[103] Siwek, 333.
[104] As cited in Siwek, 333.
[105] Simplicius, *In Libros Aristotelis De anima Commentaria*, *CAG*, 245.17-38.
[106] Themistius, *In Aristotelis Libros De Anima Paraphrasis, CAG*, 101.18-30.
[107] Pseudo-Philoponus, *In Libros Aristotelis De anima Commentaria, CAG* XV, 538.34-539.10. On the question of its authorship see "Philoponus" 2000, 1-10.
[108] See Charlton 1991, 4-12 for discussion of authenticity and authorship.
[109] Philoponus 1966, 59.27-60.37.

altering the text in either direction. Those committed to denying that Aristotle is speaking here of a divine intellect may have deleted the οὐχ. Conversely, Platonists seeking to harmonize Aristotle's views on the intellect with those of Plato may have added in the οὐχ. In the absence of more direct evidence of alteration, it is hard to come to any conclusive conclusion about the most likely direction for tampering, especially given the ingenuity of commentators at harmonizing the text with their views (for instance, both Philoponus and Pseudo-Philoponus interpret the text with the οὐχ in a way that they feel makes it fits well with the Human Intellect view).

What, then, should we take the status of the οὐχ to be? Can we delete it or must it be retained? In my view, the significant number of manuscripts without it combined with the multiple ancient commentators who clearly indicate that their manuscripts lacked it, make excising the οὐχ a viable option. It is the option I prefer and the one that I believe fits best with the Human Intellect interpretation. Given, however, that the most authoritative manuscripts retain it and that ancient commentators are split, relying on excising the οὐχ is a significant cost for the Human Intellect interpretation.

If we delete the οὐχ so that the sentence reads "[it] sometimes understands and sometimes does not understand," then it is simply making a straightforward claim about the character of potential knowledge as opposed to actual knowledge. Sometimes potential knowledge is made actual and results in understanding and sometimes it is not. Such a claim is compatible with any of the interpretations of III 5 and does not offer particular support to any of them. I think this is the easiest and perhaps the best way to read this sentence. Given that the most authoritative manuscripts operate with the alternative reading, this sentence fits more easily

with the Divine Intellect and Platonist Intellect interpretations than with the Human Intellect interpretation

d. Concluding Remarks

> When separated, this alone is the very thing that it is and this alone is undying and everlasting. But we do not remember because this is impassible, but the passive intellect is destructible. And without this, it understands nothing.[110]

χωρισθεὶς δ' ἐστὶ μόνον [22]
τοῦθ' ὅπερ ἐστί, καὶ τοῦτο μόνον ἀθάνατον καὶ ἀΐδιον. οὐ
μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὁ δὲ παθητικὸς
νοῦς φθαρτός· καὶ ἄνευ τούτου οὐθὲν νοεῖ.[111] [25]

On my reading, Aristotle now turns to the question of the separability of the human intellect and soul from the human body. He has argued in III 4-5 that the intellect and its activities are immaterial. Neither the receptive or productive intellect is the form of any part of the body and their activities are also not bodily. Given this and given that the intellect is a power of the human soul, intellectual activities are proper to the soul. This means that the soul meets the criteria for separability in existence that Aristotle laid out in books one and two of the *DA*.[112]

In my view, we should read the claims Aristotle makes in this section as concerning the entire intellect. The antecedent of τοῦτο is the intellectual power in opposition to the other powers of the soul. Since the intellect is the only power of the soul whose activity is non-bodily it is the only power of the soul that continues to be active and is undying and everlasting. I will argue that we should not take the passive intellect (ὁ παθητικὸς νοῦς) mentioned here to be the

[110] *DA* III 5, 230a22-5.
[111] *DA* III 5, 230a22-5.
Line 22: ἐστὶ om. V, post μόνον in xW ||
Line 23: ἀΐδιον καὶ ἀθάνατον in xW || WH^{c1}N^{c}m^{1}R^{c}iySim^{clp}So Plut. ap. Phil. ||
Line 24: μνημονεύομεν…431b17 ἐκεῖνα desunt in E || παθητικὸς rell.: παθητὸς H^{a} ||
I discuss whether we should read παθητικὸς or παθητὸς in my interpretation of III 5 (see fn. 120 below).
Line 25: οὐδὲ X ||
[112] See Chapter II, section 6.

same as the potential intellect of III 4. Instead, it should be understood as that aspect of the intellect which concerns perceptible things and directly relies on sense perception.

I take the first part of this sentence to be noting that the intellectual power is the only power whose activity is not bodily and thus the only power that truly is the soul's actuality and truly *is*, as opposed to having being as the formal aspect of some soul-body compound. The intellect can be separated because it has its own activity and thus can be what it is on its own. The powers other than that of intellect will no longer be active and may no longer actually persist, since they are powers of parts of the human body, and this body has been destroyed. The intellect is undying and everlasting, but they are corruptible and pass away with the body. As I discussed in Chapter V, however, the survival of the intellect is sufficient for the survival of the whole human soul and even the human being, on several plausible interpretations.

Although the claim that the entity in question is undying and everlasting may seem to fit better with the Divine Intellect interpretation, my reading offers a better interpretation of this passage. First of all, we should note that on my interpretation Aristotle is affirming a possibility he explicitly suggested in *Metaphysics* Λ 3: intellect and the sort of soul which has intellect do survive after the destruction of the body in a way which other forms do not. Since intellectual soul can exist on its own apart from the body and is immaterial, it is not subject to change or decay and can rightly be called undying and everlasting. Given that Aristotle brings up these claims elsewhere, there is nothing strange about his affirming them here.

The Divine Intellect interpretation has difficulty accounting for the separation mentioned in this sentence. Burnyeat and Caston argue that χωρισθεὶς, the aorist particple, does not always imply a past act of separating.[113] This is no doubt true but they still need to give a satisfactory

[113] Burnyeat 2008, fn. 54, 53; Caston 1999, 208.

account of why Aristotle mentions separation. Burnyeat translates, "And being separated [sc. from everything else], it is what it is essentially and nothing else." He reads Aristotle as speaking of the intellect's distinctness from things, but he does not explain why we are in danger of not taking the divine intellect to be separate. It is also far from clear why Aristotle should employ an aorist principle instead of an adjective or some other straightforward expression.

Frede takes the separation here as temporal: the divine intellect leaves us when we die and then truly is what it is, but this again outlines the need for a satisfactory account of what the union of the divine intellect with us consists in. If we take the divine intellect to be united to us because the divine intellect is the agent or producer of our thought, then the union consists in its activity, the activity of the agent, being present in the patient. Understood in this way, it is hard to see how the activity of the divine intellect which is bringing about or contributing to our understanding could be separated from the human intellect and then be what it truly is.

Perhaps the claim is that then the divine intellect will simply be what it is, instead of also serving as a cause for our activity. If, however, the divine intellect is the productive intellect only insofar as it is the agent of our thought, it is hard to see how the productive intellect, as such, could survive the destruction of the composite. Gerson's Platonist Intellect interpretation is in better shape, as he can claim that intellect itself simply returns to its everlasting and undying self-reflexive activity. When separated, only its own understanding continues; it no longer helps to produce our understanding as well.

The claim that this alone is undying and everlasting also creates difficulties for Caston's version of the Divine Intellect interpretation as it is difficult to specify a comparison class for which the claim holds true. If Aristotle is speaking about all things or all souls or all intellects, why claim that only the divine intellect is undying and everlasting? Surely the other unmoved

movers and perhaps other entities share the same features. Frede's version fares better, as he can claim that since Aristotle is speaking of the divine intellect insofar as it is present in our souls, the contrast is with the rest of our souls (and with our bodies). Gerson's Platonist Intellect interpretation is also in better shape since he can take the comparison to be between intellect itself and the intellect or understanding or our soul or of us as composite things.

Aristotle then claims that "we do not remember because this [sc. the intellect] is impassible, but the passible intellect is destructible." I understand Aristotle as claiming that we no longer remember or perform other cognitive activities that are essentially bodily after death. I take the claim about memory to concern the failure of memory after death, and not as a quasi-Platonic claim which is supposed to account for our failure to recollect the existence of our souls prior to this life.

Caston translates ὅτι not as "because," but as "that." We often fail to recall that while the divine intellect is impassible our passible understanding is corruptible. This reading, while ingenious, is not particularly plausible. Aristotle usually restricts verbs of remembering to discussions of memory of perceptible things. I am not aware of any other instance where he describes our failure or difficulty to hold some belief in terms of a failure of memory. The three other occurrences of μνημονεύομεν in the corpus all concern memory properly speaking.[114] None of them are about memory of some philosophical claim or other or involve some error concerning truth or falsity.

Frede claims that this sentence is supposed to account for our error, for the faults of human reason. Aristotle is claiming that we do not remember, that we err, because even though the divine intellect is impassible, our intellect, unlike the divine, is corruptible.[115] This

[114] *De memoria et reminiscentia*. 450b15, 451b16; *Problemata*, 956a8.
[115] M. Frede, 384.

interpretation is similarly implausible because it also relies on an intellective use of verbs of memory that is not attested in Aristotle. Frede also does not specify exactly how this claim accounts for the error in our thinking. The corruptibility of our intellect would explain why the intellect ceases to be and might contribute to explaining why it is fallible, but the corruptibility of the intellect itself would hardly be the most important characteristic in explaining our intellectual failings. Further, Aristotle rejects the idea that we can properly be said to err concerning our understanding of something. He makes this claim in the *DA* and repeats it in *Metaphysics* Θ.[116] There he clarifies the claim, suggesting that we can only grasp or fail to grasp the essence of something, we cannot err or falsely grasp the essence. Given that understanding is the only intellectual activity that Aristotle has accounted for at this point in the *DA*, it is implausible to read this sentence as speaking of intellectual failings.

Burnyeat agrees that Aristotle is speaking of the failure of memory after the destruction of the composite human being, but understands the implications of this very differently:

> the lack of memory testifies to an important sense in which the life of the intellect is not *ours*, not part of our personal life. *Metaphysics* Λ 9 rather suggests that, to the extent that we become God for a while, we were the divine intellect understanding *itself* as that which understands all.[117]

As I understand it, Burnyeat is claiming that we do not remember any occasion on which we understood things because, on such an occasion, we were not in fact ourselves, but instead were temporarily the divine intellect itself, an intellect which is impassible and does not produce memories. It's unclear what sort of experience Aristotle is appealing to on this interpretation: perhaps Aristotle woke up after contemplating and failed to remember his previous contemplative activities, but I certainly have met few human beings who have forgotten their most successful moments of understanding.

[116] *DA* III 9, *Metaphysics* Θ 10.
[117] Burnyeat 2008, fn. 55, 53-54.

Hendrik Lorenz has suggested to me a more plausible Divine Intellect understanding of Aristotle's claim. According to him, Aristotle's point may be about our memory of the divine intellect's life. We don't remember in our current embodied lives the immortal and everlasting life of agent intellect, even when we are united with it for a while, because being impassible in the very strong sense that it is, it never accumulates memories. In understanding we become united with something that has eternally existed and eternally understood, but we cannot access this understanding with our memory because of the impassibility of the divine intellect.

This view is more plausible than Burnyeat's interpretation, but like it, it relies on the claim that our understanding is identical to the divine understanding, a claim which seems to go against the contrast between human and divine understanding found in *Metaphysics* Λ 7. Here Aristotle claims that God not only understands things better than us because he is always in the state of understanding that we are in at our best, he is in fact in a better condition of understanding than any we could ever achieve.[118] These interpretations require the view that human understanding becomes strictly identical with the divine understanding, a view that does not seem to fit well with this passage from the *Metaphysics*.

Thus Divine Intellect interpreters can offer some account of Aristotle's claims about memory, but these claims do not easily or straightforwardly harmonize with their views. Gerson's Platonist Intellect interpretation, again, fits more easily with the text. Gerson claims that we no longer remember because now we are just intellect itself, not the passive intellect, which he understands as the attribute that intellect has insofar as it comes to be in a composite human being and operates employing our powers of imagination.[119] Intellect, when separated, just is what it is and that does not include memory or images.

[118] *Metaphysics* Λ 7, 1072b19-29.
[119] Gerson 2004, 367-9.

What is the passive or passible intellect, ὁ παθητικὸς νοῦς, which is described as corruptible?[120] On the Divine Intellect view this is the human intellect, the receptive intellect mentioned earlier in the chapter, which is here being contrasted with the divine intellect. Similarly, on the Platonist Intellect view, it is the receptive intellect of the composite human being which is being contrasted with intellect itself. On the Human Intellect view, the passible intellect mentioned here is either that aspect of the intellect which concerns perceptible things and directly relies on sense perception or, less plausibly, refers, not to a part of the intellect, properly speaking, but to images and the aspect of the soul responsible for them, the sensitive power.

The Divine Intellect interpretation can plausibly take ὁ παθητικὸς νοῦς to refer to the receptive intellect contrasted at the beginning of this chapter with the active or productive intellect, which would then be taken as the antecedent of τοῦτο. Ποιητικός, the adjective used earlier in the chapter to describe the productive or active intellect, is often used in opposition to

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[120] Jannone reads παθητός instead of παθητικός. This reading makes my interpretation easier as παθητός is not as directly correlated with ποιητικός and Aristotle repeatedly characterizes the receptive intellect of III 4 as being ἀπαθής, a word which is used in opposition to παθητός in the *De Mundo*. However, I think there are reasons to be dubious of this reading.

On the one hand, Jannone argues that H^a, is a particularly authoritative one. According to Jannone H^a is an 11th century manuscript of excellent quality, although the dating offered by some other scholars is significantly later. According to him it is the work of one hand, is very clear, and rarely contains abbreviations or elisions. It shares in some characteristics of the EL family and some of CWySUVX, but there are 100 readings which are proper to it. Due to its agreements with both the EL family and CWySUVX it likely reflects an ancient manuscript. It also agrees with Alexander in a number of places where other manuscripts do not, suggesting that H^a may reflect readings that were in manuscripts familiar to him, but were lost in the other manuscript families (Jannone, xxxii-xxxviii).

There are two main reasons not to read παθητός. To begin with, it is found only in H^a. A more serious difficulty is the lack of attested usage elsewhere in Aristotle or his contemporaries. We find παθητός in the feminine in two places in *De Mundo*, where it is contrasted with ἀπαθής, but this is of no help if the *De Mundo* is inauthentic and of a later date (*De Mundo* 392a31-4, 392b5-13). There is one occurrence in a fragment from Heraclides Ponticus given in Sextus Empiricus and the word is also found in one of the sententiae of Menander (Heraclides Ponticus, *Fragmenta*, 120, line 6. Menander, *Sententiae*, Section 1, line 457). Although these thinkers were contemporary with Aristotle, the late date of the report from Sextus and the fact that not all the sayings conventionally included in Menander's sententiae come from Menander himself mean that these occurrences may not offer solid evidence that this was a word in usage in Aristotle's time. It begins to be found regularly in fragments from Chrysippus and occurs multiple times in Philo, Plutarch, and Alexander of Aphrodisias and thus it is not implausible that a later scribe may have written παθητός in place of παθητικός.

Despite Jannone's arguments on behalf of H^a, retaining παθητικός seems to be the best option.

παθητικός.[121] Further, the receptive intellect is described as "that which is acted upon" (τὸ πάσχον) in comparison to "that which acts" (τὸ ποιοῦν), the productive intellect. This part of the passage fits well the Divine Intellect interpretation, on which the divine intellect acts on the passive human intellect, and with the Platonist Intellect interpretation, on which intellect itself acts on the composite human being to produce a passive intellect.

We are not, however, forced to identify ὁ παθητικὸς νοῦς with the potential intellect of III 4. In fact, given what Aristotle has claimed previously, the connection between the potential or receptive intellect and corruptibility is far from obvious. Although in general Aristotle thinks that things that are παθητικός, subject to affection, are, as such, corruptible, this connection does not straightforwardly apply in the case of the human intellect since it is not subject to affection in the standard way. Indeed, Aristotle has argued in III 4 that the receptive or potential intellect is not mixed with a body and not subject to ordinary alteration, leaving us with no reason to think that this intellect is corruptible. Further, if my reading of Aristotle's characterization of the productive intellect in the lines above is correct, all the characteristics that make the productive intellect not liable to corruption also belong to the receptive intellect, save for its status of being actual in substance.

We should also note that the potential intellect is responsible for our understanding of something, but is not primarily responsible for memory, which belongs to us primarily in virtue of the power of sense-perception.[122] If the contrast in this sentence is between a separated productive intellect and a human receptive intellect, then Aristotle could much more clearly and pointedly have claimed that we fail to perform intellectual activities after death, instead of using the example of memory. We have also been given no direct indication or reason for thinking that

[121] Cf. *Metaphysics*, 1021a15, *Physics*, 255a35.

[122] *De Memoria*, 1, 451a15-18. Aristotle does note that memory belongs to the intellect incidentally (*De Memoria*, 1, 450a13-14).

the potential intellect is corruptible. Aristotle does not make any reference to the most plausible reason he might think that the human intellect is subject to corruption or destruction: the connection between images and understanding. Those who think that this connection is decisive in establishing that the human intellect is not separable in existence would reasonably expect that Aristotle would mention this connection when discussing the destructibility of the intellect, but he does not.

What, then, on the Human Intellect interpretation, is Aristotle referring to when he speaks of the passible intellect? One option, put forward by Thomas Aquinas among other, is to take ὁ παθητικὸς νοῦς to refer to images and the aspect of the soul responsible for them, the sensitive power, insofar as they contribute to understanding. On this option a number of problems dissolve. Memory involves a certain use of images and comes from the sense power.[123] If ὁ παθητικὸς νοῦς refers to this power, then Aristotle would be accounting for why memory does not persist. Moreover, the sensitive power is an actuality of the body and therefore ceases to exist when the body corrupts, so no extended argument is necessary for Aristotle's claim. There are also a number of passages in which Aristotle uses νοῦς in a wider sense that encompasses imagination, so such an extended use of νοῦς is not unprecedented.[124] Nevertheless, taking Aristotle to be using νοῦς in such a relaxed sense here in a context where he is explicating the nature of νοῦς, properly speaking, results in a strained and rather implausible reading, so I do not think we should adopt this option.

The other, more plausible, alternative is to understand ὁ παθητικὸς νοῦς as referring to that aspect of the intellect which concerns perceptible, particular things and directly relies on sense perception. We have already seen a distinction between more and less universal sorts of

[123] *De Memoria* 1.
[124] Cf. *DA* III 3, 427b-428a5, III 7 431b2-9, III 10, 433a9-14, *De Motu Animalium* 6, 700b17-22.

knowledge in the *DA*. In *DA* II 5 Aristotle claims that although in general understanding can be exercised at will (unlike perception, which depends on the presence of particulars), certain types of knowledge require particulars and depend on externals:

> Actual [perception] corresponds to contemplating. There is this difference, however, that in the one case the things that bring about the activity — the object of sight, the object of hearing and likewise for the other senses — are external. The explanation is that actual perception is of particulars, while knowledge is of universals. These universals are, in a way, in the soul itself. Hence it is up to someone to understand whenever he wants, but perception is not up to him; for the presence of the perceptible object is necessary. It is much the same in the case of those bodies of knowledge concerning perceptibles, and on account of the same cause: that perceptibles are particulars and external. [125] (*DA* II 5, 417b18-28)

The sorts of knowledge that are about and centrally concerned with particulars cannot just rely on the universals in the soul, they need external particulars to be activated. Such knowledge can, then, only be activated when one has a body equipped with sense-organs.

On this reading ὁ παθητικὸς νοῦς refers to those aspects of the intellect that deal with and require particulars to operate. This would include the branches of knowledge concerned with particulars and the aspect of the intellect responsible for ἐπάγεσθαι, induction. Aristotle's characterizes the activity of ἐπάγεσθαι as being a non-deductive cognitive transition from something particular to something universal.[126] Most of his examples involve moving from perceptible particulars, so it is plausible to think that the activity of induction, or at least most of its instances, could not be carried out if the intellect were separated from the body. On this reading Aristotle is pointing out the cognitive consequences of the destruction of the body. Cognitive activities such as memory could no longer be carried out and the intellectual activities

[125] τὸ κατ' ἐνέργειαν δὲ ὁμοίως λέγεται τῷ θεωρεῖν· διαφέρει δέ, ὅτι τοῦ μὲν τὰ ποιητικὰ τῆς ἐνεργείας ἔξωθεν, τὸ ὁρατὸν καὶ τὸ ἀκουστόν, ὁμοίως δὲ καὶ τὰ λοιπὰ τῶν αἰσθητῶν. αἴτιον δ'ὅτι τῶν καθ' ἕκαστον ἡ κατ' ἐνέργειαν αἴσθησις, ἡ δ' ἐπιστήμη τῶν καθόλου· ταῦτα δ' ἐν αὐτῇ πώς ἐστι τῇ ψυχῇ. διὸ νοῆσαι μὲν ἐπ' αὐτῷ, ὁπόταν βούληται, αἰσθάνεσθαι δ' οὐκ ἐπ'αὐτῷ· ἀναγκαῖον γὰρ ὑπάρχειν τὸ αἰσθητόν. ὁμοίως δὲ τοῦτο ἔχει κἀν ταῖς ἐπιστήμαις ταῖς τῶν αἰσθητῶν, καὶ διὰ τὴν αὐτὴν αἰτίαν, ὅτι τὰ αἰσθητὰ τῶν καθ' ἕκαστα καὶ τῶν ἔξωθεν.

[126] *Posterior Analytics* I 1.

which depend on memory and imagining particulars, such as induction and knowing more particular things, would no longer be possible.

Although this reading makes sense of the text, it is not as easy or straightforward a reading as those offered by the Divine Intellect and Platonist Intellect interpretations. The Human Intellect interpretation cannot cite any definition of ὁ παθητικὸς νοῦς that indicates it has precisely those aspects that this interpretation takes it to have. The other interpretations can simply equate ὁ παθητικὸς νοῦς with the receptive intellect discussed earlier in the chapter. On any reading this is a phrase that Aristotle uses in this passage but does not discuss or carefully define anywhere else. The Divine and Platonist Intellect interpretations point to the most plausible and immediate referent, but the concision of Aristotle's text makes it hard to be sure of what exactly he meant.

In the last sentence I take Aristotle to be summing up the contention of this chapter: without the productive intellect our intellect understands nothing. The receptive intellect can understand nothing apart from the productive intellect. This reading makes for a suitable conclusion to the chapter and raises no philosophical difficulties. Alternatively, the antecedent of the τούτου could be understood as the passible or passive intellect. However, this interpretation is unattractive both on my interpretation and on the Divine or Platonist Intellect interpretations. Neither of these interpretations wants to interpret Aristotle as holding that nothing understands (or, alternatively, intellect understands nothing) without a passive intellect, since on both of these interpretations the divine separated productive intellect can understand on its own, apart from any passive intellect.

5. Conclusion

I have carefully gone through the text of III 5, examining the strengths and weaknesses of the three competing interpretations. I want to now offer a final evaluation of these interpretations. I considered three versions of the Divine Intellect interpretation: Caston and Burnyeat's reading, Alexander of Aphrodisias' reading, and Frede's reading. I think both of the first two readings have problems that prevent them from being serious candidates for the best interpretation of this chapter. Caston and Burnyeat's view is committed to a number of claims that do not fit well with this chapter or with the rest of the corpus: 1) their insistence that the productive intellect is only a final cause 2) their claim that this chapter is an excursion into first philosophy and is not crucial to Aristotle's account of human intellect as such and 3) their claim that the divine intellect is a soul. Alexander's understanding of the context of the chapter is close to mine, but I think that his insistence that God, as such, is the first object of understanding is incompatible with Aristotle's views on the order of knowing.

Frede's reading is thus the most plausible version of the Divine Intellect interpretation. In evaluating it, I will start with the generic strengths and weaknesses it has a Divine Intellect interpretation. This interpretation can account for all the attributes of the productive intellect (though Aristotle's claim that it is unmixed seems somewhat odd). It also offers an explanation for why the productive intellect is always understanding while the receptive intellect is not. This interpretation has some difficulties with explaining Aristotle's claims about memory and with specifying what the divine intellect is being contrasted with when Aristotle claims that it alone (among some class or other) is undying and eternal. The biggest obstacle, however, for this interpretation is explaining the role of the productive intellect and giving an account of why the productive intellect needs to be identified with the divine intellect.

Aristotle's description of the productive intellect as a ἕξις does not fit well with the Divine Intellect interpretation's claim that this intellect is, in fact, pure actuality. Frede's particular understanding of the role of productive intellect also faces some serious challenges. Frede's version of this interpretation relies on holding that the divine intellect can properly be said to be in us in order to explain Aristotle's claim that it is to be found in the soul. There is some plausibility to this, but this claim seems to go against Aristotle's insistence in *Metaphysics* Λ 7 that God is in a better condition of understanding than we could ever achieve, a claim which suggests that we can never reach an understanding that is, strictly speaking, the same as the divine understanding.[127] Further, Frede's construal of the divine intellect (and thus the productive intellect) as an integrated system of essences is based on a number of conjectures about how to construe understanding and the divine intellect, conjectures with only slender textual support. Aristotle does nothing to introduce such ideas earlier in the text or prepare us for them. It is hard to see how one would arrive at Frede's views on the basis of the text of the *DA* or why the text of III 5 would be written as it is if Aristotle held Frede's view. Frede's account of understanding also does not appear to allow for the sort of error in understanding that Aristotle discusses in *DA* III 6. Finally, Frede's view does little to explain how I can initially acquire intelligible forms, the problem raised in III 4. Frede's interpretation can explain a few of this chapter's claims more easily than the Human Intellect view, but his view of the role of the productive intellect is less satisfactory and his account does not fit as well with the context and the claims about intellect made elsewhere in the *De Anima*.

The second rival interpretation is the Platonist Intellect view, as represented by Gerson. In some ways, this view fits most easily with the text of III 5. Gerson's account of the productive

[127] *Metaphysics* Λ 7, 1072b19-29.

intellect as intellect itself and the receptive intellect as intellect insofar as it is present in the composite explains why Aristotle makes the claims about them that he does. Despite its compatibility with the text of III 5, I think this interpretation falls short because it does not cohere well with Aristotle's overall views on the human being and the soul. As I have discussed above, Gerson's view rejects what I have argued is the best interpretation of Aristotle's views on the relationship between the human being and the soul: that the human being is the proper subject of all human activities, in virtue of the soul and its powers.[128] Gerson also does not fully explain what intellect itself is or how it can be always active while still being partly potential. He also gives us little evidence for thinking that Aristotle ever envisages the existence of some (human) intellect that is not a human soul or a part of human soul, particularly if we reject Gerson's interpretation of I 4, 408b18-31, as I have argued we should.[129] My rejection of Gerson's interpretation comes from my rejection of his overall views on the intellect and the human being, more than from a particular text in III 5 that he fails to explain.

I believe that the Human Intellect view, as I have laid it out, makes the best sense of *DA* III 5. My interpretation, on which the productive intellect is a power proper to us which acts to make things that are potentially understood actually understood, fits better with the text and with the claims about the intellect made in III 4-5 and elsewhere in the *De Anima*. In particular, I believe it offers the best account of the productive intellect. There is good evidence for thinking that, in Aristotle's opinion, the productive intellect is internal to the human being. He describes it as being "in the soul" and as being a state, a ἕξις, which would, most plausibly, be a state of the individual soul or person. My account, on which the productive intellect is the entity that explains how we first acquire intelligible forms, solves the problem from the end of III 4 about

[128] See Chapter IV for a defense of this view.
[129] Chapter III, section 2.

how our intellect comes to be affected. This interpretation coheres best with the context and with Aristotle's claims about the intellect elsewhere.

There are, however, a few passages that the Human Intellect view cannot explain as easily as its rivals. Aristotle's claim about the passible intellect is easier to understand and construe on the Divine Intellect or Platonist Intellect interpretations. It is also true that if we retain οὐχ in line 22, the unceasing understanding that is posited seems to go more naturally with these rival interpretations. Aristotle's claim that the productive intellect is actual in its substance may also fit more easily with the other interpretations, though I have argued that the Human Intellect interpretation can make good sense of it. In each of these cases, I have presented what I think is a viable reading, albeit one that is sometimes less satisfying than its rivals. Although the Human Intellect view faces difficulties in accounting for all of Aristotle's claims, I believe these difficulties are less serious than those of its rivals. The Human Intellect view gives Aristotle a more attractive and intelligible overall theory of understanding and other intellectual activities and explains why III 5 plays a crucial role in Aristotle's account of how human understanding can come to be.

IX. Noûς and the Possibility of Survival

1. Introduction

In this chapter I evaluate the overall evidence concerning Aristotle's views on the separability of the human soul and present the two most plausible interpretations of his overall views, the moderate Divine Intellect view and the Human Intellect view. I address several objections to the Human Intellect view based on alleged inconsistencies with other parts of Aristotle's thought. I conclude by arguing that Aristotle's views on the intellect clearly show that he is neither a materialist nor a Cartesian dualist. We should accept one of the two intermediate positions I present. I argue that the Human Intellect view, on which human beings persist and continue to understand after death, makes better overall sense of Aristotle's account of the non-bodily character of intellectual activities and on his insistence that our understanding is both human and divine.

As I showed in Chapter II, one of the key questions that Aristotle intends to address in the *DA* is whether the soul is separable in existence from the body. This question is formulated in the first chapter of the work, where Aristotle presents his separability condition: the soul is separable if it has some activity proper to it that is not shared with the body. The question of separability is then referred to at a number of points in the first two books.[1] In his discussion of the intellect and its activities in book three Aristotle presents two different sorts of claims which seem to suggest opposing answers to this question. On the one hand, he claims that the intellect (and its activity of understanding) does not employ a bodily organ and is separate from the body. This suggests that understanding meets Aristotle's separability condition and thus that Aristotle thinks the human soul is separable from the body. On the other hand, Aristotle claims that the activity of

[1] See Chapters II and III for discussion of these passages.

understanding does not occur without the use of images, suggesting that understanding is dependent in some way on the body and thus cannot be "without the body."[2]

Two different interpretations of Aristotle's position on the intellect and on the possibility of survival thus emerge. The first, the moderate Divine Intellect view, emphasizes the connection between understanding and images and argues that this connection means that understanding fails to meet the separability condition, even if it is, in an important way, non-bodily. The second, the Human Intellect view, emphasizes Aristotle's commitment to the universal and non-bodily character of understanding and argues that when the soul is separated from the body understanding need not require images. These two interpretations find their key locus of dispute in *DA* III 5, Aristotle's elliptical discussion of the productive intellect, its role in thought, and the ontological status of intellect. On the first interpretation, Aristotle is contrasting the productive intellect, which is a separate, non-human being, with the perishable human intellect. On the second interpretation, Aristotle is affirming the undying and everlasting status of the human intellect while also making clear the limitations of disembodied human thought: after the destruction of the body there is neither memory nor cognition of particular, perceptible entities.[3]

On the moderate Divine Intellect view Aristotle denies that human beings or any of our components persist after the destruction of the body. Although he does not think that any bodily process is a constituent of understanding, the dependence of understanding on imaginative activity means that it cannot be done without the body. Hence it fails to meet Aristotle's

[2] Cf. *DA* I 1, 403a8-10.

[3] In this chapter I will not offer any further examination of the Platonist Intellect view, according to which the productive intellect of III 5 exists separately from any individual human being, but is not the same as the divine intellect. Although, as I discussed in Chapter VIII, Lloyd Gerson has put forward a version of the Platonist Intellect interpretation that coheres reasonably well with the text of III 5, this interpretation requires holding that different human activities have different subjects. Such a position is not, in my view, compatible with the best interpretation of Aristotle's views on the soul, body, and intellect, according to which the human being is the proper subject of all human activities. See Chapter V, section 3 and Chapter VIII, sections 2 and 5 for further discussion of my reasons for rejecting this view.

separability condition. Aristotle carefully inquires into whether the soul is separable from the body, both because this is an important question in its own right and because he wants to conduct a serious examination of Platonist views concerning the immortality of the soul, but in the end he does not think that understanding meets the separability condition. The everlasting and undying intellect mentioned in III 5 does not belong to an individual human being.

On the Human Intellect view, in contrast, Aristotle introduces the separability condition because he thinks that understanding meets it. Understanding is not an activity that is done with the body, it only employs the soul. Human beings persist after death because we continue to understand, although we can no longer remember or experience emotions. Aristotle can reasonably maintain that understanding no longer requires images after the destruction of the body. The loss of the body removes the possibility of conflict with other cognitive powers, as these are no longer operative, and the need to coordinate our understanding with our spatiotemporal life; thus the intellect does not need to employ the imaginative power when separated from the body. Aristotle's empirical constraints on the acquisition of knowledge are still satisfied, as the objects of understanding would be limited to things that had been grasped while embodied.

2. Objections to the Human Intellect View

a. Methodological Objections

Which interpretation should we prefer? Many recent interpreters have opted for some version of the first interpretation, on which the human intellect does not persist after death.[4] Some have claimed that there are general methodological reasons for preferring an interpretation which denies that the intellect is separable, given Aristotle's commitment to the unity of soul and

[4] E.g. Burnyeat 2008, Caston 1999, Frede 1996.

body and his conception of humans as natural, physical beings. Commentators have also raised objections to some of the consequences of the Human Intellect view, objections arising both from philosophical difficulties and from alleged inconsistencies with other Aristotelian claims. I will address both sorts of objections and then describe why I favor the Human Intellect view.

Some commentators are strongly committed to claiming Aristotle as a precursor to contemporary materialism and enlisting him as an ally for contemporary debates in the philosophy of mind. However, one's own conviction that materialism is the most tenable position in the philosophy of mind is not a good reason for claiming that Aristotle is a materialist or denying that he thinks intellect is separable. The allegiance of many of his contemporary commentators to materialism of some sort and their unwillingness to countenance any sort of psychic activity without a material basis should not lead them to read these features into Aristotle, absent textual reasons coming from Aristotle's own corpus. Many commentators do, however, raise methodological and interpretive concerns based on positions internal to Aristotle's views. According to these commentators, if the soul or intellect was separable, then Aristotle's position on the unity of soul and body would be threatened and human beings would not be natural or material in the way Aristotle takes us to be. We would end up with something like a Platonist view of the soul and its relation to body.[5]

In Chapter V I addressed the concern that the separability of the intellect or intellectual activity would conflict with Aristotle's claim that the soul is the first actuality of an organized body. I argued that the soul, as the primary explanatory factor of all life-activities, will also be responsible for accounting for intellectual activities, whether or not these are bodily. I also

[5] Commentators who have raised these sorts of concerns include M. Frede 1995, 104-7; Wedin 1988; Hartman 1977; Wilkes 1978, 115f.; Sisko 1999, 253, 264-6. Jaeger and Ross both think that there is a tension in this aspect of Aristotle's thought between Aristotle's quasi-Platonic view of the intellect and his general un-Platonic view of soul and body (Jaeger 1934, 332-4; Ross 1957, 65-7).

maintained that intellectual activities belong primarily to the human being, whether or not they are bodily. I will now address the concern that the separability of the soul or intellect would threaten Aristotle's conception of humans as natural, physical beings. Michael Frede, in "On Aristotle's Conception of the Soul," presents an interpretation of Aristotle on which all psychic activities of human beings are natural or physical, in an Aristotelian sense. As he puts it:

> Aristotle seems to think that the so-called affections of the soul are just like all the other doings of living organisms. They are physical or natural the way he understands "physical": they have a material side to be described in terms of the material constituents of the organism and their features, and a formal side to be specified in terms of the natural capacities of the organism. It is this formal side which makes them the natural processes which they are.[6]

Frede sees Aristotle's comments on the nature of the intellect and its activities as a potential threat to the physical or natural status of psychic activities and of the soul itself. If intellectual activities are non-bodily or non-material then they will not be natural, in Aristotle's sense, and the human soul (and thus the human being) will, in some sense, fail to be natural. He claims that this danger gives us sufficient reason to adopt something like the first interpretation and deny that the intellect or its activities can exist without the body.[7]

There is, however, no reason to think that Aristotle is committed to claiming that human beings and all human activity are natural in the sense that Frede specifies. Indeed, on the most plausible version of the moderate Divine Intellect view, the interpretation that rejects the separability of the soul, Aristotle does not think that all human activities are natural in this sense. For Aristotle something's nature is an internal principle or cause of its being moved and being at rest.[8] A thing's nature determines the characteristic sorts of changes that it undergoes and is

[6] M. Frede 1995, 104.
[7] M. Frede 1995, 105-7.
[8] *Physics* II 1, 192b9-34.

subject to, as well as the sorts of changes it will resist.[9] For any given natural change there is both some material element that persists through this change and some new form, which is produced as a result of the change, and which replaces the form formerly possessed by the thing.[10] An apple, in turning red, takes on the form of red and loses the form of green while a creek-bed, as a result of rain, goes from being dry to being wet. This is the way in which Aristotle thinks that natural things have both formal and material constituents and that the natural changes they undergo also have both formal and material constituents.

As Frede himself acknowledges, however, this picture gets more complex in the case of living things with cognitive abilities.[11] As I argued in Chapter VI, Aristotle sharply distinguishes cognitive change from natural or material changes. Cognitive changes are not processes and are non-destructive. They do not essentially involve an entity replacing one form with another from the same range. Instead they involve a cognitive subject undergoing a transition from being in a state of receptivity, to exercising its cognitive activity. I go from not hearing to hearing middle C, from not seeing to looking at the sun sparkling off the waves. Aristotle applies this notion of cognitive change to both perception and understanding. In both cases Aristotle thinks that the cognitive changes involved in these activities are not natural changes, in Frede's sense, as the characteristic transitions they involve are not processes and are not destructive.[12] Aristotle thinks that the exercise of seeing or understanding does not take time and does not have a beginning, middle, and end, in the way that natural or material processes do.

Aristotle does not register any worry that the special, non-material status of such changes will make the activities they bring about non-human or that there failing to be natural in this

[9] For further discussion see Chapter II, section 2.
[10] For further discussion see Chapter VI, section 2.
[11] M. Frede 1995, 104.
[12] *DA* II 5, 417b2-16; III 7, 431a1-7. For more discussion of the meaning and significance of Aristotle's distinctions in *DA* II 5 between types of changes see Burnyeat 2002 and Lorenz 2007.

sense is objectionable. Frede might address this by claiming that these cognitive activities constitutively involve material changes. In the case of perception Aristotle thinks that there are accompanying and, in the opinion of Frede (which I share), partially constitutive natural and material processes. However, in Chapters VI and VII I have argued that Aristotle does not think that there are any such constitutive material processes operative in the case of understanding. As long as images do not play a constitutive role in understanding, then understanding is not a natural or physical activity in the sense that Frede is using, even if it turns out that Aristotle thinks the intellect and its activity cannot exist apart from the body. If the interpretation of Aristotle's views on understanding in *DA* III 4 that I argued for in Chapters VI and VII is correct, then the activity of understanding does not have a material component. The activity of understanding, as such, is not bodily in any essential way. It consists only in the exercise of a capacity, an exercise that does not, strictly speaking, occur over time and does not have a beginning, middle and end, but instead is always what it is. Again, this is true even if it is impossible for understanding to take place without employing images, since the activity itself will not be a process and will not involve the body, even if there are imaginative (and hence bodily) processes supporting it. Thus Aristotle is committed, even according to the most plausible version of the Divine Intellect view, to thinking that some of our psychic activities are not natural or physical, insofar as they do not constitutively involve processes and have no material constituents.

Aristotle can allow that some human activities do not constitutively involve natural or material processes without threatening the unity of the human being or the unity of body and soul. Aristotle does not need to be committed to holding that all human life and activities involve processes. Indeed, given his repeated emphasis on the ways in which human beings resemble and

imitate the divine in our activity of understanding things, we should not find it surprising that Aristotle thinks that our intellectual activity resembles the divine, changeless thought of the first mover more than it does the processes of the sublunary world of change and decay. I have also argued in Chapter V that even if intellectual activities are non-bodily, they still, for Aristotle, properly belong to human beings as such.

There is also no problem with human beings not being fully natural, in Frede's sense. A wide variety of entities that are not subject to processes of generation and corruption, from the heavenly bodies to their unmoved movers, play central roles in Aristotle's understanding of reality. Aristotle also recognizes a gradation in ways of being subject to change. The heavenly bodies move from place to place and thus must have a sort of matter that allows for local change, but are not subject to any other change, while the unmoved movers are entirely changeless.[13] Human beings, on the view I am putting forward, are, in general, subject to change in the way that other sublunary things are, but we have one special sort of activity that is not partially constituted by any material process. Aristotle divides substances according to the sorts of change they are subject to. To say that a substance or one of its activities is not natural is to say that the substance or activity does not involve the processes of change characteristic of natural sublunary substances. Such a claim does not mark the substance or activity out as spooky or objectionably supernatural, as some of Aristotle's recent commentators seem to assume. If human beings are not fully natural, in the sense of natural that Frede describes, this does not mean that we are objectionable entities in any way, but only that not all our activities involve natural processes.

[13] *Metaphysics* Λ 2.

b. Consequences of the Human Intellect View

I will now consider objections directed at features and consequences of the second interpretation, according to which human beings persist after death because we continue to understand, although we can no longer remember or experience emotions. In the previous chapter I addressed some of the main interpretative difficulties that the Human Intellect view has with respect to the text of *DA* III 5. Michael Frede raises several more general objections to this sort of view which I will now consider. To begin with, he notes that, given Aristotle's commitment to the eternity of the world, there will be an actually infinite number of human souls, since Aristotle thinks that human beings have always existed. This seems to go against Aristotle's firm commitment to the impossibility of an actual infinite and thus counts strongly against my view.[14] One response a proponent of the Human Intellect view could make would be to adopt some form of reincarnation: if souls are reused, there need not be an infinite number of them. Such a view is, however, clearly unattractive to Aristotle, both because he does not conceive of the soul as having the kind of intrinsic spatial location or properties it would need if it were to come to inhabit a different body and because he holds that the human soul begins in a relatively unformed and potential state, without any trace of a pre-existing order.[15]

Aristotle is indeed strongly committed to the impossibility of an actual infinite, but the existence of an unlimited number of human souls or intellects does not conflict with his claims about the infinite. Aristotle's philosophical objections to the infinite in *Physics* III are centered around problems he raises for the possibility of an infinitely extended body or magnitude. Aristotle claims that no sensible magnitude can be infinite, while also holding that there is no

[14] M. Frede 1996, 384. I have adjusted the focus of his claims somewhat, as he targets an interpretation that is somewhat different from my own.

[15] Cf. *Posterior Analytics* II 19 and *DA* III 4.

limit to the number of divisions that a magnitude can undergo.[16] This means that for Aristotle there is no lower limit to the size of a magnitude, but there is an upper limit (the size of the universe), while there is no upper limit to the number of a multitude, but one is the lower limit.[17] Aristotle cannot, however, allow for an infinite number of magnitudes of some definite size, as this would add up to an infinite magnitude and Aristotle rejects any view that would imply the existence of an infinite magnitude. However, an infinite number of immaterial souls would not imply such a magnitude, since none of the souls has any magnitude. Thus Aristotle's central reasons for rejecting the infinite would not apply in this case.

Frede might press the objection by noting that the only sorts of infinite that Aristotle does allow are either potential or successive. Aristotle allows for successive infinites, such as time or the number of human generations that have existed, but in these the previous members pass away and are succeeded by the later members, so there is no infinite all at once. The previous moments have already passed and the previous generations have already died, so that there is only one moment right now (although an infinite number have gone before) and there are currently a finite number of human beings on the earth's surface (although an infinite number have previously walked it). The Human Intellect view, however, implies that there are an infinite number of human beings exercising their understanding right now.

In my view, this still does not create a conflict with Aristotle's views, as he does not have a problem with an unlimited number of things, as long as this number has no problematic implications for the infinity of magnitude, motion, or time. Aristotle is, for instance, committed to holding that the sun has rotated an infinite number of times. If we were to assume that the sun or its heavenly mover is capable of counting its rotations, then an infinite number will have been

[16] *Physics* III 6-8.
[17] *Physics* III 7.

numbered (in an infinite time). I do not think that conceding such a possibility would create any problems for Aristotle's views on the infinite as it has no problematic implications about the infinite in magnitude, motion, or time. The rotations of the sun do not form some one thing that is actually infinite in a problematic way. Similarly, the infinite number of human souls would not form some one thing that is actually infinite in a problematic way.

In book three of the *Physics* Aristotle is rejecting the physical infinite and anything that implies it. It is only infinites of the physical or material kind or of kinds suitably related to this kind that he is interested in, as is shown by his presentation of the sorts of things that can be infinite and the relation between them:

> The infinite is not the same in magnitude and movement and time, in the sense of a single nature, but the posterior depends on the prior, e.g. movement is called infinite in virtue of the magnitude covered by the movement (or alteration or growth), and time because of the movement.[18]

In this passage Aristotle lays out the three kinds he speaks of in the *Physics* as being infinite in some way. He then argues that the infinity of motion and time depends on the infinity of magnitude (just as, for him, more generally, motion and time depend on magnitude). He sees the infinite as relating to the physical and to matter, he is not concerned with infinite numbers, if they have no physical and material implications. Thus there is no reason to think that merely having an unlimited number of immaterial human souls would go against Aristotle's denial of any actual material infinite.

Frede also raises a further objection. He claims that on the sort of view I am proposing all the human intellects separated from bodies would eternally hope to be incorporated into a complete human being and to be able to function as they should. They would, however, be eternally frustrated in this hope and would eternally continue to exist in a way contrary to their

[18] *Physics* III 7, 207b22-5. Revised Oxford translation (Barnes 1984).

nature. Given Aristotle's commitment to the order and goodness of reality, these consequences should count strongly against ascribing to Aristotle the Human Intellect view.[19] I think that this objection relies on a misconception of the character and capacities of human beings when separated from the body. Since Aristotle in *DA* III 5 explicitly denies any sort of memory to the soul when separated from the body, there is no reason to think that when a human being is constituted only by her intellect and its activity, she would remember needing a body for certain activities or desire to be reunited with the body. Indeed, since it is only theoretical intellectual activity that she will engage in there will be no practical desire of any sort for any action other than the theoretical activity in which she is already engaged. There is no reason to think that beings in such a stage would be unsatisfied in any way. They would have ample internal satisfaction and pleasure from the intellectual activities they perform while also having no opportunity to exercise any abilities that would lead them to desire a different form of living or an embodied existence.

The Human Intellect view also concedes that such a life is limited in a number of important ways. First of all, it would not be open to all human beings, but only to those who have developed theoretical understanding about some object, a significant intellectual accomplishment. On the view I have developed, the intellect persists only if it possesses some intelligible forms. If some human beings never understand anything, their intellects will not come to actually possess any intelligible forms and thus will be unable to exercise understanding. Such people will not be able to persist after the destruction of their bodies. Thus human beings who die before having an opportunity to develop understanding of anything will not survive, nor will human beings who go through their whole lives operating only on memory and perception,

[19] M. Frede 1996, 384. Again, I have adjusted and amplified his objection in order for it to better engage with my own view.

as Aristotle believes may be the case with some races in distant lands (*NE* VII 5 1149a10-13). The life of a human being after the destruction of the body also fails to include many distinctive human activities: there is no opportunity to exercise the virtues of character or the virtues of practial wisdom. This life does, however, include (and, indeed, consists in) the human activity that Aristotle considers most valuable, the exercise of theoretical reason, so it is hard to find grounds for denying that he would think that this sort of life would be a valuable and desirable one for human beings to have, even if it does not involve the full range of characteristic human activities.

There is one further objection that I need to consider. In several passages throughout the corpus Aristotle seems to deny the possibility of human immortality, strongly suggesting that he does not hold the Human Intellect view, as I have presented it. In *DA* II 4, for example, Aristotle claims that:

> Since, then, [individual things] are incapable of sharing continuously in the eternal and the divine (because nothing perishable can persist one and the same in number), each partakes in the eternal and the divine in the only way it can, some more, some less. So each persists, though not in itself, but in something like itself, not one in number, but one in form.[20]

Aristotle here seems to claim that no individual living thing that belongs to the perishable sublunary sphere can persist. No individual human being can live forever; instead, it is only through the continued existence of the species brought about via reproduction that human beings are, to some degree, eternal and divine.

Aristotle's claims here do not conflict with my position. To begin with, we should note that he is talking here quite broadly about living things. In a number of places in the corpus, many of which we have surveyed, he clearly and explicitly holds that humans are eternal and divine in ways that other perishable living things are not. In response to Aristotle's denial of

[20] *DA* II 4, 415b3-b7.

individual immortality here, I want to point out that the Human Intellect view concedes that human life in its full breadth is perishable and subject to destruction. Almost all of our living activities do require a body and thus cannot continue after the destruction of the body. In this way humans are perishable and need to reproduce in order for there to continue to be humans living lives that display the full range of characteristically human activities. Even if human beings can continue to understand after death, humans are not immortal in the way the Greek gods, for example, were supposed to be, untouched by change, not subject to sickness, death, or any kind of destruction. The continued existence that I have argued Aristotle envisages is much more limited, involving only intellectual activity, without any use of the body or any memories or emotions. We should read Aristotle as denying immortality in the full sense to human beings in *DA* II 4, not as denying this weaker sense of some sort of continued human life. Similarly, in passages such as *NE* III 2, 1111b22, where Aristotle claims that being immortal can only be an object of wish, not of choice, since it is impossible for us to attain, it is plausible to read Aristotle as speaking of immortality in this fuller sense, which would include the continuance of the complete range of human activities and invulnerability to destruction or harm.[21] In considering whether Aristotle is open to the possibility of human persistence after death we need also to keep in mind the passage I discussed in chapter two from *Metaphysics* Λ, in which he claims that the survival of the intellectual soul is a possibility that should be carefully considered.[22]

3. Conclusion

In this work I have argued that Aristotle's general views on the relationship between body and soul as well as his specific views on the nature and functioning of the intellect clearly

[21] Cf. the parallel passage in *EE* II 10, 1225b33.
[22] *Metaphysics* Λ, 1070a26.

show that he is neither a materialist nor a Cartesian dualist.[23] Unlike the materialist, Aristotle thinks that the soul is ontologically prior to the body and that it is the primary explanatory factor of our living activities. Unlike the Cartesian dualist, Aristotle thinks that the human being is the proper subject of human activities, not the soul, and he holds that the full range of activities and affections characteristic of human life, from eating and digesting to perceiving and thinking, do properly belong to us as human beings. We should, instead, read Aristotle as adopting one of the two intermediate positions on body, soul, and intellect that I have presented. On the first position, the moderate Divine Intellect view, the human soul is ontologically and causally distinct from the body, but cannot exist apart from the body or do anything in separation from the body. The intellect which Aristotle describes as existing separately from the body is a divine intellect. On the Human Intellect view, in contrast, human beings are different from all other perishable living things. The human soul can exist and perform intellectual activities apart from the body.

In my judgment, the Human Intellect view, on which human beings persist and continue to understand after death, makes better overall sense of Aristotle's account of the non-bodily character of intellectual activities and on his insistence that our understanding is both human and divine. To begin with, as I argued in the previous chapter, the Human Intellect view provides Aristotle with a better theory of understanding. On this view Aristotle introduces the productive intellect to explain how human beings can come to acquire intelligible forms that are present only potentially in the material things around us. Aristotle needs to explain how the receptive intellect, which is only potential, can come to acquire intelligible forms, given that these are neither directly accessible to it nor directly taken from perception. The Human Intellect

[23] See Chapters IV through VII in particular.

interpretation proposes that Aristotle is introducing the productive intellect to address this issue raised by his theory. The role of the productive intellect and Aristotle's reasons for discussing it at this juncture in his treatise are much less clear on the Divine Intellect view. Proponents of the Divine Intellect view have not yet offered a satisfactory explanation for why Aristotle would bring in the divine intellect in III 5. The explanations they have offered make III 5 much less important to Aristotle's psychology and account of human thinking then it is according to the Human Intellect view. Unlike the Human Intellect view, they also do not seem to allow for the possibility of error in the application of understanding. Proponents need to explain why Aristotle would bring the divine intellect into his treatise on the soul in the way he does, especially given his reticence throughout the rest of his discussion of intellectual activities in the *DA* to either assume or argue for the existence of non-perceptible entities.

There is also good evidence for thinking that, in Aristotle's opinion, the productive intellect is internal to the human being. He describes it as being "in the soul" and as being a state, a ἕξις, which would, most plausibly, be a state of the individual soul or person. We also have Theophrastus's testimony which indicates that Aristotle took the productive intellect to be internal to the human soul. Although the moderate Divine Intellect view can give some account of how these claims are consistent with it, the Human Intellect view offers the most plausible explanation of how and why the productive intellect would be found within the human soul. The Human Intellect view does face difficulties in explaining some of Aristotle's statements in *DA* III 5, but these difficulties are, in my view, less serious than the difficulties faced by its rivals. Any interpretation of *DA* III 5 will have difficulty with certain passages, given the elliptical character of the text, and I think that the Human Intellect view can plausibly address all of the passages in III 5, as I worked to show in the previous chapter.

The Human Intellect view also fits best with Aristotle's insistence in *DA* III 4 on the immateriality of intellect and its separability from the body. Given that *DA* III 4-5 is the only place in book three where Aristotle explicitly considers the separability of intellect, it makes sense to put more weight on his claims in these chapters than on passages elsewhere in book three and beyond that tie understanding to images, but do not draw any implications about separation from this connection.

In my view, Aristotle thinks that the activity of understanding continues after death. Human beings survive death because we continue to be able to perform this non-bodily and immaterial activity. Human life after death is not vividly personal, with memories and emotions, since humans, when separated from the body, can only engage in theoretical intellectual activities. This means that Aristotelian immortality is not as personal nor as full-fledged as many would no doubt like, given the extremely limited range of activities on offer and the lack of most personally differentiating characteristics. Nevertheless, I have argued that human beings will still be distinct from one another because they will be distinguished by the different objects they are able to contemplate, a range that depends on the experience and knowledge they acquired while in the body. Even though human life is limited after the destruction of the body, human beings can still contemplate the highest things, ceaselessly engaging in the divine and eternal activity that Aristotle thinks is finest and most blessed.

Appendix A: Sigla Codicorum Manuscriptorum

Taken from Siwek, 23-25.

E = Paris. 1853, s. x
C = Paris. Coislin. 386, s. xi
U= Vatican. 260, s. xi
H^a = Marcian. CCXIV (479), date disputed—Siwek states s. xii-xiii, Jannone argues for s. xi
S = Laurent. Plut. LXXXI, I, s. xii-xiii
X = Ambrosian. 435 (H.50), s. xii-xiii
O^d = Marcian. CCIX (1023), s. xiii
G^c = Ambrosian. 403 (G.61 Sup.), s. xiii
D^c = Ambrosian. 837 (B.7 Inf.), s. xiii
F^c = Ambrosian. 268 (E.6 Sup.), s. xiii
E^c = Laurent. Plut. LXXXVII, 25, s. xiii
L = Vatican. 253, s. xiii
W = Vatican. 1026, s. xiii
y = Paris. 2034, s. xiii-xiv
C^c = Paris. <Supplement 314>, s. xiv
T = Vatican. 256, s. xiv (an. 1321)
v = Laurent. Plut. LXXXVII, 20, s. xiv
m = Paris. 1921, s. xiv
J^c = Ambrosian. 318 (E 118 Sup.), s. xiv
K^c = Neapolit. 323 (III E I), s. xiv
L^c = Laurent. Plut. XXXVII, 17, s. xiv
M^c = Laurent. Plut. LXXXVII, 13, s. xiv
N^c = Laurent. Plut. LXXXVI, 19, s. xiv
O^c = Marcian. CCXXVII (406), s. xiv
P^c = Matritens. 4684, s. xiv
i = Paris. 2032, s. xiv
V = Vatican. 266, s. xiv
Y^d = Vallicellanus 21 (B 93), s. xiv
U^d = Vindobon. Philos. 134, s. xiv
H^c = Escorial Σ II 15, s. xiv-xv
P = Vatican. 1339, s. xiv-xv
R^c = Paris. 2028, s. xiv-xv
U^c = Paris. 1851, s. xv (an. 1402)
S^d = Vindobon. Philos. 75, s. xv (an. 1446)
V^c = Paris. 2027, s. xv (an. 1449)
X^c = Paris. Mazarin. 4456, s. xv (an. 1451)
Q = Marcian. CC (327), s. xv (an. 1457)
f = Marcian. CCVI (747), s. xv (an. 1467)
J^d = Matritens. 4563, s. xv (an. 1470)
T^d = Vindobon. Philos. 2, s. xv (an. 1496)
Q^a = Urbinas 38, s. xv
S^c = Paris. <Supplement 332>, s. xv
T^c = Paris. 2033, s. xv
W^c = Paris. 2029, s. xv
Y^c = Laurent. Plut. LXXXVII, 11, s. xv
Z^c = Laurent. Plut. LXXXVII, 23, s. xv
c = Paris. 1861, s. xv
A^d = Laurent. Plut. X, 21, s. xv
B^d = Laurent. Plut. LXXXVII, 22, s. xv
C^d = Vatican. 249, s. xv
D^d = Palatin. 74, s. xv
E^d = Palatin. 161, s. xv
F^d = Oxoniens. Barroclan. 70, s. xv
l = Paris. 1860, s. xv
H^d = Ambrosian. 67 (A 174 Sup.), s. xv
K^d = Oxoniens. Miscell. 261, s. xv
L^d = Bernensis 135, s. xv
M^d = Vatic. Rossian. 1025, s. xv
N^d = Paris. 1852, s. xv
G^a = Marcian. CCXII (606), s. xv
P^d = Utinensis 4, s. xv
R^d = Vindobon. Philos. 157, s. xv
V^d = Vindobon. Philos. 206, s. xv
W^d = Vindobon. Philos. 220, s. xv
X^d = Monacensis 330, s. xv

Familia κ: **G^c W N^c H^c J^c O^c V** V^c W^c Z^c f N^d T^d
Familia λ: **E L F^c L^c** K^d + **P**
Familia μ: **H^a W Y^d** J^d G^a Q
Familia ν: **X v** U^d A^d + **U** Q
Familia ξ: **C E^c T** X^d P^d H^d
Familia π: **S O^d E^d R^d T^c c** D^d U^c S^c V^d + Y^c Q
Familia ρ: **K^c i P^c C^c y M^c** + S^d W^d l
Familia σ: **D^c m R^c** X^d F^d H^d + **P**
Familia τ: D^c M^d B^d L^d + U^c S^c

Sigla Commentatorum Graecorum

Phil = Pseudo-Philoponus, *In Libros Aristotelis De anima Commentaria*
Plut. ap. Phil. = Plutarch as cited in Pseudo-Philoponus, *In Libros Aristotelis De anima Commentaria*
Sim = Simplicius, *In Libros Aristotelis De anima Commentaria*
So = Sophonias, *In Aristotelis Libros De Anima Paraphrasis*
Them = Themistius, *In Aristotelis Libros De Anima Paraphrasis*

X^l = lemma from *X*
X^c = citation from *X*
X^p = paraphrase from *X*

Appendix B: Translation and Text of *De Anima* III 5

Since, as in every nature there is something which is the matter for each kind (this is what is potentially all those [in the kind]), and there is something else, the cause and the producer which makes them all, like the art in relation to the affected matter, it is also necessary that these differences be found in the soul. Thus there is the sort of understanding which has being by becoming all things and the sort which has being by producing all things, as a sort of state, like light. For in a way light makes potential colors actual colors.

And this intellect is separable and impassible and unmixed, being actual in substance. For that which acts is always more valuable than that which is acted upon and the originating principle [is always more valuable than] the matter.

Now actual knowledge is the same as the thing known. Potential knowledge is prior in time in any one [individual], yet universally it is not prior in time. But it does not sometimes understand and sometimes not understand.

When separated, this alone is the very thing that it is and this alone is undying and everlasting. But we do not remember because this is impassible, but the passible intellect is destructible. And without this, it understands nothing.[1]

Ἐπεὶ δ' ὥσπερ ἐν ἁπάσῃ τῇ φύσει ἐστὶ τι τὸ μὲν ὕλη [10]
ἑκάστῳ γένει (τοῦτο δὲ ὃ πάντα δυνάμει ἐκεῖνα), ἕτερον δὲ
τὸ αἴτιον καὶ ποιητικόν, ὅτῳ ποιεῖν πάντα, οἷον ἡ τέχνη
πρὸς τὴν ὕλην πέπονθεν, ἀνάγκη καὶ ἐν τῇ ψυχῇ ὑπάρχειν
ταύτας τὰς διαφοράς. Καὶ ἔστιν ὁ μὲν τοιοῦτος νοῦς τῷ πάντα
γίνεσθαι, ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἕξις τις, οἷον τὸ φῶς· [15]
τρόπον γάρ τινα καὶ τὸ φῶς ποιεῖ τὰ δυνάμει ὄντα χρώ-
ματα ἐνεργείᾳ χρώματα. Καὶ οὗτος ὁ νοῦς χωριστὸς καὶ
ἀπαθὴς καὶ ἀμιγής, τῇ οὐσίᾳ ὢν ἐνέργεια· ἀεὶ γὰρ τιμιώτε-
ρον τὸ ποιοῦν τοῦ πάσχοντος καὶ ἡ ἀρχὴ τῆς ὕλης. Τὸ δ'
αὐτό ἐστιν ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι· ἡ δὲ [20]
κατὰ δύναμιν χρόνῳ προτέρα ἐν τῷ ἑνί, ὅλως δὲ οὐδὲ χρόνῳ,
ἀλλ' οὐχ ὁτὲ μὲν νοεῖ ὁτὲ δ' οὐ νοεῖ. Χωρισθεὶς δ' ἐστὶ μόνον
τοῦθ' ὅπερ ἐστί, καὶ τοῦτο μόνον ἀθάνατον καὶ ἀΐδιον . οὐ
μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὁ δὲ παθητὸς
νοῦς φθαρτός· καὶ ἄνευ τούτου οὐθὲν νοεῖ.[2] [25]

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[1] The translation is my own but reflects my consultation of existing English translations including Sisko, Burnyeat, and Hicks.

[2] *DA*, III 5, 430a10-25. My version of the Greek text is based on the editions of Jannone, Ross, and Siwek. In this apparatus I indicate all the textual variants they report in the manuscripts as well as any important variants in commentaries, lemmata etc. I also indicate my reasons for certain readings as appropriate, particularly when I depart from Ross's OCT.

Line 10: ὥσπερ codd. $P^{cp}\Sigma$: om. T^{p} || ἐπειδή $WH^{c}m^{1}$|| πάσῃ in $\sigma WD^{c}H^{c}TmySim^{1}$ || ἐστίν, ἔστι *ν* || τι om. $F^{c}W^{c}Z^{c}$*So* ||

I retain ὥσπερ and τι, contra Ross, but along with Jannone, Siwek, Caston, and Burnyeat. I agree with Burnyeat (2008, fn. 46) and Caston (1999) that the καὶ at 13 picks up the ὥσπερ and I take the τι as indefinite, used as part of Aristotle's generalizing claim. For his seclusions, Ross cites only the absence of ὥσπερ from Themistius's

paraphrase and the absence of τι from Sophonia's *Paraphrasis,* but this gives us no good reason to exclude them. Siwek records some mss. where τι is omitted, but these are not the most authoritative ones

Line 11: ἐν ἑκάστῳ *So* || {Siwek ὃ] τὸ C^{1}X E^{c}, τὸ ὁ y, om. ρ (praeter i)*,* ὅτι L^{c}} {Jannone ὃ EL (e τὸ fecit) H^{a}UV : τὸ CX τὸ ὁ y } {Ross ὃ ELUP^{c}Σ : τὸ CX: ὃ τε P^{c}} || δυνάμει] νοεῖν D^{c} || ἐκεῖνο E^{1}

The reports about alternatives to ὃ in this line are somewhat conflicting, although it makes little difference to our reading of the text, as all the editors read ὃ and there is little reason to opt for any of the alternatives. I follow Siwek as he gives the most detailed reports but I also include the additional report about P^{c} given by Ross. Jannone seems to disagree with the report of Siwek with respect to E and L as he claims that there is ambiguity about what both E and L have, writing "ὃ EL (e τὸ fecit)." Ross does not disagree with any of Siwek's reports but states that P^{c} has ὃ τε, athough he also reports that P^{c} simply has ὃ. Perhaps including P^{c} among the authorities that have ὃ is a misprint, however, and he meant to claim instead that P has ὃ while P^{c} has ὃ τε.

Line 12: ποιητικόν] τὸ ποιητικόν LW$F^{c}H^{c}Pm^{1}$, τὸ αἰτίατον R^{c1} || τῷ] ὅ τῷ in ξLX (ὅτω), οὕτω F^{c}, τὸ C^{c1} || ποιῇ F^{c} || οἷον] ὥσπερ F^{c1} || ἡ om. V ||

I have again followed Jannone and read ὅτῳ, in accordance with H^{a}, Jannone's preferred manuscript, and instead of Ross's τῷ which is not found in any manuscripts (according to Ross and Jannone the other manuscripts report either ὅ τῷ or ὅτω). The variation in readings does not make a substantive difference here, however.

Line 13: πέπονθε πρός τήν ὑλην S || ὑλην om. D^{c1}, τέχνην U^{d1} ||

Line 14: νοῦς ὁ μὲν τοιοῦτος v || νοῦς om. mH^{c1} || τῷ] τὸ in π$H^{a1}F^{c}$ ||

Line 15: τὸ φῶς…16. τινα om. D^{c} ||

Line 16: γάρ om. $C^{c}P^{c}$i || καὶ om. V || καὶ τὸ φῶς om. $C^{c}P^{c}$i || τὰ om. F^{c} || ὄντα om. vThem. ||

Line 17: ἐνεργείᾳ χρώματα om. G^{c1} || ἐνεργείᾳ + ὄντα in σW$H^{c}J^{c}N^{c}$ || ἐνεργείᾳ] ἐντελεχείᾳ F^{c} || οὗτος] οὐχ ὡς S, οὕτως om. $C^{c1}K^{c}L^{c}P^{c}$ ||

Line 18: ἀμιγής καὶ ἀπαθὴς omnes codd. praeter ELPSim^{lp}Them. || ὢν] ὡς ὢν yi || ἐνεργείᾳ omnes codd. praeter $H^{a}UC^{c}E^{c}F^{c}N^{c}$ySim^{clp}So, ἐνέργειαν L^{c} ||

Line 19: τὸ δ' αὐτό… 22. οὐ νοεῖ secl. W.D. Ross || τὸ δ' αὐτὸ] τὸ αὐτὸ δὲ omnes codd. (S om. τὸ) praeter ELPF^{c}So ||

Line 21: ἐν τῷ] ὡς τὸ m. W$H^{c1}N^{c}m^{1}R^{c}$iySim^{clp}So Plut. ap. Phil. || οὐδὲ] οὐ ELW$^{1}P^{c1}H^{c1}$Phil^{c}, οὐδὲ ἐν T^{c} ||

Line 22: οὐχ om. W$H^{c1}N^{c}m^{1}R^{c}$iySim^{clp}So Plut. ap. Phil. || ὁτὲ δ' οὐ om. W^{1}, ἀλλ' ὁτὲ μὲν οὐ νοεῖ, ὁτὲ δὲ νοεῖ W^{2} || ἐστὶ om. V, post μόνον in xW ||

I discuss whether we should retain the οὐχ in my interpretation of III 5. Given that it is in the majority of mss., I follow Jannone and Ross in leaving it in the text.

Line 23: ἀΐδιον καὶ ἀθάνατον in xW || W$H^{c1}N^{c}m^{1}R^{c}$iySim^{clp}So Plut. ap. Phil. ||

Line 24: μνημονεύομεν…431b17 ἐκεῖνα desunt in E || παθητὸς H^{a} : παθητικὸς rell. ||

I discuss whether we should read παθητικὸς or παθητὸς in my interpretation of III 5.

Line 25: οὐδὲ X ||

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