# Living Without a Soul: Why God and the Heavenly Movers Fall Outside of Aristotle's Psychology

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### Abstract:

l argue that the science of the soul only covers sublunary living things. Aristotle cannot properly ascribe  $\psi_U\chi\dot{\eta}$  to unmoved movers since they do not have any capacities that are distinct from their activities or any matter to be structured. Heavenly bodies do not have souls in the way that mortal living things do, because their matter is not subject to alteration or generation. These beings do not fit into the hierarchy of soul powers that Aristotle relies on to provide unity to  $\psi_U\chi\dot{\eta}$ . Their living consists in their activities, not in having a capacity for activity.

### Keywords:

soul; living; aristotle; psychology; nous; intellect; heavenly bodies; unmoved movers

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# 1. Introduction: Aristotle's Inquiry into Soul and its Subject Matter

Which science is Aristotle's *De Anima* (*DA*) pursuing and which objects does it consider? You might think the answer is right there in the name. Indeed, Aristotle to some extent sidesteps this question by describing his work as "an inquiry into the soul [ $\dot{\eta} \psi \eta \chi \dot{\eta}$ ]."<sup>1</sup> Aristotle announces that he will examine the nature and essence of the soul and the attributes ( $\pi \dot{\alpha} \theta \eta$ ) that are proper ( $i\delta(\dot{q})$  to it. (402a5-8) But this leaves the further question of where soul belongs in Aristotle's classification of beings. In *Metaphysics* E, Aristotle divides the theoretical sciences into three branches— natural science, mathematics, and first philosophy—based on the way in which they consider being. Natural science considers beings insofar as they are subject to change and motion, whereas first philosophy considers being as such.

Aristotle begins the *DA* by noting that "the soul is a sort of first principle of animals" and takes this as evidence that knowledge about the soul would contribute "most especially to truth about nature."<sup>2</sup> Indeed, the *DA*'s first chapter ends with the claim that affections of the soul such as anger and fear are "inseparable from the natural matter of animals,"<sup>3</sup> putting both within the realm of the natural scientist, who considers matter as well as form (403b7-12). However, in the same chapter, Aristotle also raises the possibility of an affection that is proper to soul and is not

<sup>&</sup>lt;sup>1</sup> 402a4; translations are my own except as noted.

<sup>&</sup>lt;sup>2</sup> 402a6-7, trans. Shields.

<sup>&</sup>lt;sup>3</sup> 403b18, trans. Shields following Ross's conjecture (2016b, p. 103).

shared with the body, voɛîv, the activity of the understanding, o voûç.<sup>4</sup> It is a candidate for the sort of separated affection which would fall under the domain of the first philosopher (403b15-16). Aristotle refrains from restricting the soul's study to natural philosophy, leaving two options open: *"either* all soul *or* [the] sort of soul [with affections that essentially involve the body]" is "in the domain of natural science."<sup>5</sup> In *Met* E 1, Aristotle goes further and claims that "it belongs to the student of nature to investigate concerning some part of the soul, however much is not without matter."<sup>6</sup> If, as *DA* 3.4 suggests, voûç is separate from matter and the body, then voûç would not be part of natural philosophy.<sup>7</sup>

We also see this tension in a famous passage from *On the Parts of Animals* which considers whether soul falls under natural science. There Aristotle notes that:

One might puzzle, in view of what was just said, over whether it is up to natural science to address *all* soul or some [kinds of sou], since if it addresses all, no philosophy is left besides natural science. For understanding is of the objects of understanding, so that natural science would be knowledge [ $\gamma v \hat{\omega} \sigma_i \varsigma$ ] about all things. For it is up to the same science to study understanding and the objects of understanding, if they are correlative, and the same study [ $\dot{\eta} \ \alpha \dot{\upsilon} \tau \dot{\eta} \ \theta \epsilon \omega \rho(\alpha]$ ] in every case attends to correlatives, just as in the case of perception and the objects of perception. Or is it rather the case that not all soul is a principle of motion, nor all the parts...but the part responsible for moving is something else and not the power of understanding [ $\tau \dot{\sigma} \ v \sigma \eta \tau \kappa \dot{\sigma} v$ ]. For moving belongs also to other living things, ones to which thought [ $\delta \iota \dot{\alpha} v \sigma \alpha$ ] does not belong at all. It is clear, therefore, that one need not speak about all soul, for not all soul is a nature [ $\phi \iota \sigma \alpha \varsigma$ ], but some part of it, either one or many. (641a32–b5, 7-11)

Here Aristotle worries that if understanding is included within the domain of natural philosophy, this science will expand to include all of being. The argument in this passage relies on the principle of correlatives: if a science includes a power, it must include all the objects of that power. Whichever science covers the power of understanding needs to include its objects, since these are how we grasp what the power is (cf. *DA* 2.4, 415a13-22). Aristotle insists, however, that the understanding "understands all things" (*DA* 3.4, 429a18) and claims that, through the exercise of understanding, "the soul is in a way all the things that are" (3.8, 431b21). Since everything that is can be understood, the realm of intelligible objects includes all of being. If the study of the soul

<sup>&</sup>lt;sup>4</sup> All things considered, I believe that understanding and its cognates is the best overall choice to translate  $vo\hat{u}\varsigma$  and its cognates. Though there are some issues (e.g. understanding is not always a success term; understanding may suggest seeing how something complex fits together in a way that is too complex and discursive for  $vo\hat{u}\varsigma$ ), it is the best candidate for getting across in English the notion of grasping what something is and it also

has suitable cognates for both noun and verb.

<sup>&</sup>lt;sup>5</sup> 403a27-29. As Shields notes (2016b, pp. 100-101; cf. xxi).

<sup>&</sup>lt;sup>6</sup> 1026a5-6, trans. Shields.

<sup>&</sup>lt;sup>7</sup> For an overview of interpretive issues with  $vo\hat{u}\varsigma$  in the *DA* see Cohoe (2014); for discussion of *DA* 3.4 on the separability of  $vo\hat{u}\varsigma$  see Cohoe (2013).

were to fall within natural science, then natural science would expand to include all being. Aristotle's own views on voûς are in danger of collapsing first philosophy into natural philosophy.

At the end of the PA passage, Aristotle suggests one way of resolving things: perhaps only the parts of soul that are principles of natural activities, such as moving from place to place, fall under natural science. The sort of soul or the part of soul that is not a nature i.e. τὸ νοητικόν, the understanding power, falls outside the scope of physics. Yet the DA itself treats of voûg in 3.4-8. Indeed, it is there that Aristotle claims that understanding understands all things, putting all of being within its remit. Does this mean that, as Victor Caston claims, Aristotle is no longer worried about natural science swallowing up first philosophy?<sup>8</sup> Aristotle clearly remains sensitive within the DA to issues of method and scope and the special status of voûg.<sup>9</sup> Instead, his remarks in DA 1.1 and Met E 1 suggest that he is pursuing a different strategy than that put forward in the PA passage. Aristotle's inquiry into the soul will consider voûc to an extent, but Aristotle now denies that all powers of the soul fall entirely under natural science. While the voûc considered in 3.4 is a part of soul, it is not, as such, a principle of motion. In fact, it falls outside natural philosophy due to its separability from matter. The various non-rational parts of soul, by contrast, are principles of motion and so are key causes that physics must consider in order to understand the changeable being that is its subject matter. If soul turns out to play a role in both natural philosophy and first philosophy, Aristotle is under pressure to show the unity of his inquiry. He needs to determine how similar different kinds of soul are (cf. 402b1-6): do they have a common account or are they unified in a weaker way?

Answering this question requires considering how far soul extends. Is Aristotle's account of the soul as a principle of life meant to cover all living things or only some? Victor Caston, Myles Burnyeat, and Aryeh Kosman, *inter alios*, explicitly maintain that, for Aristotle, all living things, including the unmoved movers, possess soul: all of them fall within the scope of the *DA*.<sup>10</sup> Many other commentators seem to commit themselves implicitly to this view. For example, Christopher Shields claims that "Aristotle's psychology studies all living beings."<sup>11</sup> On this interpretation,

<sup>9</sup> Here I agree with Shields (2016) and Broadie (1996) who take Aristotle's approach to  $vo\hat{u}\varsigma$  in the *DA* to be sensitive to these methodological worries.

<sup>&</sup>lt;sup>8</sup> Caston (1996, p. 90) insists that Aristotle has simply changed his position between the two texts.

<sup>&</sup>lt;sup>10</sup> Caston (1996); (1999); Burnyeat (2008); Kosman (2013).

<sup>&</sup>lt;sup>11</sup> (2016a); Shields also treats the voûς of the divine beings as rational soul, in his discussion of whether *nous* needs the other powers (2016b, p. 184). Shields claims that "Aristotle makes clear that he regards *being alive* and *being ensouled* as coextensive" (2016b, p. 89) Shields is here commenting on Aristotle's insistence that psychology include plants as well as animals and humans. It is certainly right to say that Aristotle thinks any body or destructible thing that displays a living operation must have a soul by which it performs such an operation. However, we will see that Aristotle does not accept the idea that any being that is living is ensouled. C.D.C. Reeve also accepts

Aristotle thinks that all living things have  $\psi u \chi \dot{\eta}$ , a soul or principle of life. Yet there are indications that things are not so straightforward.

The *DA* does not, in fact, discuss all the beings that Aristotle takes to be living ( $\zeta \omega \dot{\eta}$ ), omitting the heavenly bodies, which Aristotle insists are alive, and the unmoved movers of *Metaphysics*  $\Lambda$ . Aristotle also repeatedly frames his account of soul as an answer to the question of what gives  $\tau \dot{\alpha} \phi u \sigma \iota \kappa \dot{\alpha} \sigma \dot{\omega} \mu \alpha \tau \alpha$ , natural bodies, life. In considering the views of his predecessors that are relevant to his inquiry into soul, Aristotle looks to what they said about  $\tau \dot{\alpha} \ddot{\mu} \mu \eta \chi o \nu$ , the ensouled or animate, and the ways in which this "most seems to differ from the inanimate [ $\tau o \hat{u} \dot{\alpha} \psi \dot{\chi} o \upsilon ... \mu \dot{\alpha} \lambda_1 \sigma \tau \alpha \delta_1 \alpha \phi \dot{\alpha} \rho \iota \tau \alpha$ , natural bodies, as ou of ( $\alpha$ , substances or beings. Aristotle then introduces soul as the thing that, *among natural bodies* ( $\tau \hat{\omega} \nu \phi u \sigma \iota \kappa \hat{\omega} \nu$ , partitive genitive), distinguishes those having life,  $\tau \dot{\alpha} \check{\kappa} \chi \epsilon_1 \zeta \omega \dot{\eta} \nu$ —plants, animals, humans—from those which lack life—water, earth, gold etc. (2.1, 412a11-14). Both framings introduce soul as a principle that gives changeable bodies life. But this framing seems to leave out two sorts of substance which play a key role in Aristotle's metaphysics: everlasting bodies that are not subject to any change other than change of place, i.e. the heavenly bodies, and immaterial substances that are living but without any bodies at all, i.e. the unmoved movers (*Met*  $\Lambda$  1).

These substances are living but does Aristotle think his account of  $\psi_{U\chi}\eta$  applies to them? We need to consider whether having a  $\psi_{U\chi}\eta$ , a principle which gives life, is the same as being  $\tau \delta \zeta \hat{\varphi} ov$ , a living creature. You might think that in the *DA* Aristotle restricts the scope of  $\psi_{U\chi}\eta$  for convenience or because he is interested in soul in order to explain the sort of terrestrial biological phenomena considered in his works on animals. Yet in his programmatic remarks, Aristotle criticizes the anthropocentrism of existing accounts of the soul: "those speaking and inquiring about the soul seem to investigate the human soul alone." (402b3-4) He clearly wants an account of soul that covers all the beings that share in  $\psi_{U\chi}\eta$ . If his account of soul is meant to apply to all living things, but he fails to consider key cases, such as the stars and the unmoved movers, he will have failed to properly inquire into what is common to soul. An appropriately done version of the *DA* would have to include the sorts of discussion found in *De Caelo* and *Metaphysics*  $\Lambda$ . If, on the other hand, not all living things have souls, we need to grasp how soul and living are distinct from one another.

the claim that soul applies to the god (2016, note 1361, p. 530). Stephen Menn is an exception to the contemporary trend (forthcoming, IIIg1). I discuss the commentary tradition at the end of section 3.

In this paper, I argue that, on Aristotle's considered view,  $\psi u \chi \dot{\eta}$  does not properly apply to supralunary beings. Aristotle's exclusion of them is not ad hoc or done merely out of convenience. Aristotle cannot properly ascribe soul to unmoved movers since they do not have any capacities that are distinct from their activities or any matter to be structured. In contrast to divine voûç, our voûç does fall under the *DA* 2.2's account of  $\psi u \chi \dot{\eta}$ , since it is a capacity by which we humans perform our activities. For Aristotle, embodied terrestrial beings are alive by having a formal principle that makes their bodies alive, whereas divine beings are living without having a distinct form by which they live.

The case of the heavenly bodies is a challenging one, but there are good reasons to think that *DA* 2.2's account of  $\psi u \chi \dot{\eta}$  does not apply to heavenly bodies in the same sense that it applies to sublunary things. The capacities of the heavenly bodies do not fit into the hierarchy of soul powers that Aristotle relies on to provide unity to  $\psi u \chi \dot{\eta}$ . The heavenly bodies also have a different matter and a different sort of activity ( $\dot{\epsilon} v \dot{\epsilon} p \gamma \epsilon i a$ ) from terrestrial things. They do not have matter with the potential to undergo the full range of alterations and become all sorts of different substances and so their forms do not structure and order matter in the way that those of sublunary living things do. Their living also consists in their unceasing activity, not in a capacity to perform psychic activities. Unlike mortal living things, they are always attaining their ends without any risk of failure.

Aristotle does think that  $\zeta \omega \dot{\eta}$ , living, applies to the god and the heavenly bodies, but this term is not predicated univocally of the various living things and  $\zeta \omega \dot{\eta}$  does not form an ordered series with a first member in the way that  $\psi u \chi \dot{\eta}$  does. Since  $\zeta \omega \dot{\eta}$  is said primarily of the god, it is appropriate for Aristotle to leave inquiry into  $\zeta \omega \dot{\eta}$  as a task for first philosophy. The science of the soul only covers sublunary living things.

### 2. The Case Against Attributing Soul to the Prime Mover

To determine whether Aristotle thinks all living things have soul we need to consider his specific account of soul. In 2.1, after introducing soul as the form of the body, Aristotle claims that "if it is necessary to say something that is common to every soul, it would be that it is the first fulfillment of a natural instrumental body [ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὀργανικοῦ]." (412b5-6) Even if Aristotle does not ultimately think this characterization is the most revelatory account of what soul is, this claim is supposed to be true of every soul. It is not, however, true of the unmoved movers. Such beings have no intrinsic relation to bodies, contra Aryeh Kosman. He holds that the first mover stands in a soul-body relationship to the outermost heavens, using this

to suggest that the god has or is a soul.<sup>12</sup> Aristotle's texts, however, do not support his interpretation. Aristotle insists that "the eternally noble and that which is truly and primarily good, and not good at one time but not at another, is too divine and too honourable to be relative to anything else. The first mover, then, imparts movement without being moved."<sup>13</sup> If the first mover's status as the soul and form of the outer heavens was part of what it is, its being and essence would be relative to the heavens, but this is just what Aristotle denies. The first mover is simply what it is, with no intrinsic relation to anything else.<sup>14</sup> Aristotle describes the unmoved movers as living and as active, but not as having a soul. It is easy to see why he avoids this. In *DA 2.2*, Aristotle again characterizes the soul as the first fulfillment 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."<sup>15</sup> This characterization cannot apply to unmoved movers who do not inform some matter.<sup>16</sup>

Now Aristotle does offer another characterization of the soul in *DA* 2.2 where he claims that "the soul is that by which primarily we live and perceive and think." (414a13-14) It is the form by which the living thing becomes able to perform its living activities. As scholars such as Robert Bolton and Stephen Menn have rightly noted, this account of the soul is prior to that of *DA* 1.1 because it does more to reveal the soul's essence as a principle and cause of life.<sup>17</sup> 2.2's definition of soul does not require that all of soul's functions be performed through a body or that all aspects of soul be related to body. As Bolton puts it, "soul, generally, is the source of each of the life functions or each group of them that subsist together. [This definition] openly affirms that anything which exercises one or more of these life functions is ensouled whether the exercise requires the operation of some bodily organ or not." (1978, 268) This allows human voûç to count as an aspect of our rational souls. It is a principle of our noetic activities, even if (as Aristotle seems to

<sup>&</sup>lt;sup>12</sup> "That the first mover is importantly psychic should be clear from the fact that it constitutes the principle of the living activity of the heaven. We may therefore speak of it as forming with the heaven what is in effect the soul and body of a single divine entity." (2013, p. 201)

<sup>&</sup>lt;sup>13</sup> *MA* 6, 700b33–701a1, trans. M. C. Nussbaum (1978).

<sup>&</sup>lt;sup>14</sup> Of course, the first mover has an extrinsic relation to the outermost heavens and the heavens are essentially related to it, but precisely because this relationship is extrinsic and non-essential on the side of the unmoved mover, it does not figure into what the first mover's living itself is.

<sup>&</sup>lt;sup>15</sup> DA 2.2, 414a18-21; cf. 2.1. Note that Aristotle makes this claim on the basis of his common definition of soul as "that by which primarily we live and perceive and think." This definition takes the soul to be the formal principle of life activities but also takes it to be a form by which some matter is made to be alive.

<sup>&</sup>lt;sup>16</sup> This is also a decisive objection to the taxonomic interpretation of  $vo\hat{u}\varsigma$  in the *DA* offered by Caston (1996) and Burnyeat (2008). Their interpretation requires there to be a separate kind of divine soul, a species that falls under the same genus as plant, animal, and human souls. On such a view, soul is predicated univocally of the god and a plant.

<sup>&</sup>lt;sup>17</sup> Bolton (1978); Menn (2002).

think), these activities are not performed through a body. Bolton attempts to extend this definition to the unmoved movers. He claims that "the prime mover too will count as a case of a living and, hence, ensouled entity, according to the definition, since the actuality of the prime mover is of the same generic type as that of the most familiar ensouled entities." (1978, p. 266) If Aristotle's 2.2 account just requires that soul be an actuality or fulfillment, then this account can apply to the divine beings too.

Bolton's claim is incorrect. As we shall see more fully in section 4, the prime mover's  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iota\alpha$  is not of the same generic type as the soul. It is pure activity, not a first fulfillment that is a capacity for further activity. Aristotle never describes an unmoved mover as an  $\dot{\epsilon}v\tau\epsilon\lambda\dot{\epsilon}\chi\epsilon\iota\alpha$  of anything else. This extension does not work. The prime mover is just  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iota\alpha$  without any  $\delta\dot{\upsilon}v\alpha\mu\iota\varsigma$ . It does not have any distinct principle by which it lives. In fact, Aristotle's definition of  $\psi\upsilon\chi\dot{\eta}$  in 2.2 involves a distinction between the thing which has life and the form which gives it life. In *DA* 2.2, Aristotle distinguishes two ways in which something can be said to be "that by which ( $\dot{\omega}$ ) we live:"

Since "that by which we live and perceive" [ $\dot{\psi} \zeta \hat{\omega} \mu \epsilon \nu \kappa \alpha i \alpha i \sigma \theta \alpha \nu \delta \mu \epsilon \theta \alpha$ ] is said in two ways, just as "that by which we know" [ $\dot{\psi} \epsilon \pi i \sigma \tau \delta \mu \epsilon \theta a$ ] (for we say both that knowledge [ $\tau \dot{\sigma} \epsilon \pi i \sigma \tau \dot{\eta} \mu \eta \nu$ ] 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 [ $\mu \rho \rho \dot{\eta} \kappa \alpha i \epsilon i \delta \delta \varsigma \tau i \kappa \alpha i \lambda \delta \gamma \rho \varsigma \kappa \alpha i \sigma i \delta \nu \epsilon \nu \epsilon \rho \gamma \epsilon i \alpha \tau \sigma 0 \delta \epsilon \kappa \tau i \kappa \sigma 0$ ], in the one case of what is receptive of knowledge, in the other case of what is receptive of health. For the activity [ $\dot{\epsilon} \nu \epsilon \rho \gamma \epsilon i \alpha$ ] 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.<sup>18</sup>

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 matches the senses of "that-by-which" that Aristotle lays out in *Metaphysics*  $\Delta$  18. Here too Aristotle distinguishes between the form that makes something what it is and the matter or underlying subject that receives the form and comes to be characterized by it. Aristotle is insisting that, in this case, the soul is the form by which something is alive and the body is the matter, that which

<sup>&</sup>lt;sup>18</sup> DA 2.2, 414a4-14. My translation and understanding of this passage have been influenced by Lorenz (2007).

is receptive of life. This also fits with the framing of Aristotle's inquiry noted in section 1: he is looking for what distinguishes natural changeable bodies with life from those without it.

The two elements of form and matter are, however, only present in embodied living things. Aristotle denies that there is any capacity or complexity in the divine movers of *Metaphysics*  $\Lambda$ , so there can be no distinction in the divine being between matter and form, between a part that informs and a part that receives. The divine being is just  $\zeta \omega \dot{\eta}$ : it does not possess a  $\psi u \chi \dot{\eta}$  due to which it lives. Thus neither the definition of 2.1 nor that of 2.2 applies to it. This means that these definitions do not cover all living things or, at the least, apply equivocally. But either of these possibilities would make them a failure, especially given the stringent requirements *APo* places on scientific definition. The *DA*'s account of soul cannot serve as the basis for a complete science of living things.

Now proponents of the view that all living things have soul can appeal to a passage from the *Topics* that puts together having a soul and being a living thing. Here Aristotle is offering an example of how to use the co-extensiveness of predicates to determine whether something has a certain property:

For example, since living thing is true of that of which having a soul is true, and having soul is true of that of which living is true, having soul would be a property of living thing. οἶον ἐπεὶ καθ' οὖ τὸ ψυχὴν ἔχειν, τὸ ζῷον ἀληθεύεται, καὶ καθ' οὖ τὸ ζῷον, τὸ ψυχὴν ἔχειν, εἴη ἂν τὸ ψυχὴν ἔχειν τοῦ ζῷου ἴδιον. (5.4, 132b16-18)

This example relies on τὸ ζῷον, animal or living thing, and τὸ ψυχὴν ἔχειν, having a soul, being co-extensive. However, given the dialectical character of this work, we cannot put too much philosophical weight on the fact that Aristotle uses this example. In the *Topics*, Aristotle is using commonly accepted definitions and claims, ones that his own fully developed philosophical views often qualify. This example is a case in point. It is only plausible if we either take τὸ ζῷον to refer to any living thing (as opposed to restricting it to animals) or deny that plants are alive. But Aristotle, when working out his own positions, usually insists that things must have perception to count as τὸ ζῷον (e.g. *DA* 2.2, 413b1-6) and he, of course, thinks that plants are living and have souls, even if they do not standardly count as τὸ ζῷον. Of course, some of the relevant dialectical interlocutors for the *Topics* may have thought that only animals were alive or that plants are also animals (*Timaeus* 77b; cf. *Phaedo* 70d, 71d). We should also note that the common background view of the time is one on which the gods, while everlasting, have bodies and need souls to animate those bodies. In Plato's *Phaedrus*, Socrates pointedly attacks the view that a god is "an immortal living thing, having both body and soul" (ἀθάνατόν τι ζῷον, ἔχον μὲν ψυχήν, ἔχον δὲ

 $\sigma\hat{\omega}\mu\alpha$ , 246d1). While Socrates insists that this view is a made-up fiction, since there cannot be an immortal combination of body and soul (246c-d), the speech he delivers treats it as the accepted background view of the gods that needs to be attacked and replaced. Aristotle himself works to show how his view of the heavens can accommodate the core truth of the traditional view: that the heavenly bodies "are gods" ( $\Lambda$  8, 1074a38-b13). If this is the background view of the gods, then it would be reasonable, to take having soul and living to be co-extensive for dialectical purposes, since gods as well as humans and animals are commonly taken to have bodies and souls, even if Aristotle's own developed view of the divine calls this into question. As we shall see, it is not until we take onboard Aristotle's own metaphysics of pure divine activity that the reasons for denying soul to the god become clear. As I have just shown, on Aristotle's own developed philosophical views, there is no definition of  $\psi u\chi \dot{\eta}$  that could properly be attributed to his divine being. As we shall see more fully in section 4, the god's living and the sort of life that sublunary creatures have are too different from one another to allow for a univocal or sufficiently unified account that applies to both.

Aristotle's views on the unity of  $\psi u \chi \dot{\eta}$  offer us further reason for denying that  $\psi u \chi \dot{\eta}$  can belong to his divine beings. After noting the incomplete nature of his definition of the soul as "that by which primarily we live and perceive and think," he raises the question of what unifies the different kinds of  $\psi u \chi \dot{\eta}$ .<sup>19</sup> To explain the unity of soul, he compares it to the case of geometrical figure.<sup>20</sup> 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.<sup>21</sup> Nevertheless, there is an order and sequence among figures, just as there is in the case of souls: "for among figures and among the ensouled, the prior always belongs to the later in capacity ( $\delta u v \dot{\alpha} \mu \epsilon_i$ ), as the triangle in the quadrilateral, the nutritive in the sensitive."<sup>22</sup>

<sup>&</sup>lt;sup>19</sup> We have already seen Aristotle's two general characterizations of soul. First, we get its characterization in relation to the body in 2.1: "If, then, we have to make a general statement touching soul in all its forms, the soul will be the first fulfillment (ἐντελέχεια) of a natural instrumental (ὀργανικόν) body" (*DA* 2.1, 412b4-6). Then in 2.2, we get a characterization that more fully reveals the soul and how it brings about life: it is "that by which primarily we live and perceive and think" and is "the principle of the previously mentioned activities and is determined by them, by the powers of nutrition, perception, thought and motion (*DA* 2.2 414a12-13; 413b11-13); cf. Johnston (2011); Frey (2015).

<sup>&</sup>lt;sup>20</sup> 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 grasp what figure really is we need experience concerning the different kinds of figure (*DA* 2.2, 414b20-415a13). This common characterization needs to be filled out further by examining the activities for which the soul serves as principle, since these are quite different. Similarly, 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.

<sup>&</sup>lt;sup>21</sup> DA 2.3, 414b24-415a1.

<sup>&</sup>lt;sup>22</sup> DA 2.3, 414b29-32.

Aristotle uses this illustration 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. Just as the quadrilateral comes after and depends on the triangle, so the perceptive soul comes after and depends on the nutritive soul.<sup>23</sup> In this kind of ordered series,  $\dot{\epsilon}\phi\epsilon\xi\eta\varsigma$ , the being of the latter members includes that of the earlier members insofar as it includes their capacities. While there are interpretive issues about the precise way in which the earlier powers are present "in capacity ( $\delta \nu \alpha \mu\epsilon$ )," for our purposes we need only register Aristotle's insistence that later members.<sup>24</sup> If the number two were not, then there would be no even numbers, but not vice versa; if triangle were not, there would be no even numbers, but not vice versa (*Cat* 12, 14a29–35, *Met* M 8, 1083b32–34). Again, while there are interpretive questions about the precise nature of this ontological dependence, the important thing is that Aristotle does insist on some sort of metaphysical dependence of the later members on the earlier ones, however it is ultimately cashed out.<sup>25</sup>

Aristotle's divine beings cannot fit into such a sequence of ordered dependence. First of all, their being does not in any way include nutritive or perceptive soul, even in capacity ( $\delta$ uváµɛı). The unmoved movers have no need of nutritive or perceptive powers, nor do they have the bodily tools that such powers constitutively require (cf. *GA* 2.3, 736b30-31). Introducing a rational soul without any perceptive or nutritive powers, as Victor Caston and Myles Burnyeat do, undercuts Aristotle's claims about the unity and interconnectedness of  $\psi$ u $\chi$ ή.<sup>26</sup> A later  $\psi$ u $\chi$ ή entirely lacking the earlier soul capacities does not fit Aristotle's hierarchical account of  $\psi$ u $\chi$ ή. Further, even if we were to hold that the divine beings somehow possessed such powers, this would make the divine beings dependent on the existence of nutritive soul, an impossible result. Any interpretation on

<sup>&</sup>lt;sup>23</sup> Cf. Hicks (1907), p. 337; Polansky (2007), p. 195. Soul cannot be given the most proper sort of speciesgenus definition. cf. *Metaphysics* Z 4, 1030a11ff. Ward (1996) brings out some of the interpretive issues with this analogy and rightly emphasizes the importance of this passage for Aristotle's discussion of soul, though I disagree with her ultimate interpretation.

<sup>&</sup>lt;sup>24</sup> Various interpretations of this analogy are given by Ward (1996), Menn (2002), Johnson (2005), Polansky (2007), Leunissen (2010), Johnston (2011), Johansen (2012) and (2015), and Frey (2015).

<sup>&</sup>lt;sup>25</sup> Recent interpretations of ontological dependence include Fine (1984), Corkum (2008), and Peramatzis (2011).

<sup>&</sup>lt;sup>26</sup> Burnyeat and Caston hold that even Aristotle's divine voûς is a species of soul. Caston (1999), p. 210: "Intellect, when it occurs separately...constitutes a species of soul that is nothing but its essence" cf. (1996), p. 186). Burnyeat (2008), pp. 28-29: "there could be a kind of soul which had intellect but no body..... Aristotle is wondering about an intellect which of its own nature functions quite independently of bodies and their powers. This is our first intimation of the divine intellect of *De Anima* III 5 and *Metaphysics* Λ." (cf. p. 33)

which the divine beings have  $\psi u \chi \dot{\eta}$  implies that what they are depends in some way on the being of nutritive soul, the first member in the ordered series of which they are part. This contradicts Aristotle's claim in *Met*  $\Theta$  8 that "eternal things are prior in being ( $\pi \rho \dot{\sigma} \epsilon \rho \alpha \tau \dot{\eta} \circ \dot{\sigma} \dot{\alpha}$ ) to perishable things." (1050b6-7) For Aristotle, it would be perverse and backwards to make the divine beings and their activities dependent on the nutritive capacities of perishable things, entities that need nutrition precisely in order to partake in the eternal and divine insofar as they are (deficiently) able. (*DA* 2.4, 415a28-30)

If the science of the soul were to cover all living things, we would expect the DA to centrally treat divine soul. However, even on Caston and Burnyeat's interpretation of the hotly disputed DA 3.5, according to which the productive understanding is divine voûc, Aristotle gives us very little about what would be the preeminent case of ensouled being. This chapter only introduces active voûg in relation to receptive voûg. Burnyeat's explanation is that Aristotle is concerned to keep physics from encroaching on first philosophy: this is "reason enough to keep III 5's excursion into theology as brief as possible." (2008, 38).<sup>27</sup> But if the god has or is a soul, then surely the study of the soul must fall under first philosophy. If the *De Anima* is inquiring into  $\psi u \chi \dot{\eta}$  and its attributes, and god is the preeminent ensouled being, why is divine living not the primary subject of the De Anima? If divine voûc is ensouled, we might have expected more on what, surely, is the key case of living (and, of course, discussion of the living heavenly beings and the various other unmoved movers is altogether absent).<sup>28</sup> Aristotle's own procedure suggests that he does not think an inquiry into  $\psi_{0,\chi}$  requires an in-depth discussion of the divine being. Why, then, think that we should attribute ψυχή to the unmoved movers, given that Aristotle never uses this language about them, and seems to be trying to avoid discussing supralunary beings (both perceptible and imperceptible) in the DA? Neither Burnyeat nor Caston address this question properly.

<sup>&</sup>lt;sup>27</sup> On Burnyeat's view, the "*De Anima* is a treatise in physics or second philosophy…but III 5…is first philosophy, theology, metaphysics. For it is wholly focussed on God, the Divine Intellect." (2008, p. 35) But on Burnyeat's view, God is also soul (or has soul?) and thus falls under the remit of the inquiry into soul. Aristotle should not be so reticent.

<sup>&</sup>lt;sup>28</sup> Perhaps the one passage that could be interpreted as referring to something like the unmoved movers or supralunary beings is the following, from Aristotle's taxonomy of types of ensouled life:

To some other [kinds of living things], the thinking power and intellect [τὸ διανοητικόν τε καὶ νοῦς] belong, as, for instance, to human beings, and, if there is some other such living thing or something more honorable, [to these]. (414b17-19)

However, I take this passage to be referring to the possibility of other embodied living things with a soul, i.e. a formal principle of their lives. If there are other embodied things at our level or more honorable (undiscovered intelligent creatures on earth or in the space between earth and the moon), the fact that they are as good or better would require them to have our best powers, the powers of discursive thought and understanding.

In fact, the view that Aristotle's prime mover is or has a soul is an anomaly in the history of interpretation. It is hard to find anyone in the commentary tradition who thinks that  $\psi_U\chi\dot{\eta}$ , as defined by Aristotle, belongs to the first cause. The late Platonist commentators distinguish, as one would expect, between soul and the higher voûç from which soul proceeds (e.g. ps. Simplicius, *in* DA *3*, 240.3-24; 245.28-245.13). They emphasize the distinction between human voûç, which is a part of soul, and divine voûç which is not psychic. Indeed, Ps.-Philoponus cites the fact that Aristotle's treatise is about the soul as evidence that the voûç discussed in III 5 must be human understanding, not divine understanding.<sup>29</sup> The fact that neither the first cause nor lower supernatural being are  $\psi_U\chi_K\delta\varsigma$ , "of the soul" is, Ps.-Philoponus claims, a decisive objection against both the reading of III 5 put forward by Alexander of Aphrodisias, which identifies the productive understanding with the first cause, and that of Marinus, which identifies the productive understanding with a lower supralunary being.<sup>30</sup>

It is not just Platonist commentators who insist that the unmoved movers cannot have souls, as the DA conceives them. Alexander of Aphrodisias, the most distinguished Aristotelian from the ancient commentary tradition, also thinks this. Both Caston and Burnyeat cite Alexander as an ancient antecedent for their views on vo $\hat{u}_{\varsigma}$  and  $\psi u \chi \hat{\eta}$ . While Alexander does identify productive voûc with the first cause, he does not hold that this being is or has soul. In his own On the Soul, he insists that  $\psi_{U}\chi_{\eta}$ , as such, is not a substance in its own right (12.8-10) and cannot be active in any way, even intellectually, apart from the body of which it is the form (12.10-13.8). He admits no exceptions to the view that higher souls have all the earlier powers (16.18-17.8). He also insists that the soul is inseparable from the body whose soul it is and cannot change on its own (17.9-15; cf. Supplement 3.117.21-22). It cannot have its own being or activity apart from the body. In fact, not only is the soul a power and fulfillment of the body, it "comes into being from a certain mixture and blend of the primary bodies." (24.3-4, trans. Caston; cf. Supplement 3.116.36-37) Given his understanding of  $\psi_{0,0}$ , it cannot apply to the divine vous. While his own DA typically follows Aristotle's wording quite closely, Alexander introduces his discussion of productive and receptive voûc by saying that both kinds must be found "ἐπὶ τοῦ voῦ," "in respect of understanding," (Bruns 88.22) instead of Aristotle's έν τῆ ψυχῆ, "in the soul." (430a13). Alexander does not use the language of  $\psi_{UX}$  at all in his discussion of the material covered in Aristotle's DA III 5. He avoids this precisely because, on his reading of the Aristotelian definition

<sup>&</sup>lt;sup>29</sup> 536.3-6. For discussion of the authorship of this commentary see Charlton (2000), pp. 1-10.

<sup>&</sup>lt;sup>30</sup> 537.18-24; cf. 534.27. The claim that productive νοῦς is ψυχικὸς is Ps.-Philoponus's gloss on Aristotle's claim that both productive and receptive νοῦς are found ἐν τῇ ψυχῇ, "in the soul." (430a13).

of  $\psi u \chi \dot{\eta}$ , it cannot apply to the first cause, the divine  $vo\hat{u}\varsigma$ . This divine and immortal  $vo\hat{u}\varsigma$ , unlike  $\psi u \chi \dot{\eta}$ , is separate and is always actively understanding by its own nature (*Supplement* 2, 108.27-109.5; 109.23-27; 111.28-30). The author of the *Supplement* emphasizes that divine  $vo\hat{u}\varsigma$  "always performs its own activities" (2, 112.12, trans. Sharples; cf. 112.25-113.3), a clear contrast with  $\psi u \chi \dot{\eta}$ , which, for Alexander, cannot be active on its own apart from the body.<sup>31</sup> My position, unlike that of Caston, Burnyeat, and Kosman, fits well with the history of interpretation of Aristotle.<sup>32</sup>

### 3. The Difficult Case of Human *Nous*

### a. *Nous* is not said univocally of humans and divine beings

We have seen that Aristotelian psychology does not cover all  $\zeta \hat{\varphi} \alpha$ , all living things. Psychology inquires into the sort of principle *by which* things live and are active. This principle then serves, as Aristotle claims in *DA* 2.4, as formal, final, and moving cause for those things. Aristotelian psychology excludes things that live just because of what they are and not because of a distinct principle. To see the difference, consider the case of nutritive activities that maintain the form of the living thing. Aristotle offers an account in *DA* 2.4 that is designed to cover all living substances that persist by self-maintaining activities that issue from a first actuality, the nutritive aspect of soul. This, however, leaves room for living things that persist over time, but not by means of such activities, such as the unmoved movers and celestial spheres. Aristotle's account of nutrition does not and cannot uncover the way these beings persist, because they do not persist due to a nutritive principle.

But what about the difficult case of  $vo\hat{u}\varsigma$ , the case that Aristotle himself brings up in *DA* 1.1? Aristotle thinks that  $vo\hat{u}\varsigma$  is the defining principle of a kind of  $\psi u\chi \dot{\eta}$ : the rational soul that humans have. If this  $vo\hat{u}\varsigma$  falls under soul and is fundamentally the same as divine  $vo\hat{u}\varsigma$ , both the unity of psychology and the exclusion of divine living beings would be called into question. As

<sup>&</sup>lt;sup>31</sup> On the authorship of this section of the *Supplement* see Sharples (2004), fn. 65, p. 29-30. The prevailing view is that these materials are by Alexander, though written earlier than his *De Anima*. This text also contrasts divine voûç with the material understanding, "what is capable of receiving forms and thoughts." (107.18-19, trans. Sharples), an understanding which is "in all the things that have a share in complete soul, that is, human beings." (107.20-21, trans. Sharples) Alcinous provides an earlier precedent for distinguishing voûç κατ'ἐνέργειαν from ψυχή, in the context of a Platonist system that is incorporating Aristotelian terminology and arguments (10.2; translation, Boys-Stones (2017), p. 169; for context and discussion see Boys-Stones (2017), pp. 149-152).

<sup>&</sup>lt;sup>32</sup> Similar trends are seen among medieval commentators. Averroes claims that soul is a natural being (*Long Commentary,* III 5.17, 436-7), implying that the term does not properly apply to higher intellectual beings. Thomas Aquinas denies that soul applies properly to supralunary beings (*QDDA* a. 7; *Summa theol.*, I, q. 50, a. 2 and 4; 51, a. 1, q. 75, a. 7)

we have seen, Aristotle's views on the unity of soul rest on the idea that higher powers of the soul, such as perception, imply and require lower powers, such as nutrition. Christopher Shields questions whether Aristotle can hold onto such a tight and hierarchical metaphysical connection in the case of rational soul, given the presence of  $vo\hat{u}\varsigma$  in beings such as the unmoved movers, which lack nutritive or perceptive powers:

Aristotle elsewhere [in the corpus] commits himself to the existence of immortal beings who think without perceiving or eating. There is, thus, no contradiction in saying that a rational soul exists without a perceptual soul or a perceptual soul without a nutritive soul. (2016b, p. 184)

Shields fails to see how vo $\hat{u}_{\varsigma}$  fits into Aristotle's ordered hierarchy because he does not distinguish between human vo $\hat{u}_{\varsigma}$  and the vo $\hat{u}_{\varsigma}$  of immortal beings.

There is, however, good reason to think that  $vo\hat{u}\varsigma$  is not said univocally of humans and the god. For one thing, in our case it is a capacity that can be exercised and takes on various distinct objects, while in the case of the god it is an activity which is identical to the god. The divine No $\hat{u}\varsigma$  exists without powers of perception or nutrition, but rational soul of the kind that humans have necessarily includes these powers. Aristotle gives us clear indications in the *DA* that the vo $\hat{u}\varsigma$  under investigation is of a different kind than the prime mover. He introduces his discussion of intellectual activities in 3.4 by presenting this section as being "about the part of the soul by which the soul know and judges (429b9-11,  $\pi\epsilon\rho$ )  $\delta\epsilon$   $\tauo\hat{u}$  µo $\rho$ (ou  $\tauo\hat{u}$   $\tau\eta\varsigma$   $\Psi$ u $\chi\eta\varsigma$   $\hat{\psi}$   $\gamma$ iv $\hat{\omega}\sigma\kappa\epsilon$ i  $\tau\epsilon$  $\dot{\eta}$   $\Psi$ u $\chi\eta$   $\kappa\alpha$   $\dot{v}\rhoov\epsilon$ î): this excludes beings who are intellectually active, but not by a psychic power, beings that need not judge ( $\phi\rhoov\epsilon$ î) in the way that we do.<sup>33</sup>

After arguing that human  $vo\hat{u}\varsigma$ , unlike perception, does not have a bodily organ but is a capacity for active understanding of any object, Aristotle specifies what he means by  $vo\hat{u}\varsigma$ :

Accordingly, what is called the understanding of the soul (I mean by understanding that by which the soul thinks [things] through and takes [things] to be true) is actually none of the things that have being before it understands them.<sup>34</sup>

Again, by speaking of a  $vo\hat{u}\varsigma$  of the soul, Aristotle indicates that this sort of  $vo\hat{u}\varsigma$  falls under *DA* 2.2's definition of soul. It is that by which we composite human beings think. At the same time, he again implies that there is a distinct (and presumably rather different) sort of  $vo\hat{u}\varsigma$ , one that is not connected to soul. This impression is furthered by Aristotle's characterization of human  $vo\hat{u}\varsigma$  as

<sup>&</sup>lt;sup>33</sup> This calls into question Jonathan Lear's claim that "God's activity is thinking, an activity in which we can engage" (1988, p. 298), a claim which relies on taking divine and human intellectual activities to be univocal.

<sup>&</sup>lt;sup>34</sup> ὁ ἄρα καλούμενος τῆς ψυχῆς νοῦς (λέγω δὲ νοῦν ῷ διανοεῖται καὶ ὑπολαμβάνει ἡ ψυχή) οὐθέν ἐστιν ἐνεργεία τῶν ὄντων πρὶν νοεῖν· (429b22-24) For discussion of this argument see Cohoe (2013).

a power that is not actually any of the objects of understanding before it is active (again, in contrast to divine  $vo\hat{u}\varsigma$ ). It is also noteworthy that the intellectual activities Aristotle mentions,  $\delta_{i\alpha}vo\epsilon_{i\tau\alpha i}$ , thinking things through, and  $\dot{\upsilon}\pi o\lambda \alpha \mu \beta \dot{\alpha} v\epsilon_{i}$ , taking to be true, are characteristic of limited human minds.<sup>35</sup> Aristotle does not apply these thinking verbs to more perfect intellectual beings.

# b. *Nous* is not the form of the body

The status of  $vo\hat{u}\varsigma$  as a power of the soul is, however, compatible with human  $vo\hat{u}\varsigma$  not being bodily. As we saw in section 2, the human soul is "that by which primarily we live and perceive and think." It is the formal principle responsible for all our living activities. Nothing about this definition requires all the activities for which it is responsible to be bodily. Indeed, Aristotle, in summing up his contention that the soul is the form of the body, clearly leaves room for  $vo\hat{u}\varsigma$  as a part of the human soul that is separable from matter saying:

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 fulfillment of some of these parts, is the fulfillment of these [bodily organs]. But nothing prevents some parts [from being separable from the body], because they are the fulfillments of no body.<sup>36</sup>

Aristotle is here taking the soul, as a whole, to be the fulfillment of a certain sort of body and observing that this holds true of most of its powers as well: they are the fulfillments of certain parts of the body. But he notes that any powers that are not the fulfillments of parts of the body are separable.<sup>37</sup> If, as *DA* 3.4 argues, the understanding is not the fulfillment of a part of the body,

<sup>&</sup>lt;sup>35</sup> On ὑπολαμβάνειν as taking to be true or as believing (in a generic sense) see Moss and Schwab (2019).

<sup>&</sup>lt;sup>36</sup> DA 2.1, 413a3-7. ὅτι μἐν 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.

<sup>&</sup>lt;sup>37</sup> 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 fulfillment of some part of the human body. Note that this does not make sense on the taxonomic reading 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.

Further support for the idea that the understanding 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 I 4. 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 or how, is difficult even to fabricate." (*DA* 1.5, 411b18-19) Aristotle raises a serious difficulty for this view based on the claim that the understanding, 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 understanding is essentially a separate divine substance, then Aristotle's objection is irrelevant. It is only if the understanding does not belong to a soul which does hold a body together that the objection applies. If the understanding does not belong to a soul that holds together a body, then it could still be true that for every soul that holds together some body, every part of that sort of soul holds together some body part. This passage thus

then the understanding is part of the human soul (indeed, the defining part), while being separable.<sup>38</sup>

### c. Human *nous* implies nutritive and perceptive powers

DA 3.4 is focused on human voûç, but without taking this voûç to be the fulfillment of any bodily part. Thus we still need to resolve the question of how voûç fits into Aristotle's sequential ordering of souls. Unlike the other powers of plants and animals, whose activities are ordered towards furthering the organism's practical interests, this power allows for activities that have no end beyond themselves. Aristotle needs to explain how his account of the soul's unity can apply to human reason. Noûç allows us to understand reality as such, not just cognize those parts of the environment with which we interact. Aristotle insists that there are no intrinsic limits to what human voûç can grasp: it outstrips the practical range of human action. Given that voûç, as Aristotle conceives it, does not require or constitutively involve a specific bodily structure, we might worry that our rational capacities do not imply having a human body or perceptible and nutritive powers. Our defining power of understanding would seem to float free, unconnected to the rest of our life or to the lives of other embodied terrestrial creatures. This endangers the ordered unity Aristotle claims to discern within ensouled creatures and their powers. As Julie Ward puts it,

it becomes hard to see why the possession of intellective soul itself entails the possession of the other capacities of soul that are essentially physical (in the sense that they are the actualities of a certain kind of body). Yet Aristotle needs to explain the reason for the serial ordering of souls in order to avoid the consequence of a disunified multiplicity within the ensouled thing.<sup>39</sup>

provides evidence against interpretations that deny that the understanding is a power of the human soul, such as the taxonomic view.

<sup>&</sup>lt;sup>38</sup> This clarifies what is wrong with Caston's claim (1996, p. 180) that  $vo\hat{u}\varsigma$ , as part of the human soul, must be part of the form of the human body. Indeed, Aristotle, in summing up his contention that the soul is the form of the body, clearly leaves room for  $vo\hat{u}\varsigma$  to be a part of the human soul that is separable from matter: "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 fulfillment of some of these parts is the fulfillment of these [bodily organs]. But nothing prevents some parts [from being separable from the body], because they are the fulfillments of no body." (*DA* 2.1, 413a3-7) If  $vo\hat{u}\varsigma$  is not the fulfillment of any part of the body, then it need not be part of the form of the body. Now, as part of the rational soul, it turns out to be part of something that is the form of the body, but it is not, as such, part of the form of the body. No $\hat{u}\varsigma$  is a part of soul as a power of the whole soul that allows for rational activities, not insofar as  $vo\hat{u}\varsigma$  is the fulfillment of the body or its parts, in contrast to other soul powers which are, as such, fulfillments of parts of the body or the whole body. This raises the larger question of what the separability of  $vo\hat{u}\varsigma$  would imply for the soul as a whole, see Cohoe (forthcoming) for discussion.

<sup>&</sup>lt;sup>39</sup> Cf. the worry of Shields (2016b, p. 184) quoted above. On Shields' reading, the ordered sequence whereby higher powers require lower ones breaks down when it comes to voûς. Now we have a power that can exist and make something alive on its own without any necessary connections to the earlier powers.

On my interpretation, Aristotle's distinction between theoretical and practical  $vo\hat{u}\varsigma$  addresses this worry.

Aristotle makes a distinction between practical thought and contemplative understanding at the end of 2.3, where he is discussing the order in which the different powers of the soul are found. He claims:

Without the nutritive part there is no perceptual [part]...and of the ones that can perceive, some have the part capable of causing movement with respect to place, whereas others do not. Lastly, the fewest [ensouled things] have reasoning [ $\lambda o\gamma i\sigma \mu ov$ ] and discursive thought [ $\delta i \alpha v oi \alpha v$ ]. For among mortal beings [ $\tau \hat{\omega} v \ \phi \theta \alpha \rho \tau \hat{\omega} v$ ] those that have reasoning also have all the remaining [powers], while those which have each of these [other powers] do not all have reasoning. Indeed, some do not even have imagination, while others live by this alone. About the contemplative understanding [ $\pi \epsilon \rho i \ \tau o \hat{U} \ \theta \epsilon \omega \rho \eta \tau i \kappa o \hat{U} \ v o \hat{U}$ ] 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]. (*DA* 2.3, 415a7-13)

Here we get the sequence of soul powers, culminating in the case of beings that reason, together with the claim that a different account is needed in the case of contemplative understanding. On my interpretation, Aristotle is distinguishing between the practical aspects of human understanding, which do fit into the sequential ordering of powers, and the theoretical aspects of understanding, which do not.<sup>40</sup>

Practical voûç implies the lower powers of perception and nutrition and works together with them. To guide our actions, voûç requires cognition of particulars, as Aristotle argues in *DA* 3.7, which, in turn, requires perception and thus nutrition. Practical understanding allows Aristotle to preserve the claim that later soul powers imply the earlier ones. This fits with Aristotle's wording at the beginning of *DA* 3.12, where he claims that "anything which lives *and has a soul* ( $\zeta_{\hat{\eta}}$  καὶ ψυχὴν ἕχῃ) has a nutritive soul from its generation until its destruction." (434a22-23) Aristotle obviously thinks that there are things that are living but do not have nutritive soul. Nevertheless, within the realm of living things that are alive by having soul, all have the nutritive power. Just as there is no way of being a quadrilateral that does not involve a connection to triangles and their

<sup>&</sup>lt;sup>40</sup> Cf. *EN* VI 1. Ward also notes the difference in terminology about practical and theoretical understanding (1996, p. 125). Ward worries, however, that this ruins the serial ordering of the soul, since it is not implied by theoretical understanding. If, however, theoretical and practical understanding turn out to be one and the same power, then this worry can be addressed.

Burnyeat claims that Aristotle is here distinguishing calculation and thought and the powers responsible for them from the (divine) contemplative understanding. On his view, Aristotle is introducing this contemplative intellect as something new and claiming that it requires a different account than that given to any of the previous powers, such as the powers of calculation and thought. (2008, pp. 17-19).

powers, so there is no way of having a "part of the soul by which the soul knows and judges" without having the requisite nutritive and perceptual powers.

Beings that are generated and live in virtue of a soul need to maintain their bodies and grow. The essence of humans requires that we perceive and maintain ourselves, so that the corresponding powers are part of what we are, not just tools that we might or might not have. While our activities of nutrition are quite different from our activities of understanding, the way these activities are caused by the soul is unified enough for them to fall under the same inquiry. The soul serves as a formal, final, and efficient cause in both cases. Thus Sarah Broadie rightly claims that "human intellect, as Aristotle presents it ...is at home with the perceptive and locomotive faculties without which it could not function as the intellect of a practical and social animal." (1996, p. 165) I agree with her in the case of practical understanding, which serves as a principle of motion and orders our lives as social animals.

#### d. Theoretical Nous falls under first philosophy

However, not all human understanding is practical. Aristotle's account of voug requires considering what it can do as a power, which goes well beyond our practical intellectual activities. Our theoretical understanding grasps being as such and its ultimate activity is contemplative, not undertaken for some further end. Such an understanding demands a different account, one that pushes at the limits of psychology.<sup>41</sup> Nothing about the activity of vóŋoic as such implies having a particular sort of body. Now Aristotle does think that, for human voûg to become active, it needs material to work with. He commits himself to the view that previous perception and experience is necessary for the development of our capacity to understand something (Met A 1; APo 2.19). Nevertheless, Aristotle's account of what the perfect activity of vóŋoic is makes no reference to the body. Even if, for human knowers, various bodily processes are in fact required to support our intellectual activities, it can still be the case that nothing about the account of the activities themselves implies a connection to any particular sort of body. In this respect, theoretical understanding does not fit neatly into Aristotle's sequence of the powers that order and structures the bodies and activities of sublunary creatures. Aristotle is acknowledging this in DA 2.3. For practical understanding to do what it does, it must use perception and so be hierarchically integrated with all our other powers. By contrast, nothing about what the activity of contemplative understanding *is* ties it to our bodies and our other powers.

<sup>&</sup>lt;sup>41</sup> There is also a question about whether theoretical understanding requires the body and necessarily involves φαντάσματα (see Cohoe 2016).

In distinguishing between reasoning and contemplation and claiming that we should give a different account of contemplation, Aristotle is not implying that only one of these is part of the human soul. Rather, theoretical understanding, even though it is still an aspect of the individual human soul, is quite different from practical understanding, because it is not a principle of natural movement. For Aristotle, intellectual activities are not motions. They are ongoing perfect activities which do not properly take place in time and can be done continuously without any intrinsic limit (3.4-7, we will return to the significance of this in the next section). They are quite different than moving around or feeling heat, imperfect motions that involve destruction. As we just noted, Aristotle thinks previous perception and experience are necessary for initially acquiring any sort of understanding. This does not, however, mitigate his claim that contemplative activities are themselves non-bodily and outside the realm of natural change. He brings in the case of practical voûç in 3.7 in a way that helps relate this understanding to other human powers, but Aristotle still takes our intellectual power to be distinct from the rest of our life in a way that is not true for the powers of any other terrestrial creature. The case of understanding introduces a decisive separation between a thing's activity and its bodily manifestation.

If, then, theoretical voûç falls outside of natural philosophy, why does Aristotle discuss it in the *DA*? It comes in precisely because of the soul's characterization in 2.2 as that by which we live. Noûç is a principle by which humans are active and living: active in a perfect and divine way, not a natural and imperfect way. Thus, according to Aristotle's definition of soul, it must be one of our soul's powers. Further, Aristotle's inquiry proceeds by first grasping a power's objects then its activities, then the power itself (*DA* 2.4, 415a13-22). Before considering the practical aspect of voûç, which does cause motions, Aristotle must talk about the objects and activities of voûç and about voûç itself. We need the basic account of what voûç understands, why it lacks an essential connection to the body, and how it relates to its objects, the material Aristotle provides in 3.4-6.<sup>42</sup> Aristotle then turns to the practical side of understanding, with his discussion of the activation of practical voûç in 3.7 and its connection to desire and the motion of animals in 3.9-10.

Aristotle discusses theoretical understanding in order to properly characterize the human soul, but he does so cautiously. In 3.4, Aristotle briefly discusses our understanding of immaterial things, objects that go beyond natural philosophy and into theology, noting that here what understands and what is understood (τὸ νοοῦν καὶ τὸ νοούμενον) are the same. However, he

 $<sup>^{42}</sup>$  This also allows Aristotle to address the question of 1.1 about whether any attributes (πάθη used broadly, as Aristotle often does) are proper (ἴδιον) to the soul.

discusses this case primarily in order to solve a puzzle about the way in which human  $vo\hat{u}\varsigma$  can itself be understood. Then, at the end of 3.7, after discussing practical thought and thought of mathematical objects, Aristotle postpones discussion of the human understanding's relation to separable objects:

In general, the understanding, when active, is the things [it understands]. But whether or not it is able to understand any of the separated things, when it itself is not separated from magnitude, must be looked into later.<sup>43</sup>

On my view, Aristotle postpones discussion because it falls outside natural philosophy. No $\hat{u}$ ç and its activities are not part of natural philosophy, precisely because these activities are not material ones or motions. Since Aristotle's inquiry into the soul is largely focused on its role as a nature and a principle of movement, he leaves aside any consideration of immaterial beings that is not strictly necessary for laying out the soul's powers and attributes.

On my interpretation, then, the human understanding has a practical aspect, which does fit into Aristotle's sequence of soul powers and falls under natural philosophy, and a theoretical aspect, which does not, as such. Nevertheless, since human voûç is a capacity by which humans perform activities and a capacity whose development and exercise depends on our lower capacities it still counts as a power of the soul and needs to be included in Aristotle's psychology, even though it pushes at its boundaries. Even on interpretations on which rational soul can operate apart from the body, e.g. Cohoe (2016), section 9; Carter (2019), pp. 224-225, voûç is still "that by which" the rational creature understands. It is still a formal principle that explains and causes activity.

# 4. Zωή is Not Univocal

As we have seen, Aristotle does not ascribe  $\psi u \chi \dot{\eta}$  to unmoved movers since they do not have a distinct formal principle, a cause of life that informs matter.<sup>44</sup> However, Aristotle does emphatically claim in *Met*  $\Lambda$  7 that the god is  $\zeta \omega \dot{\eta}$  (living) and insists in *De Caelo* 2.12 that the stars share in "doing and living" (πράξεως καὶ ζωῆς). This might suggest that we can still have

<sup>&</sup>lt;sup>43</sup> 3.7, 432a17-19 ὅλως δὲ ὁ νοῦς ἐστιν, ὁ κατ' ἐνέργειαν, τὰ πράγματα. ἆρα δ' ἐνδέχεται τῶν κεχωρισμένων τι νοεῖν ὄντα αὐτὸν μὴ κεχωρισμένον μεγέθους, ἢ οὕ, σκεπτέον ὕστερον.

<sup>&</sup>lt;sup>44</sup> Of course, as Kosman noted, there are close connections between ψυχή and ζωή, since Aristotle sometimes uses τὰ ἕμψυχα, the ensouled or alive things, with a similar extension as τὰ ζῷα, living things. But it is clear that Aristotle does not treat these terms as synonymous. And Aristotle is not the only one to separate them. Indeed, Stephen Menn suggests that the Demiurge of the *Timaeus* may serve as a precedent for a ζωή who is not a soul and does not have a soul (forthcoming, IIIg1, p. 7, fn. 12).

one unified science that covers all living things. Even if psychology cannot be universal, perhaps zoology can be. There are two problems with this suggestion. The first is that ζωή is not said univocally of all living things. Aristotle claims that some living things have life more than others ( $\mu$ âλλον ζωὴν ἔχοντα; *HA* 7(8).1, 588b22; cf. 588b4-589a10; *PA* 4.5, 681a13-21) and insists that living applies in various senses, some of which are more proper than others (*EN* 1.7, 1098a6-7; *Met* Λ 7, 1072b26-29). The second, related problem, is that a science of ζωή would turn out to be about the same objects as first philosophy.

Aristotle never provides us with a proper account or definition of  $\zeta \omega \dot{\eta}$ . Indeed, in the Topics, he criticizes Dionysius for offering a definition of ζωή that applies equally to plants and animals, when, in fact, "living does not seem to be said according to one form, but one sort of living belongs to animals and another to plants." (Top 6.10, 148a29-30, ἡ δὲ ζωὴ οὐ καθ' ἑν είδος δοκεί λέγεσθαι, άλλ' ἑτέρα μὲν τοίς ζώοις ἑτέρα δὲ τοίς φυτοίς ὑπάρχειν).45 We see this attitude playing out in the way that Aristotle generally avoids putting plants within the semantic range of  $\tau \delta \zeta \omega o v$ , animal or living thing, which would be an obvious candidate for a name that applies to all things that are alive. In PA 4.5, he says that "nature passes continuously from things lacking soul to animals through things that are living but are not animals." (ἡ γὰρ Φύσις μεταβαίνει συνεχώς ἀπὸ τῶν ἀψύχων εἰς τὰ ζῶα διὰ τῶν ζώντων μὲν οὐκ ὄντων δὲ ζώων, 681a13-15) The fineness of Aristotle's distinctions in this passage is striking, as he is denying that plants are  $\tau \dot{\alpha} \zeta \dot{\omega} \alpha$  at the same time that he is asserting that they are  $\tau \dot{\alpha} \zeta \dot{\omega} v \tau \alpha$ , living beings. Similarly, in HA 7(8).1, he claims that "the whole kind [sc. plants] relative to other bodies seems pretty much animate, but relative to animals, pretty much inanimate." (588b8-12, όλον δὲ τὸ γένος πρός μέν τάλλα σώματα φαίνεται σχεδόν ώσπερ ἔμψυχον, πρός δὲ τὸ τῶν ζώων  $\ddot{\alpha}\psi$ uxov) While Aristotle clearly thinks that plants are alive, the limited ways in which they can be active means that their  $\zeta \omega \dot{\eta}$  is more restricted and of a different sort than that of animals (much less divine living things).

Aristotle typically uses  $\tau \dot{o} \zeta \hat{\phi} ov$  in the sense of animal, in which case he takes it to have a univocal account: a substance that has the capacity to perceive.<sup>46</sup> While, as we just saw,  $\tau \dot{a}$ 

<sup>&</sup>lt;sup>45</sup> As we saw in section 2, there are problems with putting too much weight on passages from the *Topics*. This passage is still worth quoting because it brings up the issue of univocity and its suggested position fits well with Aristotle's developed views in the *DA* and the biological works. It is still clearly an incomplete discussion of the issues with Dionysius' position, however. Aristotle just brings up the one relevant point for the issue at hand in the *Topics* (equivocation) but does not raise other problems he would have with this definition. For example, Aristotle does not criticize Dionysius' definition (congenital and accompanying movement of a nutritive sort of thing, κίνησις γένους θρεπτοῦ σύμψυτος παρακολουθοῦσα) for not applying to divine beings, even though it clearly does not.

<sup>&</sup>lt;sup>46</sup> E.g. *DA* 2.2, 413b1-6; 3.12, 434a29-30; 434b23; *Cat.* 7 8a7, *Met* A 1, 980a28; Z 10, 1035b14-21; *Juv.* 4, 469b3-4; *Somn.* 1, 454b24.

ζφα often picks out animals in contrast to plants, Aristotle also sometimes uses τὰ ζφα in contrast to higher kinds of living things. In *Met* Δ 8, Aristotle contrasts τὰ ζφα with δαιμόνια (1017b12) and in Λ 1 he contrasts them with both everlasting perceptible beings and eternal separable beings (1069a29-69b2).<sup>47</sup> But in other passages, Aristotle claims that τὸ ζφον is predicated of god as well as human and horse (*Met* Δ 26, 1023b32; N 1, 1088a8-10; cf. the use of ζφον in Λ 7, 1072b26-29). It is plausible that τὸ ζφον here should be taken in the sense of living thing, since, at least on Aristotle's developed view, the god does not have a perceptive capacity, properly speaking, since the god does not have any organs of perception that are constitutively required for such a power (*GA* 2.3, 736b30-31).

The ambiguity of  $\tau \delta \zeta \hat{\varphi} ov$  comes out sharply in a passage from the beginning of the *DA* on the question of definition:

We must be careful not to neglect to consider whether there is one account of the soul, as in the case of animal [ $\zeta \dot{\psi} o u$ ], or whether there is a distinct account of each [kind of soul], as in the case of horse, dog, human, god, with the universal living thing [ $\tau \dot{o} \zeta \dot{\psi} o v \tau \dot{o} \kappa \alpha \theta \dot{o} \lambda o u$ ] being either nothing or posterior. (1.1, 402b3-6, trans. Reeve with modifications)

Commentators have been confused as to why Aristotle seemingly uses  $\zeta \tilde{\varphi} ov$  twice, first as an example of a case in which there is "one account [ $\epsilon l \hat{c} \circ \lambda \delta \gamma o \varsigma$ ]," and then as an example where the universal is "either nothing or posterior [ $o \dot{\upsilon} \theta \dot{\epsilon} v \ddot{\eta} \ddot{\upsilon} \sigma \tau \epsilon \rho ov$ ]." There have been some careful and ingenious discussions of this passage that try to show how the same  $\zeta \tilde{\phi} ov$  can have one account while also being posterior to its species.<sup>48</sup> A plausible way of resolving the apparent tension, however, is that Aristotle is making a sort of pun, using  $\zeta \tilde{\phi} ov$  in two different senses.<sup>49</sup> In the sense of animal, there *is* one account that applies univocally to all animals. By contrast,  $\tau \dot{\delta} \zeta \tilde{\phi} ov \tau \dot{\delta} \kappa \alpha \theta \delta \lambda ou$ , in the sense of living thing in general, does not apply in the same way to horse, human, and god. There is not a common univocal account of what it is to be a  $\zeta \tilde{\phi} ov$  that all these entities share. Instead, while they each have their own accounts, and can each be said to be living based on what they are,  $\tau \dot{\delta} \zeta \tilde{\phi} ov$  is something posterior to the various living things

<sup>&</sup>lt;sup>47</sup> Reeve takes δαιμόνια to be equivalent to the heavenly bodies (2016, fn. 528, pp. 366-7). In this passage, the entities being referred to by the term must have bodies. The heavenly bodies may be candidates, but it also plausible that Aristotle is referring to inferior divine powers that are taken to be connected to bodies in some significant way (though Aristotle may not be committing himself to endorsing the existence of such beings).

<sup>&</sup>lt;sup>48</sup> See, for example, Hicks' discussion and summary of previous thinkers, especially Alexander of Aphrodisias (1907, pp. 184-188).

<sup>&</sup>lt;sup>49</sup> For evidence that Aristotle uses pun-like equivocation on key terms as part of his pedagogy see Quandt (1981), pp. 187-194.

which cannot be given an account as proper or unified as the specific definitions of the various kinds.

Aristotle's theology gives us strong evidence for thinking that there is no definition of  $\zeta \omega \dot{\eta}$  that applies univocally to god, human, and horse. Consider Aristotle's case in  $\Lambda$  7 for attributing  $\zeta \omega \dot{\eta}$  to the god.

And living too certainly belongs [to the god]. For the activity of understanding is living, but he is this activity; and his intrinsic activity is the best and eternal living. We say, indeed, that the god is a living being who is eternal and best, so that living and a continuous and everlasting eternity belong to the god; for this is the god. (1072b26-29)

καὶ ζωὴ δέ γε ὑπάρχει· ἡ γὰρ νοῦ ἐνέργεια ζωή, ἐκεῖνος δὲ ἡ ἐνέργεια· ἐνέργεια δὲ ἡ καθ' αὑτὴν ἐκείνου ζωὴ ἀρίστη καὶ ἀΐδιος. φαμὲν δὴ τὸν θεὸν εἶναι ζῷον ἀΐδιον ἄριστον, ὥστε ζωὴ καὶ αἰὼν συνεχὴς καὶ ἀΐδιος ὑπάρχει τῷ θεῷ· τοῦτο γὰρ ὁ θεός.

Aristotle here moves from the god having or, rather, being the activity of understanding to recognizing the god as living. It is the activity of understanding that allows us to attribute  $\zeta \omega \dot{\eta}$  to the god. Indeed, since the god is the same as the god's activity (cf.  $\Lambda$  9), we can also say that the god *is*  $\zeta \omega \dot{\eta}$ .<sup>50</sup> While Aristotle notes that his view licenses the traditional conception of the god as the best and eternal living thing,  $\zeta \dot{\phi} \circ v \dot{\alpha} \dot{t} \delta_1 \circ v \dot{\sigma}_1 \circ \sigma \circ v$ , it does so via the  $\zeta \omega \dot{\eta}$  that is  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon_1 \alpha$ . Although speaking of the god as  $\zeta \dot{\phi} \circ v$ , a living thing, is acceptable, it turns out to be less accurate and precise than speaking of the god as  $\zeta \omega \dot{\eta}$ , the activity of living, since the divine living that is best and eternal simply consists in  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon_1 \alpha$ .

<sup>&</sup>lt;sup>50</sup> As Christopher Shields notes, "Aristotle asserts, straightforwardly, that 'life is the actuality of mind, and this actuality is god' (ή γàρ voû ἐνέργεια ζωή, ἐκεῖνος δἑ ἡ ἐνέργεια)" (1999, 188). I concur with Shields in taking this passage to express what Aristotle takes the core of living to be. I agree with Menn (forthcoming, IIIg1) and Aquinas, inter alios, that in Λ 7 Aristotle attributes voûς to the unmoved mover due to the fact that the unmoved mover is a voητόν and, hence, by the identity of vóησις and voητόν in the case of immaterial things, must also have (or rather be) vóησις.

By contrast, C.D.C. Reeve, who accepts the claim that soul applies to the god, makes the logic of this passage more indirect. Reeve suggests that Aristotle's claim that living belongs to god "because understanding is an activity of soul, which is the primary recipient of life." (2016, note 1361, p. 530, citing *Met*  $\Delta$  18, 1022a32) But this is one inference too many. Surely Aristotle is going directly from the identity of  $\zeta \omega \dot{\eta}$  with  $\dot{\eta} vo\hat{\upsilon} \dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon_{IQ}$  and the identity of  $\dot{\eta} vo\hat{\upsilon} \dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon_{IQ}$  with the god and unmoved mover to the identity of  $\zeta \omega \dot{\eta}$  and the god. There are no further intermediary steps because there is nothing more to the god than this one perfect activity (cf.  $\Lambda$  9).

<sup>&</sup>lt;sup>51</sup> Shields argues in *Order in Multiplicity* that, for Aristotle, life is a core-dependent homonymy with god's living providing the core case (1999, pp. 189-192). The activity of voûç is living itself, since it is the focal and perfect case of the activity of being, complete and self-contained. The god is living itself because the god just is perfect activity and voûç, which turn out to be one and the same. Shields claims that, for Aristotle, the core of living is being an intentional system. For Shields, any *x* that counts as a native or internal intentional system is alive. The homonymy of life comes in due to the different ways in which living things function as intentional systems. While I am sympathetic to the idea that the god is the best candidate for the core instance of both of  $\zeta \omega \dot{\eta}$  and  $\dot{\varepsilon} v \dot{\varepsilon} \rho \gamma \epsilon_{IQ}$ , my overall claims about the non-univocal nature of these terms does not require such a position.

There are also issues with Shields' specific proposal. First of all, there are reasons to doubt that Aristotle's god can be described as an intentional system, despite the efforts of some such as Michael Frede (1995 and 1996)

Aristotle repeatedly connects  $\zeta \omega \dot{\eta}$  to  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon \iota \alpha$ . For example, in *Nicomachean Ethics* 10.4, when discussing pleasure, he says:

One might think that everyone desires pleasure because everyone also aims at living; and living is a sort of activity and each is active about and with those things he loves most. (1175a10-13) όρέγεσθαι δὲ τῆς ἡδονῆς οἰηθείη τις ἂν ἅπαντας, ὅτι καὶ τοῦ ζῆν ἅπαντες ἐφίενται· ἡ δὲ ζωὴ ἐνέργειά τις ἐστί, καὶ ἕκαστος περὶ ταῦτα καὶ τούτοις ἐνεργεῖ ἂ καὶ μάλιστ' ἀγαπᾶ.

Aristotle here takes the attraction towards living, taken as  $\dot{\epsilon}\nu\dot{\epsilon}\rho\gamma\epsilon_{i}\dot{\alpha}\tau_{i}\varsigma$ , a sort of activity, to be universal. It is something that all humans (and, indeed, all living things) have. He also insists that  $\zeta\omega\dot{\eta}$  is primarily an activity, not a capacity. Having the capacity to do living activities is not satisfactory for living creatures. We all want to be what we are more fully by exercising our capacities. We desire to perform the activities which realize our life form and give us a share in acting. This fits with Aristotle's earlier discussion in *EN* 1.7, where he explores how the human good relates to living. He insists that to live,  $\tau\dot{\sigma}\zeta\eta\nu$ , is said  $\kappa u\rho\iota\dot{\omega}\tau\epsilon\rho\sigma\nu$ , more properly, of activity than of capacity. (1098a6-7) A thing is more fully living when it is active in doing its works, instead of just able to act. This is not to deny that something can be said to be living in virtue of its vital capacities, but the more proper sense of  $\tau\dot{\sigma}\zeta\eta\nu$  applies to things insofar as they are active.

These passages show the contrast between Aristotle's conceptions of  $\zeta \omega \dot{\eta}$  and  $\psi u \chi \dot{\eta}$ . For Aristotle, having  $\psi u \chi \dot{\eta}$  is binary. For any given kind of soul, you either have it or you do not. The soul is the form that makes the living body what it is. Soul continues to do this in the same way for as long as the ensouled substance persists. Things also count as ensouled based on their capacities, not their activities. Aristotle insists that the soul is the body's first fulfillment,  $\dot{\eta} \pi \rho \dot{\omega} \tau \eta \dot{\epsilon} v \tau \epsilon \lambda \dot{\epsilon} \chi \epsilon \iota \alpha$  (*DA* 2.1, 412a27) analogous to possessing knowledge. The soul, for Aristotle, is  $\ddot{\epsilon} \chi \epsilon \iota v \kappa \alpha \dot{\iota} \mu \dot{\eta} \dot{\epsilon} v \epsilon \rho \gamma \epsilon \hat{\iota} v$ , a having but not being active (2.1, 412a25). Both the comatose person and the person running a marathon possess soul in the same way. But, as we have seen, Aristotle insists that some living things have  $\zeta \omega \dot{\eta}$  more than others. Any given living thing also has  $\zeta \omega \dot{\eta}$ 

and Myles Burnyeat (2008) to characterize Aristotle's divine  $vo\hat{u}\varsigma$  in this way. In  $\Lambda$  9, Aristotle explicitly denies that there is any distinction between the divine activity of understanding and its being understood. They are one and the same. Introducing a diversity of objects, as a system would require, would lead to dependence relations and compromise the superiority of divine  $vo\hat{u}\varsigma$  by making some of its parts better than it. The god is the end itself precisely insofar as the god is ένέργεια lacking any structure or ordering toward something further. Shields' characterization, however, makes it sound as if divine  $vo\hat{u}\varsigma$  is a complex intentional system with diverse activities and objects.

The other main problem with this characterization is that it does not make the priority of the focal case clear. Shields specifies the idea of system in terms of normative end-directed behavior. But one might think that plants exhibit this as much or more than some animals or celestial beings. It is also unclear why the divine case is the primary one, since, as I just noted, here there are no operations carried out for further distinct ends, whereas we observe distinct goals in the case of plants and animals.

more when exercising its capacities than when idle. Even when it comes to activities, not every living activity qualifies as  $\zeta \omega \dot{\eta}$  in the same way. The *Topics* passage claims that the  $\zeta \omega \dot{\eta}$  for animals is different from that of plants precisely because the  $\dot{\epsilon} v \epsilon \rho \gamma \epsilon \hat{\iota} \alpha i$  in which their living consist is different. As we will see, some cases of  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon i \dot{\alpha}$  are more fully instances of  $\zeta \omega \dot{\eta}$  than others.

What all instances of  $\zeta \omega \dot{\eta}$  have in common, for Aristotle, is that they are  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon i \dot{\alpha} \tau_{I} \dot{\alpha}$  (leaving aside the less proper case, where something is said to have  $\zeta \omega \dot{\eta}$  by having a capacity for such activity). But  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon i \dot{\alpha} \tau_{I} \dot{\alpha}$  is said analogically, not univocally. The fundamental differences between various kinds of activity prevent us from being able to give a proper and universal account of  $\zeta \omega \dot{\eta}$ . Aristotle famously holds that we cannot give a definition of what it is for something to be  $\dot{\epsilon} v \epsilon \rho \gamma \epsilon i \dot{\alpha}$ , to be actively, but must instead know this by analogy, insisting:

we must not look for a definition of everything, but be able to comprehend the analogy...things are said to actively be  $[\dot{\epsilon}v\epsilon\rho\gamma\epsilon\dot{q}]$ , not all in the same way, but by analogy—as this is in this or to this, so that is in that or to that. For some are as movement in relation to a capacity, and the others as substance to some sort of matter. (*Met*  $\Theta$  6, 1048a36-38; 1048b5-9, trans. Reeve)

Of course, Aristotle does not think that every instance of an ἐνέργειά is a living activity. He holds that ἐνέργειά applies to all the categories to which movement belongs: to quality, quantity, and movement in place as well as substance (*Met* K 9, 1065b9-15; 34-1066a7; cf. *Phys* 3.1-2). Now the ἐνέργειά τις that counts as living is restricted to activities or movements that come from what the substance is. In the case of sublunary things, these activities come from the thing's form, the soul that is the principle of the living natural body.

Nevertheless, even this needs further qualification. Aristotle insists that the elements such as fire and earth imitate the divine being in being active and moving intrinsically (*Met*  $\Theta$  8, 1050b28-30). Since they are active in virtue of their form, you might think that this activity would qualify as a sort of living. Yet elsewhere Aristotle holds that they are not alive because they are not active in the right way. In *Phys.* 8.4, Aristotle insists that the elements cannot, properly speaking, "move by themselves [ $\dot{\upsilon}\phi' \ \alpha\dot{\upsilon}\tau\hat{\omega}v$ ]" in place. They are naturally at rest and resist movement. It is true that, when forced out of place, they move back to the place where they rest, but they are not, properly speaking, agents of this movement.<sup>52</sup> While fire's tendency to be above the other elements is internal to it and comes from its form, any activities that follow from this are not solely initiated by fire. They are too externally dependent to count as living. By contrast, the

<sup>&</sup>lt;sup>52</sup> 255a5-8; 255b5-13. How and why Aristotle denies that their movements are self-movements is a controversial topic, but the important point for our purposes is that he denies that the elements' movements are done by themselves or self-initiated in the way that all living activities are.

activities of plants, though limited, are self-governed and initiated. Plants engage in growth and nutrition in a goal-directed way that involves directing their nutritive activities to both maintain their form and reproduce this form (*DA* 2.4, 416a9-18; cf. 416b13-28). It is their goal-directed initiation and regulation of their activities that explains why plants are alive and why nutrition counts as an  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon$ iá  $\tau_{i}c$  that is a type of  $\zeta\omega\dot{\eta}$ .

While all living activities come from their living substances, what these activities are, as Aristotle insists in *DA* 2.4, depends both on their objects and on the power responsible for them. Here there are wide differences in what the activity works on and in how it proceeds from the power. Aristotle famously insists that  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon_{i}\dot{\alpha}$ , activity, extends more widely than  $\kappa(v\eta\sigma_{i}\alpha, movement (Met \Theta 1, 1046a1-3)$ . There is, correspondingly, an important distinction between living activities that are or involve movement and those that are activity without movement. Nutritive activity essentially involves destruction and movement. In order to go from potentially being food to actually being food, the nutriment is chemically altered by heating activities that proceed from the nutritive power (*DA* 2.4, 416b2-30). The objects of nutrition are bodies with the appropriate potentials. The activity of nutrition proceeds via alterations in the living body that is doing the eating. This sort of activity is essentially a process and cannot continue once the product (the actual nutriment, in this case) has been produced.

In *DA* 3.7, Aristotle distinguishes the sorts of activity involved in perception and understanding from those involved in nutrition and other ordinary alterations:

It is apparent that what is perceived makes the perceiver go from potentially being [what is perceived] to actively [being what is perceived], since the perceiver is not affected or altered. That is why this is a different form from movement. For movement is the activity of what is incomplete, but unqualified activity is something else, the activity of what is perfected. (431a3-8)

φαίνεται δὲ τὸ μὲν αἰσθητὸν ἐκ δυνάμει ὄντος τοῦ αἰσθητικοῦ ἐνεργεία ποιοῦν· οὐ γὰρ πάσχει οὐδ' ἀλλοιοῦται. διὸ ἄλλο εἶδος τοῦτο κινήσεως· ἡ γὰρ κίνησις τοῦ ἀτελοῦς ἐνέργεια, ἡ δ' ἁπλῶς ἐνέργεια ἑτέρα, ἡ τοῦ τετελεσμένου.<sup>53</sup>

Both perception and understanding are different sort of  $\dot{\epsilon}v\dot{\epsilon}\rho\gamma\epsilon\iota\alpha$  from the  $\kappa(v\eta\sigma\iota\varsigma)$  or qualified  $\dot{\epsilon}v\dot{\epsilon}\rho\gamma\epsilon\iota\alpha$  that nutrition is. Seeing or contemplating do not alter their respective powers, they only complete and fulfill them. They take a power that is potentially a certain form (e.g. red, horse) and

<sup>&</sup>lt;sup>53</sup> I follow Burnyeat (2002, p. 44, fn. 41) in rendering τὸ αἰσθητικόν as "perceiver," since the subject capable of perception seems to be its meaning in some key passages from *DA* 2.5 and this translation is also more neutral when it comes to the question of whether Aristotle is talking about the organ, the power, or both.

There is some dispute about the status of this chapter. Burnyeat, following Torstrik and Ross, thinks it is a collection of fragments, a sort of folder of material for Aristotle to draw from (2002, 68). Klaus Corcilius (forthcoming) makes a strong case for reading III 7 in an internally unified way that also fits with the rest of the work.

make it to actually be that form. The resulting activities—seeing red or understanding a horse are complete at every moment, as opposed to gradually proceeding from capacity to activity (*Met*  $\Theta$  6, 1048b17-36). They are also not limited by some goal that ends the activity, as the completed production of nutriment terminates the nutritive activity. They have a different and more perfect form, one that can be continued indefinitely. While there are many challenging interpretive and philosophical issues that Aristotle's distinction raises, the important point for our purposes is that these two sorts of ἐνέργεια are fundamentally different.<sup>54</sup> He uses the word ἐνέργεια for both of them, but there is no common definition that applies to both ways of being active. While Aristotle does think that perception operates through bodily organs (and his view of ἐνέργεια ἀπλῶς, not a κίνησις.<sup>55</sup> In the case of understanding, as we have seen, Aristotle goes even further. Human understanding both has an unlimited range of objects—it can understand all beings—and it does not operate through a bodily organ. It is the sort of activity that transcends the body, a fundamentally different sort of living than eating or moving one's body around.

Yet the  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iota\alpha$  of human understanding is itself less active than the divine understanding, where we see the most distinct instance of  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iota\alpha$ . In the sublunary case, the perfect activities of perceiving and understanding still proceed from the soul. They are the exercises of a capacity and animals and humans only perform these activities some of the time. By contrast, in the divine case, as we have seen, the god just is the divine activity of understanding. Here the activity continues without beginning or end. There is also no distinct power from which the activity proceeds. Something that "is in activity, but can in no way admit of being otherwise" ( $\Lambda$  7, 1072b8, trans. Reeve) is fundamentally different in its being and its living from mortal living things. It is a truly different kind of  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iotaa$ .<sup>56</sup>

There is no way to offer a generic account of  $\zeta \omega \dot{\eta}$  that applies properly to both a plant and the god because the activities in which their living consists are too different. This means that there

<sup>&</sup>lt;sup>54</sup> See Beere (2009), chapter 10 for discussion of some of the general issues with this distinction as well as Burnyeat (2002), pp. 68 ff., and Cohoe (2013), section 2, for a discussion of this distinction as applied to cognition.

<sup>&</sup>lt;sup>55</sup> There is, of course, a debate about the degree to which perception, for Aristotle, involves ordinary alteration, as Sorabji thinks (2001) or does not, as Burnyeat thinks (2002). For an overview of the dispute see Caston (2004) and for an intermediate view, see Lorenz (2007).

<sup>&</sup>lt;sup>56</sup> We can also see how different this ἐνέργεια is by considering the matter and underlying subject of an ἐνέργεια. The divine activity of self-understanding does not have the same kind of distinct primary underlying subject, τὸ πρῶτον ὑποκείμενον, that sublunary living bodies provide in the case of terrestrial living activities. The god has no underlying subject that is distinct from the god's activity, unlike the human case where the human substance that is understanding is distinct from the activity of understanding in which the substance engages. This suggests that the god and these living bodies do not share a kind, properly speaking. (cf. *Met* Δ 28, 1024b9-12).

cannot be a science of living things in the way that there is a science of numbers or in the way that there is a science of figures or ensouled things. Aristotle does think that there is a certain relationship among the various things that are living, but it is not the kind of neatly sequential order he discerns in the case of souls and figures, since there is no necessary relationship between doing one sort of ἐνέργεια and doing another. Some living things only engage in movement, some in movement and in perfect activity, and some only in perfect activity. Things with ζωή lack the unity of ensouled things, much less that of mathematical objects. Because ζωή is not univocal and its instances are very different kinds of being, the connections between various sorts of ζωή can only be considered by the methods of first philosophy. A successful inquiry into ζωή and its core cases would be a successful inquiry into ἐνέργεια and its core cases. This, of course, is the job of first philosophy or theology.

Although there is no one ἐνέργεια in which all living creatures are engaged, Aristotle insists that there is a clear order of being and value between the various sorts of ἐνέργεια. Ζωή and ἐνέργεια are analogous terms, but they do not apply on a par to all their instances. Comparing the various living activities is not like comparing the parts of animals. In that case, there are many functional analogues that have similar value. Feathers enable birds to fly and scales enable fish to swim: both are enabling locomotive activities and provide similar sorts of value and living to the creature. By contrast, the various kinds of ζωή are not functionally analogous versions of the same living thing, applied to different ecological niches. Instead, for Aristotle, some living creatures are active in a way that attains the end and the good and others are not. Their different sorts of ἐνέργεια fall into a clear hierarchy of value.

In *De Caelo*'s discussion of the various relations things can have to the good, we see how much of a difference the kind of ἐνέργεια something is engaged in makes:

We must suppose the action [ $\pi\rho \hat{\alpha}\xi_{iv}$ ] of the planets to be similar to that of animals and plants. For in this place [i.e. the earth], human actions are most varied... there is no need of action, however, for that which is best, for it itself is the "that for the sake of which," whereas action always involves two things, the "that for the sake of which" and the "for the sake of that." [où ἕνεκα ἡ καὶ τὸ τούτου ἕνεκα] Yet the non-human animals have less varied actions, and plants little at all and perhaps only one; for either there is only one end for them to attain (as, in fact, there is in the case of the human being), or if there are many, yet they are all ordered towards the best. There is, then, one thing which has or participates in the best, a second which reaches it immediately through few [actions], a third which reaches it through many, and yet another which does not even attempt to reach it, but is content merely to approach near to the highest. [τὸ μὲν οὖν ἕχει καὶ μετέχει τοῦ ἀρίστου, τὸ δἰ ἀρίκνεῖται εὐθὺς δι ὀλίγων, τὸ δὲ διὰ πολλῶν, τὸ δỉ οὐδỉ ἐγχειρεῖ, ἀλλἰ ἰκανὸν εἰς τὸ

healthy; another by reducing; a third by running in order to reduce; a fourth by doing something else to prepare itself for running, and so going through a larger number of motions; another creature cannot attain to health, but only to running or reducing. To such creatures one of these latter is the end. To attain the ultimate end would be in the truest sense best for all; but if that is impossible, a thing gets better and better the nearer it is to the best [µάλιστα µὲν γὰρ ἐκείνου τυχεῖν ἄριστον πᾶσι τοῦ τέλους· εἰ δὲ µή, ἀεὶ ἄµεινόν ἐστιν ὄσῷ ἂν ἐγγύτερον ἦ τοῦ ἀρίστου]. (*De Caelo* 2.12, 292b2-20, Trans. W. K. C. Guthrie with modifications)

Aristotle here identifies four different relations things can have to the good, applying them to the heavens and to terrestrial creatures. The first is to be the good, to be best and ultimate without action, by being the end itself, which, of course, the divine first unmoved mover is. The second is to achieve the good through one or few actions. This is the situation of the other unmoved movers and the first heavens. They everlastingly engage in noetic activity, contemplating the first unmoved mover and themselves, and by that activity they are living and being, achieving the good (*De Caelo* 2.12, *Met*  $\Lambda$  7-8). The third category is to achieve the good through many actions: this is where both the inner supralunary spheres and humans fall for Aristotle in *De Caelo* 2.12. We can achieve the good, but only through first performing the many actions it takes to preserve ourselves, grow, perceive, remember, experience, learn, and acquire knowledge. We do all these things to finally be in a position to achieve the one activity and end (292b8) in which we are really living and really blessed: contemplation of reality, of what things are.

Plants and animals fall in the fourth category, things that cannot themselves achieve the good and end, but achieve what is best for them by getting as close to the end as they can. They are still measured by the end, but they cannot obtain it. Aristotle is not denying that these things are active, but the way in which they are living is too deficient and limited to qualify as blessed. The divine  $\zeta \omega \dot{\eta}$  is still the standard for plants and animals, it is just a standard on which they fall short. We see this in Aristotle's discussion of nutrition in *DA* 2.4, where he claims that:

this is the most natural among the functions belonging to living things: to make another such as itself, an animal an animal and a plant a plant, so that it may, insofar as it is able, partake of the everlasting and the divine. For that is what everything desires. (415a27-30, trans. Shields; cf. *GC* 2.10, 336b25-337a8)

Mortal embodied creatures cannot simply continue living and acting, as supralunary beings do, so they achieve the closest approximation to this good that they can. By reproducing another creature sharing the same form, they do something that allows for continuance, but in a deficient way, just as those perpetually lacking health get as close to it as they can through undergoing

various treatments and exercises, but only ever share in health deficiently (cf. *GA* 2.1, 731b24-732a20).

This illustrates the way in which  $\zeta \omega \dot{\eta}$  is predicated of plants and animals equivocally. They do not perform the same activities or achieve the best good in the way that higher living things do. For Aristotle, living and flourishing as the kind of thing that you are is not sufficient to make you εὐδα(μων, since blessedness consists in certain sorts of perfect activity, ἐνέργεια ἁπλῶς. In EN 1.4, Aristotle notes the widespread agreement that εὐδαιμονία consists in living well and doing well, τὸ εὖ ζῆν καὶ τὸ εὖ πράττειν (1095a19). But while these descriptions can be used of a variety of living creatures, they do not apply in the same way. Plants and animals can live well or badly and Aristotle also describes them in *De Caelo* 2.12 as having a share in  $\pi\rho \hat{\alpha} \xi_{1,C}$ , action. Some plants and animals succeed much more than others in actively carrying out their relevant form of life. Aristotle denies, however, that this entitles them to be called εὐδαίμων, blessed or happy. Olive trees and sea urchins may be faring well in their respective lives, but the limitations of their activities prevent them from achieving the sort of τὸ εὖ ζῆν that gualifies a being as  $\varepsilon U \delta \alpha (\mu \omega v)$ , properly speaking. In the case of humans, we do have a perfect activity, an ένέργεια ἁπλῶς, which is sufficiently divine and excellent to allow us to be εὐδα(μων: the activity of θεωρία. Aristotle denies εὐδαιμονία to plants and animals precisely because they lack such activities.<sup>57</sup> (EN X 8, 1178b24-33) This is a reason to be careful about translating εὐδαιμονία in Aristotle as flourishing. While "flourishing" gets across the importance of evaluating one's life as a whole, it misses out on Aristotle's insistence that not all natures and activities are on a par. My house plants often flourish more than I do, even without much water or sunshine. These hardy specimens, despite their difficult achievements do not count as  $\varepsilon \dot{d} \delta \alpha (\mu \omega v)$ , because they are not active in the right way. It is also shows that Aristotle recognizes a standard of goodness that is

<sup>&</sup>lt;sup>57</sup> One might object that animals have perception, which counts as a perfect activity, complete at every moment. Indeed, Aristotle uses seeing as one of his examples of perfect and complete activities in  $\Theta$  6. There are a few reasons that animal perception does not suffice for happiness and well-being. Aristotle is clear that perceiving comes before locomotion in the order of soul powers, because it is required to make good use of one's ability to move towards and away from things. In this sense, the perceptive power is primarily a power to discriminate between the pleasant and painful (or what is likely to cause these) for the sake of moving towards or away from them. Now some senses, particularly sight, do have a further activity that can be enjoyed for its own sake, not for the sake of locomotion. Nevertheless, the perfect activity of contemplative vision is still limited. First of all, it is not clear that Aristotle thinks non-human animals can properly use vision in this contemplative way. While Met A 1 makes it clear that vision is pleasant because of its contribution to knowledge, it is unclear whether Aristotle thinks animals lacking rational souls (and thus unable to achieve scientific knowledge) use vision this way. Perception also has intrinsic limitations. First, as Aristotle notes in DA II 5, unlike understanding, it depends on the presence of external objects, and thus is not up to the creature in the same way, making it less internal and perfect. Further, unlike understanding, it constitutively depends on the body. When the organ of sight is harmed, the capacity can be lost. Further, even when contemplating Michelangelo's Pieta, one's eyes will grow weary and various conditions of the visual systems organs will intrinsically impair the activity of vision, whereas voûc, even in human beings, only has extrinsic limitations.

not just relative to a kind: he does not deny absolute goodness in the way that Richard Kraut does (2011). Plants and animals achieve the good for them, but this good is not close enough to the best good to count as  $\varepsilon \dot{d} \delta \alpha (\mu \omega v \text{ or as being } \zeta \omega \dot{\eta} \text{ in the same sense as the god.}$ 

On Aristotle's view, then, we have the best case, the god who just is the activity of voûς, then we have creatures who always engage in excellent ἐνεργεῖαι and are blessed—the other unmoved movers and outer heavenly spheres—followed by humans, creatures that are capable of achieving blessedness through rational activity but who only sometimes do so. Finally, we have creatures who are alive, but never properly attain to the good.<sup>58</sup> The ways in which all these things are living and the goods they attain are importantly different and cannot be captured by a single definition or account.

We can now see the key differences between the order and unity of Aristotle's account of  $\psi_{0}\chi_{\eta}$  and his approach to  $\zeta_{0}\omega_{\eta}$ . While there are many different sorts of  $\psi_{0}\chi_{\eta}$ , they occur in an ordered series with a first member. By contrast,  $\zeta \omega \dot{\eta}$  is used differently in many distinct cases, with a clear highest case. Aristotle's god.<sup>59</sup> Such a top down ordering is the sort of ordering we see in first philosophy. The various instances of  $\psi u \chi \dot{\eta}$  are more unified. Each  $\psi u \chi \dot{\eta}$  is the form of a natural living body and each serves as a formal, final, and moving cause of the living thing's activities. Despite the variety of activities they cause, their role in doing so and the compound mortal bodies they inform are similar. By contrast, when it comes to the activities that count as  $\zeta \omega \dot{\eta}$ , some are κινήσεις, the activities of something incomplete, and some are ένεργε $\hat{\alpha}$ , perfect and ungualified activities. Most ένεργεῖαι come from a power that the living thing has, but in the preeminent case, the activity and the being of the  $\zeta \omega \dot{n}$  are the same. Indeed, insofar as the divine being's living is its vóŋoic, an activity that understands being itself, the subjects covered by an inquiry into  $\zeta \omega \dot{\eta}$  turn out to be the same as those covered by first philosophy or theology. As we have seen, for Aristotle, we can only grasp  $\zeta \omega \dot{\eta}$  through grasping  $\dot{\epsilon} v \dot{\epsilon} \rho \gamma \epsilon_{10} \alpha$  and the many ways in which it is said. Thus the scope of ζωή is rather different than Aristotle's more circumscribed investigation into  $\psi_{U}\chi_{1}$ . It is appropriate for Aristotle to avoid adding  $\zeta\omega_{1}$  onto the agenda of the On the Soul, as its proper place is in first philosophy, with ένέργεια.

<sup>&</sup>lt;sup>58</sup> While sympathetic to Eli Diamond's claim that divine living is the primary case and that other living activities in some way resemble or participate in the divine, he goes too far in treating all living activities as directly achieving or serving as matter for the divine (2015). For Aristotle, while plants and animals imitate the divine by living and preserving their being as best they can, their activities are not similar enough to the divine activity for them to count as achieving εὐδαιμονία.

<sup>&</sup>lt;sup>59</sup> As noted above (fn. 51), there is a further question about whether ζωή is a core-dependent homonym in the sense of Shields (1999). As I said there, I am sympathetic to the idea that the god is the best candidate for the core instance of both ζωή and ἐνέργεια, but my overall claims about the non-univocal nature of these terms does not require such a position.

### 5. The Case Against Attributing Soul to Heavenly Bodies

We are left with the case of the heavenly bodies and the question of where they fit in the hierarchy of  $\zeta \omega \dot{\eta}$ . While Aristotle seems to exclude them from the *DA*, we may ask whether this is warranted. Perhaps they have souls that share a genus with the souls of sublunary creatures. After all, unlike the unmoved movers, the stars are bodily beings and have *capacities* for self-movement and understanding. It might seem that 2.2's account of the soul as the form by which a living body is active applies to them univocally.

This case is more difficult, due in no small part to the fact that Aristotle himself is somewhat unsure about how, precisely, to characterize the heavenly bodies, given the limited access we have to them.<sup>60</sup> Nevertheless, there are good reasons to think that II 2's account of  $\psi u \chi \dot{\eta}$  does not apply to heavenly bodies in the same sense that it applies to sublunary things. Their everlasting life and the very special matter they have make their relationship to their forms rather different.

We should begin by noting that one important reason for not extending  $\psi u \chi \dot{\eta}$  to the unmoved movers also applies to the heavenly bodies: including them would threaten  $\psi u \chi \dot{\eta}$ 's unity, since the heavenly bodies do not have the lower psychic capacities. On Aristotle's view, the heavenly bodies have no organs of perception or nutrition and thus no perceptual or nutritive capacities (cf. *GA* 2.3, 736b30-31). They only have the capacities for self-movement and for understanding. If  $\psi u \chi \dot{\eta}$  applies to them univocally, the ordered hierarchy of souls would collapse. Not all souls would include the nutritive and perceptive powers and so the kinds of  $\psi u \chi \dot{\eta}$  would not form a sequence in which the later members all contain the earlier ones  $\delta u v \dot{\alpha} \mu \epsilon$ .

However, this fact on its own is not decisive. Perhaps  $\psi u \chi \dot{\eta}$  is not as ordered and unified as Aristotle would like. Perhaps he avoids discussing the case of the heavenly bodies in the *DA* precisely because they cast doubt on his efforts to provide a unified account of the different sorts of  $\psi u \chi \dot{\eta}$ . To legitimately exclude them, we need an account of why their forms do not play the same kind of role that sublunary  $\psi u \chi \dot{\eta}$  plays for sublunary living bodies. There are, in fact, several features that allow Aristotle to hold that the cases are fundamentally different.

<sup>&</sup>lt;sup>60</sup> Before discussing the way in which the heavens are alive and achieve the good in *De Caelo* 2.12, Aristotle is clear on how difficult the question is:

These are questions on which it is worth while seeking boldly to extend our understanding. It is true that we have very little to start from, and that we are situated at a great distance from the phenomena that we are trying to investigate. (292a15-17, trans. W.K.C. Guthrie)

First of all, the motion of the heavenly bodies is connected to their nature in a different way than sublunary organisms. In *De Caelo* 2.1, Aristotle rejects the idea that a soul violently controlling a body could account for the everlasting movements of the heavens:

neither is it reasonable that [the heaven] should remain eternal through the necessitation of a soul: for the living [ $\zeta \omega \dot{\eta} v$ ] of such a soul could not be painless and blessed [ $\mu \alpha \kappa \alpha \rho (\alpha v)$ ], since the motion, being violent—if indeed it moves, and moves continuously, a first body which is naturally borne in some other way—must necessarily be without leisure [ $\ddot{\alpha} \sigma \chi o \lambda o v$ ] and deprived of all intellectual enjoyment [ $\pi \dot{\alpha} \sigma \eta \varsigma \dot{\alpha} \pi \eta \lambda \lambda \alpha \gamma \mu \dot{\epsilon} v \eta v \dot{\rho} \alpha \sigma \tau \dot{\omega} v \eta \varsigma \ddot{\epsilon} \mu \phi \rho o v \sigma_{s}$ ]; it will not even have, like the souls of mortal animals, relief through the relaxation of the body in sleep. (284a27-34, trans. Menn with modifications)

If its soul had to work to move its body, the heavenly body would not be able to have the sort of divine life a blessed thing must have. The heavenly body cannot be something that needs violent force to move it circularly. Now the possibility of continuous violent motion that Aristotle is rejecting differs from the way that sublunary souls move sublunary bodies. The natural motions of terrestrial organisms are not violent. Nevertheless, a key features of terrestrial living things is that our matter can become other things and take on other motions. This, after all, is why Aristotle thinks the complex bodies of humans, animals, and plants are susceptible to deterioration and death (GC 2.10). Our complex bodies are constituted out all four of the simple bodies, which can change into one another (GC 2.8-10). The matter making us up is open to becoming other things and cannot be forever held together in the configuration that constitutes our organisms (GC 2.10, 336b25-337a8). By contrast, the motion of the heavenly bodies completely fulfills their matter and what they are.

In  $Met \ \Theta$  8 Aristotle further specifies the sort of capacity for motion the heavenly bodies have:

Nor, if there is something that is eternally moved is it moved in accord with a capacity, except from somewhere to somewhere (for nothing prevents matter for this sort of movement from belonging to it). That is why the sun, the stars, and the whole heaven are always active, and there is no fear that they may sometime stand still, which is what those concerned with nature fear, nor do they get tired doing that. For movement is not for them connected with a capacity for the contradictory, as it is for things that can pass away, so that the continuity of the movement is laborious, since the substance that is matter and potentiality, and not activity, is what causes this. ( $\Theta$  8, 1050b20-27, trans. Reeve)

While the heavenly bodies have a capacity for moving, this capacity does not have a contradictory. The heavenly bodies do not have a capacity for resting. Instead, they always move due to what they are. They do not need a further principle to explain why they are moving instead of resting. Their movers come in to regulate their movement, not to give movement and life to something that would otherwise be lacking it, as soul does for sublunary bodies.

The heavenly bodies also lack the capacity for any other sorts of change. They cannot grow or shrink or come to be or cease to be. In  $\Lambda$  2, Aristotle again denies that the everlasting heavenly bodies have matter "for coming to be" (1069b25), they only have matter "for movement from where to where." (b27) This means that, as substances, they are not form-matter composites in the way that sublunary things are. They do not have matter that can take on a variety of substantial forms. They just are the substances that they are. Their only capacity is for change of place.<sup>61</sup> This makes their capacities and activities guite different from those of sublunary creatures. Aristotle thinks that for an ένέργεια to be the same sort of ένέργεια, it needs to have the same sort of underlying subject. He insists that the "activity of one matter is different from that of another, and so is the account. For of some things, it is the mode of combination, of others the mixing, and of others some other of the things we mentioned." (H 3, 1043a12-13, trans. Reeve) When the matter is different, the form and activity will be different. The account of the matter of heavenly bodies is fundamentally different than the matter of vegetative or perceptive activities, the natural corruptible body. The heavenly bodies' activities of moving and understanding do not have the same sort of primary underlying subject, τὸ πρῶτον ὑποκείμενον, as sublunary living bodies and thus do not share a genus, properly speaking. (cf. Met  $\triangle$  28, 1024b9-12).

In the De Caelo Aristotle insists that heavenly bodies are alive, noting that

we think of the stars as mere bodies and as units having a certain order, altogether lacking life; but it is necessary to believe that they partake of action and living (2.12, 292a19-22  $\dot{a}\lambda\lambda'$  ἡμεῖς ὡς περὶ σωμάτων αὐτῶν μόνον μονάδων τάξιν μὲν ἐχόντων, ἀψύχων δὲ πάμπαν, διανοούμεθα· δεῖ δ' ὡς μετεχόντων ὑπολαμβάνειν πράξεως καὶ ζωῆς).

While Aristotle insists that the heavens are alive, he affirms this by saying that they share in doing and living, reframing his answer to the question of whether they have a soul in a way that allows for more difference between their living and that of sublunary creatures. Now *De caelo* 2.2, 285a29–30 does say that 'the heaven is alive ( $\xi\mu\psi\nu\chi\sigma\varsigma$ ) and contains a principle of movement ( $\kappa\nu\eta\sigma\varepsilon\omega\varsigma\ d\rho\chi\eta\nu$ )." In context, however, Aristotle is explicit that he is "taking principle to mean that part, in a thing capable of movement, from which movement first begins:...movement of place from the right." (284b26-27). Aristotle then identifies this, in the case of the heaven, with "the

<sup>&</sup>lt;sup>61</sup> But, of course, without a contradictory capacity for resting. Aristotle also presumably continues to hold something like *De Caelo*'s view of aether, the heavenly matter, as naturally rotating (after all, if this matter was naturally at rest or naturally had a non-circular movement it would take force to move it, a view Aristotle rules out both in *De Caelo* and  $\Lambda$ ).

region from which the stars rise," (285b16-17) as this is the location, "from which it would have begun to move if it had begun" (285b6-7). The principle of movement he is discussing is not talking the soul as a formal principle in the sense of the *DA*. Aristotle seems to be reticent to straightforwardly attribute to the heavens the sort of distinct formal principle that makes sublunary living things alive.

This is due, in large part, to the fact that there is little distinction between the activity of the heavenly bodies and their being. We can usefully contrast their way of being with that of sublunary creatures. Animals, humans, and plants have a formal cause that makes them alive—their souls and does so by giving them vital capacities directed towards the living activities that are the fulfillment of what they are.<sup>62</sup> As we have seen, however, they are only  $\zeta \omega \dot{\eta}$  in the sense of engaging in  $\dot{\epsilon} v \dot{\epsilon} p \gamma \epsilon_{I\alpha}$  at some times and with respect to certain kinds of  $\dot{\epsilon} v \dot{\epsilon} p \gamma \epsilon_{I\alpha}$ . Things are, however, quite different for the heavenly bodies. The capacities for motion of the heavenly bodies are always fully realized. They are always engaged in the  $\dot{\epsilon} v \dot{\epsilon} p \gamma \epsilon_{I\alpha}$  that constitutes their  $\zeta \omega \dot{\eta}$ . They are always attaining their ends without any risk of failure. As we saw in the  $\Theta$  8 passage, Aristotle insists that their substance is activity, not matter and capacity. What it is to be a heavenly body is to be everlastingly moving in a certain way. Their being and their  $\zeta \omega \dot{\eta}$  should not primarily be understood in terms of capacities that may or may not be exercised, but in terms of their constantly realized forms, their everlasting activities of moving and understanding.<sup>63</sup> Since they are always active, we do not have to bring in a latent and ever present capacity to explain why they are living. Rather, their  $\zeta \omega \dot{\eta}$  consists in their eternal  $\dot{\epsilon} v \dot{\epsilon} p \gamma \epsilon_{I\alpha}$ .

<sup>&</sup>lt;sup>62</sup> Cf. Jacob Rosen's reading of the distinction between final and formal cause in ensouled things: "[The thing's] formal cause is the capacity to do something; its final cause is that which it is able to do...the final cause of a living thing, such as a cat, is related to but different from the thing's formal cause. The formal cause is a capacity (this is why the cat still exists while asleep), while the final cause is the corresponding activity." (2014, 105) The soul serves as the final cause of a cat, insofar as the cat's goal is the life of activity that is its soul's fulfillment. The soul is not a final cause insofar as it merely enables cat activity and causes there to be a cat substance, but insofar as cat life is aimed at actively carrying out its distinctive activities. On this interpretation, the final cause for humans, plants, and animals is our activities, which are distinct from the capacities by which we are alive.

<sup>&</sup>lt;sup>63</sup> The unmoved movers do not take lifeless matter and structure it or fulfill a capacity that might not be fulfilled: instead, they serve as objects of understanding that regulate the way in which the spheres move. They are external objects of the spheres' understanding, not internal principles or natures informing their matter.

For further discussion of the way in which the heavenly bodies may be regulated see Falcon (2005), pp. 38-40 and 74 – 5 and Johansen (2009), pp. 18–19. For the case against thinking of heavenly bodies as self-movers see Blyth (2015); cf. Menn (forthcoming), IIIb2b 4-6.

<sup>&</sup>lt;sup>64</sup> There are a variety of opinions in the commentary tradition on whether the heavenly bodies have souls. According to Simplicius, the heavens do have "soul and share in action." (*in* De Caelo, 472.22-24, Trans. Mueller; cf. 485.5; 489.12-16). It is not surprising that Platonic commentators working to harmonize Aristotle with the *Timaeus* would insist on this, since that work attributes soul to the heavenly beings more decisively than Aristotle does. Simplicius even calls into question the idea that the elements lack soul and insists they are also active (489.12). Thomas Aquinas, by contrast, denies that soul applies properly to supralunary beings (*QDDA* a. 7; *Summa theol.*, I, q. 50, a. 2 and 4; 51, a. 1, q. 75, a. 7)

#### 6. Conclusion

We have seen that the science of the soul only covers sublunary living things. Aristotle does not ascribe  $\psi u \chi \dot{\eta}$  to unmoved movers since they do not have a distinct formal principle by which they live. He does think that  $\zeta \omega \dot{\eta}$ , living, applies to his divine beings, but this term is not predicated univocally of the various living things and does not consist in an ordered series with a first member in the way that  $\psi u \chi \dot{\eta}$  does. Since  $\zeta \omega \dot{\eta}$  is said primarily of the god, it is appropriate for Aristotle to leave inquiry into  $\zeta \omega \dot{\eta}$  as a task for first philosophy.

The case of the heavenly bodies is a challenging one, but there are good reasons to think that *DA* II 2's characterization of  $\psi_U\chi\eta$  does not apply to heavenly bodies in the same sense that it applies to sublunary things. The capacities of the heavenly bodies do not fit into the hierarchy of soul powers that Aristotle relies on to provide unity to  $\psi_U\chi\eta$ . The heavenly bodies also have a different matter and a different sort of activity ( $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iota\alpha$ ) from terrestrial things. They do not have matter with the potential to undergo the full range of alterations and become all sorts of different substances and so their forms do not structure and order matter in the way that those of sublunary living things do. They only have the capacity for moving in place. Their living also consists in their unceasing activity, not in a capacity to perform psychic activities. Unlike mortal living things, they are always attaining their ends without any risk of failure. Due to these differences in being, the form of a sublunary living thing and the form of a heavenly body are fundamentally different sorts of entities.

We are left with a number of different ways in which things are living. The god just is the perfect  $\dot{\epsilon}v\dot{\epsilon}p\gamma\epsilon\iota\alpha$  of  $vo\hat{\upsilon}\varsigma$ , the unending activity of being. The other ummoved movers and the supralunary heavenly bodies share in this good, insofar as they always engage in the perfect activity of understanding. Plants and animals, by contrast, are alive by having an internal principle, the soul, which enables them to be active. However, they are active and living in a more limited way. First of all, the soul which makes them alive is an  $\dot{\epsilon}v\tau\epsilon\lambda\dot{\epsilon}\chi\epsilon\iota\alpha$  or fulfillment, which is a  $\delta\dot{\upsilon}v\alpha\mu\iota\varsigma$  or capacity for further activity. Aristotle says that it stands to this activity as  $\dot{\epsilon}\pi\iota\sigma\tau\dot{\eta}\mu\eta$ , having scientific knowledge, stands to exercising that knowledge. They are not always active and they are active by a distinct form. Further, when they are active, they are active through movement. They engage in imperfect activities whose completion is their termination. For Aristotle, these activities are not sufficient for  $\epsilon\dot{\upsilon}\delta\alpha\iota\mu\upsilonv(\alpha$ .

Humans stand in between the living things that always exercise the ἐνέργεια of νοῦς and ensouled things that cannot understand and cannot fully achieve ἐνέργεια. Like other mortal and

terrestrial living things, what makes us alive is an  $\dot{\epsilon} v \tau \epsilon \lambda \dot{\epsilon} \chi \epsilon \iota \alpha$  which is also a  $\delta \dot{\upsilon} v \alpha \mu \iota \varsigma$ . Like them, most of our activities are incomplete ones, movements directed towards a further end. However, for Aristotle, humans have rational souls that are defined by the power of  $v \circ \hat{\upsilon} \varsigma$ , a power that enables us to achieve and exercise understanding. While theoretical  $v \circ \hat{\upsilon} \varsigma$  may not fall under natural philosophy, human  $v \circ \hat{\upsilon} \varsigma$  as a whole does so. Practical  $v \circ \hat{\upsilon} \varsigma$  implies the lower powers of perception and nutrition and works together with them. The essence of humans requires that we perceive and maintain ourselves, so that the corresponding powers are part of what we are, not just tools that we might or might not have. In this way, the rational soul still fits into Aristotle's hierarchy of souls. Further, our  $v \circ \hat{\upsilon} \varsigma$  (unlike divine  $v \circ \hat{\upsilon} \varsigma$ ) also falls under *DA* II 2's account of  $\psi \upsilon \chi \dot{\eta}$ , since it is a capacity by which humans perform our activities.

This power is what we are most of all (*EN* 9.4 1166a22-23; cf. 10.7, 1177b31 -33) and its activity gives us a share in  $\varepsilon \dot{a} \delta \alpha \mu o v (\alpha)$ : happiness or, perhaps better, well-being or blessedness. (*EN* 10.8 1178b28-3) The activity of understanding can continue without any intrinsic limit. Indeed, it extends our being insofar as we become what we understand.<sup>65</sup> We live by our souls, but our vo $\hat{u}\varsigma$  allows us to become divine by participating, to some extent, in the divine activity of understanding reality. This, Aristotle insists, means that "as far as we can, we ought to make ourselves immortal ( $\dot{\alpha}\theta\alpha\nu\alpha\tau(\zeta\varepsilon\iota\nu)$ , and do all things to live a life in accordance with our supreme part."<sup>66</sup> (*EN* 10.7,1177b28-30)

<sup>&</sup>lt;sup>65</sup> Note also that Aristotle insists that we are happy by actually living, by successfully engaging in perfect activity, not merely in having the excellences of virtue or wisdom.

<sup>&</sup>lt;sup>66</sup> I would like to thank the participants in the Ancient Greek and Classical Arabic Psychology Conference, Syracuse Philosophy Annual Workshop and Network 2018, for their insightful and helpful questions. I am also grateful to an anonymous referee for pushing me to clarify several aspects of the argument and my interpretation and to Jason W. Carter for helpful comments.

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