

ARISTOTLE'S IDENTIFICATION OF THE PRIME MOVER AS GOD

I. INTRODUCTION

There is a certain conventional interpretation of Aristotle's argument, in *Metaphysics* *Λ*.7, for the identification of the first unmoved mover as God, according to which that argument has the following outline:

1. There is a Prime Mover (PM)¹ of the heavens.
2. The PM is the highest being.
3. The highest being is God.
4. Therefore, the PM is God.

But Aristotle clearly accepts the condition that any respectable candidate for Godhood should be alive. According to the conventional interpretation, therefore, he supplies the above argument with the following support:

5. If the PM is God it must be alive.
6. But the PM is purely actual (and eternal).
7. The only life-function possible for a purely actual (and eternal) being is thinking.
8. Therefore, the PM (God) is *voûs*.²

My aim in this paper is to show that the argument that is in fact to be found in *Metaphysics* *Λ*.7 is much more interesting and ambitious than the one just outlined. Though I shall not address directly all the details of the conventional interpretation, in order to set the stage for my more positive discussion, it will be useful to set out the *prima facie* considerations which I take to render it unsatisfactory as an argument and as a representation of Aristotle.

Even those who accept the conventional interpretation will admit that the syllogism in 2–4 does not occur in the text of *Λ*.7; scholars generally supply it in the apparent

¹ By 'Prime Mover' I mean the first of the 47 or 55 unmoved movers of *Metaphysics* *Λ*.8, the mover of the sphere of fixed stars. Of course, the presence of a multiplicity of unmoved movers in Aristotle's system affects how we view his theology. It need not, however, affect how we interpret his argument for the existence of God, since none of the premises in this argument requires that God be unique. Whether Aristotle's overall metaphysics can consistently admit a multiplicity of immaterial movers that are the same in kind but different in number is a different question, which has still to be satisfactorily answered. The best treatment of the problem remains that of P. Merlan, 'Aristotle's unmoved movers', *Traditio* 4 (1946), 1–30. So far as I know, none of the many recent discussions of individual forms in Aristotle's metaphysics tackles directly the problem of multiple unmoved movers, though one would think that this is a natural testing ground for any interpretation of Aristotelian individual forms.

² Versions of what I am calling the conventional interpretation are advanced in G. E. R. Lloyd, *Aristotle: The Growth and Structure of his Thought* (Cambridge, 1968), pp. 144–5; L. P. Gerson, *God and Greek Philosophy* (London, 1990), pp. 125–6; implied by L. Elders, *Aristotle's Theology: a Commentary on Book Λ of the Metaphysics* (Assen, 1972), p. 187.

W. D. Ross, *Aristotle's Metaphysics* (Oxford, 1924), vol. i, p. cxli, offers an interpretation similar to the one I advance below in that he sees Aristotle inferring the PM's identification as God from its identity as *voûs*. His précis has in common with the conventional interpretation that it sees Aristotle offering no argument for attributing thinking to the PM: 'All physical activity being excluded by the immaterial nature of the first mover, Aristotle can only ascribe to it mental activity....'

absence of explicit support for identifying the PM as God. But if we grant that Aristotle has something like 2–4 in mind, it should be clear that it is a very inadequate argument without a detailed explanation of what is meant by calling something the ‘highest being’. If, for instance, God is called the highest being in virtue of possessing such attributes as supreme pleasure and perfect wisdom, but the PM is so called in virtue of its role as the cause of the heavens’ motion, then the syllogism is not sufficient to identify the PM as God. There must be independent reason for supposing that the PM is the highest being in the right way, viz. in the way that God is, before one is justified in so identifying it. But the argument Aristotle uses to establish *that* there is a first unmoved mover plainly does not supply such independent reason. If the argument of 2–4, or something like it, is all Aristotle can offer to motivate the identification of the PM as God, then this identification reduces to an unjustified assumption.³

Nor does the support outlined in 5–8 alleviate this difficulty. In order to affirm the antecedent in 5, one must have prior reason for supposing the PM to be God. But no reason at all is forthcoming until we reach the conclusion in 8, which simply assumes the antecedent in 5. Consequently, 5–8 leave room to doubt that the PM does qualify as God, since the argument as it stands provides no justification for ascribing to it such attributes as life, wisdom or pleasure.

In itself, the fragility of Aristotle’s argument according to the conventional interpretation would be surprising. When combined with the fact that the crucial part of the overall argument, 2–4, does not occur in the text of the *Metaphysics*, this fragility favours the presumption that a better interpretation would supply Aristotle with a sturdier (or at least more ambitious) line of thought. We can see the direction in which such an interpretation will lie by noting some simple facts about the structure of his reasoning in *A.7*.

The word *θεός*, and hence the PM’s identification as *God*, does not occur until 1072b25, immediately after the PM has been defined as an actual *νοῦς* at 1072b22–3. Aristotle’s inference, therefore, seems to go from *νοῦς* to *θεός*, rather than from *θεός* to *νοῦς*, as the conventional interpretation proposes. A parallel observation can be made about the life of the PM. It is certainly true that in order to justify the belief that the PM is God, Aristotle must be able to say plausibly that it is alive. But he does not infer that the PM is *νοῦς* from the fact that it is alive and eternal. He infers that the PM is alive from the fact that it is *νοῦς*: ‘And life certainly belongs [to it]; for the actuality of *νοῦς* is life, and it is the actuality [of *νοῦς*]’ (1072b26–7). He then uses the PM’s eternal life to justify its identification as God:

φαμέν δὴ τὸν θεὸν εἶναι ζῶν ἀίδιον ἄριστον, ὥστε ζωὴ καὶ αἰὼν συνεχῆς καὶ ἀίδιος ὑπάρχει τῷ θεῷ· τοῦτο γὰρ ὁ θεός.

We say that God is alive, eternal and best, and so life and a continuous and eternal period of life belong to God. For this *is* God. (1072b28–30)

These observations indicate that Aristotle’s real strategy in *Metaphysics A.7* is both simpler and more demanding than the conventional interpretation suggests. It is simpler because if the PM is *νοῦς*, then the inference to its life and divinity is straightforward, since the argument of *A.6* has already established its eternal

³ Indeed, this seems to be Gerson’s point when he criticizes Aristotle for offering no argument ‘for the claim that the actuality of the unmoved mover is that of a life, specifically the life of thought’ (op. cit., p. 126). As I shall try to show, however, this claim is precisely what *A.7* attempts to argue for.

actuality. But it is also more demanding, for it requires him to show that the PM is *νοῦς* independently of its identification as God. If one is inclined to accept Aristotle's argument, the PM's status as God will be more secure than it could ever be on the conventional interpretation, according to which it is simply assumed. In the remainder of this paper I shall attempt a positive account of how Aristotle employs the notion that the PM is an actual object of thought (*νοητόν*) and of desire (*ὀρεκτόν*) to show first that it is *νοῦς*, and then in turn that it is God. The interpretation I offer depends on understanding Aristotle's argument in *A.7* in terms of the doctrine of the self-thinking *νοῦς* as it is articulated in *De Anima* III.4.

II. THE PHYSICAL ARGUMENT

The general outline of Book *A* is well known. Chapter one begins with the simple statement of purpose: 'The investigation is concerned with substance; for the principles and causes of substances are being sought' (1069a18–9).⁴ The book as a whole sticks to this programme, examining in an abbreviated yet systematic fashion the principles of the three kinds of substance. It divides naturally into two halves of unequal length, the first (chs. 1–5) dealing with sensible substance, the second (chs. 6–10) with immaterial substance, the unmoved movers. That these two halves can be treated as self-contained discussions is clear from Aristotle's acknowledgement at the end of chapter five that the principles of sensible substance have now been discussed: 'It has now been said what and how many are the principles of the sensibles, both how they are the same and how they are different' (1071b1–2).

Chapter six begins with a proof that there must be an eternal and immovable kind of substance (1071b5–22). The argument can be summarized as follows. Since substances are the first beings, if they are perishable, then everything is (1071b5–6). But it cannot be the case that everything is perishable. For, if everything had perished (or not yet come to be) there would be no motion, which means there would be no time.⁵ To say, then, that everything had perished (or not yet come to be) amounts to saying that there could be a time when there is no time, which is obviously impossible (1071b6–10). There must, therefore, be continuous motion in the world. The only motion, moreover, that can be everlastingly continuous is motion in a circle (1071b10–11).⁶ Aristotle then turns to consider the substance that causes this first

⁴ Similar characterizations of first philosophy: *Metaphysics* *A.2*, 982b7–10; *A.3*, 983a24–b1; *Γ.2*, 1003b16–19; *E.1*, 1025b3; *Z.1*, 1028b2–7; *K.8*, 1065a23–4.

⁵ On the essential connection between time and motion, see *Physics* IV.11, 218b21–219a10; VIII.1, 251b10–28; *De Caelo* I.9, 279a14–16.

⁶ *De Caelo* I.9 gives an explanation in terms of natural place: καὶ ἀπαυστον δὴ κίνησιν κινεῖται εὐλόγως· πάντα γὰρ παύεται κινούμενα ὅταν ἔλθῃ εἰς τὸν οἰκεῖον τόπον, τοῦ δὲ κύκλῳ σώματος ὁ αὐτὸς τόπος ὅθεν ἤρξατο καὶ εἰς ὃν τελευτᾷ (279b1–3). When compared with *Physics* VIII and *Metaphysics* *A*, the *De Caelo*'s natural place explanation invites developmental speculation, for it appeals neither to a heavenly soul nor to an external unmoved mover as cause of the heavens' motion. W. K. C. Guthrie, 'The development of Aristotle's theology – I', *CQ* 27 (1933), 162–71, sees the *De Caelo* as representing a 'materialist' stage in Aristotle's thought, when the natural motion of aether was sufficient to explain the continuous circular motion of the heavens. According to Guthrie, the introduction of the unmoved mover in *Physics* VIII and *Metaphysics* *A* is meant to complement the earlier *De Caelo* account by providing a final/efficient cause of the heavenly motion. S. Waterlow, *Nature, Change and Agency in Aristotle's Physics* (Oxford, 1982), pp. 233–57, contends on the other hand that the *De Caelo* account highlights a genuine difficulty for *Physics* VIII: in order to make plausible the idea that the heavens are moved by something (viz. an unmoved mover), Aristotle must maintain without empirical justification that the heavenly sphere is a self-mover analogous to animal self-movers.

motion (1071b12). This substance must be a pure actuality. If it were not, its causal influence on the first motion could cease. And if this were a genuine possibility, it must actually have happened, given an infinity of time.⁷ But it is not possible, since the nature of time and its connection to motion precludes the cessation of the first motion. Accordingly, there are some substances that are pure actualities, and therefore eternal and without matter (1071b13–22).⁸

At the beginning of chapter seven Aristotle locates the eternal motion demanded by the argument of chapter six in the ‘first heaven’ – the circle of fixed stars; he next begins to examine more closely the kind of substance that can cause this unceasing motion:

ἐπεὶ δὲ τὸ κινούμενον καὶ κινοῦν [καὶ] μέσον, ἔστι τοίνυν τι ὃ οὐ κινούμενον κινεῖ, αἰδίων καὶ οὐσία καὶ ἐνέργεια οὐσα.⁹

Since what moves by being moved is intermediate, there is then something which moves without being moved, being eternal, a substance and an actuality. (1072a24–6)

In positing an unmoved mover of the cosmos, Aristotle seems to be relying on the intuitive implausibility of an infinite succession of moved movers. But his objection cannot be that such an infinite succession is impossible. Since he accepts (i) that time extends infinitely from the past and into the future, and (ii) that no event is uncaused, he must also accept (iii) that there is *in fact* an infinite series of moved movers.¹⁰ His inference that there is an unmoved mover must rather rest on the idea that no series of moved movers, finite or infinite, can explain the eternal motion of the heavens.¹¹ As it stands, however, this inference is merely asserted without justification. We need to see then what resources Aristotle can bring to bear to explain why there must be an eternal unmoved mover separate from the infinite series of moved movers whose existence he accepts.

⁷ I assume here that Aristotle accepts the principle of plenitude for eternal objects. In *De Caelo* I.12 he advances detailed arguments for the position that a perishable entity cannot exist forever (see esp. 283a25–9). For discussion see R. Sorabji, *Necessity, Cause, and Blame* (Ithaca, 1980), c.8, and L. Judson, ‘Eternity and necessity in *De Caelo* I.12’, *Oxford Studies in Ancient Philosophy* 1 (1983), 217–55.

⁸ Aristotle’s reference to a number of such substances shows clearly that he has in mind here a plurality of unmoved movers, though he is not necessarily thinking of the specific account found in chapter eight (*pace* Elders, op. cit., pp. 145–6). For two different accounts of how there can be plural unmoved movers without a material principle to individuate them, see Merlan, *Traditio* 4 (1946), 1–30, and J. Owens ‘The reality of the Aristotelian separate movers’, *Review of Metaphysics* 3 (1950), 319–37, at 330–4.

⁹ Following Ross’ (*ad loc.*) construal of the meaning of these lines I have ignored the second καὶ in my translation (treating μέσον as a predicate of τὸ κινούμενον καὶ κινοῦν), and printed ἔστι τοίνυν rather than τοίνυν ἔστι. These are minimal changes to the text of the MSS, and express clearly what must be Aristotle’s thought here, that (in Ross’ words, op. cit., vol. ii, p. 374) ‘α κινούμενον καὶ κινοῦν is something intermediate, which presupposes τι ὃ οὐ κινούμενον κινεῖ.’

¹⁰ Indeed, the argument for the necessity of at least one eternal unmoved mover in *Physics* VIII.6 proceeds from assuming an unbroken succession of finite changes. See the discussion in Waterlow, op. cit. [n. 6], pp. 223–5.

¹¹ According to S. Sauve, ‘Unmoved movers, form, and matter’, *Philosophical Topics* 15 (1987), 171–96, no explanation in terms of moved movers alone will provide an intrinsic, and hence non-accidental, cause of motion. We thus have one kind of straightforward answer why Aristotle demands an unmoved mover of the cosmos: the eternal motion of the heavens would otherwise be an accident. However, Sauve’s main contention – that forms are unmoved movers whose exercise supervenes on the exercise of material moved movers – does not apply to the PM, which is the heavenly sphere’s object of desire, not its form.

At the risk of being somewhat dogmatic, we can propose the following argument by importing premises from *De Anima* III.10 and *Physics* VIII:

1. Motion is analysable into three terms (*Physics* VIII.5, 256b14ff.; *De Anima* III.10, 433b13ff.):
 - (a) The mover, which is either moved or unmoved.
 - (b) The 'by which', or instrument of movement, which both moves and is moved (the moved mover).
 - (c) The moved.
2. Everything moved has a mover (*De Caelo* II.6, 288a28; *Physics* VII.1, 241b34; VIII.4, 256a2–3).
3. This mover is either itself or something else. If itself, it is further analysable into moving and moved parts (or aspects) (*Physics* VIII.5, 258a22–7).
4. If the mover is (a part or aspect of) itself, the moving part is either moved or unmoved. If moved, then 2 and 3 apply to it again.¹²
5. In order to avoid an infinite regress of explanation,¹³ all motions must ultimately be caused by an unmoved mover.

This line of argument is sufficient to establish the necessity, for individual motions, of a first mover which is unmoved. But it does not establish that this unmoved mover exists separately from the first moved mover. In other words, the threatening regress can be obviated by making the sphere of the first heaven (as well as each of the subordinate spheres) a self-mover whose soul remains unmoved. If Aristotle wants to avoid this result, as it seems he does, he must be able to show that the unmoved mover of the first heaven is not merely one of its parts or aspects.

In this connection it is useful to keep in mind that Aristotle thinks of animals as self-movers whose souls (specifically, *ὁρεξις* or *τὸ ὁρεκτικόν*) are unmoved causes of motion. But even in the case of animal self-motion, the soul is moved accidentally as it accompanies the body (*Physics* VIII.6, 259b16–20). Aristotle might say that a similar analysis would not provide a good explanation of the heavens' motion, for according to the argument of *Metaphysics* A.6 the first cause should not involve potentiality of any kind: if the PM were susceptible to accidental motion in the manner of animal souls, it would be subject to potentiality with respect to place (1072b4–8).¹⁴ But one could reasonably object that on his own principles the PM's susceptibility to accidental motion would not by itself jeopardize its everlasting causation of the heaven's motion. For he believes in any case that the heavenly soul,

¹² Thus, while the faculty of desire (*τὸ ὁρεκτικόν*) is what moves the animal, its object of desire (*ὁρεκτόν*) is properly speaking the unmoved mover, and this will be true even if nothing external to the animal corresponds to what it desires. See *De Anima* III.10, esp. 433b10–18.

¹³ The emphasis here is on 'of explanation,' since, as I have just noted, Aristotle must accept the *fact* of an infinite series of moved movers.

¹⁴ F. Solmsen, *Aristotle's System of the Physical World* (Ithaca, 1971), p. 178, claims that in *Physics* VIII this point is motivated by Aristotle's desire to rule out the possibility of Plato's self-moving soul being the first principle of the cosmos. L. Judson, 'Heavenly motion and the unmoved mover', in M. L. Gill and J. Lennox (edd.), *Self-motion from Aristotle to Newton* (Princeton, 1994) argues persuasively that in *Physics* VIII and *Metaphysics* A the heavenly soul's susceptibility to incidental motion rules out its being the PM. S. Clark, *Aristotle's Man* (Oxford, 1975), p. 180, sees a difference between the PM and the subordinate unmoved movers on this count. He contrasts A.8, 1073a23–5 (the PM is *ἀκίνητον καὶ καθ' αὐτὸ καὶ κατὰ συμβεβηκός*) with 1073a33–4 (the subordinate movers are unmoved *καθ' αὐτὸ*), and adduces *Physics* 259b21ff., which attributes accidental motion to 'certain principles (*ἀρχαί*) of the heavenly bodies, as many as experience more than one motion' (b30–1). Clark's distinction will depend on the legitimacy of identifying these principles with the subordinate unmoved movers of *Metaphysics* A.8.

which *is* subject to such motion, *does* eternally desire the PM and eternally move the heavenly body.

Thus, Aristotle's argument that there must be an eternal unmoved mover does not by itself disallow all kinds of potentiality from all such movers, even if we are sympathetic to his desire to eliminate potentiality altogether from the being of the first cause. Given Aristotle's own implied analogy between heavenly and animal motion, a model according to which the PM is simply the soul of the heavens naturally suggests itself; the onus is on him to show that the specific kind of potentiality involved in this model would be a potentiality of the PM *as a cause*.

Although he characterizes animals as self-movers, Aristotle does not allow that they initiate movement from nothing. 'Spontaneous' movement is always either preceded by some combination of internal motions and environmental influences or stimulated by an object of desire, perception or thought (*Physics* VIII.2, 253a7–20; 6, 259b7–16). Accordingly, an animal soul is never an unqualifiedly unmoved mover.¹⁵ Its history includes motions which contribute to causing the 'spontaneous' movement; or, alternatively, one will be able to trace apparent spontaneity to an object of desire, perception or thought, which is an unmoved mover relative to the moving part of the soul. Aristotle therefore recognizes the intentionality of objects of desire and thought, but he does not allow that objects whose existence is merely intentional can provide a full explanation of animal self-motion.¹⁶ For he assumes that there must actually be real objects corresponding to the intentional objects that cause animals to move. One might object that humans at any rate are sometimes motivated by imaginary or illusory objectives that have no correspondence to reality. Aristotle does not offer an explicit refutation of this idea. But his view of the role of sense-perception in concept formation suggests that any such illusory object must be traceable to something real that exists independently of one's thoughts and desires.¹⁷

Given Aristotle's assimilation of the heavenly motion to animal motion, we have had to consider the possibility that the first heaven is a self-mover, and that there is no unmoved mover separate from it. But Aristotle also denies that animals create

¹⁵ I am deliberately avoiding the difficulties presented by *De Anima* I.3–4, which denies that the soul is moved, but rather makes the soul the source of movement and change in the body. D. Furley, 'Self-movers', in A. O. Rorty (ed.), *Essays on Aristotle's Ethics* (Berkeley and Los Angeles, 1980), pp. 55–67 [originally published in G. E. R. Lloyd and G. E. L. Owen (edd.), *Aristotle on Mind and the Senses* (Cambridge, 1978), pp. 165–79], argues that because its object of desire is intentional, the animal may be regarded as a self-mover, although, since there must actually be an external object, 'the movement of an animal does not provide an example of a totally autonomous beginning of motion' (65).

¹⁶ I here follow the convention of using 'intentional *existence*' to refer to Franz Brentano's conception of 'intentional *inexistence*,' according to which mental objects do not have to exist outside the mind, and which he took to be the distinguishing mark between mental and physical phenomena: 'Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction to an object (which is not to be understood here as meaning a thing), or immanent objectivity. This intentional inexistence is characteristic of mental phenomena' (*Psychology from an Empirical Standpoint*, trans. A. Rancurello, D. Terrell, and I. McAlister, [New York, 1973], pp. 88–9). For a very interesting discussion of how ancient interpretations of Aristotle set the stage for the medieval and Brentanian conceptions of intentionality, see R. Sorabji, 'From Aristotle to Brentano: the development of the concept of intentionality', in H. Blumenthal and H. Robinson (edd.), *Aristotle and the Later Tradition* (Oxford, 1991), pp. 227–59.

¹⁷ Furley, op. cit. [n. 15], p. 67, makes a similar point: 'What about delusions, hallucinations, etc.? Aristotle could reply that although animals may on occasion move in pursuit of a purely imaginary goal, these cases are parasitic on genuine cases. They would not pursue the imaginary goal unless there were similar goals in reality.'

motion from nothing. Given uniform laws of the causal principles of motion, and the impossibility of creating time, he is entitled to deny this of the heavens as well. He would also be right to insist that it is not enough to say that the cause of the heavens' motion is an intentional (in the Brentanian sense) object of desire, for there must be a cause of any such object. On the other hand, if the cause were simply the heavens' own act of thinking/desiring, the PM would seem nothing more than a fantasy, and we are back to the heavens creating motion from nothing. As Aristotle puts it in terms of his own mythological tradition, everything would come to be out of night and chaos (1072a19–20).

These considerations seem enough to warrant Aristotle's belief that the PM must be an actual object of desire that exists independently of the heavenly soul. In addition, if we take into account his doctrine of *νοῦς*, it is clear that a merely intentional object, a thought in the mind of the heavens, would not be the right sort of entity to exert the causality for which the PM is supposed to be responsible. We have seen that the argument of *A.6* requires that the cause of the first motion be in essence an actuality, and that this requirement does not by itself exclude any and every sort of potentiality from any and every eternal mover. But according to Aristotle's theory of *νοῦς*, a thought in the mind of the heavens would not be subject to a kind of potentiality that is harmless to its role as a cause. It would depend *for its existence* on the activity of the intellect that is thinking it, and so unless something else were causing it perpetually to be thought, nothing would ensure that it might not be thought. And if something else were causing it perpetually to be thought, that would be the purely actual cause we are seeking. To define the PM as an object of thought within the heavenly intellect would mean, then, that the cause of the heaven's motion would depend for its existence on its being thought by the heavens.¹⁸ Such an analysis might suffice for certain instances of animal motion in the sublunary world, but when applied to the eternal heavenly motion it blurs the distinction between cause and effect beyond recognition, and subjects the motion of the world to a contingency that would be fatal to Aristotle's argument. Accordingly, if the first motion of the world is to continue unceasingly, the intellect of the heavens must forever be thinking its thought-object, but there must also be an object existing independently of that intellect. Otherwise, no actuality would ensure the everlasting motion and time that are necessary conditions of the existence of the (Aristotelian) world. The implications of this point, however, cannot be fully appreciated without examining the stretch of *A.7* that is intended to show the intelligibility of the PM, and to that I shall now turn.

III. THE PM AS UNITARY OBJECT OF THOUGHT AND DESIRE

Aristotle's characterization of the PM as a final cause in the sense of an object of love, *ὡς ἐρώμενον* (1072b3), is one of the most familiar doctrines from the Aristotelian *Corpus*. But the PM is on Aristotle's view not merely an object of desire. When he first

¹⁸ *A.7*, by arguing for the actual existence of a transcendent PM, removes this difficulty from occurring at the level of the heavenly soul. The conception of the PM as *νοῦς*, however, will invite its recurrence at the level of the PM itself. If the divine *νοῦς* is a faculty like other *νοοί*, then either its object of thought is the cause of its actualization, in which case it is not the *first* cause, or it produces its object of thought from itself, in which case it is thinking a fantasy. This dilemma is faced in *A.9*, and resolved with the characterization of the PM as *ἡ νόησις νοήσεως νόησις*, which finally eliminates potentiality from the being of the PM, and thereby breaks down the distinction between its essence and that of its thought object. I discuss the argument of *A.9* in greater detail in '*Νόησις νοήσεως* in *Metaphysics A.9*' (unpublished).

considers its nature, his assimilation of the cosmic motion to animal motion actually provides him with two candidate descriptions for such an unmoved cause:

κινεῖ δὲ ὥδε τὸ ὀρεκτὸν καὶ τὸ νοητόν· κινεῖ οὐ κινούμενα. τούτων τὰ πρῶτα τὰ αὐτά.

The object of desire and the object of thought move in this way. They move without being moved. The first instances of these things are the same. (1072a26–7)

The crucial point occurs in the last sentence: ‘the first instances of these things are the same.’ Aristotle’s immediate purpose requires him to establish this result.¹⁹ If the PM were an object of desire but not intelligible, the first heaven would not understand what it desires. Conversely, if the PM were an object of thought but not of desire, it would have no reason to move, since the νοητόν by itself gives rise only to noetic self-motion, i.e. not everything one thinks of does one desire.²⁰ Aristotle’s task, then, is to show that the most desirable object is necessarily the highest object of thought.

His first move is to divide the object of desire (τὸ ὀρεκτόν) into two species, τὸ ἐπιθυμητόν and τὸ βουλευτόν. The former is an apparent good, the latter the object of rational desire, i.e. what is genuinely desirable.²¹ This observation supports the inference that in either case desire proceeds from an act of cognition that is causally prior to it. Thus he says, ‘We desire because it seems rather than it seems because we desire’ (1072a29). Aristotle can now conclude that the origin (ἀρχή) of desire is thought (a30), but this does not yet justify his assertion that the first objects of desire and thought are the same. So far he has established only the intermediate conclusion that the first object of desire originates in thought. This is enough to show that the heavenly sphere must have a thought before it desires. But this is not the same as saying that its object of desire *is* its object of thought, for the intelligible object that causes a given desire to arise need not be the thing that is desired. One can see this easily by imagining the highest object of thought to be a certain principle or system of principles, the understanding of which would somehow provide one with the ultimate understanding of the world, along the lines, perhaps, of the Unified Field Theory in modern physics. Such a principle would be the ultimate description of the world, and one would naturally want to acquire knowledge of it, but this knowledge would not necessarily result in a desire to move toward any particular goal. Nor if it did cause one to move would the goal have to be the principle itself. The PM, on the other hand, must be desirable in such a way that merely understanding it will necessarily motivate the heavens to rotate.²² If he is going to retain the idea that the

¹⁹ As we shall see, his ultimate purpose requires it too. Identifying the PM as an object of love provides the requisite form of final causality for explaining it as an *unmoved* mover. But to show that this unmoved mover is God, Aristotle must be able to demonstrate that it is νοῦς, which cannot be done simply from its status as ὀρεκτόν. Aristotle’s strategy is to identify the first objects of thought and desire so as to show that if the PM is the first object of love, it is necessarily the first object of thought; as I shall argue, from the PM as νοητόν, he can get to the PM as νοῦς.

²⁰ Cf. *De Motu Animalium* 6, 700b23–5: ὥστε κινεῖ πρῶτον τὸ ὀρεκτόν καὶ διανοητόν· οὐ πᾶν δὲ τὸ διανοητόν, ἀλλὰ τὸ τῶν πρακτῶν τέλος.

²¹ Aristotle sometimes divides ὁρεξις into three species: ἐπιθυμία, θυμός, and βούλησις (*De Anima* 414b2, *De Motu Animalium* 700b22, *Eudemian Ethics* 1223a26–7). Elsewhere, as here, he is content to divide desire simply into rational (βούλησις) and irrational (ἐπιθυμία and θυμός) kinds (*De Anima* 432b5–6, 433a22–30). See M. Nussbaum, *Aristotle’s De Motu Animalium* (Princeton, 1978), pp. 334–6.

²² The question naturally arises, why does the first heaven *rotate* if the PM is its goal? The PM not only does not rotate, it does not move. We should recognize first that the heaven’s rotation is not the PM’s only direct effect. It causes itself primarily to be thought and desired, and this effect is more immediate than (though not temporally prior to) the heavenly rotation. The first heaven’s contemplation of the PM is thus part of the way in which it maintains a state

cause of the world's motion is the supreme object of thought, Aristotle must now advance a course of reasoning to show that this object of thought must also be the best, and therefore the most desirable, thing.

Aristotle turns at 1072a30 to consider that which moves thought, the νοητόν. Here he makes use of the συστοιχία, the Pythagorean table of opposites, whose 'positive' members constitute the class of things that are intelligible in virtue of themselves.²³ Of this intelligible class of things there is a first member, substance; and of substance there is similarly a first instance: simple and actual (i.e. immaterial) substance. The kind of priority invoked here is not made explicit, but in a parenthetical statement that is surely directed against positors of mathematical Forms, Aristotle rules out one possible assumption:

ἔστι τὸ ἐν καὶ τὸ ἀπλοῦν οὐ τὸ αὐτὸ· τὸ μὲν γὰρ ἐν μέτρον σημαίνει, τὸ δὲ ἀπλοῦν πῶς ἔχον αὐτό.

The one and the simple are not the same. For the one signifies a measure, but the simple how something is disposed. (1072a32–4)

The priority involved is then not a matter of counting: immaterial substance is not a unit by which we quantify beings. Rather, its way of being (πῶς ἔχον) is that in terms of which other intelligible objects must be understood. Hence it is the first of intelligible objects.

Aristotle's importation of the Pythagorean συστοιχία is important for his overall argument. The συστοιχία provides a way of classifying all of existence according to pairs of opposition. The positive side corresponds to what is in its own right, and is therefore intelligible in itself, whereas items on the negative side are intelligible as privations of their counterparts on the positive side. It is natural to assume that the beautiful (τὸ καλόν) occurs on the positive side, and furthermore that τὸ καλόν and that which is desirable in itself (τὸ δι' αὐτὸ αἰρετόν) occur on the same side as each other (1072a34–5), since something is choiceworthy in itself only if it is καλόν. Just as Aristotle characterizes the entire positive side as intelligible in itself, he takes the occurrence of τὸ καλόν on this side to imply that it too is predicated, at least analogically, of the entire side. Thus he concludes that the first member is both the most intelligible and the most desirable thing, for in any series the first member is superior to those that follow it, and the συστοιχία is a table not only of νοητά, but of καλά as well. If that which moves the heavens is supremely desirable, it must therefore be supremely intelligible. Aristotle has now provided a justification (of sorts) for his assertion above that τούτων τὰ πρῶτα τὰ αὐτά (1072a27).

The συστοιχία argument thus shows that the first objects of thought and desire are the same. But this is more than Aristotle needs to show how the PM can move while remaining unmoved, which is what 1072a24–6 demand. In order to show this, he needs only to introduce the notion of the final cause as an object of love; this is in fact what he does at 1072b3–4 when he introduces the distinction between a final cause *for* and a final cause *of* something. We must now consider Aristotle's purpose in arguing that the PM is the first object of both desire and thought, the πρῶτον νοητόν as well as

of being which is like the PM's state of being. Indeed, from the perspective of the heavenly sphere itself, this is the most important way, since it is by contemplating that it emulates the internal nature of the PM. But since the first heaven is also a spherical body, its rotation causes its material capacity – the capacity for circular motion – to be actualized as well. If the sphere did not rotate, it would fall short of the PM as τέλος, for at least one of its capacities would remain unrealized.

²³ For the συστοιχία see also *Metaphysics* A.5, 983a23–6; Γ.2, 1004b27–1005a5; *Physics* I.5, 189a1; III.2, 201b25–6 (= *Metaphysics* K.9, 1066a15).

the *πρῶτον ὀρεκτόν*. I shall argue that this point enables him to transform his argument for a first unmoved mover into an argument for the existence of God, for it provides him with the grounds for asserting that the PM is thinking and alive, and consequently for identifying it as God.

The physical argument of chapter six began from the idea that there must be a cosmic motion that is continuous and incessant. If this motion is going to be truly everlasting, its cause must be a pure actuality. Chapter seven establishes that this cause must also be unmoved if we want to avoid an explanation in terms of an infinite succession of moved causes. The unmoved nature of the cause can be explained by appeal to the idea of the final cause as an object of love. But the fact that this cause must be *actual* means that it cannot simply be an intentional object of desire – it must have actual existence of its own. Moreover, the dependence of desire on thought, along with the *συστοιχία* argument, shows that this object of desire must also be an intelligible object. Accordingly, it cannot be that this intelligible object exists merely as the content of the heavens' thinking, for then its existence would depend on the operation of the heavenly *νοῦς*.²⁴ This dependence would be undesirable for at least two reasons: (1) the first intelligible object would not be a pure actuality, and we would be left unable to explain the everlastingness of the cosmic motion; (2) as in the case of animal motion, we should still want to know what causes the celestial *νοῦς* to think this object of thought.

I have thus far tried to show that while Aristotle recognizes the intentionality of the heavens' internal object of desire and thought, he thinks that the PM cannot have an existence that is merely intentional. This would be contrary to his account of animal motion as well as to the requirement of chapter six that the cause of the natural world's motion be an eternal, and therefore pure, actuality. A merely intentional object, such as a *νοητόν* in the celestial soul, depends for its actuality on the *νοῦς* that is thinking it, and this dependence is enough to discount it from being the sort of thing that could cause the world's eternal motion. The PM is, therefore, not merely an intelligible object; it is an intelligible object that exists independently from the motion(s) and actualization(s) of which it is the final cause as an object of love. The question that now arises is, how can Aristotle plausibly explain the existence of such an object?

According to Aristotle, intelligible objects, *νοητά*, are forms.²⁵ If we ask about the

²⁴ G. Lindbeck, 'A note on Aristotle's discussion of God and the world', *Review of Metaphysics* 2 (1948), 99–106, denies substantiality to God on the grounds that his 'actual existence cannot be inferred from the desire which the world has towards him' (104). Aristotle, however, does not infer God's substantiality from his desirability, but from his *intelligibility*. Owens, *Review of Metaphysics* 3 (1950), observes brilliantly that the actuality of the first *νοητόν* would 'be immediately identified with the substance held to be producing it', and hence 'would have to be a thinking of itself, and so would be substance in its own right, with no dependence whatsoever on the celestial soul' (329). Owens also denies that this thought *can* be thought by anything else, presumably because this would attribute to God the potential of being thought *by something else*. This worry is a red herring, however, for such a potentiality would be harmless to the PM's actuality as a substance and, therefore, to its role as a cause. There is no reason why the celestial soul, e.g., cannot think it, so long as the thought produced *in* the celestial soul is not itself the PM.

²⁵ E. Ryan, 'Pure form in Aristotle', *Phronesis* 18 (1973), 209–24, argues that there are no pure forms – including the unmoved movers – in Aristotle. As it applies to the PM, his argument involves denying the equivalence, which I am assuming, between *νοητόν* and *εἶδος*. Ryan claims, contra Ross (op. cit., vol. ii, p. 380), that Aristotle's statement at 1072b21, that *νοῦς* is *τὸ δεκτικὸν τοῦ νοητοῦ καὶ τῆς οὐσίας*, is not 'parallel' to his statement at *De Anima* 429a15–16, that *νοῦς* is *δεκτικὸν τοῦ εἶδους καὶ δυνάμει τοιοῦτον ἀλλὰ μὴ τοῦτο*. But his reason for denying a parallelism between the two passages – viz. that the *De Anima* passage is about human

ways in which forms may exist, we see that there are at least two: as the form of a material, composite substance, and, presumably, as a pure form such as the unmoved movers. But how is it precisely that these pure forms have their existence? If we start from what we know about forms of sensible substances, it seems difficult to get the idea of a pure form. In the sensible world, forms are always forms *of* a material substance. Aristotle can infer that there must be objects that are pure forms from the fact that his physical argument requires an eternally actual cause – such a cause could not have matter without jeopardizing its actuality. While such a move is open to him, however, it still would require a plausible explanation of the mode of existence of such pure forms. But there is a well-known model for the existence of matterless forms within Aristotle's system, namely form as it is being thought. Indeed, since Aristotle excludes substantial genera and species from his mature ontology (*Metaphysics* Z.13), to say nothing of Platonic Forms, there seems to be no other candidate mode for the separate existence of matterless forms.²⁶

We are thus left with two ways in which forms may exist: either naturally, viz. compounded with matter in sensible substances, or in *νοῦς* as an (intentional) object of thought. If we consider these two alternatives we see now that Aristotle has available a way to get from the PM as an object of thought to the PM as *νοῦς*. Sensible substances considered as matter-form compounds are not in themselves objects of thought, for they are intelligible only insofar as their forms can be thought. And though the forms of sensible substances are in themselves potential objects of thought, they are actual objects of thought only when being thought, at which point they are in the intellect and separate from matter. Given these two 'formal' modes of existence – in nature and in *νοῦς* –, and the fact that in the former mode the form is only a potential object of thought, the identification of the PM as an actual (and immaterial) object of thought, existing independently of the heavenly soul, requires that it be an object of thought *in* an intellect (cf. note 24 above) – no other mode of existence is open to it. And since, according to Aristotle's theory of *νοῦς*, an intellect at the highest level of actuality is necessarily thinking itself, the PM is not simply an object of thought, it is also the intellect that thinks this object.²⁷ This last inference will constitute the defining step in Aristotle's argument for the existence of God, and thinking – is insufficient, for there is nothing in *Metaphysics* 1072b18–21 that does not apply to human thinking. In fact, the description there of *νοῦς* becoming intelligible by 'touching and thinking' does not strictly apply to the PM, which cannot *become* anything at all. As we shall see, Aristotle is using his theory of human *νοῦς* in *A.7* to argue that the *νοητόν* that moves the heavens *is* *νοῦς* in the first place. *A.9*'s identification of the PM as *ἡ νόησις νοήσεως νόησις* will then move beyond the theory of human *νοῦς* by removing from the PM all implied potentiality. So, far from the *De Anima* description not fitting into *A.7* or 9, the *A.7* argument will not work without it. When we consider Aristotle's unconscious assumption of an equivalency between *νοητόν* and *εἶδος* in *De Anima* III.4 (429a15, a28, a29), there is no way of understanding *τοῦ νοητοῦ καὶ τῆς οὐσίας* at 1072b21 except as equivalent to *τοῦ εἶδους*.

²⁶ Partisans of a species-form interpretation of primary substance in *Metaphysics* Z will no doubt object that the species-form itself has such a way of existing. While my own sympathies lie much more with those who defend particular forms, my interpretation here depends on neither view. For even if one believes that Aristotle accepts such things as species-forms and identifies them as the primary substances, there is nothing to suggest that he would plausibly consider the PM to be a species-form.

²⁷ Thus the PM as intelligible object is numerically identical with the *νοῦς* thinking it. It will have to be essentially identical as well to satisfy the argument of chapter 6, but this issue is not settled until chapter 9, with the definition of the PM as a pure actuality (cf. note 18 above). At this point in *A.7* Aristotle is using the *De Anima*'s conception of self-thinking *νοῦς* to establish that the PM is a thinker as well as a thought. See R. Sorabji, *Time, Creation and the Continuum* (London, 1983), pp. 144–5, for a discussion of the numerical identity of the intellect and its object.

enables him at last to move beyond physics and into theology. For even in *Physics* VIII he could prove the necessity of an eternal PM; but this proof alone does not entitle him to assume that the PM is God, however natural such an assumption might seem after two and a half millennia of western philosophical theology. God must be alive, and Aristotle cannot attribute life to the PM until he can reasonably ascribe to it a function that is characteristic of life.

IV. THE PM AS A THINKING, LIVING GOD

At 1072b13–14 Aristotle signals that he has finished his discussion of the PM as the first cause of the natural world and shifts the focus of his examination to internal features of the PM:

ἐκ τοιαύτης ἄρα ἀρχῆς ἡρτῆται ὁ οὐρανὸς καὶ ἡ φύσις. διαγωγὴ δ' ἐστὶν οἷα ἡ ἀρίστη μικρὸν χρόνον ἡμῖν κτλ.

On such a principle therefore depend heaven and nature. Its way of life (*διαγωγὴ*) is such as our best is for a short time, etc.

The occurrence of the word *διαγωγὴ* intimates that the PM is the sort of thing that can be said to be alive and therefore to have a way of life, or at least something analogous to a way of life. But if we consider the logical structure of the entire passage, which extends to 1072b30, we can see that Aristotle's mention of the PM's *διαγωγὴ* is not based on an assumption that the PM is God (and therefore has a life). This mention serves to announce the topic of b14–30, which is an examination of the internal nature of the PM, not to provide a premise in its argument. Indeed, at the end of the passage he offers a reason for ascribing life to the PM and accordingly identifying it as God:

καὶ ζωὴ δέ γε ὑπάρχει· ἡ γὰρ νοῦ ἐνέργεια ζωὴ, ἐκεῖνος δὲ ἡ ἐνέργεια· ἐνέργεια δὲ ἡ καθ' αὐτὴν ἐκείνου ζωὴ ἀρίστη καὶ αἰδῖος. φαμέν δὴ τὸν θεὸν εἶναι ζῶντα αἰδῖον ἄριστον, ὥστε ζωὴ καὶ αἰὼν συνεχῆς καὶ αἰδῖος ὑπάρχει τῷ θεῷ· τοῦτο γὰρ ὁ θεός.

And life belongs to it; for the actuality of *νοῦς* is life, and it is the actuality [of *νοῦς*]. Its actuality is in itself a life that is best and eternal. And we say that God is alive, eternal and best, so that life and a continuous and eternal duration belong to God. For this *is* God. (1072b26–30)

Aristotle concludes that the PM is God from the fact that it is alive and eternal. Its eternality was inferred from its causal relationship to the first heaven's motion. but its life is established by its activity, which is here characterized as the actuality of *νοῦς*. What we have seen thus far is certainly enough to call into question the conventional interpretation I sketched at the beginning of this paper. For it is clear that Aristotle takes himself to be providing some reason for identifying the PM as God, namely that it is *νοῦς* and is therefore alive. I now want to argue that this characterization of the PM's activity is also not merely assumed by Aristotle, but is supported by what the *De Anima* has to say about *νοῦς* and its relation to *νοητά*.

First consider the lines in which the topic of *νοῦς* is introduced, and which immediately precede the passage just quoted:

ἡ δὲ νόησις ἡ καθ' αὐτὴν τοῦ καθ' αὐτὸ ἀρίστου, καὶ ἡ μάλιστα τοῦ μάλιστα. αὐτὸν δὲ νοεῖ ὁ νοῦς κατὰ μετάληψιν τοῦ νοητοῦ· νοητὸς γὰρ γίνεταί τι γιγνάνων καὶ νοῶν, ὥστε ταῦτ' ὁ νοῦς καὶ νοητόν.

Thinking in itself is of what is best in itself, and the purest thinking is of the purest good. And *νοῦς* thinks itself through participation in the intelligible. For it becomes intelligible by touching and thinking, so that *νοῦς* and its object of thought are the same. (1072b18–21)

Thinking in itself is of what is best in itself. 'In itself' (καθ' αὐτήν) recalls Plato's *Phaedo* (66a) and suggests thinking in abstraction from the senses and sensible objects, an appropriate association for a νοῦς that is completely separate from matter.²⁸ The fact that its object is best draws support from the συστοιχία argument, which intends to make sense of the idea that the first objects of thought and desire are the same. The appeal to the purest (ἡ μάλιστα) thinking and its object, the purest good, re-emphasizes the notion of priority/supremacy that is a crucial element of the συστοιχία passage. In other words, the first sentence here is simply an application of the principle that the primary objects of thought and desire are the same. The next sentence then attempts to unify the object and subject of this act of thinking. Note first that neither the statement that 'νοῦς thinks itself through participation in the intelligible', nor what precedes it applies only to the special case of God's thinking. Indeed, the word θεός has not yet been used in the chapter. This sentence along with what follows it down to line 24, is a statement by Aristotle of part of his theory of νοῦς in *De Anima* III.4. Thus, we should understand his comments here as drawn from the *De Anima* discussion in order to establish that since the PM is an actual object of thought, it is numerically indistinguishable from the intellect thinking it.

According to *De Anima* III.4, νοῦς in and of itself does not have a particular nature; it is merely a kind of potential, without actual attributes of its own (429a21, 430a8). As such, it is conceived of as a featureless receptacle for form (429a15, *Metaphysics* 1072b22 [with note 25 above]).²⁹ The absence from νοῦς of specific properties of its own enables it to think forms without interference from its own nature. It is just the intellect's lack of specificity that enables it to think, and in some sense to be, all things (429a18, 431b21),³⁰ though it is not actually any of the νοητά until it thinks (429b30). Aristotle even goes so far as to say that the mind does not exist before the activity of thinking (429a24). The last statement seems intended primarily to have a certain rhetorical effect, to emphasize strongly the intellect's original state of pure potency. Though he cannot mean this literally, one can understand why he puts the point this way. For Aristotle, the only actually existing immaterial substance is a thinking νοῦς. If we remove its activity, we are left with an immaterial potentiality. In Aristotle's ontological scheme there is a sense in which such an object does not exist. This is not to say that νοῦς comes into existence when it thinks, and goes out of existence when it stops thinking. Rather, the point is that since νοῦς is separate from matter, there is no material entity, such as a body organ, that stands as matter to the form of νοῦς' actualization, and which would be present even when νοῦς is not actualizing (as for instance the eye is present even when one is not seeing).³¹

²⁸ ... ἀλλ' αὐτῇ καθ' αὐτήν εἰλικρινεῖ τῇ διανοίᾳ χρώμενος αὐτὸ καθ' αὐτὸ εἰλικρινὲς ἔκαστον ἐπιχειροῖ θηρεύειν τῶν ὄντων, ἀπαλλαγείς ὅτι μάλιστα ὀφθαλμῶν τε καὶ ὠτῶν καὶ ὡς ἔπος εἰπὲν σύμπαντος τοῦ σώματος, ὡς ταραττοντος καὶ οὐκ ἑώντος τὴν ψυχὴν κτήσασθαι ἀληθειάν τε καὶ φρόνησιν ὅταν κοινωνῇ; (*Phaedo* 66a1–6).

²⁹ Cp. *De Anima* II.2, 414a10, and the senses as receptacles: II.12, 424a18; III.1, 425b23.

³⁰ Aristotle was certainly influenced on this point by Plato's arguments in the *Timaeus* for the featurelessness of the ὑποδοχή, which would otherwise obscure the sensibles coming to be in it (50d2–e4, cf. 51a6–b2). For Aristotle the intellect can only be forms. But insofar as the actuality of anything in the world (even down to the four elements) is expressed by the account of its form, the intellect can think the essence of anything. Thus a stone cannot be in the soul, but its form can (431b29). Cf. Alexander, *De Anima*, 84.18–21.

³¹ See M. Wedin, *Mind and Imagination in Aristotle* (New Haven, 1988), c. 5, esp. p. 166, for a very clear discussion of what Aristotle means by saying that νοῦς is nothing actual before it thinks. D. Modrak, 'The nous-body problem in Aristotle', *Review of Metaphysics* 44 (1991), 755–74, discusses the general problem of νοῦς' separateness from matter.

Correspondingly, Aristotle does not conceive of this activity of thinking (expressed by the verb *νοεῖν* and the noun *νόησις*) as one in which the mind focuses its attention on some object or issue and then produces 'thoughts' about it. The object of thought is the form which the mind becomes in the act of thinking, so that within this act subject and object are numerically indistinguishable. *Metaphysics* 1072b19–21 is an appeal to this doctrine. Its purpose is to establish that the PM, as the supreme object of thought, is necessarily the object of an act of thinking that is not separate from it. In order to understand more clearly what this doctrine amounts to, we will have to consider more of what the *De Anima* has to say about *νοῦς*' self-thinking.

Near the beginning of *De Anima* III.4 Aristotle explains that the largely helpful analogy between the intellect and the senses breaks down at a certain point. An indication of its failure is that *νοῦς* does not suffer from any blunting effect after it thinks something 'vehemently intelligible' (*σφόδρα νοητόν*), as the senses do after they have received an especially intense sensation (429a31–b3).³² Indeed, not only is the intellect not blunted by strong impressions, they render it more sensitive to weak ones. It turns out, however, that there are two levels of actuality at which *νοῦς* may receive impressions, and it is at the second of these that it is said to think itself:

ὅταν δὲ οὕτως ἕκαστα γένηται ὡς ὁ ἐπιστήμων λέγεται ὁ κατ' ἐνέργειαν (τοῦτο δὲ συμβαίνει ὅταν δύνῃται ἐνεργεῖν δι' αὐτοῦ), ἔστι μὲν καὶ τότε δυνάμει πῶς, οὐ μὴν ὁμοίως καὶ πρὶν μαθεῖν ἢ εὐρεῖν· καὶ αὐτὸς δὲ αὐτὸν τότε δύναται νοεῖν.³³

Whenever it becomes each thing in this way, as the one who is called a knower in actuality (this happens whenever one is able to think through oneself), it is even then somehow potential, but not in the same way as before it learned or discovered. Then it is able to think itself. (429b5–9)

The first thing to notice is that *ἕκαστα* in line six refers back to *τὰ εἶδη* in 429a29 above, so that Aristotle is describing the condition of the noetic soul when it has learned some subject matter. At this point it has moved from being purely a potentiality with no actual nature of its own to having, at some time, learned something. It has received the appropriate forms and become them. This is how we describe the man with scientific knowledge: he might not now be exercising his knowledge, but he is still actually a knower (*ἐπιστήμων*) because he may exercise it without having to change by learning something. Yet when *νοῦς* is in this condition it is still in a state of potentiality. This potentiality, however, is a potentiality of *νοῦς* with respect to itself. It is able to think the form that it had become at some previous time and preserved as a disposition of itself.³⁴ When it actually does think this form it is said to think itself. But note the meaning of the verb 'think' (*νοεῖν*) in this context.

³² This is a consequence of his theory of the sense as a *δύναμις* and a *λόγος* of the sense-object. Sensory excesses destroy the proportion which is needed for the sense to function (II.12, 424a25–32; III.2, 426a27–b7). Cf. 422a21–3, 31–3; 424a14–15.

³³ On retaining the manuscript reading (*δὲ αὐτόν*) of 429b9, and for a thorough history of the editing of this line, see J. Owens, 'A note on Aristotle, *De Anima* III.4, 429b9', in *Aristotle: The Collected Papers of Joseph Owens*, ed. J. R. Catan, (Albany, 1981), pp. 99–109 (originally published in *Phoenix* 30 [1976], 107–118).

³⁴ The details of how this is supposed to work are controversial. From the *De Memoria* it is clear that human habitual knowledge is mediated by images (*φαντάσματα*), which are the proper objects of memory (450a24; cf. 450a14). Thinking, in turn, requires images, within which the objects of thought are somehow located (*De Anima* 431a16–17, 431b2, 432a12–14; *De Memoria* 449b31). Since memory is associated with perception and imagination rather than with the intellect (449b30–450a25), the memory of scientific knowledge must be preserved through the images produced by the faculty of imagination. For discussion of how the *De Memoria* may shed light on Aristotle's theory of thinking, see R. Sorabji, *Aristotle on Memory* (London, 1972), pp. 2–8, and Wedin, op. cit. [n. 31], pp. 136–41.

It does not seem to represent an obvious sense of what we would call discursive knowledge, or knowing *about* something – viz. knowing propositions about an external object. When Aristotle says that νοῦς thinks a form he means that νοῦς is constituted for the time being by the essence which that form is. When this reception of form is a matter of exercising one's habitual knowledge, we say that νοῦς thinks itself. It thinks forms that constitute part of its capacities.³⁵

R. Norman has argued in a seminal paper that the self-thinking described in *De Anima* and appealed to in *Metaphysics A* cannot be understood as a species of what we might normally call self-knowledge or self-awareness.³⁶ His basic point is supported by the fact that Aristotle relies heavily on the theory of the self-thinking νοῦς later on in the same chapter of the *De Anima* when he explains how νοῦς is intelligible:

καὶ αὐτὸς δὲ νοητός ἐστιν ὥσπερ τὰ νοητά. ἐπὶ μὲν γὰρ τῶν ἀνευ ὕλης τὸ αὐτὸ ἐστὶ τὸ νοοῦν καὶ τὸ νοούμενον· ἡ γὰρ ἐπιστήμη ἡ θεωρητικὴ καὶ τὸ οὕτως ἐπιστητὸν τὸ αὐτὸ ἐστίν.

And it is itself intelligible just as the intelligibles. For in the case of things without matter the thinking thing and the thing being thought are the same. For theoretical knowledge and its object are the same. (430a2–5)

In the case of theoretical knowledge – knowledge of immaterial forms, or forms *qua* immaterial – the intellect becomes the form in question. Knowledge is identical with its object actually in the moment of being exercised, and potentially *qua* habit of the intellect. In this way νοῦς need have no potentiality relative to forms immanent in sensibles, as it must during the period before it has learned something. Saying of νοῦς that it ‘thinks itself’ is Aristotle’s way of expressing both the identity of the actualizing intellect with its object, and the fact that the intellect need be potentially related to nothing external to itself once it has acquired habitual knowledge.

We can now see that within the Aristotelian noetic self-thinking is not reducible to self-awareness, and indeed that it cannot usefully be explained in terms of the concept of self-awareness. In turn, by identifying the PM as a self-thinking νοῦς in *Metaphysics A.7*, Aristotle’s concern is not to restrict the object of God’s thought to himself because of the unworthiness of other objects. The concept of νοῦς’ self-thinking provides him with a way of identifying an actual immaterial object of thought as the content of an intellect that is thinking it, and with which it is numerically identical. Accordingly, the external object of thought and desire that is the Prime Mover of the heavens is a *thinking* that is identified with its own thought content. This is what it means in Aristotle’s system to be a self-thinking unmoved mover.

³⁵ This interpretation of νοῦς’ self-thinking originates with Alexander. See *De Anima* 86.5–29, and also the section on νοῦς in the work Bruns published as *De Anima Libri Mantissa*, 108.2–9, 109.4–23.

³⁶ ‘Aristotle’s philosopher-god’, *Phronesis* 14 (1969), 63–74. This is not to say that the self-thinking νοῦς is not aware of itself, which is entirely another issue. This means only that, on Aristotle’s theory, νοῦς’ self-thinking is not its self-consciousness. Indeed, nowhere in the technical discussions of νοῦς does he ask the question, ‘how do we know that we are thinking?’ (He does, of course, ask the equivalent question for the senses: *De Anima* III.2, 425b12–15, with which compare *De Somno* 455a15–20.) Thus, I see no textual evidence for K. Oehler’s claim, ‘Aristotle on self-knowledge’, *Proceedings of the American Philosophical Society*, 118 (1974), 493–506, that, ‘Mind thinks itself not because it thinks the forms which it has become but insofar as it is conscious of its object, i.e. of the forms. Self-consciousness is consciousness being conscious of itself by means of the consciousness of its object’ (498). Indeed, Wedin, op. cit. [n. 31], pp. 265–8, offers an interesting argument to the effect that the PM is not capable of thinking first person propositions and hence is not capable of self-consciousness at all.

It is, however, a natural corollary to the conventional interpretation that God's self-thinking is simply the result of locating a thought-object that is worthy of Him – this, one expects, would be Himself. There are two further considerations that make this view of God's thinking unlikely.

(1) Aristotle's remarks about *νοῦς* at 1072b18–21 apply equally to human and to divine *νοῦς*, and human *νοῦς*' self-thinking is something that occurs at the highest level of actuality, regardless of the content of its thinking.³⁷ Moreover, what the conventional interpretation lacks is a justification for the idea that the PM is *νοῦς* in the first place. The *De Anima* doctrine of the self-thinking *νοῦς* provides such a justification, and is introduced into the text at the exact point where it is needed to do so.

(2) It turns out too that *νοῦς*' self-thinking *as νοῦς* is an idea that cannot be made sense of in Aristotelian terms. I have already pointed out that the human intellect has in itself no actual nature besides the capacity to receive forms. 'Receiving' forms is what constitutes thinking them. But for Aristotle form is actuality.³⁸ This view is clearly developed as part of his examination of sensible substance in the middle books of the *Metaphysics*, particularly in *H.2–3* and *Θ.8*. Form is the actuality of sensible substance, and is contrasted with matter, which is merely potential until actualized by an appropriate form: 'Thus it is clear that substance, i.e. the form, is actuality' (*Θ.8*, 1050b2 [cf. *H.2*, 1043a26–8; *Θ.8*, 1050a15–16]). Now, if objects of thought (*νοητά*) are forms, and form is actuality, then the potential nature of *νοῦς* precludes it from being the kind of actual form that could be the object of its own thought.³⁹ It must first become a form, an actuality, before it can be intelligible. Even then, however, it is not intelligible *as νοῦς*, but as the actual thing, the form. Since *νοῦς* by itself is not actual, it cannot be an actual form, and it therefore cannot be the object of its own self-thinking in the absence of an enforming content. Self-thinking in the absence of an intelligible form would, on Aristotle's theory, be entirely without content.⁴⁰

³⁷ At this point, one might object that if this is what Aristotle has in mind for God's self-thought, then why would the apparent problem of *A.9* arise at all, i.e. why would he have to argue that God thinks of himself rather than something else? I address the details of *A.9* in a paper currently in progress, but the short answer is that he does not argue there that God thinks of himself, if by this is meant anything other than the *De Anima* notion of self-thinking. *A.9* seeks to examine aporiae about the *νοῦς*-God of *A.7* that arise from the conception of *νοῦς* itself; specifically, the problematic notion is *νοῦς*' nature as a faculty, which may be exercised or not. The different candidates for *νοῦς*' thought-object proposed at 1074b22–3 (itself, one other thing always, different things at different times) are possible answers to the question *τί νοεῖ*; only as it is posed at 1074b21, independently of deciding whether the nature of God is *νοῦς* (= *δύναμις*) or *νόησις* (= *ἐνέργεια*). 1074b28–33 then outlines the undesirable consequences that follow if we identify the nature of God as *νοῦς* (= *δύναμις*), and the conclusion at 1074b33–4 redefines it as *νόησις νοήσεως* – the actuality of an actuality, i.e. a pure actuality – in order to avoid these consequences. God's self-thought is a corollary of this redefinition, but it is not to be understood in any terms other than those available from *De Anima* (pace Modrak, *Review of Metaphysics* 44 [1991], 772).

³⁸ J. Owens, *The Doctrine of Being in the Aristotelian Metaphysics*, 3rd ed. (Toronto, 1978), pp. 457–60, discusses the wider implications of this feature of Aristotle's metaphysical thought.

³⁹ This statement of course applies only to an individual *νοῦς*' relationship to itself. *νοῦς* as a natural entity is an actual form and can be studied as part of the overall project of studying the soul, as Aristotle himself does in the *De Anima*. Clearly, though, the kind of understanding one possesses after having studied the intellect in the manner of *De Anima* III is no more to be described as self-knowledge or -awareness than the knowledge of other functions of the soul.

⁴⁰ Indeed, it is sometimes raised as a criticism of Aristotle's conception of God that His thought is contentless. Consider the eloquent statement of B. Fuller, 'The theory of God in Book XII of the *Metaphysics*', *Philosophical Review* 16 (1907), 170–83, at 176–7: 'God's essence, we are told, is thought of thought. But thought of thought of what? By draining thought and

Such lack of content, however, should not be viewed as a bizarre and unsatisfying result of Aristotle's theory. A contentless act of noetic self-awareness is ruled out by *De Anima*, which makes the ontology of the intellect in an important sense dependent on its object of thought. For the object of thought enforms and actualizes the merely potential human intellect.⁴¹ If there is to be even a loose univocity of reference in the use of 'νοῦς' to denote both human and divine thought, then the self-intellection of νοῦς *qua* νοῦς – in the case of God this would be some kind of pure self-awareness – is disallowed by the very conceptions that allow Aristotle to identify the PM as νοῦς, and therefore as God.

V. CONCLUSION

If I am right about Aristotle's application of the *De Anima* account of self-thinking to the PM in *Metaphysics* A.7, then we are in a position to confirm that the dialectical strategy of the chapter is quite different from the one scholars have usually found there. Far from assuming the PM's identity as God and then being concerned with limiting the object of God's thought to himself, Aristotle is tackling what must be considered a more fundamental and more difficult task: he is trying to show in the first place *that* the PM required by his physical system is God. This demonstration proceeds from the PM's role as an actual object of thought and desire that is not defined in terms of its intentional status. The *De Anima*'s theory of the functioning of the mind is then rung in to support the inference that, since it is actual, this object of thought must be the content of a νοῦς at the second level of actuality, a self-thinking. Finally, since thinking is a life function – indeed, the supreme life function – it is obvious that the PM is God, for what is God but eternal, purely actual life?⁴²

University of North Dakota,
Grand Forks

JOSEPH G. DEFILIPPO

form of its filling of sensible reference, we have apparently deprived it of all that gives it value and relevance. It is reduced to mere reflection upon itself, with no other self than the barren act of reflection to reflect upon.... It is like consciousness without anything but its mere name to be conscious of, and therefore meaningless.'

⁴¹ Cf. *Metaphysics* Θ.8, 1049b18–29, and *De Anima* III.4, 429a13–15. See also the passages cited in note 29 above.

⁴² An earlier version of this paper was delivered in October 1990 at the New York meeting of the Society for Ancient Greek Philosophy; I am grateful for questions and comments I received on that occasion. I would also like to thank Michael Frede, David Furley, Lindsay Judson and Steven Strange for their generous and helpful criticisms.