

From De Anima III,4 to De Anima III,5
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I

This paper is an attempt to deliver on a promise I made ten years ago, that the way of thinking about Aristotle on νοῦς that I was then developing in the context of Metaphysics Λ would also shed light on De Anima III,5. There are certainly close connections between these two Aristotelian accounts of νοῦς, and we can fairly demand of any reading of either that it should be able to make sense of the connections. I have moved to ἐνέργεια on this demand by Victor Caston's recent paper "Aristotle's Two Intellects: A Modest Proposal"; my paper will be in part a response to his, and I will indicate points both of agreement and of disagreement.¹

I want to talk mainly about De Anima III,5, in its context in De Anima III. But let me start by recalling some points about Λ, which may help to motivate the discussion of DA III,5.

Λ identifies the mover of the daily motion of the heavens (and perhaps also the movers of the other heavenly motions) as νοῦς, in agreement with Anaxagoras and with Plato.² But Aristotle also builds up an argument, critical both of Anaxagoras and of Plato, about how this νοῦς moves the heavens, and also about how it νοεῖ. His starting point in this argument is the thesis of Λ6, that the mover of the heavens is essentially ἐνέργεια--that it is essentially acting rather than merely possessing the capacity for action, or, more generally, that by its essence it is actually everything that it can potentially be. Aristotle says, more sharply, that the principle just is an ἐνέργεια (or that its οὐσία is ἐνέργεια), whereas (he says) on his opponents' view the principle would be merely a δύναμις (or its οὐσία would be δύναμις), since the action would be merely an accident of some underlying substance whose essence involves only the capacity for action. Aristotle's thesis implies that the principle is eternally acting, and eternally acting in the same way, eternally moving the heavens and thereby ordering the world, against Anaxagoras and the Timaeus, who represent νοῦς as originally quiescent and not intervening in the primordial chaos. But Aristotle's thesis has implications, not just for when the mover moves the heavens, but also for how it moves them: since the mover has no unactualized δύναμις, its activity must take place without change in itself, and so it must move the heavens without itself being moved in the process--either in the sense that it would first need to be moved itself in order to act on the heavens (my body or some parts of it must be moved to depress keys on the keyboard; a Platonic soul must itself be in motion to communicate motion to its body), or in the sense that it would be reciprocally affected by the heavens. This seems at least to exclude the sort of violent actions of νοῦς on the world which Anaxagoras, and sometimes also Plato, seem to countenance. But it is not obvious that it allows any kind of action, and indeed most Greek philosophers after Aristotle's time think that every activity involves a change in the agent, and therefore that there are no unmoved movers. But Aristotle offers an alternative model for action without change in

¹Caston's paper is in Phronesis v.44 (1999), pp.199-227. My promise was made in "Aristotle and Plato on God as Nous and as the Good," Review of Metaphysics, v.45, March 1992, pp.543-73. My apologies to Victor for the fact that, in the present version (with footnotes still in the rough), my disagreements with him are often noted in footnotes without full argument.

²For the identification of the demiurge of the Timaeus with the "νοῦς which has ordered all things" of the Laws and the νοῦς which is "king of heaven and earth" in the Philebus, see my Plato on God as Nous (Southern Illinois University Press for the Journal of the History of Philosophy Monograph Series, 1995, reissued by St. Augustine's Press, 2002).

the agent: "the objects of desire and of thought move in this way: they move without being moved" (Λ7 1072a26-7). Every object of desire is also an object of thought, and we can desire it only through thinking it. The object of thought is the cause of our thinking it, at least in the most obvious cases--this book, or its red color, is the cause of my perceiving it. But the object can cause me to perceive it without change in itself. At least, it is not changed by the fact that I perceive it, and there is no obvious change that it must undergo in order for me to perceive it. On the current theory, I cannot see the object unless it has been struck by photons, which, even if they are perfectly reflected with no change in energy, will communicate some tiny change in momentum to the object. But Aristotle's theory has nothing to correspond, and indeed his theory of sensation is deliberately designed to avoid the position of the "Heracliteans" of the Theaetetus, that the sensible as well as the sentient is changed in the encounter that gives rise to sensation. So sensible qualities acting on the perceiver give a plausible model for an unmoved mover. And if the object is an object of desire as well as of perception, then by acting on the perceiver it can cause local motion, which gives a model for how the first principle can cause local motion in the heavens.

The thesis that the first principle is ἐνέργεια also has implications for how it thinks or intellectually perceives, νοεῖ, and for what it νοεῖ. The first principle must be not just a power of νοῦς, but a νόησις, an act of thinking (so Λ9 in several places), and so it must be a νόησις of something in particular. For Plato νοῦς performs its act of ordering the world by νοεῖν the forms in the intelligible paradigm, the animal-itself, but Aristotle argues in Λ9 (too briefly and cryptically) that what the first principle νοεῖ must be the first principle itself. Aristotle gives (or hints at) several arguments for this conclusion, but one thing he says is that "the νοούμενον and the νοῦς are not different [in] whatever things do not have matter [i.e. in cases where the νοούμενον has no matter]," so that "they will be the same, and the νόησις will be one with the νοούμενον" (1075a3-5). Aristotle certainly does not mean that every individual soul is identical with every νοούμενον that it νοεῖ (in other words that each soul νοεῖ only itself); rather, every science (1071a1) or νόησις (1071a3) is identical with its νοούμενον, at least if that νοούμενον is non-material. Since the soul as subject of knowledge is not identical with the knowledge it possesses, the knowing subject is also not identical with the object it knows; but the first principle is not a soul possessing knowledge but is pure νόησις by its essence, so that in this case the knowing subject is identical with the known object.

This passage of Metaphysics Λ has close echoes with the De Anima, and especially with De Anima III,5. There too we find a higher kind of νοῦς, which is distinct from "what is called the νοῦς of the soul" (DA III,4 429a22) and νοεῖ in a different way from it: it is essentially ἐνέργεια (DA III,5 430a18), "it is not the case that at one time it νοεῖ and at another time it does not" (430a22), and it is identical with its object (430a19-20); it is separate and impassible (430a17-18), and it alone, apparently by contrast with "what is called the νοῦς of the soul," is immortal and eternal (430a23). It is natural to hope that the account of νόησις developed in De Anima III,4-5, and the distinction between the higher and lower ways of νοεῖν, would help to illuminate what Aristotle says about the divine first principle in Metaphysics Λ: Λ would be drawing here on the De Anima, as it draws elsewhere on Physics VIII and other works, pulling the "high points" or conclusions of different treatises together to give an account of the first principle, and inviting the reader to turn to those treatises to fill in the details. Unfortunately, De Anima III,5 is also highly compressed and controversial. Worse, at first reading it does not seem like a logical development of Aristotle's theory of the soul, but like a sudden theological intrusion into an otherwise more "naturalistic" psychology. If this is so, the chapter is unlikely to

give us much of a basis for understanding Metaphysics Λ. To make better sense of De Anima III,5, and to derive any benefits for Λ, we will have to examine more closely how the chapter relates to the argument Aristotle has been developing before it.

II

Certainly, as we read De Anima III, Chapter 5 comes as a surprise. Victor Caston's article "Aristotle's Two Intellects: A Modest Proposal" states the problem sharply. In the first place, nothing before DA III,5 has prepared us for the revelation that there are two intellects, one mortal and one immortal. The νοῦς discussed in DA III,4 must be identified with the παθητικός νοῦς of III,5; if we are now asked to accept that there is a distinct ποιητικός νοῦς (traditional shorthand for Aristotle's "νοῦς ... τῷ πάντα ποιεῖν", 430a14-15, cp. ποιητικόν at a12) which acts on this first νοῦς, presumably this is because there is something that happens in the παθητικός νοῦς which a ποιητικός νοῦς is needed to explain. But, as Caston says, there is no obvious explanatory gap in DA III,4, and there is no agreement on what the ποιητικός νοῦς is needed to do (Avicenna says that it implants the forms of material things, abstracted from their matter, in the παθητικός νοῦς; Averroes says that it illuminates the forms of material things, as they exist in the imaginative power, so that the παθητικός νοῦς can perceive them; both are under some suspicion of being make-work). If DA III,5 had fallen out of our manuscripts, would we notice that anything was missing from Aristotle's psychology?

The first thing to say is that the ποιητικός νοῦς cannot possibly be a part or faculty of the human soul. There is nothing absurd in saying that our souls are immortal and ungenerated, or that they have an immortal and ungenerated core. But the ποιητικός νοῦς is essentially ἐνέργεια (DA III,5 430a18: either τῇ οὐσίᾳ ὧν ἐνέργεια or τῇ οὐσίᾳ ὧν ἐνεργεία, depending on the manuscript, but to the same effect), with no unactualized potentialities, so that at every moment it is actually doing everything that it ever does or ever can do; "it is not the case that at one time it νοεῖ and at another time it does not" (DA III,5 430a22, wrongly bracketed by Ross in his editio maior but not in his OCT). If it were a part of our souls, we would be eternally knowing and contemplating all the intelligible truths that we are ever capable of knowing, which is absurd. As Aristotle says elsewhere, "if we have [already the ἔξεις of knowledge of the first principles], it is absurd: for it would follow that we have knowledges more precise than demonstration without noticing it" (Posterior Analytics II,19 99b26-7, cp. Metaphysics A9 993a1-2, specifically about having the knowledge innately)--but if the ποιητικός νοῦς were part of our souls, we would even more absurdly have to have the ἐνέργεια of knowledge, and not just the ἔξεις, at every instant without noticing it. Aristotle says in De Anima III,4 that "what is called the νοῦς of the soul [ὁ καλούμενος τῆς ψυχῆς νοῦς]--I am calling νοῦς that by which the soul reasons and affirms--is none of the beings in ἐνέργεια until it thinks/knows them" (429a22-4), and that "it has no nature except this, that it is δυνατόν [or δυνατός]" (a21-2); this is clearly the παθητικός νοῦς of DA III,5, which is in potentiality to all the things it thinks/knows. Since the παθητικός νοῦς is contrasted with the ποιητικός νοῦς, which actualizes the potentiality of the παθητικός νοῦς and is itself essentially ἐνέργεια, it follows that this νοῦς is not "the νοῦς of the soul," but is a νοῦς outside of souls and superior to souls.³

The idea of a νοῦς outside of souls seems strange to us, and scholars tend to suppose that the ποιητικός νοῦς must be a special kind of soul, or a part or power or activity of a soul--if not of a human soul, then of a divine soul (so Caston). And this tendency becomes almost irresistible if

³Cp. Theophrastus 307B FSH&G contrasting ὁ ψυχικός νοῦς with ὁ ἐνεργεία νοῦς, τουτέστι ὁ χωριστός.

we translate νοῦς by "intellect," and speak of the παθητικός νοῦς and the ποιητικός νοῦς as two intellects. But Aristotle gives us no reason to think that the ποιητικός νοῦς of DA III,5 is a soul or any part of a soul. And in Aristotle's philosophical context it was perfectly possible to think of a νοῦς separate from souls. As I argued in Plato on God as Nous, Plato's world-ordering νοῦς is not a soul but a separately existing virtue, Reason-itself, which souls participate in in order to be wise. There is also no reason to think that the νοῦς of Metaphysics Λ, a refinement of Plato's νοῦς, is a soul. It is, rather, a separately existing knowledge--Λ9 calls it a νόησις and apparently an ἐπιστήμη (at 1075a1), and in Λ10, when Aristotle says "for the others it is necessary that there be something contrary to wisdom and the most noble knowledge, but not for us" (1075b20-21), "wisdom and the most noble knowledge" are names not simply for a human knowledge of the divine first principle (why would this have to have a contrary, and why would that be objectionable?), but for the divine first principle itself. So too in De Anima III,5, the "knowledge in actuality," of which Aristotle says that "it is not the case that at one time it thinks/knows [νοεῖ] and at another time it does not" (430a19-21, in the section wrongly bracketed by Ross), must be the ποιητικός νοῦς. Or, more precisely: Aristotle says that this knowledge in actuality is temporally posterior to knowledge in potentiality "in the individual" but not absolutely, which implies that this knowledge can come to exist in individual souls; but Aristotle also says that "when it has been separated, it is only what it is" (a22-3), only knowledge without a distinct knowing subject, and then it is the "separate" (a17) ποιητικός νοῦς.

Now while in a Platonic context a separately existing knowledge is no more surprising than a separately existing justice or a separately existing health, it may be surprising that Aristotle retains this one piece of Platonism while rejecting so many others. But that is indeed what he is doing; and perhaps there is no reason why not, since many of the arguments that Aristotle uses to show that health or justice could not exist apart from the conditions of matter will not apply to the case of knowledge, or at least not to the special kind of knowledge he calls νοῦς.⁴ Aristotle goes beyond Plato in applying the ἐνέργεια/δύναμις distinction, both in De Anima III,5 and in Metaphysics Λ: in Λ he argues that a separate immaterial knowledge must be essentially actual knowledge (that it must be an act of contemplation and not merely an ability to contemplate), and he uses this thesis to refine Plato's description of the world-ordering νοῦς. But while it may be consistent to posit such a separately existing knowledge, none of this explains why we should posit it. At least in Λ there is a phenomenon, the rotation of the heavens, which this νοῦς is called on to explain, though we might wonder why this explanation is required. But in the De Anima, what is a separate essentially actual knowledge supposed to explain?

To answer this question, we need a careful reading of the logic of DA III,5; but we will have to start by going back to DA III,4. Indeed, I think the chapter-division (which is of course not part of Aristotle's text) has been rather misleading here, and has often led to III,5 being read too much in isolation from the ongoing argument of III,4. For there is an ongoing argument, and if III,5 were not there there would be something seriously missing from that argument. I think it is almost (but not quite) true that the operations of "the νοῦς of the soul" are causally independent of any higher νοῦς. But causality is not the only issue. III,4 also raises aporiai about νοῦς and the νοητόν, which would not be fully solved if we did not have III,5.

De Anima III,4 divides into two main parts. In 429a10-b22, Aristotle gives a sketch of the soul's power of νοῦς and activity of νοεῖν, based chiefly on an extended comparison with sensation; in 429b22-430a9, he raises two aporiai about the relation between νοῦς and the νοητόν, and begins to solve these aporiai, but the solution (particularly the solution to the second

⁴I develop this argument more fully in "Aristotle and Plato on God as Nous and as the Good."

of these aporiai) is not finished until the end of III,5 (so that it might have been at least as reasonable to break the text of III,4-5, 429a10-430a25, into two chapters 429a10-b22 and 429b22-430a25, rather than the current division 429a10-430a9 and 430a10-25). My main concern here is with Aristotle's posing and solving of the aporiai in 429b22-430a25, but the aporiai make sense only against the background of Aristotle's basic principles about cognition. He has first laid out these principles in developing his theory of sensation in Book II, and he takes them up again in the first part of III,4, 429a10-b22, in developing a theory of νοῦς by drawing on what he has said about sensation especially in II,5 and II,12, and bringing out the similarities and the differences between sensation and νοῦς.

Aristotle states his basic theses about νοῦς, by analogy with what he has said about sensation, in two sentences near the beginning of III,4: "if νοεῖν is like sensing, it would either be being affected by the intelligible object, or something else similar to this. So [νοῦς] must be unaffected but receptive of the form, and potentially such [as the object]--not potentially this [object]; and νοῦς must be to the intelligible objects as the sensitive [power] is to the sensible objects" (429a13-18). But there is much here that we must unpack by going back to Book II. Aristotle is drawing on the thesis of II,12 that "sense is what is receptive of sensible forms without the matter, as the wax receives the sign of the signet ring without the iron or the gold" (424a17-20). He also uses the corollary that this kind of receptivity implies that the recipient is neutral with respect to the contrary qualities of the objects: plants, although they have souls and although they are affected by heat and cold, do not sense heat and cold, and "the reason is that they do not have a mean and a principle such as to receive the forms of sensible things, but only such as to be affected by them together with the matter" (II,12 414b1-3; so too vision requires that the medium [De Anima II,7] and the organ [the pupil, De Sensu c2] be transparent and thus neutral). Now in III,4 Aristotle makes more explicit than he had in Book II why the recipient must be neutral: the soul's νοῦς, "since it νοεῖ all things, must be unmixed, as Anaxagoras says, in order to dominate, that is, in order to know--παρεμφαινόμενον γὰρ κωλύει τὸ ἀλλότριον καὶ ἀντιφράττει--so that it has no nature except this, that it is δυνατόν [or δυνατός]" (III,4 429a18-22). The reason for the neutrality is given in the phrase that I have left in Greek, because its meaning is disputed. Ross in his analysis (p.290 of his editio maior) renders the phrase "for the intrusion of anything foreign to it interferes with it": in other words, he takes τὸ ἀλλότριον, modified by the participle παρεμφαινόμενον, to be the subject of the verbs κωλύει and ἀντιφράττει (so his commentary, p.292; so too the Oxford translation and Hamlyn). But all ancient and medieval commentators that I have checked⁵ take παρεμφαινόμενον as the subject and τὸ ἀλλότριον as the object of the verbs, and a closer look at the meaning of παρεμφαίνειν and the parallel contexts of its use shows that they must be right. In the Timaeus, the receptacle must be "unshaped by all those forms which it is going to receive from anywhere: for if it were similar to any of the things that enter into it, then when things of a contrary or entirely different nature come to it, it would not receive their likenesses well, since it would display its own appearance alongside them [τὴν αὐτοῦ παρεμφαίνον ὄψιν]" (50d7-e4); less metaphysically, in the Aristotelian Problemata, "water is more transparent [or possibly 'more reflective'] than olive oil: for olive oil has color, whereas water, being displayed without color alongside [the objects seen through it or reflected in it: ἄχροον παρεμφαινόμενον], makes the image [ἔμφασις] clearer" (XXIII,9 932b22-4). In both of these texts, an object is being displayed or imaged in some medium, and the medium is also displaying some quality of its own alongside the object--

⁵Alexander De Anima p.84, Themistius p.94, ps.-Simplicius p.226, Averroes p.354, Thomas #680 and the Latin translation there cited; I haven't checked the pseudo-Philoponus or the Latin Philoponus or the Alexander minora

this is what παρεμφαίνειν means--and the more the medium displays a quality of its own, the worse it will display the object (in the Timaeus, this happens particularly if the quality of the object is opposed to the quality of the medium). This is also what Aristotle is saying in the De Anima passage, and indeed he must be deliberately echoing the Timaeus passage. Thus, in the De Anima passage, παρεμφαινόμενον γὰρ κωλύει τὸ ἀλλότριον καὶ ἀντιφράττει must mean that the soul's νοῦς must not itself have any determinate nature, "because if it were itself displayed alongside its objects, it would hinder and block what is of a different character."⁶

Aristotle's manipulations of his predecessors here are rather bizarre. He allegorizes Anaxagoras ("in order to dominate, that is, in order to know") so as to make him refer to a cognitive power in the soul rather than to an ordering principle of the cosmos (he cites the same tag of Anaxagoras--νοῦς must be unaffected and unmixed, in order to dominate--as a point about unmoved movers, Physics VIII,5 256b24-7). At the same time, he assimilates Anaxagoras' νοῦς, not to the demiurge of the Timaeus, but to the receptacle. This assimilation is probably eased by the fact that, a few lines further down (50e8-51a1), the Timaeus compares the receptacle to a smooth surface for impressing shapes, which would suggest a human cognitive power, the wax tablet of the Theaetetus (Timaeus 50c2 calls the receptacle an ἐκμαγεῖον, the same word used in the Theaetetus for the wax tablet); Aristotle must be thinking of the Theaetetus when further down in De Anima III,4 he compares the soul's νοῦς, prior to any act of νοεῖν, to "a tablet in which nothing is present written in actuality" (430a1-2). But beyond any literary resonances between Anaxagoras and the Timaeus and Theaetetus, the deeper point is that in the physical and epistemological cases alike we must posit a principle, the receptacle/matter or what receives forms in the soul, which must be distinct from ordinary objects, having no features in common with them and no distinctive features of its own, in order to receive their forms. And this idea of neutrality helps to explain Aristotle's saying that νοῦς "must be unaffected [ἀπαθές] but receptive of the form" (429a15-16, cited above): this seems strange, since receiving the form of an object sounds like a way of being affected by the object, and it seems especially strange as an inference from the previous sentence, that "if νοεῖν is like sensing, it would either be being affected [πάσχειν τι] by the intelligible object, or something else similar to this" (429a13-15, cited above). But presumably the point is that, like Anaxagoras' νοῦς (cited as ἀπαθές at DA III,4 429b22-3) and like the receptacle, the soul's νοῦς, and equally the sensory powers, must undergo no alteration or change of intrinsic quality in interacting with their objects, so that they can remain receptive to all objects equally (see DA II,5, where exercising the sensory powers, like exercising an art, is "either not alteration ... or a different kind of alteration," 417b6-7--surely the artisan's quality, i.e. his art, has not changed simply by being exercised; note however that a sensory power need not be neutral to all qualities, but only to those qualities it can sense). So when the form of the object is received in a cognitive power, it must not be present in it in the normal way that a form is present in matter: perhaps something like the way that the color of an object is present in a mirror, or in an actually transparent medium. This does not mean that the bodily organ of a sensitive power is not qualitatively changed in sensing--at least sometimes it certainly is, as when we are dazzled by a bright light (DA III,4 429a29-b5)--

⁶Ross and Hamlyn and the Oxford all greatly weaken the force of παρεμφαίνειν. Ross says p.292 that τὸ ἀλλότριον is "plainly" the subject of the verbs, perhaps because, not having the parallels in mind, he does not consider the possibility that the νοῦς is itself the antecedent of παρεμφαινόμενον. Or perhaps he rejects this possibility because the gender would have shifted from masculine [ἀμυγή at 429a18, picking up νοῦς] to neuter here at 429a20; well, the gender has indeed shifted, and we should print δυνατόν, transmitted by all the manuscripts, at 429a22, and not clean it up to δυνατός with Ross.

but this is not what it is to sense the object, and if the organ is altered too much it will interfere with sensation (the sensory power is not itself qualitatively affected, although its exercise may be blocked when the organ is affected, DA I,4 418b18-24).

So far we have been talking about the similarities between νοῦς and sensation, which are Aristotle's starting point in De Anima III,4. But he also brings out at least two important differences. First, "the ἀπάθεια of the sensitive and of the intellectual [powers] is not alike" (429a29-30), just because the sensory powers have organs which can be affected, whereas νοῦς has no bodily organ--"the sensitive [power] is not without a body, but [νοῦς] is separable" (429b4-5)--and so cannot suffer the kinds of impediments to its exercise that the sensory powers can. Second, and connected with this, when the intellectual power has been exercised in such a way that we acquire a science [ἐπιστήμη], we can then exercise that science in contemplating [θεωρεῖν] without any need of an external object to exercise it on, whereas to exercise sensation an appropriate external object and medium are necessary and sufficient. Thus the actualization of νοῦς takes two steps, from the power to the ἔξις of ἐπιστήμη and from ἐπιστήμη to the activity of contemplation, while the actualization of sensation takes only one step, from the power to the activity (for all this compare DA II,5 417b2-27 with III,4 429b5-9; at 429b9 the Bywater-Ross emendation of δὲ αὐτόν to δι' αὐτοῦ as in b7 is necessary, despite Barnes). Both of these points about the differences between νοῦς and sensation will need qualification. Some of the qualification comes in Aristotle's paragraph on the relation between cognizing flesh and cognizing the essence of flesh, DA III,4 429b10-22, which I will pass over for now; the paragraph is important, and I will come back to it later, but Aristotle's formulations of the aporiai about νοῦς and the νοητόν at 429b22-9 do not depend on it.

Aristotle raises two aporiai. First, if νοῦς is, as we have said following Anaxagoras, "simple and unaffected and has nothing in common" with anything else, how will it νοεῖν, if νοεῖν is something like being affected--as we have also said, and as seems to follow if it is receiving the form of the object (429b22-5)? And there seems a special difficulty in νοῦς' being affected by the νοητόν, since it seems that X can be affected by Y only if X and Y share something in common (most obviously by belonging to the same genus), and we have said that νοῦς has nothing in common with any of its νοητά (thus b25-6). Aristotle seems to have the resources to handle this aporia, but it leads to a second and deeper aporia. We have said that νοῦς is simple and has nothing in common with any of its νοητά. But it seems that νοῦς can νοεῖν itself (it is certainly not sensible, but we must cognize it somehow if we can talk about it; De Anima III,2 allows even sight to see that it sees yellow, since the sight's act of seeing the yellow and the yellow's act of moving the sight are a single act of the agent and patient, and are cognized simultaneously; surely the same argument should show that νοῦς cognizes itself cognizing the νοητόν). But if νοῦς can νοεῖν itself, then νοῦς is itself something νοητόν. But then either its being νοητόν is an additional attribute, distinct from its own nature, which it shares with the other νοητά (or, to put it the other way around, its being νοῦς is an additional attribute, distinct from the common nature which it shares with the other νοητά), in which case νοῦς is "mixed" or composite, contrary to what we have assumed; or else being νοῦς and being νοητόν are the same thing, so that "νοῦς will belong to the other [νοητά] as well, and the νοητόν will be one in species" (429b26-9, this quote b27-8), although it seems absurd that everything that is thinkable and knowable should be itself thinking and knowing.

In answer to the first aporia, which asked how νοῦς will νοεῖν without being affected by its object, or how it will be affected without having anything in common with its object, Aristotle answers briefly that in a certain sense it is affected, and in a certain sense it does have something

in common with its objects, since "νοῦς is in a way potentially the νοητό, but actually none of them [or: actually nothing] before it νοεῖ" (429b30-31, cp. 429a21-4); "the way it is potentially is as in a writing-tablet in which nothing actually written is present, which is what happens in the case of νοῦς" (429b31-430a2), like the wax tablet of the Theaetetus, and like the material principle of bodies. So the action of the νοητόν on the soul's νοῦς does not depend on their having any common predicate in the same way: rather, the νοῦς has potentially the same predicate that the νοητόν has actually. However, although this is all that Aristotle says here, it is not precise enough: for it is also true that when fire acts on some matter which currently has the form of earth, and turns it into more fire, the patient (at the beginning) has only potentially the predicate which the agent has actually; and yet if the νοῦς and the νοητόν were related as the earth and the fire, there would not be a sufficient answer to the aporia. Although earth is only potentially hot and fire is actually hot, earth and fire belong to the same genus ("simple corruptible body," or more broadly "corruptible body"): it is because they both belong to this genus that they are susceptible to the contrariety hot/cold, everything in this genus being actually cold and potentially hot or vice versa, and the different things in the genus can interact by heating and cooling each other. If νοῦς and the νοητόν were related in this way, then, contrary to Aristotle's assumptions, they would have something in common in the most straightforward sense, and νοῦς would be affected in the most straightforward sense; also, the νοητόν would not be an unmoved mover, but could be reciprocally affected by acting on the νοῦς, as a hot body can be cooled in heating a colder body. So when Aristotle says that "νοῦς is in a way potentially the νοητό" (my stress), it must be in a different way from the way that earth is potentially fire, or is potentially hot.

One model for how νοῦς and the νοητόν could have the same predicate in different ways, or could be the same thing present in different modes, is given by the case of an art and the matter that the art acts on: this is elsewhere Aristotle's standard model for an agent and patient not sharing a genus, or not sharing (the same kind of) matter, and therefore for action without reciprocal action. This is certainly one model he has in mind here too, but it cannot be fully adequate. The locus classicus is from On Generation and Corruption I,7:

The same account holds for acting and being acted on as for being moved and moving. For "mover" is said in two ways: that in which the principle of motion exists is said to be the mover, and so is the last thing, the thing proximate to the thing moved and the coming-to-be. So likewise with "agent" [or "maker"]: for we say both that the doctor is what heals and that the wine is. So nothing prevents the first mover in a motion from being unmoved (and in some cases this is even necessary), whereas the last [mover] always moves by being itself moved; and so too in action the first [agent] is unaffected, but the last is itself affected. For those [agents] which do not have the same matter [as their patients] act without being affected (like the art of medicine, which in producing health is in no way affected by the person who is being healed); but the food is also an agent [of health] and it is affected (for it is heated or cooled or affected in some other way at the same time that it acts). Here the art of medicine is [the agent] as the principle, and the food as the last [agent] and as the thing in contact [with the patient]. So those agents which do not have their form in matter are unaffected, whereas those which are in matter [sc. the same kind of matter as the patient] are subject to affection. (324a24-b6)

Here the first agent in healing a person is not the doctor, but the art of medicine which is present in the doctor: the doctor belongs to the same genus and has the same kind of matter as the sick person, and he must be moved at least incidentally in order to heal (he must move his limbs or at least his mouth, etc.), but the art of medicine, which does not belong to the same genus and does not have matter, remains unaffected. Furthermore, while we can say that the art of medicine, or the doctor as its bearer, possess something actually that the sick person possesses only potentially, namely the form of health, they do not possess it in the same way that the sick person (once healed) will possess it; this is why the art, or the doctor qua bearer of the art, do not risk losing the form of health in the act of healing the sick person, as the fire risks losing its heat in the act of heating the earth. As will become clear a few lines further down in the *De Anima* (III,5 430a10-14, to be discussed below), Aristotle has the art model in mind in thinking about the relation between the soul's νοῦς (analogous to the person being healed) and its νοητόν (analogous to the art of medicine), and this avoids many difficulties of the earth-and-fire model. But this model cannot be exact, since the person being healed is in no way ἀπαθές and receives the form of health in the full straightforward sense, whereas νοῦς is somehow ἀπαθές and receives the form of its object in some less straightforward way.

One feature that distinguishes νοῦς both from the earth and from the sick person is that νοῦς, like a blank writing-tablet, is "actually none [of the νοητά] before it νοεῖ": when it passes from not-knowing to knowing X, in the prior state it is neither X nor the contrary ¬X (I will use "¬" as a sign for the contrary rather than for the contradictory). So the transition to knowing X is not a transition from ¬X to X; indeed, since the knowledge of contraries is the same, the end-state of the transition is no more X than it is ¬X. Now of course not every νοητόν has a contrary: for instance, one necessary condition for X to have a contrary is that X should exist in some ὑποκείμενον which is capable of receiving both X and its contrary. But in cases where the νοητόν X does have a contrary, then when the νοητόν comes to be present in the νοῦς, it does not come to be present in it in the same way that it is present in its ὑποκείμενον, since the νοητόν and its contrary cannot both at the same time be present in something in the way that they are present in their ὑποκείμενον. Nonetheless, Aristotle insists that S's knowing X is X's being in some way present in S. This seems to hold for ascriptions of knowledge both in the ἔξις-sense and in the ἐνέργεια-sense. S's ἐνέργεια of intellectually knowing X, like S's ἐνέργεια of sensing X, is also X's ἐνέργεια in S, since the passive ἐνέργεια of the patient (here the knower S) is also the active ἐνέργεια of the agent (here the object X) in the patient; and for S to have ἔξις-knowledge of X is for X to be present in S in such a way as to enable it to operate there. But in the present passage Aristotle says nothing further to make clear the distinctive way in which νοῦς is potentially the νοητά, or the way in which they come to be in νοῦς; somewhat more clarity may emerge in his treatment of the second aporia.

Having briefly handled the first aporia (429b29-430a2), Aristotle turns to the second aporia: can νοῦς νοεῖν itself, so that it is itself something νοητόν? then how do we avoid the conclusions that, if being νοῦς and being νοητόν are different, νοῦς is composite, and that, if they are the same, everything νοητόν also νοεῖ? Aristotle says:

And [νοῦς] itself is νοητός, as the νοητά are. For in [ἐπί + gen.] things that are without matter the νοοῦν and the νοούμενον are the same thing: for theoretical knowledge [ἐπιστήμη] and what is known in this way are the same (but we must investigate the cause why [we do not? it does not? there is not?] always νοεῖν);

but in [ἐν] things that have matter, [the νοῦς] is potentially each of the νοητά, so that [ὥστε] νοῦς will not belong to them [= the νοητά] (for the νοῦς of such things is a δύναμις without matter), but the νοητόν [= being νοητόν] will belong to it [= νοῦς]. (430a2-9)

There are many difficulties here.⁷ Some observations on the structure of the passage may help. (1) Clearly, Aristotle is considering in parallel the cases of "things that are without matter" and of "things that have matter": in both cases we ask what the relation is between the νοοῦν and the νοούμενον, or (apparently equivalently) the ἐπιστήμη and the ἐπιστητόν. To ask about knowledge "in the case of" things without or with matter (there can be no difference in meaning between ἐπί in the first case and ἐν in the second) must mean to ask about the knowledge of such things (not about the knowledge possessed by such things). (2) When, in discussing the first case, Aristotle speaks of "theoretical knowledge" [θεωρητική ἐπιστήμη] and of "what is known [ἐπιστητόν] in this way"--i.e., known theoretically--the structure of the argument seems to require that only things that are without matter are known theoretically, since otherwise the conclusion that the νοοῦν and the νοούμενον are the same thing should apply equally in the case of things with matter. This may seem strange, since a famous passage, Metaphysics E1, says that physics and mathematics and first philosophy are all theoretical ἐπιστήμαι, and physics is a science of matter-form composites or of forms that are inseparable from matter (or are "not without matter"), but certainly not of "things that are without matter." But another passage, De Partibus Animalium I,1 639b30-640a9, contrasts physics with the "theoretical ἐπιστήμη", which argue from "what is" to what follows from that, whereas physics argues from "what will be" to what must be for that to come about: physics shares this characteristic with the arts, so the implication may be that physics is a productive ἐπιστήμη, as if we were sharing nature's own deliberations about how to produce things). Indeed, when Metaphysics E1 argues that physics "is neither practical nor productive" (1025b21, argument through b24) and therefore that "if all thought is either practical or productive or theoretical, physics would be θεωρητική τις, but [ἀλλά] theoretical about that sort of being which is capable of being moved, and about an οὐσία-in-the-sense-of-λόγος for the most part only as inseparable" (b25-8), Aristotle is either weakening the sense of θεωρητική or at least controversially widening its extension. It is thus not shocking that in De Partibus Animalium I,1 and De Anima III,4 Aristotle should assume that the θεωρητικαὶ ἐπιστήμαι are only the sciences of things without matter.⁸ (3) A final and

⁷fortunately there are at least no serious textual issues, note some minor ones. two notes against Kosman's treatment of 430a6-9, bottom of his p.354: (a) he translates 430a6-7 as "... each of them is potentially thought," which just doesn't correspond to the syntax; (b) the construal he seems to suggest for 430a8-9 in his footnote is impossible, and the reading ἐκεῖνοις [just barely attested, and an obvious lectio faciliior] would totally collapse the μέν/δέ contrast

⁸note that De Partibus Animalium I,1 itself uses θεωρ- terms liberally, and says that physics or the physicist is θεωρητικός of this or that (but not, I think, just θεωρητικός without a dependent genitive). but when there is an official classification of the sciences, physics is not among the θεωρητικαί. in Metaphysics E1, to make an important point (some forms cannot exist apart from matter and cannot even be studied scientifically apart from matter), Aristotle classifies differently. the Metaphysics view is presumably Aristotle's considered decision, but the view of the other texts is a natural default position for him when he is not putting any special effort into revising the standard classification. the Stoics apparently think that physics, like ethics, is both theoretical and practical (where they, like Aristotle sometimes, seem not to distinguish practical from productive knowledge): see my "Physics as a Virtue," BACAP Proceedings v.11. I am not sure what I think about the two ὥς-es in the Metaphysics E1 passage. in Metaphysics Λ9 1074b38-1075a5 (a passage I may either come back to or discuss in the introduction) it again looks as if the theoretical sciences may be restricted to the sciences of things without matter, and as if the sciences of enmattered essences are merely productive

important point about the structure of our present passage De Anima III,4 430a2-9 is that the last ὥστε clause (that νοῦς will not belong to the νοητά, but being νοητόν will belong to νοῦς) must apply only to Aristotle's second case, the case of things that have matter, since Aristotle's reason for concluding that νοῦς will not belong to these νοητά is that "the νοῦς of such things is a δύναμις without matter": "such things" here can only mean "things that have matter," and this would not be a reason to think that νοῦς does not belong to the νοητά if the νοητά themselves were without matter. In Aristotle's first case, the case of things without matter, his statement that "[νοῦς] itself is νοητός, as the νοητά are" will still hold, and will be supported by his argument that in this case the νοοῦν and the νοούμενον are the same thing, but he has given no argument that in this case νοῦς will not belong to the νοητά.

In trying to understand how Aristotle answers our aporia, the first thing to confront is his assertion, here and in closely related passages such as De Anima III,5 430a19-20 (= III,7 431a1-2), De Anima III,8 431b20-432a1, and Metaphysics Λ9 1074b38-1075a5, that knowledge either is simply identical with its object, or is the object somehow abstracted from its matter. As we saw above, Aristotle comes to these formulations as a natural extension of his account of sensation as a reception of sensible forms without the matter. As we also saw, a subject S's ἐνέργεια of intellectually knowing X, or of sensing X, is also X's ἐνέργεια in S, and S has ἔξις-knowledge of X when X is present in S in such a way as to enable it to operate there. Thus to attribute to S a ἔξις-knowledge of X, or to say that S ἔχει the ἐπιστήμη of X, is the same as to say that X is present in S, or (equivalently, according to Metaphysics Δ23 1023a23-5) that S ἔχει X. Since S ἔχει the ἐπιστήμη of X precisely when S ἔχει X (and since the ἐπιστήμη of X can be functionally defined as whatever S ἔχει on these occasions), the natural conclusion is that the ἐπιστήμη of X simply is X itself. However, as we also saw above, there will be complications when the object X has matter. In this case--even in the case where we are sensing X rather than knowing it intellectually--it cannot be the matter-form composite but only the form which is present in the knowing subject. Aristotle often prefers to say that in this case what is properly νοητόν is the form rather than the form-matter composite, so it would still be possible to say that the νοητόν is present in the knowing subject. But, as again we saw, the νοητόν X (where X is the form) must be present in the soul in a different way from the way that it is present in its matter, since for X and for its contrary or privation ¬X to be present in the soul is the same, whereas for X and for ¬X to be present in their matter are incompatible. So it is not surprising that Aristotle describes the mode of presence (or mode of being) of the form X in the soul as a mode of presence (or of being) without matter. It may be more surprising that here (but not in any of the parallel passages) Aristotle describes the νοῦς of things that have matter as "a δύναμις without matter." He cannot be referring here to νοῦς as a bare capacity for acquiring knowledge (a "first δύναμις"), which would entirely disrupt the parallel with theoretical ἐπιστήμη; rather, νοῦς here must be some kind of ἔξις-knowledge (a "second δύναμις"). I think Aristotle's language makes best sense if here (as apparently in De Partibus Animalium I,1 639b30-640a9 and perhaps Metaphysics Λ9 1074b38-1075a5) he is classifying sciences of things that have matter as productive sciences, or at least taking productive sciences as paradigmatic for this case. Thus the art of medicine, which is the ἔξις-knowledge of health, is a "δύναμις without matter" in the soul of the doctor for producing health, and also for producing disease, whereas the health and disease that exist in their natural matter are not in the same way δυνάμεις, but are simply the contrary effects of this δύναμις exercised in different ways.

Given, then, that the ἔξις-knowledge (whether we call it ἐπιστήμη or νοῦς) of an immaterial object simply is that object, and that the ἔξις-knowledge of a material object is that object

somehow abstracted from its matter, how does Aristotle answer the questions raised in the second aporia, and resolve the threatened absurdities? One question was whether νοῦς νοεῖ itself, so that it is itself νοητόν, and Aristotle's answer is clearly that it is, both in the case of an immaterial and in the case of a material object. From the way Aristotle argues for this conclusion, it is clear that he means, not that νοῦς as a bare capacity for knowledge ("first δύναμις") is νοητόν, but rather that a ἔξις-knowledge ("second δύναμις") is νοητόν. In the immaterial case, the ἐπιστήμη simply is its object, and since the object is νοητόν, so is the ἐπιστήμη. In the material case, the ἐπιστήμη is the object somehow abstracted from its matter; here too Aristotle describes the object, the form in the matter, as νοητόν, and taking away the matter can only make the form more νοητόν, not less.

A second question was whether, given that it belongs to νοῦς to be νοητόν, whether its being νοῦς and its being νοητόν are the same. If they are the same, the threatened absurdity was that νοῦς would belong to every νοητόν. If they are different, the absurdity (or anyway the difficulty, given what Aristotle has said previously about the simplicity of νοῦς) was that νοῦς would be composed of a νοῦς-aspect and of an aspect it shares with the νοητόν: we could think of these either as a generic νοητόν nature and a superadded differentia that specifies something as νοῦς, or as an underlying νοῦς-nature and something superadded that it receives from the νοητόν. Now in one sense it seems undeniable that there is such a composition in νοῦς, because there must be a distinction between νοῦς as a "first δύναμις" and the ἔξις-knowledge that comes to be in it, where this ἔξις-knowledge is either the νοητόν or the νοητόν somehow abstracted from its matter. But in the ἔξις-knowledge itself, which is both νοῦς and νοητόν, are being νοῦς and being νοητόν the same, or are they two aspects out of which it is somehow composed?

In the material case, the extensions of νοῦς and the νοητόν (or of νοῦς-of-X and the-νοητόν-X) are different, so their intensions must be different; so how can we avoid the conclusion that the νοῦς(-ἔξις) is composite? Well, there is no composition between an underlying νοῦς-nature and something superadded that it receives from the νοητόν, unless by the underlying νοῦς-nature we mean the "first δύναμις": there is no need to posit any third thing between this δύναμις and the form that it receives by abstracting the νοητόν from its matter. Nor is there composition between a generic νοητόν nature and a superadded differentia that specifies something as νοῦς, since what distinguishes the νοῦς-ἔξις from a mere non-thinking νοητόν such as its own object is not something superadded to the νοητόν, but something subtracted. It is not that the νοητόν is simple and the νοῦς is composite, but rather there is form/matter composition in the νοητόν, and form not compounded with matter in the νοῦς.

In the immaterial case, Aristotle's arguments do not support the conclusion that being νοῦς and being νοητόν (being νοῦς-of-X and being the-νοητόν-X) are non-coextensive; in fact, his argument at the beginning of our passage (430a3-5) supports the conclusion that they are coextensive. So it seems that Aristotle must simply accept the allegedly absurd conclusion that νοῦς belongs to every νοητόν. Does this mean that each immaterial intelligible object itself thinks? In the first instance, it means that each immaterial intelligible object is itself a ἔξις of knowledge. But since Aristotle is willing in our passage to pass from saying that the ἐπιστήμη and the ἐπιστητόν are the same to saying that the νοοῦν and the νοούμενον are the same, he is apparently willing to say that the ἔξις itself νοεῖ, knows or thinks, perhaps rather as Plato is willing to say that justice is itself just. However, in our present passage Aristotle does not explicitly draw the conclusion that the νοητά themselves possess νοῦς, nor does he deal with the objections or difficulties of interpretation that this conclusion would give rise to: he merely says that νοῦς is itself νοητόν in both the material and immaterial cases, and that the νοητά do not

have νοῦς in the material case, and says things that seem to imply that the νοητά do have νοῦς in the immaterial case, while leaving the issue for further investigation.

If being νοῦς and being νοητόν (being νοῦς-of-X and being the-νοητόν-X) are coextensive in the immaterial case, then are they intensionally different in such a way that there would be a composition in νοῦς, the other threatened absurdity? Again, there is undeniably a composition between νοῦς as a "first δύναμις" and the ἐπιστήμη which is identical with the immaterial νοητόν, but there is no reason to posit any further composition between νοῦς-substrate and νοητόν in the ἐπιστήμη itself. Nor is there composition between a generic νοητόν nature and a superadded differentia that specifies something as νοῦς: in the material case, what distinguishes the νοῦς-ἔξις from its νοητόν is not something added but something subtracted, and in the immaterial case there is neither addition nor subtraction, since they are both the same without qualification. Rather than νοῦς being a species of the νοητόν (even a *species unica*), Aristotle seems to agree at least roughly with the view suggested at 429b28, that "the νοητόν is one in species," namely that the (immaterial) νοητόν is simply νοῦς. Probably he agrees with this only roughly, since if the immaterial νοητόν were one in species, it would also be only one in number, since it would have no matter to differentiate individuals within a species (so *Metaphysics* Λ8 1074a33-7), and we do not have enough grounds to commit Aristotle to the view that there is only one immaterial νοητόν. But even if we refine to say that the immaterial νοητόν is a single genus with many species,⁹ each of those species will be equally νοῦς, and there will not be νοῦς-νοητόν composition at any level. If we are not willing to say that being νοῦς and being νοητόν are absolutely the same in intension, at any rate they are not distinguishable in the way that genus and differentia are distinguishable within a species-form, but perhaps rather as the road from Athens to Thebes is distinguishable from the road from Thebes to Athens. Some such intensional identity or quasi-identity seems to be implied by the parallel *Metaphysics* Λ9 1074b36-1075a5, where, given that the divine ἀρχή, which must be the best of all things, is both νοῦς (or more precisely νόησις) and νοητόν, it is asked "if νοεῖν and νοεῖσθαι are different, under which aspect will goodness belong to it? For being νόησις and being νοούμενον are not the same." Here as in *De Anima* III,4 Aristotle answers that in the immaterial case the ἐπιστήμη or the νόησις is the same as its object, and he does not say anything explicit about whether this is intensional or merely extensional identity, but if the answer is supposed to answer the question, it seems that it must be intensional identity or something very close to it.

Clearly our passage from *De Anima* III,4 leaves loose ends about how an immaterial νοητόν νοεῖ. Aristotle explicitly raises and defers one question: "but we must investigate the cause why [we do not? it does not? there is not?] always νοεῖν" (430a5-6). Indeed, if an immaterial νοητόν X is identical with the knowledge of X, and if X, being immaterial, must be eternal, it seems that there should always be knowledge of X. Does this mean that my soul always has knowledge of X? (Just that it always possesses the ἐπιστήμη, or also that it is always contemplating X? Just that my soul has knowledge of X whenever my soul exists, or does it also follow that my soul has existed from eternity and will exist to eternity?) Or just that, at any given moment, some soul or other must possess ἐπιστήμη of X, or be contemplating X? Or does X just eternally contemplate itself? If so, how is that activity related to some individual soul's contemplating X, or having ἐπιστήμη of X, at some given time? How is my soul, or the "first δύναμις" of νοῦς

⁹or a quasi-genus predicated of its quasi-species πρὸς ἓν (like being as said of the categories) or *per prius et posterius* (like number as said of two, three etc.; perhaps this counts as a true genus). none of this matters for the point at hand

which is my soul's rational part, affected by an eternal immaterial νοητόν, which is an eternal immaterial νοῦς?¹⁰

III

These kinds of questions, it seems to me, are why De Anima III,5 is necessary. The answer to the aporiai raised at De Anima III,4 429b22-9 is not simply De Anima III,4 429b29-430a9, but extends to the end of De Anima III,5 at 430a25: so that, as I said above, the chapter-division between III,4 and III,5 is artificial, and could have been made at least as reasonably at 429b22, so that the aporiai and their answers would be a single chapter. It is thus wrong to say with Caston that III,5 could simply be removed without damage to the overall argument: if it were removed, we would have no answers to the questions about immaterial νοητά which are naturally raised by the end of III,4.¹¹

The interpretation of the sixteen lines of De Anima III,5 is of course extremely controversial. I will proceed through the text point by point, but without explicitly addressing every controversy, so as not to lose sight of the argument that I think the text as a whole is making, in the context of the aporiai of De Anima III,4. I will quote the text (in the form in which I accept it, with notes on the more important textual disputes), and offer a provisional translation, in two installments.

ἐπεὶ δ' ¹² ἐν ἀπάσῃ ¹³ τῇ φύσει ἐστὶ ¹⁴ τὸ μὲν ὕλη ἐκάστω γένει (τοῦτο δὲ ὁ πάντα δυνάμει ἐκεῖνα), ἕτερον δὲ τὸ αἴτιον καὶ ποιητικόν, τῷ ποιεῖν πάντα, οἷον ἡ τέχνη πρὸς τὴν ὕλην πέπονθεν, ἀνάγκη καὶ ἐν τῇ ψυχῇ ὑπάρχειν ταύτας τὰς διαφοράς· καὶ ἔστιν ὁ μὲν τοιοῦτος νοῦς τῷ πάντα γίνεσθαι, ὁ δὲ τῷ πάντα ποιεῖν, ὡς ἔξις τις, οἷον τὸ φῶς· τρόπον γάρ τινα καὶ τὸ φῶς ποιεῖ τὰ δυνάμει ὄντα χρώματα ἐνεργεῖα χρώματα. (430a10-17)

Since in every nature there is one thing which is matter for each genus (this is what is potentially all those things), and another which is the cause and agent/maker, through making [them] all, as the art is related to the matter, necessarily these distinctions must exist also in the

¹⁰ {added note, February 2003} the sense of the question, in context, is maybe clearer to me than it was. the passage shows quite clearly that it's not just knowledge in the sense of the (second) ἐνέργεια that's identical with its object (if immaterial), but knowledge in the sense of the ἔξις; it's because he's said that knowledge in the sense of the ἔξις is identical with its object (i.e. the object X is itself present in the soul) that the question arises, so why doesn't it always know itself? (after all, what barrier could there be between it and itself?); and yet clearly we don't always contemplate it, even for all the time when the ἔξις is present in our soul. presumably the separately existing X does indeed always contemplate itself, but we don't always contemplate by means of that ἔξις; or, to put it another way, the ποιητικός νοῦς is always acting intrinsically (the sun is always shining), but it is not always acting on us (not always shining on us). this might be taken up in ἄνευ τούτου οὐθὲν νοεῖ at the end of DA III,5; perhaps this is esp. plausible if we interpret οὐ μνημονεύομεν as "we do not always remember," and don't close the parenthesis until the end of 430a25

¹¹ Kosman (in Nussbaum-Rorty) says, like me, that III,5 is answering an aporia from III,4; unlike me, he seems to think (p.354) that it is primarily the aporia about why νοῦς doesn't always νοεῖν (though see p.355 for a connection with the aporia about whether νοῦς belongs to the νοητόν?). but we develop the idea very differently

¹² deleting ὥσπερ (after δ') with Ross (in both editions)

¹³ the variant πάσῃ may be right; it doesn't make much difference (as LSJ say s.v. ἅπας, "the use of ἅπας for πᾶς is chiefly for the sake of euphony after consonants"). either way, the overall sense of the sentence seems to require the meaning "in every nature," not "in the totality of nature": ἐν ἀπάσῃ τῇ φύσει is parallel to ἐκάστω γένει. (the article before φύσει is not decisive, cp. SE 178b37-9, τὸ ἀνθρώπος καὶ ἅπαν τὸ κοινὸν οὐ τότε τι ... σημαίνει, Metaphysics Θ8 1050a7-8 ἅπαν ἐπ' ἀρχὴν βαδίζει τὸ γιγνόμενον καὶ τέλος)

¹⁴ deleting τι (after ἐστὶ) with Ross (in both editions)

case of the soul: what is like this [= what plays the role of matter] is νοῦς through becoming all things, and the latter [is νοῦς] through making them all, as a kind of ἔξις, like light: for in a way light too makes what are potentially colors actually colors.

From where we were at the end of III,4, it was surprising to learn that every immaterial νοητόν X--perhaps something like a Platonic form, since the De Anima has given no arguments against the existence of such forms--is itself a νοῦς, apparently exercising eternal νοεῖν: certainly there are many questions about the manner of such νοεῖν. Aristotle responds to these concerns by distinguishing two types of νοῦς, one (the παθητικός νοῦς, as he calls it further down at 430a24-5) which plays the role of matter and is potentially each thing, that is, potentially each thing which it is able to νοεῖν, and one which plays the role of ποιητικόν (thus traditionally called the ποιητικός νοῦς) and makes the potential νοῦς to be actually each of the things which it is potentially, that is, each of the things which it is able to νοεῖν, as the art makes the matter to be each of the things which it is potentially. The παθητικός νοῦς is the kind of νοῦς that has been described in III,4--"what is called the νοῦς of the soul [ὁ καλούμενος τῆς ψυχῆς νοῦς]--I am calling νοῦς that by which the soul reasons and affirms--is none of the beings in ἐνέργεια until it thinks/knows them" (429a22-4), and "it has no nature except this, that it is δυνατόν [or δυνατός]" (a21-2)--while the ποιητικός νοῦς is something new, not mentioned in III,4.

Victor Caston asks, "why on earth should Aristotle have thought there were two intellects?" (p.202; I entirely agree with him that the ποιητικός and παθητικός νοῦς are two distinct things, one eternal and one corruptible, and not two functions or aspects of a single νοῦς). Well, if the word "νοῦς" in Greek functioned like the words "mind" or "intellect" in English, meaning always an individual rational soul, then it would certainly be surprising to have a different νοῦς suddenly introduced at this stage of the argument. But "νοῦς" had a number of senses in Greek philosophical discourse, some of them rendered very badly by "mind" or "intellect." As I have argued, Plato uses the word "νοῦς", in its philosophically most important contexts, to refer not to a mind or rational soul (or rational part or power of a soul), but to a separately existing virtue, Reason-itself, which souls participate in in order to think and act rationally. It may be surprising (but is nonetheless true) that Aristotle also believes in such a separately existing virtue, but in any case Aristotle has available to him an already-established sense of νοῦς as something independent of souls. Furthermore, something like this sense is very useful at this juncture in the argument. It would be very surprising if every immaterial νοητόν X were itself an individual disembodied mind; but, Aristotle points out, there is a different and higher sense of νοῦς, or a different and higher way of being νοῦς, and if the argument has established only that every immaterial νοητόν is a νοῦς in that higher way, then while the result may still be news to the Platonist, it is not absurd, and we can accept it and explore the consequences. Doing this will not mean accepting uncritically Plato's concept of νοῦς in the higher sense, but rather refining it, by means especially of the ἐνέργεια/δύναμις distinction, and drawing some un-Platonic consequences from some starting-points that Aristotle and Plato share.

Aristotle says now that the higher νοῦς is to the lower as an art to the raw material for that art. This was his model from On Generation and Corruption of an agent and patient which are not in the same genus and do not have the same (kind of) matter, and where therefore the patient does not act reciprocally on the agent, so that the agent is an unmoved mover: I cited this above as a possible model for how the νοητόν can act on νοῦς (on νοῦς in the δύναμις-sense) without being reciprocally affected. Aristotle stresses both in De Anima III,10 and in Metaphysics Λ7 that the νοητόν and ὁρεκτόν are unmoved movers, acting first on the soul, and then through the soul on

other things; so it is reasonable to say, following the model from On Generation and Corruption, that the νοητόν is to the soul's νοῦς as the art is to the matter, and that the soul's νοῦς receives forms from the νοητόν as the matter receives forms from the art. The difference is that in the present text, Aristotle is saying, not that the νοητόν is to the soul's νοῦς as art to matter, but that a higher νοῦς is to the soul's νοῦς as art to matter. But this substitution makes sense here, since Aristotle is here interested specifically in the case of an immaterial νοητόν: at the end of De Anima III,4, we knew that such a νοητόν was itself a νοῦς, but we wanted to know what kind of νοῦς it is, how it νοεῖ, how it is related to the soul's νοῦς when the soul νοεῖ it, and De Anima III,5 is intended to clear up these questions. Aristotle is now saying that the immaterial νοητόν is not a νοῦς in the same way that the soul's νοῦς is, but rather is a kind of νοῦς that is to the soul's νοῦς as the art to the matter.

The immaterial νοητόν is not, of course, a part of the human soul. As we have noted, it is eternally exercising νοεῖν, which no part of the human soul is doing. Also, independently of Aristotle's claim that an immaterial νοητόν is itself a νοῦς, you and I can know the same immaterial νοητόν, and it is no more a part of your soul than it is of mine. Nonetheless, a strong tradition, going back to Themistius and the neo-Platonic commentators on the De Anima and endorsed by St. Thomas and more recently by Brentano and Ross, holds that the ποιητικός νοῦς of De Anima III,5 is indeed a part or faculty of the human soul. (The chief motivation for the ancient writers and many of their successors is to save Aristotle for the doctrine of the immortality of [at least a part of] the human soul: this can be done only by making the ποιητικός νοῦς part of the human soul, since Aristotle says that "this alone is immortal and eternal.") All of these writers cite, as proof for their interpretation, Aristotle's saying here that "these distinctions must exist ἐν τῇ ψυχῇ" (Brentano Psychology of Aristotle p.111, Ross' editio maior p.45). Ross argues that "ἐν τῇ ψυχῇ can hardly mean only 'in the case of the soul'" (Ross, Aristotle, 1959 edition, p.304 n85), but this assertion is wrong and indeed outrageous. To find "ἐν" meaning "in the case of," we need only look seven lines further up in the De Anima, where "ἐν δὲ τοῖς ἔχουσιν ὕλην" at 430a6 meant "in the case of things that have matter," parallel to "ἐπὶ μὲν τῶν ἄνευ ὕλης", "in the case of things that are without matter," at 430a3.¹⁵ And just now Aristotle has said that the agent is to the patient as the art to the matter, where the art is an agent external to the matter, not a part or aspect of the matter (or a part or aspect of the same substance that the matter is a part or aspect of). Victor Caston proposes that "ἐν τῇ ψυχῇ" means "within the genus 'soul'", so that the παθητικός νοῦς would be a human soul (or the rational part or faculty of a

¹⁵Ross, however, takes "ἐν δὲ τοῖς ἔχουσιν ὕλην δυνάμει ἕκαστον ἔστι τῶν νοητῶν" (430a6-7) to mean not "it [sc. νοῦς] is potentially each of the νοητά," but "in things that possess matter each of the objects of reason is potentially present" (editio maior p.291). I find this bizarre. One might say in some contexts that in matter all of the νοητά are potentially present, although that would need some qualifications (only those νοητά which are forms in matter, and only those νοητά which can inform this particular kind of matter--e.g. celestial νοητά aren't potentially present in sublunar matter), but it doesn't make much sense to say that all these νοητά are potentially present in the things that have matter. But in any case, if Aristotle were saying this here it would have no connection at all with the argument he is making (Ross' comment, "meaning presumably that these objects are there, ready to be picked out and recognized by reason," p.295, does not seem to me to help). It is obvious that "ἐν δὲ τοῖς ἔχουσιν ὕλην" at 430a6 is parallel to "ἐπὶ μὲν τῶν ἄνευ ὕλης" at 430a3; in both cases Aristotle is supposed to be arguing that νοῦς is related to the νοητά in such a way that it too is νοητός, although in the material case the νοητά do not themselves have νοῦς; on Ross' interpretation, what Aristotle is saying at 430a6-7 would have nothing to do with this argument. Aristotle has said at a2-5 that in the immaterial case the νοῦς (or the νοοῦν or the ἐπιστήμη) is simply the same as the νοητόν, and he goes on to say in the parenthesis at a7-8 that in the material case the νοῦς is the δυνάμις without matter of the νοητά: surely at a6-7 he is saying that in the material case the νοῦς is δυνάμει the νοητά, rather than that all the νοητά are δυνάμει present in things that have matter.

human soul) and the ποιητικὸς νοῦς would be a divine soul. But there is no reason to think that the ποιητικὸς νοῦς is a soul (or a part or faculty of a soul) at all: certainly Plato's νοῦς-itself is not a soul but rather what souls participate in (e.g. Laws X 897b1-4); we have seen Aristotle qualifying the potential νοῦς as ὁ τῆς ψυχῆς νοῦς (DA III,4 429a21-4), and Theophrastus contrasting ὁ ψυχικὸς νοῦς with ὁ ἐνεργεῖα νοῦς, τουτέστι ὁ χωριστός (Fr. 307B FHS&G); there is no hint whatever that the God of Metaphysics Λ is or has a soul. And in the parallel case of "the matter for each genus" (430a10-11), the art is not itself a member of that genus, but an agent possessing the same form in a higher way:¹⁶ so too in the case of soul, the ποιητικὸς νοῦς, which acts on the soul, has or is νοῦς in a higher way than the soul does.

Aristotle compares the ποιητικὸς νοῦς to light, "for in a way light too makes what are potentially colors actually colors." In the immediate context, this is most easily taken to mean that the ποιητικὸς νοῦς makes the potential νοῦς to be actually each of the things which it is potentially (that is, each of the things which it is able to νοεῖν) as light makes the potential colors to be actual colors. Aristotle may also be thinking that, as light makes the potential colors to be actual colors and so to be actually seen, the ποιητικὸς νοῦς makes the potential νοητά to be actual νοητά, or actual νοούμενα. Presumably this comes to much the same thing, since to make the potential νοῦς actually νοῶν and to make the potential νοητά actually νοούμενα would be the same act viewed from two different sides. Either way, as has often been observed (e.g. Ross Aristotle p.147), Aristotle is recalling the Sun passage of Republic VI, where the light of the sun "makes our sight to see, and the visibles to be seen, in the best way" (508a5-6); without the presence of light, "sight will see nothing, and the colors will be invisible/unseen" (507e2). Plato here is interested in sight and the visible only as an analogy for νοῦς and the νοητόν: "what this [sc. the good] is in the intelligible domain in relation to νοῦς and the νοούμενα, that [sc. the sun] is in the visible domain in relation to sight and the things seen" (508b13-c2). Plato keeps up a systematic analogy, soul:νοῦς:good:truth:intelligibles::eye:sight:sun:light:visibles, where the good is the cause of νοῦς to soul and of truth and thus intelligibility to the intelligibles, as the sun is the cause of sight to the eyes and of light and thus visibility to the visibles ("νοῦς" in this passage is not used for a being superior to souls, but always for the δύνανμις in the soul analogous to sight in the eye).¹⁷ Aristotle simplifies this picture. His theory of vision gives no special role to the sun, but only to light, which links the visibles with the eye by actualizing the potentially transparent medium so that the visibles can act on the medium and thus on the eye. So here in his account of intellection he does not distinguish between an analogue of light and an

¹⁶which implies that in ἐν ἀπόσῃ φύσει too, if it means (as I think it must) "in every nature" rather than "in the totality of nature," ἐν means "in the case of" rather than "inside"

¹⁷Plato systematically distinguishes here between light, corresponding to truth or intelligibility, and the sun, corresponding to the good, which is the best (but not necessarily the only) source of light. Note that although the sight, and the eye in which it exists, are not (a/the) sun, the eye is "sunlike," and has its δύνανμις as an overflow from the sun (508a11-b8), and that "the sun is not sight, but, being the cause of it, is seen by it" (508b9-10), all of which carry over well for Aristotle to the relation between the soul's νοῦς (sight or the eye) and the ποιητικὸς νοῦς (the sun or its light). Plato probably intends that light is to the sun as sight [ὄψις] is to the eye: while we most naturally think of sight as a power residing in the eye, Plato is likely to be thinking of the kind of optical theory presented in Euclid's Optics, where ὀφθαλμοὶ radiate out from the eye in straight lines--the most obvious way for the eye to be sunlike is that ὀφθαλμοὶ radiate out from it as light radiates out from the sun (the sun is often described as the eye of a god, presumably seeing by means of its rays, and "ἀγχαί" can be used of rays either from the sun or from the eyes, which are both propagated in straight lines, reflected by mirrors, etc.). Vision occurs only when both ὄψις, coming from the eye, and light, coming from the sun or from some other light-source, fall upon the same object. (Plato describes ὄψις as coming out of the eye to meet either the object or something emerging from the object both in the Theaetetus and in the Timaeus; the details of the accounts differ, and only the Timaeus gives a role to light.)

analogue of the sun: he mentions just one cause, which is the cause of actual νοεῖν to the soul's power of νοῦς and of actual νοεῖσθαι to the intelligibles. A further difference from Plato is that Aristotle here describes this cause, not as the good, but as νοῦς, νοῦς in a higher sense than that in which the soul's δύναμις is called νοῦς. As I've noted, Plato uses the word only in the lower sense in this passage, but it is far from clear that he would identify the good even with νοῦς-itself, the Reason in which souls participate. That νοῦς for Plato is the demiurgic principle responsible for imposing form on matter in an orderly way, but the good-itself seems to be a higher principle prior to, and somehow giving rise to, the immaterial Forms themselves.¹⁸ By contrast, while Aristotle agrees with Plato that there is a separate good-itself (Metaphysics Λ10 1075a11-15), he denies that it is anything beyond νοῦς (indeed, since the good-itself is an immaterial νοητόν, and since every immaterial νοητόν X is identical with the knowledge of X, the good-itself must be identical with knowledge of the good, that is, with the highest kind of νοῦς). So the causal role that Plato ascribes to the good-itself, Aristotle gives to a νοῦς that is purely ἐνέργεια. And indeed it seems reasonable that such a νοῦς should be sufficient, by its acting on the soul (or by the soul's coming to "participate" in it), to actualize the soul's δύναμις of νοῦς, with no need to invoke any cause superior to νοῦς. (The hard question is whether an external νοῦς is necessary for cognition, not whether it is sufficient.)

However, the most important difference between De Anima III,5 and Plato's Sun passage is that, while for Plato the source of νοεῖν and νοεῖσθαι is the single first principle above the many νοητά, Aristotle's argument as we have traced it implies that every immaterial νοητόν must be a ποιητικὸς νοῦς. And this seems to lead to a tension. Aristotle says that the ποιητικὸς νοῦς makes the potential νοῦς to be actually each of the things which it is potentially, that is, each of the things which it is able to νοεῖν (and thus presumably also makes the potential νοητά to be actually νοούμενα), as light "makes what are potentially colors actually colors." This suggests the Platonic picture on which there is a single cause of νοεῖν and νοεῖσθαι, itself νοητόν but also a cause of νοεῖσθαι to many inferior νοητά; whereas for Aristotle, as we have just seen, at least every immaterial νοητόν is itself a ποιητικὸς νοῦς and thus presumably sufficient to cause the soul to νοεῖν it without help from further above. I will discuss different possible ways of resolving this tension after I have gone through the second half of III,5.

καὶ οὗτος ὁ νοῦς χωριστὸς καὶ ἀπαθὴς καὶ ἀμιγής, τῇ οὐσίᾳ ὧν ἐνέργεια.¹⁹ αἰεὶ γὰρ τιμιώτερον τὸ ποιοῦν τοῦ πάσχοντος καὶ ἡ ἀρχὴ τῆς ὕλης. τὸ δ' αὐτὸ ἐστὶν ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι· ἡ δὲ κατὰ δύναμιν χρόνῳ προτέρα ἐν τῷ ἐνί, ὅλως δὲ οὐδὲ χρόνῳ, ἀλλ' οὐχ ὅτε μὲν νοεῖ ὅτε δὲ οὐ νοεῖ.²⁰ χωρισθεὶς δ' ἐστὶ μόνον τοῦθ' ὅπερ ἐστὶ, καὶ τοῦτο μόνον ἀθάνατον καὶ αἰδιδιον (οὐ μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὁ δὲ παθητικὸς νοῦς φθαρτός) καὶ ἄνευ τούτου οὐθὲν νοεῖ. (430a17-25)

And this νοῦς is separate and impassible and unmixed, being essentially actuality[/activity]: for the agent is always superior to the patient and the principle to the matter. Knowledge in

¹⁸there is no sign that the demiurge of the Timaeus creates the forms that he looks to as his model. both Republic VI and the Philebus argue, in an ethical context, against identifying the good with νοῦς/φρόνησις/ἐπιστήμη. the Platonist tradition is divided on the relation between νοῦς and the good: Alcinous identifies νοῦς with the good (and the Forms with its ἐνέργεια = νοήσεις), while Plotinus and most later Platonists make the good a first principle superior to νοῦς and to the Forms

¹⁹reading ἐνέργεια in preference to ἐνεργεία (agreeing with Ross)

²⁰keeping a19 τὸ δ' ... a22 οὐ νοεῖ, bracketed by Ross in his editio maior (not in the OCT). in a22 keeping οὐχ (agreeing with Ross)

actuality is the same as the object; knowledge in potentiality is temporally prior [to knowledge in actuality] in the individual, but universally it is not prior even temporally. Rather, [knowledge or νοῦς in the actuality-sense] does not sometimes think/know and sometimes not think/know: and when it has been separated it is just what it is [i.e. it is just knowledge/νοῦς and nothing else], and this alone is immortal and eternal (but we do not remember, because this is impossible, whereas the passive νοῦς is corruptible), and without this nothing thinks/knows [or, dropping the parentheses around "but ... corruptible": "and without this it thinks/knows nothing"].

The first sentence picks up the Anaxagorean predicates that Aristotle had applied in De Anima III,4 to the potential νοῦς in the soul, and argues that they apply in a stronger way to the ποιητικὸς νοῦς. When the agent and the patient νοῦς encounter each other, the patient has the knowledge of X in potentiality and the agent has the knowledge of X in actuality: this is because the agent simply is the knowledge of X existing separately, which is because the agent simply is X itself existing separately, and the knowledge of X is identical to X. Of course, this argument applies only to an immaterial νοητόν X, and not to a form existing in matter. In the case of an enmattered form X, Aristotle has given no argument why the rational soul's potential knowledge of X must be actualized by a separately existing νοῦς or knowledge of X, rather than simply by a concrete material instance of X. And, rather than reconstructing an argument for this conclusion on his behalf, I think we should question whether he is really committed to the conclusion; I will argue below that he does not in fact believe it. In any case, in De Anima III,5 he is speaking only about a case where "knowledge in actuality is the same as the object," and, as we saw in De Anima III,4, this holds only for a νοητόν existing separately from matter.

At any rate, this is true if 430a19-22, "τὸ δ' αὐτὸ ἐστὶν ἢ κατ' ἐνέργειαν ἐπιστήμη τῶ πράγματι ἢ δὲ κατὰ δύναμιν χρόνῳ προτέρα ἐν τῷ ἐνί, ὅλως δὲ οὐδὲ χρόνῳ, ἀλλ' οὐχ ὅτε μὲν νοεῖ ὅτε δὲ οὐ νοεῖ", are part of De Anima III,5. Ross proposes (in his editio maior of 1961, not yet in his OCT of 1956) to delete the passage. Ross' stated reason is: "These words, all except the final words ἀλλ' οὐχ ὅτε μὲν νοεῖ ὅτε δὲ οὐ νοεῖ, recur in ch. 7 431a1-3. They cannot have been meant to stand in both places; one early editor must have placed them in ch. 5 while another placed them in ch. 7, and a third included them in both places. They are harmless in ch. 7, which is in any case a collection of scraps; here they seriously interfere with the course of the thought, which without them would be continuous" (Ross, Aristotle's De Anima, 1961, p.296). But even if the duplication between III,5 430a19-22 and III,7 431a1-4 were perfect, and even if the same passage could not stand in both places,²¹ it makes no contribution in III,7 (which is, as Ross says, a collection of scraps): the question is whether it contributes in III,5, or whether it disrupts an argument that would be better without it. Contra Ross, it does contribute in III,5, since the κατ'

²¹but the two passages are not identical: the first two lines' worth are identical (or almost identical, depending on which manuscripts we follow), but then III,5 continues ἀλλ' οὐχ ὅτε μὲν νοεῖ ὅτε δὲ οὐ νοεῖ, and III,7 continues ἔστι γὰρ ἐξ ἐντελεχείᾳ ὄντος πάντα τὰ γινόμενα. both make sense, although the extra line in III,7 is a generality rather than something specific to νόησις; the extra line in III,5 might not make sense in III,7, without the antecedent provided by the discussion of "this νοῦς". I have no idea how Ross imagines these two different last lines as arising on his account. I don't see much objection to letting both passages stand. III,7 is, as Ross says, a collection of scraps, of a kind that occurs in a number of other Aristotelian treatises at the end of some discussion: these are best interpreted as piles of out-takes not used in the final version of that discussion (left by Aristotle in a pile at the end, or left by Aristotle as lose Blätter and put by an editor in a pile at the end), and that might include a variant version of a passage he did use. "They cannot have been meant to stand in both places" is true, in the sense that if Aristotle had made a final revision for publication he would have deleted one version or the other (he would have deleted the "collection of scraps," once he had made sure that he had used everything valuable in them somewhere--or else he had already deleted them, and someone else rescued them), but this does not authorize us to do the deleting for him

ἐνέργειαν ἐπιστήμη which is the same as its object--that is, the knowledge of an immaterial νοητόν--is precisely the ποιητικός νοῦς that Aristotle has been discussing. He has just said that this νοῦς is the ἀρχή, i.e. that it is prior (in one or more senses) to the παθητικός νοῦς: he has said that it is τιμιώτερον, i.e. that it has a priority of honor, but we might want a demonstration that it is prior in some other sense. The issue here is a special case of the issue of priority between δύναμις and ἐνέργεια as discussed in Metaphysics Θ8 (which Aristotle echoes especially closely in the De Anima III,7 variant of our passage). Here as in Metaphysics Θ8, the sense of priority to which δύναμις seems to have the strongest claim is priority in time, and in both texts Aristotle concedes that in one way δύναμις is prior in time, but argues that in another way δύναμις is not even temporally prior (οὐδὲ χρόνῳ in our passage). Knowledge κατὰ δύναμιν--that is, νοῦς in the sense of the bare δύναμις in the individual soul--is temporally prior to actual knowledge in the history of the individual soul, but, Aristotle claims, it is not temporally prior in the history of the universe, since there was never a time when there was no actual knowledge. And this is true not just because there has always been some human being or other who possesses actual knowledge (and, even granting the eternity of the human species, it is not obvious that, for any given immaterial νοητόν X, there has always been some human being who has knowledge of X), but because οὐχ ὅτε μὲν νοεῖ ὅτε δὲ οὐ νοεῖ--that is, because the actual knowledge itself is identical with the immaterial νοητόν and therefore exists separately and eternally, and is itself eternally knowing.

As Aristotle then says, "when this has been separated, it is just what it is." The subject of this assertion is ἐπιστήμη or νοῦς: grammatically, since "χωρισθείς" is masculine, its antecedent is "νοῦς", but Aristotle is drawing no distinctions here between νοῦς and ἐπιστήμη. In speaking of this thing's being separated, or of its being just what it is, Aristotle is calling on one of his basic technical distinctions: if a thing A exists, it exists either "separately and καθ' αὐτό" (as far as I can tell there is no difference in meaning between these two terms) or not separately and καθ' αὐτό. A exists καθ' αὐτό if it is not predicated of some other underlying nature, not καθ' αὐτό if it is so predicated. In Aristotle's official phrase, A exists καθ' αὐτό if "it is not, being something else, what it is." This is better put the other way around: A exists not καθ' αὐτό if "being something else, it is what it is," as "the walking [thing], being something else [e.g. man or Socrates], is walking."²² In other words, A exists not καθ' αὐτό if the thing which is A has some other underlying nature B, of which A is predicated, so that the A exists only because the B exists and is A; whereas if A exists καθ' αὐτό, then the A exists because there is something whose nature is just to be A. Or, cutting a bit finer than Aristotle usually does, we can distinguish two ways that A can exist not καθ' αὐτό: A exists not καθ' αὐτό and concretely if A exists because the B exists and is A (A = white, B = Socrates); A exists not καθ' αὐτό and abstractly if A exists because the B exists and is called by some name paronymous from A (A = whiteness, B = Socrates, who is not whiteness but white).²³ Whenever whiteness exists, it exists not καθ' αὐτό and abstractly, and this is because whiteness cannot exist in separation from a body or surface which is white. We might also think that whenever knowledge exists, it exists not καθ' αὐτό and

²²That exists καθ' αὐτό which "is not said of some other underlying thing [ὃ μὴ καθ' ὑποκειμένου λέγεται ἄλλου τινός]: for example, the walking [thing], being something else, is walking [τὸ βαδίζον ἕτερόν τι ὃν βαδίζον ἐστί], and likewise the white, but substance, and whatever signifies a this, are not, being something else, what they are [οὐχ ἕτερόν τι ὄντα ἐστὶν ὅπερ ἐστίν]. So the things that are not [said] of some underlying thing [καθ' ὑποκειμένου], I call καθ' αὐτά, and the things that are [said] of some underlying thing I call accidents" (Posterior Analytics I,4 73b5-10).

²³cp. Aristotle's distinction between the modes of existence of τὸ βαδίζον and of τὸ βαδίζειν at Metaphysics Z1 1028a20-29

abstractly, because knowledge cannot exist in separation from a person or soul which is knowing. However, Aristotle's view is, instead, that some kinds of knowledge can exist in separation from a knowing person or soul, and that some cannot. Apparently, when X is an enmattered form, the knowledge of X cannot exist in separation from a soul (indeed, it cannot exist in separation from a body, see discussion below), but when X is a separate immaterial νοητόν, then the knowledge of X can exist in separation from a soul and from any other underlying nature, since the knowledge of X is just X (and, as we have seen, Aristotle does not think there is composition in X in such a way that its being this νοητόν would be an underlying nature and its being the νοῦς of that νοητόν would be a superadded attribute). When some knowledge is capable of existing separately, and when it has been separated, then it is just what it is--i.e., it is not some other underlying nature which is knowing, or some other underlying nature's knowledge, but is simply knowledge.^{24, 25}

It needs stressing that Aristotle's view is not just that the immaterial νοητόν X is some νοῦς or ἐπιστήμη, but that it is the very νοῦς or ἐπιστήμη that the soul has of X. When someone ἔχει the ἔξις of ἐπιστήμη of X, the ἔξις which he ἔχει is just X itself. Numerically one and the same thing can be your ἔξις, and also my ἔξις, and also a separately existing substance. This thing is νοῦς κατ' ἐνέργειαν; and the rational power of the soul is called νοῦς κατὰ δύναμιν, not because it is able to become this thing, but because it is able to ἔχειν this thing and so to be called by a name paronymous from it, νοῶν or ἐπιστήμων.²⁶ Now "when this has been separated it is

²⁴I intend this to be neutral as to whether the knowledge has at one time been an attribute of something else and at another time existed separately, or whether it has merely at one time been posited to be an attribute of something else and at another time been posited to exist separately. Aristotle does sometimes use χωρίζειν for a mental act of separating (so *Metaphysics* Z11 1036b7, and in a number of places, collected in Bonitz, where Plato or Platonists are the subject--this usage is already in Plato). cp. Caston's discussion esp. p.208. I think he goes too far: an aorist participle, unlike a perfect participle, does signify prior action. but this need not entail that the thing has really at one time existed separately and at another time not. in the example Caston cites from DA 403a14-15, I would say that we have a temporal sequence in a thought-experiment

²⁵I thus disagree with Caston's discussion of what it means for νοῦς to be separate or separable, esp. his p.210. Caston talks about separating the rational "capacity" from other psychic capacities, but Aristotle is talking about separating an ἐνέργεια, not a δύναμις. it is presumably true that the rational power of a soul can be instantiated without the non-rational powers (presumably in the souls of the heavenly bodies), but why should that make it a ποιητικός νοῦς? Caston's use of the word "God" here is dangerous--perhaps every rational soul without non-rational powers can be called a god (or, if it has a body, the soul-body composite can be called a god), but there are lots of gods, and it cannot be said of gods in general that they are essentially ἐνέργεια or identical with their νοητά; and there is no Aristotelian support for saying that the God or gods of whom these things are true are souls or have souls. the parallel Caston cites from DA II,2 413b24-7 is not genuinely parallel: this is explicitly about νοῦς as a θεωρητικὴ δύναμις, which is described as a type of soul. I also think that, in context (and with a reference back to the end of DA II,1), this passage is talking about the immortality of a part of the soul of a rational animal, and not just about "taxonomic" separation, i.e. about whether the rational power is sometimes instantiated without the irrational powers or without a body. the view I take Aristotle to be suggesting in the II,2 passage, that the rational soul is immortal, is contradicted by the view I take him to be asserting in III,5, that only the νοῦς ποιητικός is immortal and that the rational soul is not. but the several references in DA I-II to the possible immortality of the rational soul are highly tentative, and defer the problem for a further scientific investigation; when that investigation arrives in DA III,4-5, and the necessary distinctions are made, it turns out that the arguments for the immortality of νοῦς apply only to the νοῦς ποιητικός, and not to the νοῦς which is part of the soul.

²⁶describing this knowledge as a ἔξις raises a natural question: when Aristotle calls it an ἐνέργεια, does he mean a first ἐνέργεια, i.e. a habit of knowledge, or does he mean a second ἐνέργεια, i.e. an activity of contemplating? on the one hand, Aristotle's descriptions of νοῦς in the δύναμις sense clearly refer to a first δύναμις, so we would expect that when he talks about νοῦς in the ἐνέργεια sense by contrast, he should mean a first ἐνέργεια. on the other hand especially the parallel with *Metaphysics* Λ9, where the separate νοῦς is described more precisely as νόησις, which is certainly a second ἐνέργεια, suggests that the separate νοῦς of DA III,5 too is an ἐνέργεια of

just what it is, and this alone is immortal and eternal." In other words, the knowledge that the soul possesses (of an immaterial νοητόν) is eternal and is capable of existing without the soul, both before the soul came to be and after the soul passes away. The fact that the soul possesses something eternal does not imply that the soul is eternal. If Alexander possesses an incorruptible diamond, this does not imply that Alexander is incorruptible: when Alexander passes away, Alexander's diamond will not pass away, but will simply cease to be Alexander's diamond. When I pass away, my knowledge (of an immaterial νοητόν) will not pass away, but will simply cease to be my knowledge--and it was never my knowledge alone, but was my knowledge in so far as it was present in me, and your knowledge in so far as it was present in you. At any rate, it will cease to be mine, and I will cease to be, if "I" means my rational soul (or the whole soul, or the soul-body composite) rather than meaning the knowledge present that is currently present in my soul. That seems like the more natural way to use the pronoun "I." But what Aristotle means by "I" and "we" is contentious, as becomes clear from what follows.

I do not claim to know what Aristotle means by "(οὐ μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὁ δὲ παθητικὸς νοῦς φθαρτός) καὶ ἄνευ τούτου οὐθὲν νοεῖ" (nor am I sure that Ross' parentheses are correct). But I will offer three options that seem to me the most likely, which is not to deny that there are other possibilities too.

Recall that Aristotle has just said that only the ποιητικὸς νοῦς (that is, that knowledge of an immaterial νοητόν which we possess) is immortal and eternal. He may now be saying (Option 1) that after our potential νοῦς has ceased to exist, and after the ποιητικὸς νοῦς has therefore been separated from it, "we" (whatever was in us and survives) will not remember. "We" will certainly νοεῖν, but νοεῖν is different from remembering (and even from διανοεῖσθαι, reasoning), because remembering (and reasoning) depend on a potentiality and a process of actualizing that potentiality, and so cannot happen when there is only the ποιητικὸς νοῦς, which is always actually knowing everything that it is capable of knowing. As Aristotle says here, "this is without

νόησις, i.e. that it is always contemplating and that its contemplation is essential to it and not a superadded attribute. this is connected with the question of Aristotle's assertion, here and in Λ, that, in the "theoretical"/immaterial case, ἐπιστήμη κατ' ἐνέργειαν is identical with its object: does he mean the first ἐνέργεια, the ἔξις (which is what he normally calls ἐπιστήμη) or does he mean the second ἐνέργεια, the θεωρεῖν? I don't see any way of answering that avoids all the difficulties, but I think Aristotle has to mean that the ἐπιστήμη-ἔξις is the object as present in the soul (or, in the material case, the form of the object present in the soul without its matter), and that the θεωρεῖν is not precisely the object, but is simultaneously a passive ἐνέργεια of the soul and an active ἐνέργεια of the object. it remains true that the object is essentially ἐνέργεια, i.e. is essentially νόησις, but for us to have the object, or for the object to be present in us (or present to us), is not the same as for us to ἐνεργεῖν, or for it to ἐνεργεῖν in us or on us: ἔχειν, here as everywhere else, is merely a potentiality for ἐνεργεῖν. while ἐνέργεια may be essential to the separate νοῦς in the sense that it is essential to it to be contemplating at each moment, it cannot be essential to it that it is producing contemplation in me at each moment--clearly, sometimes it is not doing so, due to obstructions on my part rather than on its. but note that, for Aristotle, there is not a big explanatory gap between ἔξις and (second) ἐνέργεια: if something has a ἔξις of knowledge, then it will ἐνεργεῖν unless something obstructs it (at least if it's ἔξις of something immaterial--apparently if it's knowledge of an enmattered form, and certainly if it's practical or productive knowledge, it also needs an external occasion to be exercised on; sometimes Aristotle adds a clause "if you want" or "if you attend to it," sometimes not). if the immaterial νοητόν X has/is ἔξις-knowledge of itself, there will be no obstruction to its contemplating itself, and so it will always do so; whereas if I have ἔξις-knowledge of X, because I have X or X is present in/to me, something might still obstruct me from contemplating it, or obstruct it from acting in/on me. (perhaps, in terms of the Sun analogy, I have the first δύναμις if I have healthy eyes, I have the ἔξις if the sun is shining on me and enabling me to see, I have the second ἐνέργεια only if, additionally, my eyes are open; the sun is the ἔξις that at the first stage I do not have, at the second stage I have it but am not exercising it, at the third stage I am exercising it; it is always acting, but not always acting on my eyes.) in Λ9 Aristotle brushes carelessly over the distinction between ἔξις and (second) ἐνέργεια, perhaps because there can be no obstructions in the cases he is considering

πάθος", whereas memory depends on a πάθος (or on two successive πάθη, first of forgetting and then of remembering); the only "νοῦς" that is capable of these πάθη is corruptible, and once it has been corrupted, there is no longer anything capable of remembering. This is important for the issue of immortality which Aristotle has just mentioned, because it means that "we" will not remember anything from this life, but will simply continue to know the same eternal truths that "we" knew from eternity before this life. (On this construal, I am not sure what the final "ἄνευ τούτου οὐθὲν νοεῖ" adds to the argument: it may be just a general comment, "without this [sc. the ποιητικός νοῦς], nothing νοεῖ", picking up from before the parenthesis and thus justifying Ross' punctuation.)

Option 1 seems to be supported by the quasi-parallel in *De Anima* I,4 408b18-29, esp. b24-9. As Aristotle says there, νοεῖν or θεωρεῖν is ἀπαθές, although it "is quenched" [μαραίνεται] when something else within us is corrupted: "reasoning [διανοεῖσθαι] and loving or hating are not its πάθη, but the πάθη of what possesses this, inasmuch as it possesses it: whence when this [= the possessor] perishes, it [= the νοῦς] does not remember or love, since these [πάθη] belonged not to it but to the compound [κοινόν] which has perished: but νοῦς is perhaps [ἴσως] something more divine and ἀπαθές". Particularly the distinction here between διανοεῖσθαι, a πάθος belonging to something composite, and νοεῖν, which belongs to something higher and simpler and ἀπαθές, suggests the DA III,5 distinction between the παθητικός νοῦς (which was introduced in DA III,4 as "that by which the soul διανοεῖται and affirms," 429a23) and the ποιητικός. The DA I,4 passage would then be saying that the activity of νοεῖν is "quenched" in us only in the sense that conditions may prevent that ποιητικός νοῦς from being present in, or from acting in and on, the παθητικός; and DA I,4 and DA III,5 would both be saying that the ποιητικός νοῦς by itself, rather than the παθητικός νοῦς when the two are conjoined, does not remember, and thus that we will not remember after death. However, the DA I,4 passage is very tentative, like all the passages in DA I-II talking about separation or immortality, and when it suggests that νοῦς is ἀπαθές it may be saying this of all νοῦς, not yet distinguishing ποιητικός from παθητικός; the contrast between possessor/composite and possessed may be not between παθητικός and ποιητικός but between the body-soul composite and νοῦς considered as a separable part of the soul.²⁷ But, however we decide on this issue, one point that emerges from the DA I,4 passage is that νοεῖν and μνημονεύειν are different: so in DA III,5, although "οὐ μνημονεύομεν" may well mean that there is no remembering without the potential νοῦς (Aristotle certainly believes this, whether he is saying it here or not), "ἄνευ τούτου οὐθὲν νοεῖ" must mean (whether οὐθὲν is subject or object) that there is no νοεῖν without the agent νοῦς.

However, it is also possible that Aristotle is talking, not about whether "we" in a future state will remember things from this life, but about whether we in our present life remember the knowledge which has existed from eternity. There seem to be two options here. He could (Option 2) be picking up the question, deferred at the end of DA III,4, about the reason why we do not always νοεῖν. Then "οὐ μνημονεύομεν" would mean, not that we never remember, but that we do not always remember: the explanation would then follow, namely that although the ποιητικός νοῦς is ἀπαθές, the soul's νοῦς is not ἀπαθές, but is subject to πάθη on account of which it sometimes forgets, and sometimes remembers, knowledge which is available to it. On this construal, saying that the παθητικός νοῦς is corruptible would not seem to contribute much to the argument (it might just be an emphatic way of making the point that it cannot be expected

²⁷this is how Caston reads it (his pp.213-14 n19) and this is what is suggested by the immediately preceding comparison with what happens to the senses in old age. but I am not sure this interpretation is fully determined by the passage, and the echoes with DA III,4-5 are surprisingly close if this is all that is going on. I suspend judgment.

to stay in the same state). On the other hand, there might be a point to saying "ἄνευ τούτου οὐθὲν νοεῖ", i.e. "without this [sc. the ποιητικὸς νοῦς], it [the παθητικὸς νοῦς] does not νοεῖν anything" (we would thus have to remove Ross' parentheses): the soul's νοῦς is not self-sufficient for knowledge but depends for knowing on participating in something extrinsic, so that it is not surprising that it is not always knowing. Or, finally (Option 3), Aristotle may be taking for granted the explanation of why we do not always νοεῖν, and making instead the point that even when, in this life, we participate in the eternal knowledge and make it our knowledge, we are still not remembering it from before this life, as Plato says we are. As in Option 1, the ποιητικὸς νοῦς, being ἀπαθές, does not remember, so it could only be the παθητικὸς νοῦς that remembers. But "the παθητικὸς νοῦς is corruptible," and so (we would have to add) it is also generated: so it cannot remember the knowledge that it had before this life, because it did not have the knowledge before this life, because it did not exist before this life, although the knowledge did. On this interpretation, "οὐ μνημονεύομεν" might be translated "the theory of recollection is false." This would be worth saying, because Aristotle has come rather close to the theory of recollection, in saying that our knowledge of immaterial νοητά has existed from eternity, and that we can come to possess and to exercise this knowledge because it is already there and available to us, and we are already in potentiality to it. But, Aristotle would now be saying, Plato is wrong to conclude that our soul preexisted and possessed this knowledge before our present life: while our knowledge preexisted, it was not at that time our knowledge, because our soul did yet exist to possess it, and so, if we now come to possess that knowledge and make it ours, we are not recollecting it.²⁸

IV

I now want to deal with some issues left open by this reading of De Anima III,5, and, in the process, compare my interpretation with Victor Caston's. Caston says that his own interpretation identifies the ποιητικὸς νοῦς with God, and he lists me and Michael Frede as the only modern interpreters who agree with him. I did in fact make this identification in my 1992 paper,²⁹ but I would now want to be more careful. Strictly speaking, the question "what is the ποιητικὸς νοῦς?" is ill-posed, since we have no reason to think there is only one of it. Any separate immaterial νοητόν is a ποιητικὸς νοῦς, and any separate immaterial νοητόν that my soul can νοεῖν is a ποιητικὸς νοῦς that can act on my soul. When Aristotle says "in every nature there is one thing which is matter for each genus (this is what is potentially all those things), and another which is the cause and agent/maker," he does not mean that in each nature there is numerically only one agent and one patient (obviously "ὁ παθητικὸς νοῦς" signifies a type, not a unique individual), and there is no good reason to think that he means even that the agent νοῦς is numerically one. There are as many of them as there are separate immaterial νοητά. There might be one, or ten, or 47, or 55, or infinitely many; Aristotle is not concerned with this question in the De Anima, and the methods of the De Anima would not be able to resolve it.³⁰

²⁸on the issue against Plato on this option, cp. Augustine's attempt to prove immortality in the De Immortalitate Animae by arguing that the sciences are immortal and therefore the soul as their subject must also be immortal. among the options here offered, I prefer Option 3, but think that Option 1 is also quite possible

²⁹this identification explicitly in "Aristotle and Plato on God as Nous and as the Good," p.562 n26. on the other hand I also said something which, if thought through, should imply the same qualification I would want to make now, p.566 n29

³⁰Caston argues, p.212, that "there can be only one such intellect [sc. meeting the description of the divine intellect given in A7-9], just because it is actuality," citing A8 1074a35-7: "the first essence does not have matter--for it is

Another problem--connected, as we will see, with the problem of whether the ποιητικὸς νοῦς should be identified with the one first God--is the problem of how it is a cause to our soul, and of what exactly it causes in our soul. Caston raises this problem in acute form, noting that the account of the soul's intellectual activity in *De Anima* III,4 seems self-sufficient without the help of the ποιητικὸς νοῦς: "the tasks which commentators have invented for the Agent Intellect to fill--such as abstraction, selective attention, or free choice--are factitious. They are not problems Aristotle even acknowledges; a fortiori, they cannot be the reasons he appeals to for the existence of a second intellect" (Caston p.200). Caston's own solution is to say that the ποιητικὸς νοῦς--that is, on his account, God--is a final cause, or perhaps more precisely an exemplar: God "constitutes [by which I think Caston just means 'exemplifies'] the complete actualization towards which all of our intellectual striving is directed, in emulation of his perfect state" (ibid.). Caston allows that Aristotle would describe this final causality, like God's causality on the heavens, as a special kind of efficient causality, but he says that it is not "what we would call a 'causal' relation" (p.224, cp. p.200; Caston's emphasis). Caston thinks that Aristotle introduces God in DA III,4-5, not because there is something that happens in the soul that could not be explained without God, but because we understand the soul better by putting it in cosmological and theological context, by comparing it with the divine exemplar.

I am not comfortable talking about "what we would call causality." Modern science, unlike Aristotelian science, does not use the notion of cause (and without the scientific anchor, modern philosophers can, and do, use the word however they want to). In Aristotle's terms, we have a pair of something ποιητικόν and something παθητικόν, and there is no doubt that he thinks of the former as an efficient cause to the latter (if Aristotle says that arts are efficient causes, I think we should adapt to his usage, rather than saying that he does not mean what "we" mean by efficient cause). I do not see any basis in the *De Anima* for saying that God, or the ποιητικὸς νοῦς, is a final cause to the soul. Of course, *Metaphysics* Λ7 says that God moves the heaven as final cause and as ὁρεκτόν and νοητόν; and *Eudemian Ethics* VIII,3 also says that God is a final cause (as "to possess which" rather than "to benefit whom," same distinction Λ7 1072b1-3) of human actions. But for God to cause the heaven to move, he has to cause it to desire him, and to do this he has to cause it to know him: "we desire because it appears [good or beautiful], rather than its appearing so because we desire it: for the starting-point [ἀρχή] is νόησις; and νοῦς [i.e. the παθητικὸς νοῦς of the heaven] is moved by the νοητόν" (Λ7 1072a29-30). So while God is a final cause to the heaven of its moving, he is an efficient cause to the heaven's παθητικὸς νοῦς of its knowing him, as a color is an efficient cause of its being seen.³¹ So here as in the *De Anima*, the ποιητικὸς νοῦς seems to be simply an efficient cause to the παθητικὸς νοῦς, not a final one, and we cannot use its being a final cause to explain the peculiar way in which it is an efficient cause (the mere fact that it is an unmoved mover does not imply that it is a final cause,

actuality. Therefore the first mover is one both in account and in number, since it cannot be moved" (Caston's translation). This shows that it cannot be numerically multiplied within its species, but Λ8 also says that there are many separate immaterial substances, thus presumably many species of separate immaterial substances, each with one instance. Why shouldn't each of these be a νοῦς (and a ποιητικὸς νοῦς)? What distinguishes them? Well, they are sciences, and so they are distinct because their objects are distinct. Of course, they are their objects, so if we don't already know them, we won't be able to understand how they differ. But that may be our problem rather than theirs. Perhaps they are distinguished by relations of essential subordination, by being said per prius et posterius. But Aristotle doesn't give us much to go on. Certainly only one of them is the good-itself.

³¹cp. DA III,10, where the ὁρεκτόν is an unmoved mover τῷ νοηθῆναι.

since the color is not a final cause of its being seen).³² In the Eudemian Ethics, God is a final cause of our actions because we do them for the sake of God, i.e. in order to possess God, i.e. to maximize the quantity and quality of our contemplation of God (to do this we need leisure, a soul undisturbed by passions, etc.), but there is no suggestion that God is the final cause of our contemplating God, and while we can say that we act in order to contemplate God, we cannot say that we contemplate God in order to contemplate God (we might say this negatively, meaning that the contemplation of God is not for the sake of anything else, but it would not be positively causa sui). Rather, God is the efficient cause of our contemplating him (once we are properly prepared and all obstacles are removed), and both God and our contemplation of God can in different ways be called the final cause of our other actions.

I may not be disagreeing very radically with Caston here. So far I have claimed only that God, or any ποιητικός νοῦς X, is the efficient cause of our contemplating X. I am not sure that Caston would disagree with this claim--his article does not seem to address this issue explicitly. But, Caston might say, if this is all that the ποιητικός νοῦς is cause of, then Aristotle is not positing it in De Anima III,5 to explain anything in the soul: if I have not already been contemplating the ποιητικός νοῦς, then I am not aware of any psychological phenomenon that needs explaining, and if I have already been contemplating the ποιητικός νοῦς, then I do not need reasons for positing it.³³ The ποιητικός νοῦς is only doing explanatory work if it is the cause of our cognizing something other than itself.

Aristotle does seem to imply that the ποιητικός νοῦς is the cause of our cognizing something other than itself when he compares it to light, which "makes what are potentially colors actually colors." As I noted above, Aristotle is taking this comparison from Republic VI, but, as I also noted, he is modifying Plato's account in ways that threaten to undermine the comparison. For Plato, a single first Form of the Good is the cause of our νοεῖν each of the other νοητά. For Aristotle, if X is a separate immaterial νοητόν (like a Platonic Form if there were any, and the De Anima hasn't argued that there aren't), then the argument of De Anima III,4-5 shows that X is itself a ποιητικός νοῦς, a pure ἐνέργεια with no potentialities needing to be actualized by something else: X is itself a cause of our νοεῖν X, and there seems to be no room for anything higher than X (like God, if X is not itself the first God) to be a cause of our νοεῖν X. So how is any ποιητικός νοῦς the cause of our νοεῖν anything other than itself?

³²I disagree with Caston's claim, p.219, that GC I,6 says that being productive κυρίως requires mutual contact. "things which cannot touch each other cannot ποιεῖν and πάσχειν κυρίως" (322b22-4) is not making a point about mutuality, nor is b26-9 ("καὶ τούτοις ὡσαύτως" needn't mean that the contact must be mutual in this case too); in any case, 323a25ff makes clear that contact is not always mutual, and that movers are not always moved, although these do hold in the majority of cases and in the most familiar cases; there is no warrant for saying that only such mutual cases are cases of κινεῖν or ποιεῖν κυρίως. I agree with Caston (citing GC I,7 324b13-15) that the final cause, qua final cause, is not a mover κυρίως, but being a final cause is not the only way of being an unmoved mover

³³of course, someone might argue from our being able to think of such a νοῦς to the actual existence of such a νοῦς as the cause of our thinking: this is how Descartes argues in the third Meditation (and a clear line can be traced back from Descartes through Augustine and Plotinus to De Anima III,5), but the kind of thinking of God that Descartes is considering is what the scholastics call "abstractive" as opposed to "intuitive" (e.g. conceiving of a table vs. perceiving one actually present). Aristotle does not seem to be concerned with that kind of cognition of God, but rather with a direct intellectual intuition of something (non-spatially) present. (perhaps in the ethical context as described in Eudemian Ethics VIII,3, someone who has not yet succeeded in contemplating God, but has decided to organize his life in the hope of doing so, would at the outset have an abstractive but not an intuitive cognition of God. but of course Aristotle is not arguing for the existence of God from this phenomenon.)

Let me mention one possible answer which I think can be rejected quickly. Aristotle might think that a ποιητικός νοῦς can be the cause of our knowing a plurality of intelligible contents because it itself knows those contents, that is, because it is itself the separately existing knowledge of those intelligible contents, so that it must itself be those intelligible contents: where for the one thing X to be the many things Y, Z, etc., they must be something like different parts of X or different aspects of X. I think this is a consistent and reasonable position. It was Plotinus' position: for Plotinus, the many Forms, or many sciences, are inseparable parts within νοῦς as a whole, like many theorems within a single universal science.³⁴ But Aristotle rejects all this, and more generally he denies that a separate immaterial substance can consist of parts (so Metaphysics N2), because he denies the possibility of inseparable parts: for Aristotle as for Plato, to say that something is a whole is to say that it is both one and many, and while Plato in the second part of the Parmenides is apparently willing to tolerate such a compresence of contraries in the Forms, for Aristotle such a compresence of unity and multiplicity is intolerable unless the whole is actually one and potentially many, because it can be divided into many parts and so become actually many. But in separate immaterial things there are no unactualized potentialities, and so a whole cannot be potentially many without being actually many: in which case it is not actually one, and thus not a whole. This does not force Aristotle to deny plurality in separate immaterial things: Y and Z can be two separate immaterial things, but then they cannot also be a single whole. So Y and Z can each be a ποιητικός νοῦς, Y being a knowledge of Y and Z being a knowledge of Z, but X cannot be a single ποιητικός νοῦς which is a knowledge of both Y and Z. Or, as Aristotle puts it with drastic compression in Metaphysics Λ9, after asserting the identity of a separate νόησις with its object: "there remains an aporia, whether the νοούμενον is composite: [if it were, the νόησις] would change among the parts of the whole. Perhaps everything which does not have matter is indivisible" (1075a5-7); where "perhaps" [ἤ] is Aristotle's way of introducing his solution to an aporia, and does not express any doubt.

The only remaining way that a ποιητικός νοῦς could be the cause of our νοεῖν something other than itself is if it is the cause of our νοεῖν the forms of material things; and this, of course, has been the view of most of the commentators. But, once we reject Plotinus' option of positing complexity within the separate νοῦς, it is mysterious how a single simple νοῦς can be the cause of our knowing a plurality of contents. Victor Caston rightly emphasizes that the De Anima III,4 account of how we know the forms of material things makes no mention at all of such a higher cause; and, as I hope to have shown above, De Anima III,5 introduces the ποιητικός νοῦς in order to solve a problem from III,4 about our cognition of separate immaterial things, not about our cognition of enmattered forms.

In fact, I think that things Aristotle says in De Anima III,4 imply, and are intended to imply, that a separately existing νοῦς has no role at all in our cognition of enmattered forms. God cannot give us knowledge of the form of a horse, because God himself does not know the form of a horse; speaking more precisely, the knowledge of the form of a material thing cannot be a separately existing substance, because it cannot exist apart from matter.

Recall that in De Anima III,4, after describing νοῦς on the analogy of sensation, Aristotle had noted various differences between νοῦς and sensation. While sensation, like νοῦς, is in some way ἀπαθές, the exercise of sensation depends on an organ which is subject to πάθη: "the sensitive [power] is not without a body, but [νοῦς] is separable" (429b4-5). The exercise of sensation depends on external conditions (the appropriate object must be present and acting on the organ), and it may be obstructed if the organ is damaged, whereas νοῦς is immune to these

³⁴see my "Plotinus on the Identity of Knowledge with its Object," Apeiron, v.34, n.3, September 2001, pp.233-46

limitations: once we have acquired an ἐπιστήμη, we can exercise it in contemplation independently of any bodily organ or any external body. Or so Aristotle says. But then, in a passage I skipped over before, he adds some qualifications.

Since magnitude and being-magnitude, water and being-water, are different (and so in many other cases, but not in all: in some cases they are the same), [the soul, or the person] judges being-flesh and flesh either by different [powers] or by [the same power] differently disposed [ἢ ἄλλω ἢ ἄλλως ἔχοντι κρίνει]. For flesh is not without matter, but is like the snub, this-in-this. So by the sensitive [power] [the soul, or the person] judges hot and cold, i.e. the things of which flesh is a ratio [λόγος], but it judges being-flesh by a different [power], either by a separate [power] or [by a power which is to the sensitive power] as a bent line is to the same line when it is stretched out [ἥτοι χωριστῶ ἢ ὡς ἡ κεκλασμένη ἔχει πρὸς αὐτὴν ὅταν ἐκταθῇ]. Again, even in the case of things which are by abstraction, the straight is like the snub, for it is together with [μετά; i.e. cannot exist without] the continuous, whereas the essence, if being-straight is different from the straight, is something else, let it be the dyad.³⁵ So it judges it either by a different [power] or by [the same power] differently disposed. So, in general, as the objects are separable from matter, so too will what is concerned with νοῦς [τὰ περὶ τὸν νοῦν] [be likewise separable from matter]. (DA III,4 429b10-22)

This is appallingly condensed, but it is possible to tease out the points Aristotle is making. It is often possible to distinguish that which is X from what-it-is-to-be-X, the essence of X: this will be true whenever X is a composite, a-form-in-a-matter, like flesh, which consists (say) in a certain ratio among the elements or among their primary qualities. So, in these cases, the question arises whether the thing which is X (an instance of X) and the essence of X are discerned by the same or different cognitive powers. Everything that Aristotle has said up to this point in *De Anima* III,4 leads us to expect that, in a case like flesh, they will be different: the essence or form of flesh will be grasped by νοῦς (which is "receptive of the form," 429a15-16), while this particular instance of flesh will be discerned by sensation; or, more precisely, sensation will perceive the matter (the elements or qualities) in which this particular instance of flesh resides, and so bring it before the judgment of νοῦς, and then νοῦς will judge that it falls under the concept of flesh. However, Aristotle disrupts this expectation by suggesting that the two judgments, about this particular flesh and about the essence of flesh, may be made not by two different powers but by the same power in two different conditions--like the same line when straight and when bent.

Commentators have tried out at least three interpretations of what Aristotle is suggesting here. (1) The view of all the ancient commentators, of St. Thomas, and recently of Charles Kahn, is that Aristotle is suggesting (and endorsing the suggestion) that both this particular flesh and the essence of flesh are discerned by the same power, νοῦς, in two different modes of operation:³⁶ as

³⁵Xenocrates' view, see Themistius *In de Anima* pp.11-12

³⁶Themistius, the pseudo-Simplicius (Priscianus Lydus), the pseudo-Philoponus (Stephanus), the genuine Philoponus (extant in Latin translation). I couldn't immediately find anything in Alexander that shows how he read the text. Kahn is in Nussbaum-Rorty, esp. p.370ff. sometimes the view is that sometimes sense grasps the singular or composite and intellect grasps the universal or essence/form, but that sometimes intellect grasps the singular/composite, as it must do when comparing it to the universal and judging that they are distinct (e.g. Thomas #712)

Thomas puts it, "[intellect] knows the nature of the species, or what something is, by 'stretching itself out straight,' but it knows the singular itself by a certain 'bending-back,' inasmuch as it goes back upon the phantasms from which intelligible species are abstracted" (*In de Anima* #713). This view is attractive in its insistence that it is possible to think about sensible things, and not merely to sense them. But this reading is just not compatible with the details of the text: "by the sensitive [power] [the soul, or the person] judges hot and cold, i.e. the things of which flesh is a ratio, but it judges being-flesh by a different [power], either by a separate [power] or as a bent line is to the same line when it is stretched out"--the first power mentioned is the sensitive power, and the second power is either a power separate from the sensitive power (that is, presumably, $\nu\omicron\upsilon\varsigma$), or else it is to the sensitive power as the bent line is to the straight line. The text does not open the possibility that both powers are $\nu\omicron\upsilon\varsigma$ differently disposed: either the first is sensation and the second is $\nu\omicron\upsilon\varsigma$, or they are both sensation differently disposed. And, if they are both the same power differently disposed, then this power is compared to a straight line when it is directed toward flesh or its matter, and compared to a bent line when it is directed toward the essence of flesh--not vice versa as Thomas and the others insist. (2) So we might say, as Hicks and Ross are inclined to, that Aristotle is not asking whether a particular act of cognition should be attributed to sensation or to $\nu\omicron\upsilon\varsigma$, but is asking whether sensation and $\nu\omicron\upsilon\varsigma$ are themselves two separate powers: "it seems more probable that Aristotle is merely saying in *Il.* 14-17 that the faculty of sense-perception and that of reason are either separate faculties or one faculty operating on different objects, the one on sensible things, the other on essences" (Ross ad loc.). If this is indeed the question, then Aristotle would certainly not be endorsing the suggestion that flesh and the essence of flesh are grasped by the same power: "though A[ristotle] here expresses himself cautiously, there is no doubt that he thought of the two faculties as entirely different, except in the fact that both are forms of apprehension" (ibid.). But it would be bizarre if Aristotle were suddenly expressing doubts about whether $\nu\omicron\upsilon\varsigma$ and sensation are separate, ten lines after declaring, "the sensitive [power] is not without a body, but [$\nu\omicron\upsilon\varsigma$] is separable" (*De Anima* III,4 429b4-5). (3) The key to the correct interpretation (which seems to have been Zabarella's, according to Hicks) is to see that Aristotle is comparing sensation, not with $\nu\omicron\eta\sigma\iota\varsigma$ as such, but specifically with the $\nu\omicron\eta\sigma\iota\varsigma$ of enmattered forms such as the essence of flesh or the essence of snubness. Of course $\nu\omicron\upsilon\varsigma$ is separable, but Aristotle is suggesting that the $\nu\omicron\eta\sigma\iota\varsigma$ of enmattered forms may be inseparable from sensation (and thus inseparable from matter, since sensation is not without a bodily organ): such $\nu\omicron\eta\sigma\iota\varsigma$ would then be the act of a power which is numerically the same as the sensitive power, but differs from it in $\lambda\omicron\gamma\omicron\varsigma$. More precisely, the power would be the sensitive power differently disposed, and essentially dependent or parasitic on the sensitive power, as bent line is on straight line, and as snub is on nose, or flesh on the elements and their qualities. So it would follow, as Aristotle says it does, that "in general, as the objects are separable from matter, so too will what is concerned with $\nu\omicron\upsilon\varsigma$ [be likewise separable from matter]": the knowledge of separate immaterial things is itself separable from matter, but the knowledge of inseparable enmattered forms is itself inseparable from matter. Aristotle certainly means to endorse this suggestion, and it fits closely with things he says elsewhere.

In several places in the *De Anima* Aristotle raises the question whether $\nu\omicron\epsilon\iota\nu$ can take place without imagination [$\phi\alpha\nu\tau\alpha\sigma\acute{\iota}\alpha$] or without an image [$\phi\acute{\alpha}\nu\tau\alpha\sigma\mu\alpha$]. In *De Anima* I,1, in asking whether the soul or any of its activities can exist apart from bodies, Aristotle says that $\nu\omicron\epsilon\iota\nu$ is the most plausible case, but notes that "if this too is a kind of imagination, or not without imagination, then this too would not be able to exist without a body" (403a8-10); in Book III the

problem of the relation between νοῦς and imagination is a constant theme.³⁷ The "collection of scraps" DA III,7 says that "the soul never νοεῖ without an image" (431a16-17; cp. 431b2, "the νοητικὸν νοεῖ the forms in images"). Most remarkably, *De Anima* III,8, after recalling that the soul's νοῦς is potentially the forms of intelligible things, as its sensory power is potentially the forms of sensible things, says:

since nothing at all exists separated beyond [κεχωρισμένον παρὰ] sensible magnitudes, as it seems [ὥς δοκεῖ], the intelligibles are in sensible forms, both those [intelligibles] which are said by abstraction [i.e. mathematical] and those which are states and affections of sensibles. And for this reason, if [νοῦς? the person?] did not sense anything, [it/he] would not learn or understand anything, and whenever [it/he] contemplates, [it/he] must always contemplate some image at the same time [ᾧμα] (432a3-9),

adding that "the first thoughts," the simples as opposed to the compounds which are affirmed or denied, "are not images, but are not without images" (a12-14). Now it would be very surprising if, so soon after *De Anima* III,5, Aristotle has decided that there are no intelligible substances separated from bodies. But I take it that the qualification "as it seems [ὥς δοκεῖ]" is crucial. While the Platonists believe that our knowledge of mathematics and of value-predicates plainly requires the existence of forms separate from matter, Aristotle thinks this is much more problematic. Our knowledge can arise without real separation, and in fact all of the obvious cases of our knowledge can be shown to depend on sensible things; in particular, our knowledge both of natural forms and of mathematical ones, although it is not simply an activity of the sensitive power in the way that imagination is, is essentially dependent on such an activity, so that our thinking of such forms must always be accompanied by an image. Aristotle himself believes that there is at least one ποιητικὸς νοῦς existing separately from matter, and that at least some human beings have knowledge of it, but he does not claim to have proved this in DA III,4-5: he has proved only that if there is an intelligible substance existing separately from matter and if some human beings have knowledge of it, then it is a ποιητικὸς νοῦς. All the knowledge that we can readily point to, and whose existence we can take for granted at this stage in the argument, is of forms that cannot exist apart from matter, and the knowledge itself depends on sensation and thus on matter. And this is just the conclusion that Aristotle was drawing at DA III,4 429b10-22, on the interpretation I am urging. The basis for this conclusion is that, as he says there, natural and even mathematical things are like the snub: that is, they each essentially presuppose some particular kind of matter, so that not only can they not exist without that matter, they cannot even be defined without it. Aristotle likewise says that at least natural things are said like the snub in *Metaphysics* E1 and *Physics* II,2, drawing the lesson is that the student of nature will study forms (and thus will use definitions and demonstrations), but that he will study forms in such a way that he studies their appropriate matter at the same time. But if we cannot know the forms of natural things without also knowing their matter, and if a pure νοῦς (a νοῦς that could exist and operate without any material substrate or organ) would necessarily grasp their forms alone without their matter, then it follows that they cannot be grasped by a pure νοῦς, but only by a νοῦς operating in dependence on sensation. So Aristotle has to qualify the claims he made just before our passage, that "the sensitive [power] is not without a body, but [νοῦς] is separable" (DA III,4

³⁷so in III,3 it "seems" [δοκεῖ] that νοεῖν consists of two activities, imagination and judgment [νόλησις], where imagination is a necessary precondition of judgment, 427b14-16 and b27-9

429b4-5), and that once someone has ἐπιστήμη he can exercise it without dependence on external things. These claims are true of νοῦς and ἐπιστήμη as such, but not of the νοῦς and ἐπιστήμη of enmattered forms, which cannot be acquired or exercised without sensation and matter. So Aristotle concludes, qualifying his earlier claims, that "in general, as the objects are separable from matter, so too will what is concerned with νοῦς [be likewise separable from matter]" (429b21-2).

The conclusion of all this is that the separate νοῦς of De Anima III,5 does not exist in the case of our knowledge of enmattered forms, but only for our knowledge of separate immaterial things; or, more precisely, our knowledge of separate immaterial things is a separate νοῦς, whereas the knowledge of enmattered forms exists only in souls, indeed only in embodied souls. And consequently the ποιητικός νοῦς causes us to know it, and nothing other than it. By rejecting a good-itself superior to νοῦς, and by rejecting a single νοῦς-whole with many parts or aspects, and by denying that the forms of natural things can exist or even be cognized apart from matter, Aristotle has undermined his Platonic comparison with the light that "makes what are potentially colors actually colors" (DA III,5 430a16-17). The ποιητικός νοῦς is a light that reveals only itself. So I agree with Caston that it does not explain anything that happens in the soul. It causes something that happens in the soul, by efficient causality, not final, but all it causes is that we know it. And if we do not already know it, what Aristotle says about it in De Anima III,4-5 gives us no reason to believe in its existence.

But I think this is perfectly all right with Aristotle. He is not trying to prove the existence of God, or prove the existence of separate immaterial νοητά, in De Anima III,5, any more than he is in the equally theological conclusion of the Eudemian Ethics. He does try to prove the existence of separate immaterial νοητά--each of which is a ποιητικός νοῦς, and the first of which is the first God and good-itself--in Metaphysics Λ. De Anima III,5 does not give any reason to believe in the existence of a ποιητικός νοῦς, or of any separate immaterial νοητόν, except in the sense that, if you already believe in the existence of a separate immaterial νοητόν, it gives you reason to think that this separate immaterial νοητόν is a ποιητικός νοῦς. De Anima III,5 is introduced to solve an aporiai hanging over from the end of DA III,4, but this aporia does not arise for you unless you already believe in separate immaterial νοητά. De Anima III,5, like so many other texts in Aristotle, is arguing not against "atheists" or materialists, but against people with too "low" a conception of the divine things existing separately from matter: "although the Forms have manifold difficulties, what is most absurd is to say that there are natures besides those within the heaven [i.e. within the sensible world], but that these are the same as the sensibles except that these are eternal while those are corruptible. For they say that these are man-itself and horse-itself and health-itself, and nothing other [than man, horse, etc.], doing much the same as those who say that the gods exist but are human-shaped: for neither were those [the poets] positing anything other than eternal men, nor are these [the Platonists] making the Forms anything other than eternal sensibles" (Metaphysics B#5 997b5-12). Against people who believe in separate mathematical, separate virtues, and separate horses, and who fall into great difficulty in explaining how these things can interact with the soul so as to be known (Sophist 248a4-e6), Aristotle argues that the only thing that exists separately from matter and is capable of acting on the soul is νοῦς, and νοῦς of a special kind: not a δύναμις of νοῦς but a pure ἐνέργεια of νόησις, and not a νόησις of natural things or of abstractions, but νόησις νοήσεως alone.