

The Aim and the Argument of Aristotle's Metaphysics

Part III: The true path

IIIα: Metaphysics Θ: ἐνέργεια and δύναμις

IIIα1: Θ and the ongoing investigation περὶ ἀρχῶν.

IIIα2: Θ1-6: δυνάμεις, τὸ ὄν δυνάμει, and the concept of ἐνέργεια.

IIIα3: Θ7-9: conclusions for the ἀρχαί and the priority of ἐνέργεια.

IIIα2: Θ1-6: δυνάμεις, τὸ ὄν δυνάμει, and the concept of ἐνέργεια.

The problem, in reading Metaphysics Θ, is not to see how it bears on the ἀρχαί, but to see how it bears on the senses of being. For although Aristotle justifies the new investigation that he is announcing in Θ1 by referring it back to the E2 program of studying being in all of its senses, in fact the main investigation that follows in Θ1-2,5 (in which Θ3-4 seem to be a digression) is devoted to δυνάμεις as a kind of ἀρχαί, with no explicit discussion of τὸ ὄν δυνάμει. Aristotle does indeed speak of δύναμις and ἐνέργεια in their dative-adverbial senses in Θ6, saying that "ἐνέργεια is τὸ ὑπάρχειν τὸ πρᾶγμα [the thing's existing or being present or having a predicate] not in the way we call δυνάμει [or not in the way we say that it exists (etc.) δυνάμει]" (1048a30-32); he has also mentioned τὰ ὄντα δυνάμει and ἐνεργεία or ἐντελεχεία in the last few lines of Θ3 (1047a35-b2), and used the word δυνατόν in Θ3-4 in the sense not of "capable" but of "possible" (a possibly existent thing or possibly obtaining state of affairs). But the problem is to see how these ways of speaking about being are connected in Aristotle's argument with δυνάμεις as a kind of ἀρχαί, or with ἀρχαί in general, including the kinds of ἀρχαί that Aristotle himself believes are genuinely first.

In my view, Aristotle does in Θ as in EZH keep a close connection between the study of being and the study of the ἀρχαί, with the study of being functioning as a means to the study of the ἀρχαί. But exactly how the connection works is complicated, and depends on a careful reading of the overall argument of Θ. Here I will just make some general remarks about how the connection should work, before turning to a more detailed study of the argument of Θ.

Most generally, the reason why the study of being is supposed to be useful for archeology is that the ἀρχαί must be known as causes, and Aristotle proposes that the highest causes will be causes of the most universal effects, being and its attributes. Different senses of being will have different kinds of causes. In particular, the causes of being δυνάμει--the causes, to a thing X, of the fact that it is (at least) potentially existent--will be δυνάμεις or δυνάμενα causes (the possessors of δυνάμεις), like the housebuilder, while the causes of being ἐνεργεία will be ἐνέργεια or ἐνεργοῦντα causes like the housebuilder housebuilding: "δυνάμεις [are causes] of δυνατά [= possibles = τὰ ὄντα δυνάμει], and ἐνεργοῦντα of ἐνεργούμενα" (Physics II,3 195b27-8).¹ As we have seen, B#14, in asking "whether the ἀρχαί are ... δυνάμει or ἐνεργεία"

¹for some reason this passage is missing from the parallel Metaphysics Δ2 (it would be at the very end--perhaps it was merely accidentally omitted), although Physics II,3's earlier distinction between δυνάμενα causes like the housebuilder and ἐνεργοῦντα causes like the housebuilder housebuilding is indeed in Metaphysics Δ2 (Physics 195b4-6 verbatim identical or almost identical, depending which manuscripts we follow, to Metaphysics 1014a8-10). however, note a caveat: the ἐνεργούμενον house of Physics II,3, of which the ἐνέργεια of housebuilding (or the ἐνεργοῦν housebuilder), is the cause, is not the actually existing house but the house-actually-being built, since Aristotle says that the ἐνεργούμενον thing comes to be, and ceases to be, simultaneously with its ἐνεργοῦν cause, whereas the house continues to exist after the housebuilder has ceased housebuilding and even after he has died

(B1 996a9-11), means to be asking whether the ἀρχαί are merely δυνάμεις or δυνάμενα causes, on the one hand, or whether they are already ἐνεργοῦντα causes: thus, in the argument for the ultimately rejected side, Aristotle argues that if the ἀρχαί are not merely δυνάμει, then "there will be something else prior to the ἀρχαί, for the δύναμις is prior to that cause [i.e. to the ἐνεργοῦν cause]" (B#14 1002b34-1003a1). And in the argument that Aristotle himself accepts, he argues that only ἀρχαί that are already ἐνεργεία are sufficient to explain why the things derived from the ἀρχαί actually exist and are not merely δυνατὰ εἶναι (1003a3-4): if the causes are merely δυνάμεις, all this explains is that their effects are δυνατὰ or δυνάμει ὄντα, and so Aristotle concludes in B#14 that if the ἀρχαί are merely δυνάμεις "it is possible for none of the things-that-are to be" (1003a2-3), and more strongly in the Λ6 parallel that "none of the things-that-are will be" (1071b25), since there will be no sufficient reason for their actual existence. So in the aporia περὶ ἀρχῶν that Θ is designed to address, Aristotle is assuming that δυνάμεις and ἐνέργειαι as causes are correlated with potential and actual being as effects, and he is using this correlation to draw conclusions about what kind of causes the ἀρχαί must be. And this is the fundamental connection between the ontological and archeological sides of Θ.

However, Θ does not make this connection as clearly and straightforwardly as one might hope, certainly not at the outset. This is chiefly because Aristotle thinks that the concepts of δύναμις and ἐνέργεια as they might apply to ἀρχαί, and the concepts of being δυνάμει and ἐνεργεία, are difficult to grasp immediately; and so he chooses to start with the cases that are better-known to us, that is, with the nominal rather than dative-adverbial senses, with δύναμις rather than ἐνέργεια, and with the most familiar kind of δύναμις, what Aristotle calls a δύναμις πρὸς κίνησιν, that is, a power for acting on something or being acted on by something. Ontology, and ἐνέργεια, and other senses of δύναμις, are introduced only in Θ6-9 and in the digression Θ3-4. So in the introduction to Θ1, right after having said that "being is said as potentiality and as actuality and product [κατὰ δύναμιν καὶ ἐντελέχειαν καὶ κατὰ τὸ ἔργον]," and that we should therefore "distinguish/determine [διορίσωμεν] about potentiality and actuality [ἐντελέχεια]" (1045b32-5), Aristotle adds:

And first [we should distinguish/determine] about the δύναμις which is so called in the most primary sense, but is not the most useful² for what we are now aiming at: for δύναμις and ἐνέργεια are broader than only those which are said πρὸς κίνησιν. But after we have spoken about this [kind of δύναμις], we will also explain the other [δυνάμεις] in the distinctions/determinations about ἐνέργεια. (1045b35-1046a4)

Here it is clear that the linguistically primary, but for some reason less useful, sense of δύναμις is δύναμις πρὸς κίνησιν: Aristotle is echoing the wording of B#14 in B1, which asked "whether the ἀρχαί are ... δυνάμει or ἐνεργεία, and whether κατὰ κίνησιν or in some other way" (996a9-11). Aristotle has up to this point in the Metaphysics been coy about what the other kind of δύναμις would be, but Θ6 tries to explain the general concepts of δύναμις and ἐνέργεια by giving a series of examples analogously related as ἐνέργεια to δύναμις, and says that "some are related as κίνησις πρὸς δύναμιν, others as οὐσία to some matter" (1048b8-9): this makes it clear that the kind of δύναμις that is not πρὸς κίνησιν is πρὸς οὐσίαν, and that the "most useful" kind

(Physics 195b16-21, Metaphysics 1014a19-25, almost verbatim identical). so this passage seems to be saying only that actualities of motion require ἐνεργοῦντα causes, not that actualities in all categories including substance do ²reading χρησιμωτάτη, with Ab and Ross and Jaeger, rather than χρησίμη with EJ

of δύναμις will thus be δύναμις πρὸς οὐσίαν.³ The reason that this is "the most useful for what we are now aiming at" is that the kind of δύναμις that has the best claim to be among the ἀρχαί is not (e.g.) a power of heating or cooling (or of being heated or cooled), but rather some kind of matter, which will be related as a δύναμις to some kind of οὐσία that can come-to-be out of it, whether a universal first matter for all οὐσίαι, like Anaximenes' air or the Platonic receptacle, or a matter for some particular kind of οὐσία, like Anaxagorean pre-cosmic bone, which is not actually bone but only what can compose the bones of some actual animal. And Aristotle will indeed discuss this kind of material δύναμις-ἀρχή in Θ7, once he has established in Θ6 that matter may be called a δύναμις, as having the same relation to οὐσία that other δυνάμεις do to acting or being-acted-on.

When Aristotle says that δυνάμεις πρὸς κίνησιν are δυνάμεις in the sense which is linguistically most primary and easiest for us to grasp, he is relying, not on uses of "δύναμις" in ordinary language (where it mostly means physical or military strength), but on the kinds of δυνάμεις that his predecessors had posited. While philosophical reflection on δυνάμεις surely begins with the physicists and the medical writers (witnessed for us mainly by the On Ancient Medicine), Aristotle is drawing in the first instance on Plato. Plato says in the Sophist, equivalently, that the mark of being is δύναμις (247e3-4), or that a being is whatever possesses a δύναμις εἴτ' εἰς τὸ ποιεῖν ... εἴτ' εἰς τὸ παθεῖν (247d8-e3): he simply takes for granted that every δύναμις is for ποιεῖν or πάσχειν, and Aristotle himself makes the same assumption in early texts, notably at Protrepticus B81.⁴ Aristotle's predecessors, as far as we know, never speak of ἐνέργεια, never use "δυνάμει" or "κατὰ δύναμιν" adverbially,⁵ and never speak of δυνάμεις for οὐσία rather than for ποιεῖν or πάσχειν. Thus Aristotle's procedure in Θ is to begin from his predecessors' discourse about δύναμις, and then to extend it, recapitulating his own discovery of the "more useful" concepts--"more useful" not just because somehow ontologically deeper, but because more useful for getting at the ἀρχαί.

The most important conceptual extension is from δύναμις πρὸς κίνησιν to δύναμις πρὸς οὐσίαν; to grasp this extension is just to grasp the analogy between the way that the matter for some substance is related to that substance and the way that the power of heating is related to the action of heating something, or the way that the power of sight is related to the passion of seeing something. As Aristotle says in Θ1 1045b35-1046a4 (cited above), he will describe this extension in the sense of δύναμις only when he introduces the concept of ἐνέργεια in Θ6. And this makes sense, because we cannot grasp the extended concept of δύναμις except by grasping the analogy, that is, by grasping the δύναμις-ἐνέργεια relation that is common to the two cases, and thus by grasping the concept of ἐνέργεια as well. And, conversely, Aristotle has not much need to speak of "ἐνέργεια" while he is considering only δυνάμεις that are πρὸς κίνησιν, since he can simply speak of "κίνησις" or "ποιεῖν or πάσχειν". This roughly recapitulates Aristotle's own progress, since although he is already speaking in the Protrepticus of the ἐνέργεια (interchangeable with χρῆσις) of some active or passive δύναμις, he feels no need there to speak of a general class of ἐνέργεια, and calls the class "ποιεῖν or πάσχειν", or more economically

³I emphatically reject Kosman's attempt to correlate this distinction with a distinction between δύναμις πρὸς κίνησιν and δύναμις πρὸς ἐνέργειαν (since every κίνησις is an ἐνέργεια, this could only be a distinction of a narrower from a wider class, not a contradistinction between two nonoverlapping classes); see my discussion of Θ6 below, and my old Ancient Philosophy article

⁴see my old Ancient Philosophy article. Aristotle cites the Sophist ἴδιον of being at Topics V 139a4-8

⁵exception that proves the rule: where the meaning is "in square"

"κίνησις".⁶ As Aristotle himself says in Θ, "the name 'ἐνέργεια', which is applied to actuality [ἡ ἐνέργεια τοῦνομα, ἡ πρὸς τὴν ἐντελέχειαν συντιθεμένη], has been extended [ἐλήλυθε] to other things too from [applying to] κινήσεις especially" (Θ3 1047a30-31); and "δύναμις" is extended correspondingly.⁷ So in the main body of Θ1-5 (excluding the introduction Θ1 1045b27-1046a4 and the digression Θ3-4; I will call this text "Θ1-2,5") Aristotle speaks only of powers to do or suffer something, not of powers directed toward a predicate in some other category (e.g. a power to be yellow or three feet long or a horse or a table), much less of powers to exist. As he warns us, this discussion is "not the most useful" for discovering what might be the first ἀρχαί, such as a first matter. Nonetheless, Aristotle's discussion of δύναμις in Θ1-2,5 contains some important lessons for how he sees the different applications of the notion of δύναμις as fitting together, and why he feels justified in speaking of δυνάμεις πρὸς οὐσίαν in Θ6, and of τὰ δυνάμει ὄντα in Θ3. I will discuss Θ1-2,5 rather quickly, extracting what will be useful for understanding Θ3-4 and Θ6-9.

Θ1,2-5: δυνάμεις

Θ1-2,5 are heavily dependent on Δ12, the Δ chapter on δύναμις: much of the discussion simply recapitulates that chapter. The main thesis is stated in Θ1 1046a4-11: "that δύναμις and δύνασθαι are said in many ways, we have determined elsewhere: let those which are called δυνάμεις homonymously be discarded ... but those which [are called δυνάμεις] with reference to the same form [ᾧσαι πρὸς τὸ αὐτὸ εἶδος--not necessarily univocally, but by some relation or other to the primary sense] are all some kind of ἀρχαί, and they are called [δυνάμεις] by reference to a single primary [kind of δύναμις], which is an ἀρχή of a change [taking place] in something else [than what the ἀρχή resides in] or [in the thing itself in which the ἀρχή resides] qua something else." It is important that the claim is not simply about the noun δύναμις but also about the verb δύνασθαι: there are many kinds of context in which we say that S δύναται to V, and Aristotle is announcing a program of explaining all of these except the purely equivocal ones through some sort of ἀρχή, and of relating all these ἀρχαί to δυνάμεις in the single primary sense. The description of this primary kind of δύναμις is taken from the beginning of Δ12 (1019a15-18), and the claim that all other non-equivocal δυνάμεις are said by some relation to it is from the end of Δ12 (1019b34-1020a6). Δ12 cites as its examples of such primary δυνάμεις the productive arts (medicine, housebuilding), which in the terminology of Θ2 are "rational δυνάμεις", but the definition will also cover irrational δυνάμεις such as a fire's power to heat or dry or burn something, and indeed these will be the less complicated examples. In Θ1-2,5, as in Δ12, Aristotle then extends the concept of δύναμις step by step. The first extension is from active powers to passive powers, "the ἀρχή, in the patient itself, of passive change [i.e. of being changed] by something else or [by the patient itself] qua something else" (Θ1 1046a12-13, cp. Δ12 1019a20-23): the active power in the agent and the passive power in the patient will be

⁶again see my [Ancient Philosophy](#) article. Aristotle is developing the notion of a χρῆσις of a δύναμις from some bits in Plato ([Euthydemus](#), [Theaetetus](#), [Clitophon](#)). notes also on ἐνέργεια/κίνησις identification (unmistakable in the [Protrepticus](#)--B80 is a discussion-ender; other early Aristotle texts too), and on κίνησις as equivalent to "ποιεῖν or πάσχειν" in lists of the categories. also note that δυνάμει and ἐνεργεία (or κατὰ δύναμιν and κατ' ἐνέργειαν) in early works such as the [Protrepticus](#) are only found modifying verbs of action or passion; you could say "S is δυνάμει V-ing," but in such a case δυνάμει should be read as attached to the verb or participle and not to the copula, and "S is δυνάμει λευκόν" would be impossible: there is no notion of τὸ δυνάμει ὄν. the later Aristotle is generalizing from this narrow range of uses

⁷cp. the parallel Θ8 1050a21-3 (meaning discussed in my [Ancient Philosophy](#) article)

correlatives, said *πρός* each other (Δ15 1020b28-30), they will have a single shared *ἐνέργεια* (for the action is the same as the passion, and takes place in the patient), and Aristotle is willing to say that they are in some sense a single *δύναμις* (Θ1 1046a19-22), although present in two different subjects. Next, beyond the power of being changed or acted on, there is also a power of not being changed or acted on (especially, of not being destroyed or damaged) by some active power (Θ1 1046a13-15, Δ12 1019a26-32); put positively, this is the power of a thing to preserve itself and to resist the powers of other things.⁸ Finally, when we say that something *δύναται* to V (to do or undergo something), sometimes we mean not just that it has a *δύναμις* of V-ing simpliciter, but that it has a *δύναμις* of V-ing well (Θ1 1046a16-17; treated earlier in Δ12, 1019a23-6, which adds the *δύναμις* to do something when or as one chooses): this class of *δυνάμεις* is important because it will presumably include the arts, since while both an architect and a layman might build a house, only the person who can build a house well is said to have the art of architecture.

When Aristotle defines *δύναμις* as "an *ἀρχή* of a change in something else or qua something else," he is obviously mimicking the definition of *φύσις* as "an *ἀρχή* and cause of motion and rest in what it primarily belongs to, per se and not per accidens" (*Physics* II,1 192b21-3): the extra clause "or qua something else" is intended to include under *δύναμις* the same case that the extra clause "per se and not per accidens" is intended to exclude from *φύσις*, namely the doctor curing himself.⁹ Presumably the reason why Aristotle so carefully excludes *φύσεις* from his definition of *δύναμις* is that *φύσεις* and *δυνάμεις* are intended to explain different things: a *δύναμις* explains the fact that S *δύναται* to V, while S's *φύσις* explains the fact that S *πέφυκε* to V, or simply the fact that S V's: for if S's *φύσις* is to V, S will V unless something external prevents it, so that a further cause must be cited to explain why S does not V, not to explain why S does V. So the *φύσις* of S can be sufficient to explain what S does or undergoes; whereas a crucial claim that Aristotle is gathering support for (though not explicitly stating) in Θ1-2,5 is that a *δύναμις* for V-ing is not sufficient to explain the fact that something actually V's. To us, given our familiarity with the Aristotelian notion of *δύναμις*, this appears almost tautological, but Aristotle had to do a great deal of work to make it appear so. As we have seen, one side of B#14 maintains that the *ἀρχαί* are *δυνάμεις* (or potential causes, the bearers of *δυνάμεις*), and something like this was the view of many of the physicists. Against this view, Aristotle maintains (in the argument for the side he endorses in B#14, again in Θ, and again in Λ) that S's *δύναμις* for V-ing--in the sense of *δύναμις* that Aristotle brings to the fore in Θ1,2-5--is not sufficient to explain why S should V rather than not V-ing; one way to formulate why not is to say that a single *δύναμις* is at the same time a *δύναμις* for V-ing and for not V-ing (or for the contrary of V-ing), so that some further cause is needed to explain why the *δύναμις* should result in one *ἐνέργεια* rather than the other.

In Θ1,2-5, Aristotle singles out the case of rational *δυνάμεις*, which are in a special way powers for two contraries at once. Thus in Θ2 he says that "in the case of rational *δυνάμεις*, [the

⁸the Δ12 version gives an argument to justify calling such states *δυνάμεις*: we speak most properly of a passive *δύναμις* when it is a *δύναμις* for something good, for being perfected in some way rather than for being damaged or destroyed; a thing is destroyed not because it is powerful but because it is unable to escape destruction, and so the state in virtue of which it escapes being destroyed (by some agent which would otherwise destroy it) is a *δύναμις*, this turns on the notion of a *δύναμις* for doing something well, which in Δ12 comes before, but in Θ1 after, the notion of a power of resisting

⁹cited in the discussion of *φύσις* *Physics* II,1 192b23-7 and in the discussion of *δύναμις* *Metaphysics* Δ12 1019a17-18. see Θ8 on the *δύναμις* and *φύσις* falling under the same genus, which can more broadly be called *δύναμις*.

δυνάμεις] for contraries are the same, whereas the irrational δυνάμεις are one δύναμις for one thing, as the hot is [a δύναμις] only for heating, but the art of medicine is [a δύναμις] for both illness and health" (1046b4-7, cp. b18-20). Aristotle of course has a particular interest in rational powers, such as the arts, and he wants to show how these rational δυνάμεις fit into his general theory of δυνάμεις, and what is distinctive about them; his assertion that these powers are simultaneously for contraries was an Academic commonplace going back to the Platonic Socrates, who claims both that we cannot have scientific knowledge [ἐπιστήμη] of X without also having scientific knowledge of its contrary, and also that the artisan who can produce X can also produce the contrary of X.¹⁰ However, there is also a weaker sense in which even irrational powers are powers for contraries: as Aristotle puts it in Θ9, "in whatever things are called [δυνατά, not metaphorically] but through δύνασθαι, the same thing is δυνατόν [=capable] of both contraries, e.g. what is said to be able [δύνασθαι] to be healthy is also, and simultaneously, able to be sick: for it is the same δύναμις of being healthy and being sick, or of being at rest and being in motion, or of building and knocking down, or of being built and falling down" (1051a5-10).¹¹ It is worth noting that Aristotle's examples here are either rational active powers or irrational passive powers, not irrational active powers like the power of heating: how would he maintain that the power of heating is also a power for cooling, thus apparently contradicting Θ2? But the sense in which even these powers are for contraries emerges from Physics VIII,1: "Some things move [transitive] in only one way, others also produce the contrary motions, as fire heats but does not cool, while the ἐπιστήμη of contraries seems to be one. But it seems that even in the first case there is something similar: what is cold heats when it has turned [away] and is receding,¹² as the person with ἐπιστήμη errs [or does wrong, e.g. by producing illness] willingly, when he uses his ἐπιστήμη in the reverse direction. But those things which are capable [δυνατά] of acting or being acted on, or moving or being moved, are not capable in all conditions [πάντως δυνατά], but when they are disposed in this way and are near one another: so when they are near, one moves and the other is moved, if they were already in such a condition that one was capable-of-moving and the other was capable-of-being-moved [κινητικόν, κινητόν]" (251a28-b5). Thus an irrational power for producing X does not always produce X, but sometimes produces the contrary of X, not because of any intrinsic change in the power or its bearer (or because it just arbitrarily decides whether to produce X or not), but because in order to produce X it needs to be conjoined with something else that has the correlative passive power; when the two correlative powers are brought together, and there is no obstruction, the action always results. And this is not so different from what Aristotle thinks about rational powers: what determines whether the doctor produces health or disease or neither is not an arbitrary

¹⁰for the claim about theoretical knowledge, see e.g. Charmides 166e7-8, saying that the ἐπιστήμη of ἐπιστήμη must also be an ἐπιστήμη of ἀνεπιστημοσύνη, and Phaedo 97d1-5 (the same ἐπιστήμη of good and evil); for the claim about the arts, see Republic I 333e-334a, arguing that the person who can guard against disease can also produce it, and that the person who can guard well is also a good thief (the contradiction that Polemarchus gets into around 335de results from the claims that a kind of knowledge is a power for opposites, that goodness only benefits rather than harms, and that goodness for a human being is a kind of knowledge; see also the Hippias Minor, arguing that the person who can (reliably) tell the truth about a given subject can also (reliably) lie about it). Aristotle many times in the Topics cites the claim that the ἐπιστήμη of two contraries (or more generally of two opposites) is the same (e.g. 105b5, 110b20, 155b30-34, 164a1, and cp. Metaphysics M 1078b25-7), where this is clearly an Academic commonplace, not a distinctive Aristotelian thesis.

¹¹cp. Θ8 1050b8-12, saying (perhaps more guardedly, but perhaps simply because this is all that is needed in the argumentative context) that each power is a power for two contradictories at once

¹²cp. the sun producing heat (in the northern hemisphere) in summer when it is near (i.e. is further north), and producing cold (in the northern hemisphere) in winter when it is farther away (further south); cp. GC II,10

uncaused decision, but rather the combined presence of his art, of the person with the passive power to be treated in a certain way, and of a desire, where a desire is an activity of some rational or irrational part of the soul, itself with some preceding cause (so Metaphysics Θ5).

Thus because a power for X must be conjoined with a correlative power in order to produce X (and may produce different effects when conjoined with different correlative powers), it is not a power for X alone, but also for the contradictory or even the contrary of X; and because the power for X is also a power for the contradictory or contrary of X, it does not of itself cause or explain the fact that X is, τὸ εἶναι, but only the fact that X can be, τὸ ἐνδέχασθαι εἶναι. It is thus crucial for Aristotle to exclude φύσεις from his definition of δύναμις, and to insist that all δυνάμεις (of acting or suffering or resisting, of doing something simply or doing it well) are ascribed to a thing in relation to some other object, and cannot be exercised without a correlative δύναμις in the other object. He needs this precise scientific understanding of δύναμις in order to resolve B#14 by showing that, even though ordinary actual causes or δυνάμεις-being-exercised are preceded in time by the corresponding δυνάμεις or potential causes, nonetheless δυνάμεις (or potential causes as bearers of δυνάμεις) are not sufficient to explain actual effects, so that the ἀρχαί must be, or at least include, things which are not merely δυνάμεις or potential causes, but are already actual causes. This gives Aristotle the argument he needs against physicists such as Anaxagoras and Empedocles, who think that the ἀρχαί were δυνάμεις or potential causes, quiescent before the coming-to-be of the world, and then arbitrarily began to act at some moment: if these causes were previously quiescent, then either they were not yet capable [δυνάμενα] or they were not yet conjoined with their correlatives, and if they were not capable or conjoined, they cannot begin to act until something acts to make them capable or to conjoin them; so if everything was quiescent, everything will remain quiescent. Aristotle draws just this lesson as an immediate corollary to the passage from Physics VIII,1 (cited above) on how δυνάμεις are δυνάμεις for contraries and how they depend on their correlatives: "therefore, if there was not always motion, it is clear that they were not [when they were quiescent] in such a condition that they were capable [δυνάμενα] of moving and being-moved. Rather, one or the other of them must have changed [in order to be so capable]: for this is what must happen in relatives [sc. that for them to become related in a way that previously they were not, at least one of them must change intrinsically], e.g. if not being [previously] double it is now double, one or the other must change, if not both. So there will be some change prior to the first change" (Physics VIII,1 251b5-10). And Aristotle will rely on and develop this argument in Λ6, in arguing that there has always been motion and that there is at least one ἀρχή which has always actually been producing motion and which is of itself an ἐνέργεια, rather than a δύναμις which must be conjoined with something else to produce an ἐνέργεια.¹³

¹³Note however a difficulty. In arguing that δυνάμεις are not sufficient as ἀρχαί, we (and Aristotle) are assuming that a δύναμις cannot be exercised until it is conjoined with the correlative δύναμις. However, in some passages Aristotle speaks of δυνάμεις which will be exercised if nothing external prevents, without needing any positive external assistance. Thus in Θ7 he says that a natural thing, which has its ἀρχή of becoming something within itself, is δυνάμει "those things which it will be of itself if nothing external prevents" (1049a13-14), whereas the matter for an artifact X, which depends on an external active ἀρχή (the art) in order to become X, is still δυνάμει X as long as it contains no internal obstacle to being made X, so that if it is conjoined with the external active ἀρχή it will become X if nothing external prevents (a5-8). the kind of "δύναμις" that the natural thing has (which is the φύσις of the thing, not a δύναμις as more narrowly defined in Θ1 and Δ12) is the kind of δύναμις described in Physics VIII,4: water which has become air, and thus a light body, will actually rise (or be actually up) if nothing prevents it, but as long as something does prevent it, it is still in a sense δυνάμει light, although not in the same sense as when it was water (255b8-21; these are what are traditionally called "second potencies," or perhaps they are a subclass of second potencies, since e.g. a sense or an art might be a second potency, and it will not be exercised unless its appropriate

The argument that Aristotle gives in B#14 on behalf of not-merely-potential ἀρχαί is (as befits B) a general dialectical argument not relying on the scientific understanding of δύναμις developed in Θ. But it is still an important argument, and it gets taken up again in Θ, fortified by the scientific understanding of δύναμις. To repeat the argument, "if the στοιχεῖα are δυνάμει, it is possible [ἐνδέχεται] for none of the things-that-are to be: for even what is not yet is δυνατόν [= able] to be, since what is not comes-to-be, and nothing that is ἀδύνατον [= impossible] comes-to-be" (B#14 1003a2-5, cited above). As we have seen, the hypothesis "the στοιχεῖα are δυνάμει" means that they are potential causes, i.e. δυνάμεις or their bearers. The argument is logically rather complicated. Aristotle establishes the sub-conclusion "some things which are δυνατά [= δυνατὰ εἶναι, capable of being] are not-beings [i.e. not-yet-existent things or not-yet-realized states of affairs]" with an argument that can be filled out as follows: "some things come-to-be; but everything that comes-to-be is δυνατόν, since what is ἀδύνατον does not come-to-be; again, everything that comes-to-be is a not-being, since what already is does not come-to-be; thus some things are both δυνατά and not-beings." But then the sub-conclusion "some things which are δυνατά are not-beings" is supposed to imply, further, that if (all) the ἀρχαί were merely potential causes, it would be possible for nothing (beyond the ἀρχαί themselves) to be, presumably because the sub-conclusion shows that the fact that X is δυνατόν does not entail that X is. The missing step must be "if (all) the ἀρχαί were merely potential causes, the existence of the ἀρχαί would entail merely the fact that the things of which they are causes are δυνατά [and not the further fact that these things are]." The crucial assumption here is that δυνάμεις or δυνάμενα causes are correlated with δυνατά effects: for X to be δυνατόν (in the sense of δυνατόν εἶναι) must be precisely for something to be a δύναμις of X, or Aristotle's argument does not get off the ground. As we saw above, this is just the correlation asserted in Physics II,3: "δυνάμεις [are causes] of δυνατά, and ἐνεργούντα of ἐνεργούμενα [sc. as the housebuilder housebuilding is the cause of house-being-built, cf. 195b5-6]" (195b27-8). And the scientific justification for this causal correlation between δυνάμεις as ἀρχαί and τὸ εἶναι δυνάμει (which is what allows Aristotle to address the question of δυνάμεις as ἀρχαί through his investigation of the causes of being in different senses) comes from the Δ12/Θ1 analysis of δυνάμεις, which shows that because the δύναμις for X does not yield X without external cooperation, it is not sufficient to explain why there is X rather than not-X. (The pre-Socratic physicists, if they think that their narrative explanations are sufficient and that we do not need a further cause to explain why something acts now rather than sooner, will deny this correlation between δυνάμεις and εἶναι δυνάμει in the sense of ἐνδέχεσθαι εἶναι: so they will deny that Aristotle has a right to refer to τὸ ἐνδέχεσθαι εἶναι as "τὸ εἶναι δυνάμει.")

object is present). an embryo would be δυνάμει the animal in this way, and this sort of δύναμις escapes Aristotle's argument in Λ6: "if it is as the theologians [= mythologists] say, who generate [all things] out of night, or if 'all things were together' as the physicists say, the same impossibility [will arise]. For how will it be moved, if there is [sc. in the original pre-cosmic state] no cause in ἐνέργεια? The wood [ύλη] will not move itself, rather [the art of] carpentry moves it, nor will the katamenia or the earth move themselves, rather the [male or plant] seed moves them" (1071b26-31, cited above). These are not the kinds of δυνάμεις that Aristotle's opponents were describing as ἀρχαί of the cosmos, and so Aristotle does not focus his argument on them. Still, there are good reasons why nobody had described the ἀρχαί in this way. If the world arose from a world-embryo which would on its own become a world if nothing obstructed, then that world-embryo could not have been the ἀρχή existing from eternity, since if so it would have taken the time to become the world already, unless something eternal prevented it; and even if there were an external obstacle that had been preventing it from all eternity (which Aristotle thinks is impossible, because something cannot be eternally in an unnatural state), Aristotle's argument remains that there would have to have been a prior motion to remove the obstacle.

Θ3: τὰ δυνάμει ὄντα; against the Megarians

After beginning with an account of δυνάμεις as ἀρχαί, Aristotle begins to consider them as causes of εἶναι δυνάμει only in Θ3; and even there, his understanding of εἶναι δυνάμει mostly appears indirectly. Aristotle begins, in an apparently abrupt digression, by attacking "those who say, like the Megarians, that [something] δύναται only when it ἐνεργεῖ, and that when it does not ἐνεργεῖν it does not δύνασθαι, e.g. that one who is not house-building cannot housebuild, but only the housebuilder-when-he-is-housebuilding, and likewise for the other cases" (1046b29-32); and the rest of the chapter (except possibly the final remark 1047a30-b2) is formally an argument against these people. But the Megarians seem to be mostly a convenient straw man (like e.g. Protagoras elsewhere): by refuting them Aristotle gets the occasion to develop what are basically the thoughts from B#14, showing that (in ordinary cases) a δύναμις for X exists temporally prior to X and also that it is not a sufficient explanation for X, since it can exist whether X does or not. In the process, it becomes much clearer how Aristotle is conceiving τὰ δυνάμει ὄντα; we can also glimpse some of the other conceptions of not-beings or not-yet-beings that Aristotle is competing with.

Aristotle begins with three relatively lightweight reductiones ad absurdum of the Megarian thesis, giving his favorite examples of δυνάμεις--the arts, the senses, and sensible qualities--and pointing to the paradoxical consequences for these kinds of δυνάμεις if the Megarians were right. If something δύναται only when it ἐνεργεῖ, then, Aristotle argues, a person no longer possesses the sense of sight (and is therefore blind) whenever his eyes are closed (1047a7-10), and he is no longer a housebuilder whenever he is not actually building a house (and so must relearn the art of housebuilding each time he returns to exercise it, 1046b33-1047a4). This argument relies on the assumption that the art or the sense is precisely the δύναμις for the corresponding artistic or sensory activity (Aristotle makes this explicit in the art case: "he will not be a housebuilder when he is not housebuilding, for to be a housebuilder is to be able [δυνατός] to house-build, and likewise with the other arts," 1046b34-6). Indeed, arts and senses are Aristotle's standard examples of δυνάμεις as early as the Protrepticus, and one of his first uses of the δύναμις-ἐνέργεια distinction is to distinguish αἴσθησις κατὰ δύναμιν, αἴσθησις in the δύναμις-sense, from αἴσθησις κατ' ἐνέργειαν, αἴσθησις in the ἐνέργεια-sense, as possession from use.¹⁴ But it is not obvious that an art or a sense is precisely a δύναμις, and rather than admit that people become blind whenever they blink, the Megarians might well say that someone can have the sense of sight [ὄψις] without being able to see: having sight is a necessary condition for being able to see (and having the art of housebuilding is a necessary condition for being able to build a house, or rather for being able to build a house well), but it is not a sufficient condition. The presence of an appropriate object, the lack of an opaque body in between, the presence of light, etc., are also necessary conditions for being able to see; when these conditions are all jointly satisfied, then the person is able to see, and that is also when he does see. Likewise, the arts can be qualities which are necessary conditions of δύνασθαι, rather than δυνάμεις in themselves. And similarly with Aristotle's third example, the sensible qualities: Aristotle tries to show that the Megarian position implies "the λόγος of Protagoras" (1047a6-7), since the Megarians cannot distinguish an object's being hot or sweet from its being perceived as hot or sweet (a4-6). The missing assumption must be that to be sweet is just to have a δύναμις for being perceived as sweet (by normally disposed observers in some normal range of circumstances?), so that the Megarians would have to concede that it is not sweet except when it

¹⁴Protrepticus references, perhaps cite my AP paper

is being actually perceived.¹⁵ But while Aristotle's own favorite strategy for avoiding Protagoreanism is to identify a sensible quality with a disposition for being perceived in a certain way, the Megarians need not follow him in this (but may say e.g. that a sensible quality is an insufficient but necessary condition, or an insufficient but necessary part of an unnecessary but sufficient condition, for being able to be perceived, and thus also being actually perceived, in a certain way), and so are not caught in any paradox. These first three anti-Megarian arguments all have the air of routine applications of topical rules ("see if he has confused a δύναμις with an ἐνέργεια"; "see if his thesis implies the λόγοι of Heraclitus or Protagoras"), and while they are not bad after their kind, it is not hard for the opponent to find a premiss to deny so as to escape them.

But Aristotle also gives a rather deeper (though again not unanswerable) argument against the Megarians; and this is essentially an expansion on considerations from B#14. The text is complicated, and I start by quoting it in full.

Again, if what is deprived of δύναμις is ἀδύνατον [= impossible], what is not happening [or coming-to-be, γιγνόμενον] will [sc. on the Megarian thesis] be ἀδύνατον of happening [= it is incapable of happening, or it is impossible for it to happen]; but someone who says that what is ἀδύνατον of happening either is or will be is speaking falsely (for this [sc. "what neither is nor will be"] is what "ἀδύνατον" means), so that these doctrines abolish motion and coming-to-be. For what is standing will stand forever and what is sitting will sit forever, for if it is sitting it will not stand up, since it is impossible [ἀδύνατον] for something to stand up if it is not able [δύναται] to stand up. So if these things cannot be said, it is clear that δύναμις and ἐνέργεια are different (but these doctrines make δύναμις and ἐνέργεια the same, so it is no small thing they are trying to abolish): so that it is possible [ἐνδέχεται] for something to be δυνατόν [= possible], and yet not to be, and [for something to be] δυνατόν [= capable] of not being, and yet to be;¹⁶ and likewise with all the other categories [or predicates], [it is possible {ἐνδέχεται} for something], being capable [δυνατόν] of walking, not to walk,

¹⁵this is still some way from "the λόγος of Protagoras," since the Megarians would still not be admitting that the same object is both sweet and bitter. at most, they would be admitting that it is sweet at one time and becomes bitter at another time (or that it is simultaneously sweet and bitter if it is simultaneously perceived, presumably by two observers in different conditions or circumstances, as sweet and as bitter). but they will have to concede this only if they say that sweetness is simply the δύναμις for being perceived-as-sweet, rather than for being perceived-as-sweet by "normal" observers in "normal" circumstances (however this might be spelled out). but then they are no worse off than Aristotle, since if he says that sweetness is simply the δύναμις for being perceived-as-sweet, he will have to admit that the same object is both sweet and bitter at the same time, as long as it could be perceived by one observer as sweet and by another observer (in a different condition or circumstance) as bitter

¹⁶assuming the transmitted text is correct, Aristotle has got his constructions crossed: in "ἐνδέχεται δυνατόν μὲν τι εἶναι, μὴ εἶναι δέ", "δυνατόν" must be absolute and must be the predicate complement of the first "εἶναι" (since the whole clause must be infinitive to be governed by "ἐνδέχεται"), whereas in "δυνατόν μὴ εἶναι, εἶναι δέ", which Aristotle clearly intends to be parallel, "δυνατόν" must govern "μὴ εἶναι" (since if it were absolute the meaning would be "it is possible for something to be impossible and yet to be," which is absurd; since this clause too is governed by "ἐνδέχεται", we must supply another "εἶναι", presumably from the first "εἶναι" in the first clause, to govern the "δυνατόν" in the second clause). however, "δυνατόν" absolute, meaning "possible," and "δυνατόν εἶναι", "capable of being," are coextensive and Aristotle interchanges them freely and perhaps even without noticing; so the slight incongruity here should be harmless

and, being capable [δυνατόν] of not walking, to walk.¹⁷ That is δυνατόν which, if the ἐνέργεια of what it is said to have the δύναμις of were true of it [ὑπάρξει], nothing ἀδύνατον [impossible] would follow. I mean, e.g., if [something is] capable [δυνατόν] of sitting and it is possible [ἐνδέχεται] for it to sit, if sitting were true of it, there would be nothing ἀδύνατον; and likewise if [something is δυνατόν of] being moved or moving [something else] or standing or making [something else] stand or being or coming-to-be or not-being or not-coming-to-be. (1047a10-29)

Now this argument too is an attempt at reducing the opponent's thesis to some well-known extremist paradox: the Megarians were no more Parmenideans than they were Protagoreans. But the way that Aristotle tries to infer from the Megarians' thesis to the impossibility of change reflects something important.

The first point to note is that Aristotle's argument here is very closely related to his argument in B#14 1003a3-5 (cited above). There (on the way to the conclusion that a δύναμις, since it is a cause of δυνατά qua δυνατά, is insufficient to explain why something should exist rather than not existing) Aristotle had argued that if some things come-to-be, then (since only what is not comes-to-be, and since what is ἀδύνατον does not come-to-be), there must be something that is both δυνατόν and οὐκ ὄν. Here he uses the same considerations to argue the contrapositive, that if only what actually is is δυνατόν (so that what-is-not is ἀδύνατον), then nothing comes-to-be. But since Aristotle takes this to be a reductio ad absurdum of the Megarian claim that only what actually is is δυνατόν, his argument here comes to much the same thing as the argument of B#14 1003a3-5. But there are three points about the argument which emerge more clearly from the fuller Θ3 version.

The first is the connection between being δυνατόν through some δύναμις and being δυνατόν as οὐκ ἀδύνατον. From Δ12 we would get the impression that these are simply two different senses of the word "δυνατόν". "What does not necessarily signify a falsehood, [i.e. either] what is true¹⁸ [or] what is capable [ἐνδέχεται] of being true ... is δυνατόν in one way" (1019b30-33), i.e. by not being ἀδύνατον,¹⁹ but "these things are δυνατά not in accordance with a δύναμις" (1019b34-5), whereas things that are called δυνατά in accordance with a δύναμις all have some relation to an ἀρχή of change in something else or in something qua something else (1019b35-1020a6). But now in Θ3 it turns out that these two senses of δυνατόν are intimately connected. Aristotle now feels free to infer from "S lacks the δύναμις to V" to "S is ἀδύνατον of V-ing" and thus to "S does not V and will not V": since the relevant sense of "S is δυνατόν to V" is explained as "if S V-ed, nothing ἀδύνατον would follow," the sense of "S is ἀδύνατον of V-ing" must be "if S V-ed, something ἀδύνατον would follow," which to avoid circularity can only mean "if S V-ed, contradictories would follow."²⁰ In fact, Aristotle now seems to think that the "physical" formulation "S has the δύναμις to V" and the "logical" formulation "if S V-ed, no contradiction would follow" are mutually entailing, and it is not hard to see what his grounds are. Certainly nothing can physically have the power to do something that it would entail a

¹⁷translating what I suppose must be the sense of the emendation accepted by Ross and Jaeger. as far as I can see, the transmitted text can only mean "[it is possible for something], being capable of walking, not to walk, and, not walking, to be capable of walking." Aristotle may have written this, but I don't think he could have meant it.

¹⁸deleting εἶναι after ἀληθές at 1019b32, with Ross and Jaeger

¹⁹in Δ12 Aristotle has first introduced the relevant sense of ἀδύνατον, and only then introduces this sense of δυνατόν as its negation

²⁰thus the Θ4 example is that the diagonal (of a square) should be measured (by a submultiple of the side)

contradiction for it to do. And conversely, since Aristotle says that "it is ἀδύνατον for something to stand up if it is not able [δύναται] to stand up," he must think that it contains a contradiction for something that has no δύναμις for V-ing (and that thus οὐ δύναται to V) to V.²¹

Another point that emerges more clearly from the fuller argument in Θ3 than from the briefer version in B#14 is the connection between modality (as Aristotle conceives it) and time. Aristotle argues that, if there is nothing δυνατόν other than what actually is, then nothing will ever come-to-be, since what already is does not come-to-be and what is ἀδύνατον also does not come-to-be. And it seems obvious enough that if X is ἀδύνατον (either logically, because X would entail a contradiction, or just physically, because there is nothing capable of producing or becoming/undergoing X), then X does not occur or come-to-be. But Aristotle is claiming, not just that if X comes-to-be at time t, then X must be δυνατόν at time t, but also that X must have already been δυνατόν before time t. Perhaps his reason is that the relevant powers cannot have instantaneously appeared and gone into action at time t, but must already have existed for at least some time in order to act at t. Aristotle speaks as if, if there are not active and passive powers for X at the present moment, then X will never come-to-be, but this is an oversimplification: if, for instance, there is presently something with an active power for producing something with an active power for producing X, and something with a passive power for becoming something with an active power for producing X, and so on, then it should be possible for X to come-to-be at some future moment. But Aristotle can still claim that at the time when X comes-to-be, X must already be δυνατόν through some powers already existing at that time; and he can also claim that, if it is δυνατόν for X to come-to-be at some time in the future, then there must already be δυνάμεις in virtue of which it is δυνατόν for X to come-to-be later, even though these may not be directly δυνάμεις for X, and even though X may not be δυνατόν to come-to-be now.

Here too, though, it seems that the Megarians have resources for resisting Aristotle's conclusions. The Megarians will agree that if X comes-to-be (more correctly, if X is),²² then X is δυνατόν, but they will deny Aristotle's stronger claim that X must have been δυνατόν before it came-to-be. Or, more precisely: before X came-to-be, it was true that X was δυνατόν, since the δυνατόν for the Megarians is "what is or will be";²³ but if (to take an example) the ice will melt on Tuesday, and if it is now Monday, then it is now possible for the ice to melt, but only because it is now possible for the ice to melt tomorrow, not because it is now possible for the ice to melt

²¹two qualifications and an observation. (1) in many cases where it is possible for S to V, we may be reluctant to say that S has a δύναμις for V-ing, because (i) S's V-ing may depend, not on S alone, but on the cooperation of two or even of a great many substances, sometimes also because (ii) S (and any other substance whose cooperation it requires) does not have a "dedicated" δύναμις for V-ing, but a δύναμις which could equally be exercised in many different ways, and sometimes also because (iii) that these substances should cooperate in such a way that S V's is not explainable teleologically, but is simply an accident of the way they come together, so due to "chance" or "spontaneity" in the sense of *Physics* II. Charlotte Witt's example of my "δύναμις" to win the lottery combines all of these features. Nonetheless, the fact that the outcome is possible is explained by each of the substances which are conjoined having a certain δύναμις. (2) as noted below, it may be that S will V the day after tomorrow, although it does not today have a δύναμις for V-ing, but will acquire such a δύναμις only tomorrow. Nonetheless, the fact that the outcome is possible is explained by certain present δυνάμεις, e.g. S's passive δύναμις to receive the δύναμις to V, and something else's active δύναμις to produce in S the δύναμις to V. (3) there is what looks like a surreptitious shift of scope in saying that "it would entail a contradiction for S, which has no δύναμις to V, to V": what entails a contradiction is not "S is or will be V-ing" but "the thing which has no δύναμις to V is or will be V-ing." But, while there is some contextual variation in what Aristotle means by saying that the assumption that S V's would entail a contradiction, he can often be taken to mean that the assumption that S V's, together with the present attributes of S, would entail a contradiction; and that S presently has no δύναμις to V is a present attribute of S.

²²the Megarian denial of a process of coming-to-be should not make too much difference here

²³references

today ("the ice melts on Monday" neither is nor will be true, and is thus for the Megarians impossible). Aristotle will say that, if the ice will melt on Tuesday, this requires that Tuesday it will have the δύναμις of meltability, and that it will have had the δύναμις of meltability for at least some time before it exercises this δύναμις (unless the ice undergoes an intrinsic qualitative change between Monday and Tuesday, it will have had this δύναμις already on Monday), and that it will therefore already have been δυνατόν of melting; and meltability is not a δύναμις for melting-on-Tuesday, but simply for melting, without a time-index, so that now on Monday it is possible (without time-index) for the ice to melt, and this fact is determined by the present qualitative state of the ice, not by facts about what will happen or will be able to happen tomorrow. But the Megarians will deny that the present qualitative state of the ice is enough to make it possible for the ice to melt: a passive power, as long as it is without the correlative active power (or vice versa), not only will not but cannot be exercised. So for X to be δυνατόν, there is required not simply some S with a passive power for X, but also some T with an active power for X; but again, as long as these powers are not conjoined, or are obstructed from acting, they not only will not but cannot be exercised. So for X to be δυνατόν, the appropriate powers must exist, and be conjoined and unobstructed; but once these necessary conditions for X to be possible are jointly satisfied, X will also actually happen.²⁴ Aristotle will reply that S may have a δύναμις for X without having a δύναμις for X-in-all-circumstances, and that as long as S has a δύναμις for X, it is correct to say that X is δυνατόν, even if X is not δυνατόν-in-all-circumstances, and even if circumstances can therefore prevent X from actually happening.²⁵

Δυνατά and δυνάμει ὄντα in different categories: Θ3 and Δ7

A final and important point that emerges from Θ3 is that "δυνατόν" can be said in different syntactic contexts, and of things in different categories. Aristotle says, "it is possible for something to be δυνατόν, and yet not to be, and [for something to be] δυνατόν of not being, and yet to be; and likewise with all the other κατηγορία [categories? predicates?], [it is possible for something], being δυνατόν of walking, not to walk, and, being δυνατόν of not walking, to walk" (1047a20-24, cited above). Here, in contrasting different κατηγορία, Aristotle apparently means to contrast an expression "S is δυνατόν," equivalent to "S is δυνατόν εἶναι", with an expression like "S is δυνατόν βαδίζειν": for S to exist, or to be ἀπλῶς, is different from for S to be P, where P is a predicate in some category of accidents, but "δυνατόν" can be attached to either kind of predication. However, even within the syntactic type of expressions "S is δυνατόν," in the sense of "S is δυνατόν εἶναι", S itself could be of different category-types. When Aristotle contrasts "S is δυνατόν εἶναι" with "S is δυνατόν βαδίζειν", S must be a substance in the second case, and so it is easiest to think of it as also being a substance in the first case: as Socrates, even when he is not actually walking, is capable of walking, so too, even when Socrates does not actually exist, he is capable of existing. But in "S is δυνατόν" (in the sense of "S is δυνατόν εἶναι"), S could also be a propositional entity such as for-Socrates-to-walk (τὸ Σωκράτην βαδίζειν), and

²⁴need some rewriting in this paragraph. what I've just said is presumably not the Megarians' own position, just an ad hominem argument they could use against Aristotle. rather than saying that the ice has a δύναμις of meltability but it is not δυνατόν for it to melt, they will presumably deny that it has a δύναμις of meltability before it actually does melt. Aristotle's dispute with the Megarians here is typical of his insistence that things have the monadic-dispositional properties that they appear to have, as against revisionist claims (typical of the minor Socratic schools) that things really have only relational-occurrent properties (e.g. "sweetening-Socrates-now" vs. "sweet")

²⁵so Θ5 1048a16-21 (I think: the text isn't pellucid)--check Ross, Makin. thus: (S can produce X) in C, but not (S can produce X in C))

Aristotle's examples of τὸ δυνατόν as opposed to τὸ ἀδύνατον are very often of this kind (in Θ4 τὴν διάμετρον μετρηθῆναι, in Δ12 both τὸ τὴν διάμετρον σύμμετρον εἶναι and τὸ καθῆσθαι ἄνθρωπον): when in Δ12 Aristotle says that something is δυνατόν as opposed to ἀδύνατον "whenever it is not necessary for the contrary to be false" (1019b28-9), he seems to be assuming that the δυνατόν is propositional. On the other hand, there are also syntactic contexts where it is not the whole proposition but its predicate which is said to be δυνατόν or ἀδύνατον, e.g. "τὸ μετρεῖσθαι ἀδύνατον" (Θ4 1047b12): Aristotle of course intends this as equivalent to "τὸ τὴν διάμετρον μετρηθῆναι ἀδύνατον" (or rather "τὸ τὴν διάμετρον καὶ τὴν πλευρὰν σύμμετρηθῆναι ἀδύνατον"), but this is just to say that "P is δυνατόν/ἀδύνατον for S" is equivalent to "for-S-to-P is δυνατόν/ἀδύνατον". The predicate case will be closely parallel to the propositional case: just as a proposition must be δυνατόν as a precondition of its being true, so a predicate must be δυνατόν (for some given subject) as a precondition of its being true (of that subject). And the contexts in which "δυνατόν" is affirmed of a predicate are important, because they link the contexts in which "δυνατόν" is affirmed of a proposition with the contexts in which "δυνατόν" means "capable." As we have seen, Aristotle says, "that is δυνατόν [= capable] which, if the ἐνέργεια of what it is said to have the δύναμις of were true of it [ὑπάρξει], nothing ἀδύνατον would follow. I mean, e.g., if [something is] δυνατόν of sitting and it is possible [ἐνδέχεται] for it to sit, if sitting were true of it, there would be nothing ἀδύνατον" (1047a24-8, cited above).²⁶ this text makes it clear that "Socrates is δυνατός of sitting" is equivalent to "sitting is δυνατόν for Socrates" and thus to "for-Socrates-to-sit is δυνατόν".

It is clear from Θ3 that Aristotle does not intend there to be fundamentally different senses of δυνατόν in these different contexts. Rather, "S is δυνατόν to P," "P is δυνατόν [for S]" and "for-S-to-P is δυνατόν" are supposed to be inter-transformable. And this allows us to see how Aristotle is construing "X is δυνατόν εἶναι", at least in the case where X is a being in some non-substance-category. Thus if X is cutting [τέμνειν], in the category of ποιεῖν, or sitting [καθῆσθαι], in the category of κεῖσθαι, X will be δυνατόν εἶναι only if X is δυνατόν εἶναι in some subject S, or δυνατόν for some subject S, where X is δυνατόν for S (possible for S) if S is δυνατόν to X (capable of X-ing). So, at least in these cases, the grammatical analogy between "X is δυνατόν εἶναι" and "X is δυνατόν βαδίζειν" is misleading: X is δυνατόν βαδίζειν because of a power which X itself possesses (even when it is actually sitting) for walking, but X is δυνατόν εἶναι, not because of a power for existing which X might possess even when it is actually non-existent, but because of a power that something else has for X: only actually existing things can actually have powers, and so X, before it actually exists, cannot have a power for existing. In medieval scholastic terminology, X's active and passive δυνάμεις for cutting or being heated are "subjective potencies," powers existing in X as a subject, the "δύναμις" in virtue of which X (τὸ τέμνειν, or τὸ Σωκράτην τέμνειν) is δυνατόν εἶναι is an "objective potency," that is, not a power existing in X itself, but a power existing in something else which has X as its object. Thus, at least where X is in the categories of ποιεῖν or πάσχειν, X is δυνατόν εἶναι (and δυνατόν of being in something, or δυνατόν for something) because something else has the active power to produce X or the passive power to receive or undergo X.

The categories of ποιεῖν and πάσχειν are of course the original cases (for Aristotle's predecessors, and for Aristotle himself) for the notion of δύναμις and (in Aristotle) for the δύναμις/ἐνέργεια distinction. To understand how Aristotle's mature notions of δύναμις and ἐνέργεια go beyond earlier notions, we must understand the process by which the notions of δύναμις and of the δυνατόν, and of ἐνέργεια, are extended (in different syntactic contexts) from

²⁶note on what is certain and uncertain in the construal and why

ποιεῖν and πάσχειν to the other categories including substance. We have noticed this process in Θ3, and it becomes the object of a fuller discussion in Θ6, but Aristotle is perhaps clearest about the logic of the process in his account of τὸ ὄν δυνάμει and ἐντελεχείᾳ at the end of Δ7:

Being also signifies what is, on the one hand potentially [δυνάμει], on the other hand actually [ἐντελεχείᾳ], [any] of the aforementioned [kinds of being]: for we say that both what sees potentially [δυνάμει, i.e. what has the sense of sight] and what sees actually [ἐντελεχείᾳ] are seeing, and likewise we say that both what is capable [δυνάμενον] of exercising [χρηῖσθαι] knowledge [ἐπιστήμη] and what is exercising it know, and both that to which rest already belongs and what is capable [δυνάμενον] of resting [are] resting. And likewise with substances: for we say that Hermes is in the stone, and that the half of the line is, and that what is not yet ripe is grain; but when [something like this] is δυνατόν [= capable of being, or capable of being present in something, or capable of being something], and when it is not yet [so δυνατόν], we must determine elsewhere [= Θ7]. (Δ7 1017a35-b9)²⁷

Here, as generally in Δ7's account of being, Aristotle goes cheerfully back and forth between 1-place and 2-place uses of εἶναι. He starts here from 2-place uses, and specifically from cases of "S is P" where "P" is a participle, and in the first instance the participle of a verb of ποιεῖν or πάσχειν. Indeed, he starts more specifically from the verbs of sensory and intellectual cognition which were his favored examples of the δύναμις/ἐνέργεια distinction already in the Protrepticus: these verbs are good examples for the equivocity of a word between δύναμις- and ἐνέργεια-senses, since it is true, as a matter of ordinary language, that the geometer who is actually contemplating the Pythagorean theorem and the geometer who merely has the ability to contemplate it are both said, in different senses, to know the theorem.²⁸ But (as already in the Protrepticus) the δύναμις/ἐνέργεια distinction is easily extended to all verbs of ποιεῖν and πάσχειν: the thought is not that in "S is V-ing" the verb "is" is ambiguous, but rather that the verb "V" (or the participle "V-ing") is ambiguous between a δύναμις- and an ἐνέργεια-sense. It takes a more systematic generalization of the ambiguity to other sentences of the form "S is P" before it can be seen as an ambiguity in the verb "is." Here Aristotle first offers a generalization to sentences "S is P" where "P" is a participle of a verb that does not signify ποιεῖν or πάσχειν or κίνησις:²⁹ so he speaks here of "resting," as in Θ3 he speaks of being δυνατόν (capable) of sitting or standing alongside being δυνατόν of walking. In terms of categories, he is here extending the expression "S is δυνάμει P" from cases where P is in the categories of ποιεῖν or πάσχειν (or in the single category of κίνησις) to cases where P is in the category of κείσθαι, "position." But, it could then be argued, it is only a grammatical accident that in "S is sitting" the predicate is expressed by a verb or participle, and in "S is white" the predicate is expressed by an adjective: if we can say "S is δυνάμει sitting," we should also be able to say "S is δυνάμει white," and so extend the expression "S is δυνάμει P" to the category of quality, and presumably all other categories of accidents as well.

²⁷the following three paragraphs now overlap heavily with a newer discussion in Iγ1; I think how to rationalize

²⁸so, with these same examples, Protrepticus B79, which cite in full; perhaps also comment on B80-81

²⁹recall that in Θ1 he speaks of δυνάμεις for ποιεῖν and πάσχειν as δυνάμεις for κίνησις. this is using "κίνησις" in a loose sense (I will say more about this below in talking about Θ6), but in the Protrepticus he had without any reservations identified "ποιεῖν or πάσχειν" with "κίνησις"

However, in Δ7 Aristotle skips this stage, saying immediately "and likewise with substances," which are for his purposes the most important new cases for δύναμις, once it is extended beyond κίνησις or ποιεῖν and πάσχειν: this is why he says in Θ6 that of the pairs of things said as ἐνέργεια to δύναμις, "some are [said] as κίνησις to δύναμις and others as substance to some matter" (1048b8-9), ignoring qualities and the like. And it is striking that his three Δ7 examples of τὸ ὄν δυνάμει applied to substances illustrate three different syntactic contexts in which we might say that something ἐστὶ, meaning that it ἐστὶ δυνάμει: "Hermes is in the stone" asserts that something is present in something, "the half of the line is" asserts that something exists, and "what is not yet ripe is grain" asserts that something is something. It is possible that Aristotle did not specifically intend to cover all possible constructions of substantial εἶναι, and that it is only by chance that he did not write, say, "the Hermes in the stone is": certainly he does not intend there to be any fundamental ontological difference between the situations described by the three sentences. But the ontological equivalence between the three types of sentence is just the point: and this is what allows Aristotle's analysis of εἶναι δυνάμει as applied to non-substances to be extended to the substantial case.

The same ontological equivalence occurs in the non-substantial case. Thus the predicative "Socrates is walking" is equivalent to the local "an act-of-walking [βάδισις or βαδίζειν] is present in Socrates," and the existential "an act-of-walking exists" or "a walking-thing exists" is equivalent to the predicative "some H is walking" or the local "an act-of-walking exists in some H," where H is the per se ὑποκείμενον of walking (perhaps footed-animal is the per se ὑποκείμενον of walking, as nose is of snub and odd is of number). And because the predicative "some H is walking" can be said δυνάμει as well as ἐνέργεια, the local and the existential sentence can also be understood δυνάμει. What Aristotle is now claiming is that in the substantial case too the predicative, local and existential sentences can also be taken in a δύναμις-sense; and here too, as in non-substance cases, the δύναμις-sense is seen most clearly in the predicative construction. Aristotle thinks that every material substance, as well as every accident, has some per se ὑποκείμενον, its essential matter or "matter of the form";³⁰ and if M is the per se ὑποκείμενον of S, then "S exists" is equivalent to "some M is S" or to "[the form of] S is in some M." So if the predicative sentence "M is S," like action- or passion-predications, can have a δύναμις-sense, then local and existential sentences about substances can too.³¹ This way of thinking about "S is δυνάμει ὄν" or "S is δυνατόν" is allied with Aristotle's analysis, in Physics I,7, of "S comes-to-be": uncontroversially, "white comes-to-be" is equivalent to "something [some appropriate substance] comes-to-be-white"; Aristotle then claims that, even for a substance, "S comes-to-be" is equivalent to "something [some appropriate matter] comes-to-be S."³² So here, in Metaphysics Δ7 and in Θ, Aristotle is claiming that, just as

³⁰reference back to discussions in Part II (in IIδ?), and texts of Aristotle there cited (the basic text from Δ, E1 and Physics II on the snub, Z11)

³¹by "local" here I mean sentences like "this form or composite is in this matter," not like "Socrates is in the Lyceum"

³²to judge from Aristotle's texts (in Physics I and GC I), he assumes that the default view will be that the coming-to-be of a substance is coming-to-be ἀπλῶς and that coming-to-be ἀπλῶς is coming-to-be out of nothing, since if S comes-to-be out of M, M comes-to-be S, and thus S is not coming-to-be ἀπλῶς but is merely coming-to-be S, i.e. an already-existing thing is merely acquiring a new attribute and no substantial coming-to-be is taking place. since it is also the default view that there is no coming-to-be out of nothing, there is an aporia against the possibility of substantial coming-to-be, an aporia which Aristotle is trying to resolve. Aristotle's answer is to agree that substantial coming-to-be is coming-to-be ἀπλῶς, but say that coming-to-be ἀπλῶς does not have to be coming-to-be out of nothing: when S comes-to-be out of M, or M comes-to-be S, this is still the coming-to-be ἀπλῶς of a new substance S, as long as M is not τότε τι, so that there is not the same this at the beginning and the end of the process.

"walking is δυνατόν [= δυνατόν εἶναι or δυνάμει ὄν]" is equivalent to "something [some appropriate substance] is δυνάμει white," so too for a substance, "S is δυνατόν [= δυνατόν εἶναι or δυνάμει ὄν]" is equivalent to "something [some appropriate matter] is δυνάμει S."

The analogies between coming-to-be and being-δυνάμει, and between the substantial and non-substantial cases, can be seen in the argument from B#14, "if the στοιχεῖα are δυνάμει, it is possible [ἐνδέχεται] for none of the things-that-are to be: for even what is not yet [τὸ μήπω ὄν] is δυνατόν [= able] to be, since what is not comes-to-be, and nothing that is ἀδύνατον [= impossible] comes-to-be" (1003a2-5).³³ Here it is left ambiguous, and makes no difference to the argument, whether the things-that-are are substances like Socrates, accidents like κίνησις [= τὸ κινεῖσθαι], or propositional entities like τὸ Σωκράτην κινεῖσθαι: if any of these are-not, then it is possible for them to come-to-be (in the case of τὸ Σωκράτην κινεῖσθαι, we might translate γίνεσθαι as "happen" rather than "come-to-be"), as long as they are δυνατὰ εἶναι; where τὸ Σωκράτην κινεῖσθαι is δυνατόν εἶναι if Socrates is capable of being moved, κίνησις is δυνατόν εἶναι if some appropriate substance is capable of being moved, and Socrates is δυνατόν εἶναι if some appropriate matter is capable of being Socrates. In any of these cases, Aristotle is saying, ἀρχαί that are merely δυνάμεις or potential causes can explain only the fact that Socrates or κίνησις or τὸ Σωκράτην κινεῖσθαι is δυνατόν εἶναι, and not the fact that it actually is. Indeed, while on a quick reading of B#14 we might be most inclined to think of the "things-that-are" as substances, when Aristotle takes up the argument again in Λ6 his key example is κίνησις: if the ἀρχαί are δυνάμεις, "κίνησις will not be eternal: for it is possible for τὸ δυνάμει ὄν not to be" (1071b18-19):³⁴ κίνησις is δυνάμει οὔσα through a δύναμις of moving or a δύναμις of being moved, and Socrates is δυνάμει ὄν through a δύναμις of producing Socrates or a δύναμις of becoming Socrates.

Aristotle thus analyzes "X ἔστι" and "X ἔστι δυνάμει" or "X ἔστι δυνατόν [εἶναι]" where X is a substance by analogy with the cases where X is a proposition or a predicate, especially of action or passion; this allows him to give the causal conditions for X's existing δυνάμει (the appropriate δυνάμεις) and also for X's coming to exist in actuality (the exercise of these δυνάμεις). His account of τὰ μήπω ὄντα as τὰ δυνάμει ὄντα, and of what must happen for them to come to exist in actuality, contrasts sharply with the only earlier account of τὰ μὴ ὄντα in the sense of τὰ μήπω ὄντα, the fifth Hypothesis of Plato's Parmenides (160b5-163b6); and Aristotle is well aware of the contrast. Plato here hypothesizes that some one thing is non-existent (ἐν εἰ μὴ ἔστιν), and argues that, if so, that thing must be sayable and knowable (160c2-d6) and have various other predicates (being the same as itself and different from other things, and so on), and that it must be in some sense (οὐσίᾳς δεῖ αὐτὸ μετέχειν πῆ, 161e3) in order for these predicates to be truly affirmed of it. But since what-is-not is nowhere,³⁵ this non-existent thing cannot be locally moved, either from place to place or by rotation within a single place (162c6-d5); nor can

philosophers before Aristotle had assumed (and most philosophers after Aristotle would continue to assume) that an ultimate ὑποκείμενον must be τόδε τι (and must be the οὐσία of the things that are made of it or come-to-be out of it), and so are unable to take this solution

³³see above n12(?) for problems of construal; I assume that εἶναι here (except in the original "the στοιχεῖα are δυνάμει") is existential, i.e., 1-place

³⁴see discussion above for the relation of this text to B#14; here, and there, take account also of Λ10 1075b30-34. note also, just before this text, that if the ἀρχαί do not act [ἐνεργεῖν], "οὐκ ἔσται κίνησις" (1071b17). also discuss Θ8 1050b8ff, also taking up B#14: "τὸ μὴ δυνατόν ὑπάρχειν οὐκ ἂν ὑπάρξειεν οὐθενί" (1050b9-10) seems to imply that what is δυνατόν is a predicate that may possibly apply to some given subject, but Aristotle's discussion seems to include δυνατὰ of every conceivable logical type, passing from one type to another without batting an eye

³⁵refs; a commonplace also endorsed by Aristotle ("where is the goatstag or the sphinx?")

it be altered, since then we could no longer reidentify it as the same non-existent thing (162d5-8); so it cannot be moved at all, and must therefore be at rest (162d8-e2). Nonetheless, following the program of the Parmenides, Plato also argues that a one-that-is-not is moved, in a different sense: for it has μεταβολή from being to not-being (and presumably vice versa), and the interlocutor agrees that every μεταβολή is a κίνησις (162b9-c6). We know that Aristotle was aware of this passage, and took it seriously as a rival account of substantial coming-to-be, since in Physics V,1 he goes out of his way to argue that γένεσις, defined as μεταβολή ἐκ μὴ ὑποκειμένου εἰς ὑποκείμενον (224b35-225a20), is not a kind of κίνησις, since its subject would be τὸ μὴ ὄν and τὸ μὴ ὄν cannot be moved (with a glance at the Parmenides, Aristotle notes that this follows since τὸ μὴ ὄν is nowhere, and adds that τὸ μὴ ὄν also cannot be at rest, 225a25-32).³⁶ On Plato's account, it seems as if the not-yet-existent object is simply waiting in an antechamber, and moves from there into physical space when it comes-to-be; Plato is not concerned to ascribe causes either for the thing's initial quasi-existence or for its transition to full existence, and certainly it would be no help to say that the non-existent object has a δύναμις for existing and that when it exercises this δύναμις it steps into physical space. By contrast, Aristotle puts the δυνάμεις in already existing objects, and can say that a new substance (like a new accident) comes-to-be when an appropriate δύναμις is exercised.

Aristotle is alluding to this passage of the Parmenides in the last lines of Metaphysics Θ3:

The name "ἐνέργεια", which is applied to ἐντελέχεια [ἢ ἐνέργεια τοῦνομα, ἢ πρὸς τὴν ἐντελέχειαν συντιθεμένη], has been extended [ἐλήλυθε] to other things from [applying to] motions [κινήσεις] especially, for it is motion which appears especially to be ἐνέργεια. For this reason they do not attribute being-moved [κινεῖσθαι] to things-that-are-not, whereas they do attribute other predicates [κατηγορίαι], e.g. that things-that-are-not are thought and desired, but not that they are moved; and this is because they are not in ἐνέργεια, and they would be in ἐνέργεια [if they were moved]. For some things-that-are-not are δυνάμει: but they are not, because they are not ἐντελεχεία. (1047a30-b2)

The "they" who attribute other predicates, but not motion, to things that are not, are certainly Plato (who specifically lists being sayable and knowable, although not being desired, among the predicates of the non-existent one). Plato does not have the term "ἐνέργεια", but he wants to say that the non-existent object is in one sense, and is not in a fuller sense; but all he can think to deny to this object (besides a spatial location), in order to bring out the full-blooded sense of being that it lacks, is motion. In Aristotle's terms, this is because "it is motion which appears especially to be ἐνέργεια". However, Aristotle says, the name "ἐνέργεια" is rightly extended, not only to actions and passions involving no change of state, but to actuality in general, in every category including substance. (Aristotle here uses the word "ἐντελέχεια", otherwise almost totally suppressed in Θ, because here he needs a word that means unambiguously "actuality" rather than "activity," precisely in order to say that even actualities which are not actions or passions should be called "ἐνέργεια" too). Just because the notion of δύναμις as a cause, and of δυνάμει εἶναι as its effect, are being extended to the case of substance, the correlative notions of ἐνέργεια and ἐνεργεία εἶναι will also be extended.

³⁶note comment above on what is radical about Physics I,7 (namely, that S-becoming-P can be substantial, and thus ἀπλῶς, coming-to-be); and connect with earlier discussion in Iβ2 about Γ2 against a form of being which a non-existent object would come-to-participate-in (which is the Parmenides' view)

Extending ἐνέργεια: from Θ3 and Δ7 to Θ6

In the first half of Θ6 (Θ6α = 1048a23-b17), for the first time, Aristotle thematizes this extension of the concept of ἐνέργεια across the categories from κίνησις to οὐσία. As Aristotle says, "since we have spoken about the δύναμις which is said in relation to motion, let us determine about ἐνέργεια, what ἐνέργεια is and what it is like: for when we make these distinctions the δυνατόν will also become clear at the same time, that we call δυνατόν not only what is of such a nature as to move something else or be moved by something else, either simpliciter or in a particular way [i.e. well], but [we speak of δυνατόν] also in a different way, for the sake of which we have also gone through these [kinds of δυνάμεις and δυνατά]" (1048a25-30). Here Aristotle is picking up a promise from Θ1: "first [we should determine] about the δύναμις which is so called in the most primary sense, but is not the most useful for what we are now aiming at: for δύναμις and ἐνέργεια are broader than only those which are said πρὸς κίνησιν. But after we have spoken about this [kind of δύναμις], we will also explain the other [δυνάμεις] in the determinations about ἐνέργεια" (Θ1 1045b35-1046a4, cited above).³⁷ When he was talking only about δυνάμεις that are πρὸς κίνησιν, he had no need to speak more than incidentally of ἐνέργεια (since it was sufficient to speak of κίνησις or ποιεῖν and πάσχειν), but now, rather than simply saying that we can extend the concept of δύναμις, he has to say that we can extend the correlative concepts of δύναμις and ἐνέργεια together: that is, by seeing that the same relation that holds between a κίνησις and its δύναμις also holds between some other X and Y, we will see that X is to Y as ἐνέργεια πρὸς δύναμιν, so that the concept of ἐνέργεια, and the correlative concept of δύναμις, can be extended proportionately or analogically from κινήσεις and δυνάμεις πρὸς κίνησιν to cover these cases as well. Aristotle wants to do this for two reasons, first because, as he says here at the beginning of Θ6 (and in the earlier passage from Θ1), the kind of δυνάμεις (and of δυνατά things) that are most useful for his investigation are not δυνάμεις πρὸς κίνησιν, but some other δυνάμεις, namely the kind of material ἀρχή that he will discuss in Θ7, which has a stronger claim to be the first of all things. But, secondly, he also wants to explore the extended concepts of ἐνέργεια and δύναμις because, on the view that he himself will defend against most earlier philosophers in Θ8, ἐνέργεια are prior to δυνάμεις, so that the truly first ἀρχαί will be ἐνέργεια; and these ἀρχαί will not be κινήσεις but some other and prior kind of ἐνέργεια. And the nature of these ἀρχαί (as ἐνέργεια, or ἐνεργοῦντα causes) will be best shown by contrasting them with the δυνάμεις and δυνάμενα causes that earlier philosophers had posited as ἀρχαί: this order of exposition is reflected, not only in Θ1-5's account of δύναμις preceding Θ6's account of ἐνέργεια, but also in Θ7's account of the material ἀρχή that is δύναμις each thing, preceding Θ8's revisionist claim that ἐνέργεια is prior to δύναμις.

So too in Θ6, Aristotle begins his account of ἐνέργεια with a negative, contrastive description: "ἐνέργεια is τὸ ὑπάρχειν τὸ πρᾶγμα not in the way we call δύναμις: we call δύναμις [i.e. we say that something ὑπάρχει δύναμις] in the way that Hermes [ὑπάρχει, or is] in the wood and the half [-line] in the whole, namely because they would be separated out of it, and in the way that even the person who is not contemplating [ὑπάρχει, or is] knowing, as long as he is capable of contemplating; the other way [of ὑπάρχειν we call] ἐνεργεία"

³⁷questions of consistency in translation policy, here and in the previous citation of this text (distinguish vs. determine, said vs. so called)

(1048a30-35).³⁸ Aristotle is here closely following the account of being *δυνάμει* and *ἐντελεχεία* at the end of Δ7 (1017a35-b9, cited above), which had given Hermes, the half-line, and the person capable of exercising knowledge, among its examples of being *δυνάμει*.³⁹ This means that here, unlike the main treatment of *δύναμις* in Θ1-5, Aristotle is treating the nominatives *ἐνέργεια* and *δύναμις* as abstracts derived from the adverbial datives *ἐνεργεία* and *δυνάμει*: *ἐνέργεια* and *δύναμις* are two contrasting senses of being, whether of predicative being as in the person who is potentially knowing or locative being as in the Hermes which is potentially in the wood (the half-line is an example of existential being in Δ7, of locative being here; Aristotle is indifferent to which way it is formulated). Aristotle now uses *ἐνέργεια*, rather than (as in Δ7) *ἐντελέχεια*, for the sense of being contrasted with *δύναμις*, and the justification for this must come from what we have already seen about *ἐνέργεια* and *δύναμις* in Θ. Θ3 had contrasted *δύναμις* with *ἐνέργεια* (e.g. 1047a18-19, φανερόν ὅτι δύναμις καὶ ἐνέργεια ἕτερόν ἐστιν): Aristotle had concentrated there on examples of *δύναμις* in the usual Θ1-5 sense, and argued against the Megarian thesis that something has such a *δύναμις* only when it *ἐνεργεῖ*. This gave rise to a contrast between something being merely *δυνατόν εἶναι*, or *δυνάμει ὄν*, and being in a fuller sense, in the first instance only for *κινήσεις*: Socrates is walking, or his act of walking is, merely *δυνάμει* when Socrates merely has the *δύναμις*, and *ἐνεργεία* when Socrates exercises it. But, as Aristotle had noted in passing at the end of Θ3, "the name '*ἐνέργεια*', which is applied to *ἐντελέχεια*, has been extended to other things from [applying to] *κινήσεις* especially" (1047a30-31). Now, in Θ6, he calls on Δ7 for its extension of being *δυνάμει* from *κινήσεις*-cases to *οὐσία*-cases, and he specifies that whenever something is, not merely in the diminished sense in which the person capable of contemplating is knowing, or Hermes is in the wood, then it is *ἐνεργεία*, regardless of whether the thing (the predicate, or the subject of the locative or existential judgment) is a *κίνησις* or an *οὐσία*. And these dative-adverbial uses of *δύναμις* and *ἐνέργεια* are not disconnected from the senses in which *δυνάμεις* and *ἐνέργειαι* might be *ἀρχαί*, since wherever A is P *ἐνεργεία* and B is P *δυνάμει*, B will have (or be) a *δύναμις* for being P, and A will have (or be) an *ἐνέργεια* of being P. Indeed, when Aristotle returns to issues about priority and *ἀρχαί*, in Θ7-9 and in Λ, it is impossible to separate the dative-adverbial senses of *δύναμις* and *ἐνέργεια* from powers and their exercises. While Aristotle sometimes speaks of a candidate *ἀρχή* not as itself a *δύναμις* but as *δυνάμει* P or *δυνατόν* for being P, he also speaks of *δύναμις* and *ἐνέργεια* as *ἀρχαί* (as in Λ5) or asks of

³⁸I tentatively read the last words as *θεωρήσαι· τὸ δὲ ἐνεργεία*, with EJ (and most other manuscripts and the *Translatio Media* and Ross and Jaeger), but *θεωρήσαι τὸδε ἐνεργεία* with Ab (and Ib) and Moerbeke is attractive {but add now, from a letter to Alan Code: "I think I now incline to EJ instead of Ab/William, since the emphasis is supposed to fall on the notion of *ἐνέργεια*, which is now being officially introduced. He recalls from Δ7 how we can say that something *ἔστι/ὑπάρχει* *δυνάμει*, whether predicatively or locatively/existentially, whether a *κίνησις* or an *οὐσία*; then he says, I suppose innovating on Δ7 (which had *ἐντελέχεια*, not *ἐνέργεια*), 'the other way of being I call *ἐνεργεία*' (1048a35). This is what bears the stress (he has after all said that this will be a discussion of *ἐνέργεια*, τί ἐστιν καὶ ποῖόν τι, and he picks this up at the end of the chapter, although a sense of *δύναμις/δυνατόν*, not πρὸς κίνησιν but πρὸς οὐσίαν, will also become clear at the same time); he then goes on to try to clarify this new notion of *ἐνέργεια* by *ἐπαγωγή*."} note also Code's point that, on the Ab reading, there would be a circularity, since *ἐνέργεια* would be defined by the negation of *δύναμις* and *δύναμις* would be defined by reference to *ἐνέργεια*. this is not necessarily fatal, but it's a disadvantage of the Ab reading. I agree with Code's point that τὸ δέ (if we read that) is contrasting with the way Hermes is, and not going back to the previous clause

³⁹to be strict about it, Hermes was in stone in Δ7 and in wood in Θ6. it was explicitly a half line in Δ7, here just ἡ *ἡμίσεια*, but the feminine gender (here and in the preceding ἡ ὄλη) reflects a suppressed substantive *γραμμή* (this is common). we have here a typical instance of the sort of juncture at which Aristotle calls on Δ in later books of the Metaphysics.

some candidate ἀρχή whether its οὐσία is δύναμις or ἐνέργεια (Λ6 1071a17-20, Λ9 1074b18-21 etc.); in Θ8 he asks whether ἐνέργεια or δύναμις is prior, and while sometimes he treats this as asking whether things that are ἐνεργεία P or δυνάμει P are prior,⁴⁰ he also states his conclusion as being that "ἐνέργεια is prior to δύναμις and to every other principle of change [i.e. to φύσεις as well as δυνάμεις]" (1051a2-3, picking up 1049b4-10), and when in Θ9 he says that evil (which always results from the bad ἐνέργεια of a δύναμις that is per se a δύναμις for some good ἐνέργεια) is "posterior by nature to δύναμις" (1051a18-19), he means δύναμις as a power that can be exercised in different ways, and not simply as the condition that δυνάμει ὄντα are in.

In Θ6, to explain the concept of ἐνέργεια more fully than by saying that it is not the way things are δυνάμει, Aristotle gives a series of examples where A is to B as ἐνέργεια is to δύναμις; that is, where A is P ἐνεργεία and B is P δυνάμει. As we would expect, he begins with his most standard examples of a δύναμις which can be either exercised or merely possessed, namely τέχναι/ἐπιστήμαι and the sensory powers, and then extends from these to cases where the predicate P is not an action or passion but a substance.

What we mean will become clear in particular cases through enumeration: we must not seek a definition for everything, but must also get an overview through analogy,⁴¹ that [it is] as the [housebuilder] housebuilding is to the housebuilder, and the waking is to the sleeping, and the seeing is to what possesses sight but has its eyes shut, and what has been separated out of the matter is to the matter, and the finished product is to the unworked [raw material]. Of this opposition let one member be marked out as ἐνέργεια,⁴² the other as the δυνατόν; but they are not all called [= said to be P] ἐνεργεία in the same way, except⁴³ by analogy, as this is in this or to this, so this is in this or to this: for some are as κίνησις to δύναμις, others as οὐσία to some matter. (1048a35-b9)

The three examples of things said as κίνησις to δύναμις are all Aristotelian commonplaces: the seeing and what possesses sight but has its eyes shut are in the Protrepticus (B79), and so are the waking and the sleeping (B80), where being awake is analyzed as exercising the sensory powers,⁴⁴ and the predicate that the waking has in a stronger way than the sleeping is living: "for the waking [person] should be said to live in the true and proper sense, but the sleeper [should be said to live only] on account of his being able to pass into that κίνησις according to which we say that he is awake [διὰ τὸ δύνασθαι μεταβάλλειν εἰς ταύτην τὴν κίνησιν, καθ' ἣν λέγομεν ἐγρηγορέναι] and senses some object" (B80). As in Δ7, Aristotle extends from this kind of case to cases where B is P δυνάμει and P is a substance; he now says that in these cases too, since the

⁴⁰which is perfectly legitimate, since A can be prior to B because A is an attribute of something prior to what B is an attribute of (Δ11 1018b37-1016a1): so ἐνέργεια can be prior to δύναμις because the things which are ἐνεργεία are prior to the things which are δυνάμει.

⁴¹I read τῷ ἀνάλογον with EJ (and Jaeger), not τὸ ἀνάλογον with Ab and a second hand in E (and Ross). τῷ ἀνάλογον is odd, but one sees what it must mean, and it seems guaranteed by τῷ ἀνάλογον at 1048b7 (EJAb; again, a second hand in E corrects τῷ to τό, but clearly just because the writer is bothered by the odd syntax, not on any manuscript authority; and in this case τό would not really make sense). anyway, this is the least of the many textual troubles in this much-troubled passage

⁴²I am assuming that Jaeger's note (and supplement) at 1048b5 is wrong, but it might possibly be right; of the parallels he cites, B#12 1002a23 is rather striking

⁴³perhaps note to Denniston on ἀλλ' ἢ.

⁴⁴perhaps cite the definition of sleep from the De Somno.

same proportion holds as in the κίνησις-cases,⁴⁵ A is P ἐνεργεία. (And for this reason the form, in virtue of which the form-matter composite A is P actually, and not merely potentially as the matter B is, may be called an ἐνέργεια [consequence drawn at Θ8 1050b2-3: ἡ οὐσία καὶ τὸ εἶδος ἐνέργεια ἐστίν], and the per se matter of P, which is whatever B has in virtue of which it is potentially P, may be called a δύναμις for P.) There is something missing in the syntax of the passage, and (following Ross) I have supplied "[it is]" to fill the gap as neutrally as possible,⁴⁶ but I suspect this is not actually how Aristotle intends the gap to be filled. Toward the end of the passage I have quoted, when Aristotle says that the different instances are not all said to be ἐνεργεία in the same way except by analogy, the different ways in which something might be said to be ἐνεργεία seem to be (i) as κίνησις to δύναμις, and (ii) as οὐσία to some matter: it is especially to bridge these two cases that Aristotle says "as this is in this or to this, so this is in this or to this" i.e. "as κίνησις is to δύναμις, so οὐσία is to the appropriate matter." And we can, and very likely should, read the sentence introducing the analogy in the same way, by reading one καί as "also" rather than "and," to yield a complete sentence: "that as the [housebuilder] housebuilding is to the housebuilder, and the waking is to the sleeping, and the seeing is to what possesses sight but has its eyes shut, so also is what has been separated out of the matter to the matter, and the finished product to the unworked [raw material]."⁴⁷

Ἐνέργεια and κίνησις

After a parenthetical discussion of the different way in which the infinite and the void may

⁴⁵Ross in his note on 1048b7 he wants "this πρὸς this" to refer back to the κίνησις-cases and "this in this" to the οὐσία-cases; but clearly both have to refer to both, or there is no analogy. Aristotle has spoken up to now of A as to [πρὸς] B, both in κίνησις- and in οὐσία-cases. presumably the way "in [ἐν]" would work is that the act of seeing is in the person with shut eyes as the finished Hermes is in the block of stone. note the comparison of Pauson's Hermes (Θ8 1050a19-21), where ἐπιστήμη is either inside or outside the pupil as this Hermes is either inside or outside whatever it may be: hard to say what's going on here, but anyway it shows it's easy for Aristotle to make the cross-categorial comparison, ἐπιστήμη is in something as a Hermes is in something.

⁴⁶the Greek text I am reading is ... τὸ δὲ ἐνεργεία. δῆλον δ' ἐπὶ τῶν καθ' ἕκαστα τῆ ἐπαγωγῆ ὁ βουλόμεθα λέγειν, καὶ οὐ δεῖ παντὸς ὄρον ζητεῖν ἀλλὰ καὶ τῷ ἀνάλογον συνορᾶν, ὅτι ὡς τὸ οἰκοδομοῦν πρὸς τὸ οἰκοδομικόν, καὶ τὸ ἐργηγορὸς πρὸς τὸ καθεῦδον, καὶ τὸ ὄρων πρὸς τὸ μῦον μὲν ὄψιν δὲ ἔχον, καὶ τὸ ἀποκεκριμένον ἐκ τῆς ὕλης πρὸς τὴν ὕλην, καὶ τὸ ἀπειργασμένον πρὸς τὸ ἀνέργαστον. ταύτης δὲ τῆς διαφορᾶς ... (this agrees with Jaeger, and differs from Ross only in reading τῷ ἀνάλογον instead of τὸ ἀνάλογον). I don't mean that this is too elliptical for Aristotle to have written it as it stands, but the sense does need to be filled out somehow, and it's not obvious how (to see the point, try reading my translation without the supplement "[it is]"). as Ross notes in his apparatus, Schwegler and other 19th-century editors (including Bonitz conjecturally) proposed deleting the stop after τὸ δὲ ἐνεργεία in a35, and modifying and repunctuating the subsequent text in various ways, so that τὸ ἐνεργεία would be the subject that is affirmed to be ὡς A πρὸς B. this is an attractive idea, but I don't see a way to do it that leaves a reasonable text without excessive intervention. the hyparchetype of the EJ family is apparently troubled by the same syntactic gap, since after the final πρὸς τὸ ἀνέργαστον E and J have (according to Ross) ἔστι τέ τι καὶ ταύτης διαφορᾶς ... (according to Jaeger they have τὸ before ταύτης; Vuillemin-Diem by silence supports Ross); E adds a correction, ἔστι τοῦτο for ἔστι τέ τι [apparently also the reading of the Greek exemplar of the Translatio Media], but neither of these readings seems acceptable

⁴⁷of course, we could also read the first καί as "also" and the other three as "and," rather than (as I am proposing) reading the third καί as "also" and the other three as "and." this would be simpler, and, one might say, it would be odd for Aristotle to write the sentence in such a way that the correct parsing could not be determined from the sentence itself, but only from a few lines further on. on the other hand, in speaking the parsing would be clear from pauses and emphases; if my suggestion is right, no emphasis and no pause at the first two καί's, a pause before the emphatic third καί, no emphasis and no pause at the fourth καί. I think Aristotle could well have said this unambiguously, and not realized that the written version was ambiguous. I realize this is all speculative, but I do think that content-wise this is where the emphasis should go: this is the only place the analogy is non-obvious

be said to be δυνάμει (although they never exist ἐνεργεία), Aristotle adds an important amendment (Θ6β = 1048b18-35) to what he has said about ἐνέργεια in Θ6α, clarifying and correcting the division of ἐνέργεια into those said as κίνησις to δύναμις and those said as οὐσία to some matter. At least, he probably does. For the whole passage Θ6β is missing in the two best manuscripts, E and J, and is present only in A^b and some recentiores. It is hard to explain this very unusual textual situation, and the passage has sometimes been suspected of being an interpolation (a marginal comment in some ancestor of A^b which has contaminated the later manuscripts of the EJ family), but it is very hard to imagine a gloss with such a sustained argument of this degree of philosophical sophistication (the doctrine is certainly Aristotelian, being presupposed at NE X,4, but the present passage could not have been generated out of NE X,4).⁴⁸ The more serious possibility is that, as Jaeger thought, Θ6β is a later addition by Aristotle himself, coming back to clarify and correct what he had said too hastily in the first version of Metaphysics Θ. But all that is certain is that the passage is, like many other passages that we have encountered in the Metaphysics, formally a digression, which could be skipped, in a shorter written text or a shorter oral presentation, to leave a coherent and acceptable text, but which nonetheless adds something of value to the argument. It could have been written later than its surroundings, but it could also have been written at the same time.⁴⁹ In examining the text, the important questions will be not when but why Aristotle thought this clarification was helpful, and why he had spoken in an incorrect or misleading way in Θ6α in the first place.

Aristotle says:

Since of those actions [πράξεις] which have a limit [πέρας], none is a τέλος, rather they are things existing in relation to a τέλος, as of thinning [the τέλος is] thinness:⁵⁰ when these [body-parts] are being thinned, they are in motion in such a way that the things the motion aims at [ὄν ἔνεκα ἢ κίνησις] are not [yet] present. These things are not a πρᾶξις, or at least not a complete [τελεία] one, for they are not a τέλος; but in that [sc. in a τελεία πρᾶξις, or in the case of a τελεία πρᾶξις] both the τέλος and the πρᾶξις are present.⁵¹ for instance, he both sees

⁴⁸all this needs to be updated in response to Myles' article in OSAP

⁴⁹in his apparatus Jaeger says that the final sentence of Θ6 (coming after the contested passage Θ6β), τὸ μὲν οὖν ἐνεργεία τί τέ ἐστι καὶ ποῖον, ἐκ τούτων καὶ τῶν τοιούτων δῆλον ἡμῖν ἔστω (1048b35-6), "recapitulatio sunt, sed eorum, quae hoc additamentum praecedunt (!)"; this is apparently supposed to be more evidence that Θ6β is indeed a later "additamentum." but there is nothing unusual here, certainly nothing to justify Jaeger's exclamation point. Aristotle had said, at what is in our editions the beginning of the chapter, that we should now study τί τέ ἐστὶν ἢ ἐνέργεια καὶ ποῖόν τι (1048a26-7); he is now announcing that this discussion is closed. Θ6β is subordinate to this discussion, it has itself been nicely closed off in the preceding sentence 1048b34-5, and there is no reason why Aristotle should "recapitulate" it now, any more than he "recapitulates" any other details of the discussion. there are lots of parallels for this (e.g. Θ8 1051a2-3), and it gives no reason to believe Θ6β was not written at the same time as its surroundings. what may give reason to believe this is the absence of Θ6β from EJ (and the Greek exemplar of the Translatio Media). on the other hand, I don't see any good explanation of this circumstance on Jaeger's hypothesis either (Jaeger certainly does not think that Ab generally has access to a later version of Aristotle's text than EJ do). pending further illumination, I suspend judgment on the question.

⁵⁰keeping the manuscript τοῦ ἰσχνάινειν ἢ ἰσχνασία (with Code-Laks-Most), with misgivings: this means that when Aristotle uses ἰσχνασία again a few lines down, he is using it in exactly the opposite sense to here. Bywater and Ross write τὸ ἰσχνάινειν ἢ ἰσχνασία, which may be right; Jaeger accepts this correction and then deletes ἢ ἰσχνασία as a gloss, which may also be right. (am I keeping, rejecting, or emending αὐτό? can it go back to τέλος?)

⁵¹keeping the manuscript text in b22-3, rejecting two conjectures of Bonitz, against Ross and Jaeger (and agreeing with Code-Laks-Most, and with Bonitz' printed text; Jaeger's apparatus falsely implies that Bonitz printed his conjectures here) ... d discuss my reasons, following correspondence with Code. Bonitz' conjectures here are almost

and has seen at the same time, and thinks and has thought, and understands and has understood, but [it is not true at the same time that] he learns and has learned, or is being healed and has been healed. [But] he lives well and has lived well at the same time, and flourishes [εὐδαιμονεῖ] and has flourished. If not, he would have to stop, as when he thins, but in fact he does not, but rather both lives and has lived [i.e. he "has lived" without ceasing to live]. We should call the one kind [thinning, learning etc.] κινήσεις, the other [seeing, understanding etc.] ἐνέργειαι. For every κίνησις is incomplete [ἀτελής], [e.g.] thinning, learning, walking, housebuilding: these are κινήσεις, and incomplete. For [it is not true at the same time that] he is walking and has walked, or is building a house and has built a house, or comes-to-be and has come-to-be, or moves and has moved [intransitive], and moves and has moved [transitive]: these are different.⁵² But he has seen, and is seeing, the same thing at the same time, and [likewise] understands and has understood. The latter kind I call an ἐνέργεια, the former a κίνησις. (1048b18-35)

This passage at least verbally contradicts Θ6α, since Θ6α says that waking and seeing are said to be ἐνέργειαι as κινήσεις in relation to some δύναμις; but according to Θ6β, seeing is a τελεία πράξις and every κίνησις is an ἀτελής πράξις, so that seeing cannot be a κίνησις (I will return below to Aristotle's argument from the present and perfect tenses to this conclusion). The τέλειον/ἀτελές distinction is by no means peculiar to this passage: "ἔστιν ἡ κίνησις ἐνέργειά τις, ἀτελής μέντοι" (DA II,5 417a16-17); "ἡ κίνησις τοῦ ἀτελοῦς ἐνέργεια [ἐστι], ἡ δ' ἀπλῶς ἐνέργεια ἕτερα, ἡ τοῦ τετελεσμένου" (DA III,7 431a6-7); "ἡ κίνησις ἐνέργεια μὲν εἶναι τις δοκεῖ, ἀτελής δέ· αἴτιον δ' ὅτι ἀτελές τὸ δυνατόν, οὗ ἐστιν ἐνέργεια" (Physics III,2 201b31-3), and at least the first of these texts, quite possibly also the second, use the distinction to argue that sensations are τέλειαι ἐνέργειαι, and therefore not κινήσεις.⁵³ However, it is also by no means peculiar to Θ6α to describe sensations as κινήσεις: this is a standard part of the theory of sensation, taken largely from Plato, that Aristotle professes in early writings: "sensation as an activity is a motion via the body, when the sense is affected in some way [ἡ αἴσθησις ἡ κατ' ἐνέργειαν κίνησις ἐστι διὰ τοῦ σώματος, πασχούσης τι τῆς αἰσθήσεως]" (Physics VII,2 244b11-12); "sensation in the activity-sense is a motion of the soul via the body [ἡ λεγομένη αἴσθησις ὡς ἐνέργεια κίνησις τις διὰ τοῦ σώματος τῆς ψυχῆς ἐστι]" (De Somno 454a8-10).⁵⁴

universally accepted (and Θ6β does have an unusual number of apparent corruptions, and I have accepted some of Bonitz' emendations elsewhere in the passage), but as far as I can see his conjectures in this case simply do not yield sense (I cannot get Ross' translation out of the text he prints), and the transmitted text makes good sense, and I think is close to guaranteed by the next sentence

⁵²transposing ἀλλ' ἕτερον to after καὶ κινεῖ καὶ κεκίνηκεν, but Jaeger may be right in deleting καὶ κινεῖ καὶ κεκίνηκεν as a *varia lectio*: the text is troubled

⁵³a similar contrast in NE X,4, too diffuse to quote in full: "seeing seems to be τέλειαι in any [span of] time" (1174a14-15), contrasted with κίνησις further on. whether the DA III,7 passage is saying that sensation is not κίνησις depends on whether the subject of οὐ γὰρ πάσχει οὐδ' ἀλλοιοῦται at 431a5 is τὸ αἰσθητικόν from a5, as people usually think, or τὸ αἰσθητόν from a4, as I have argued elsewhere (but I am now less sure)

⁵⁴the catchphrase κίνησις διὰ τοῦ σώματος, used in both of these texts, deliberately echoes the Timaeus' description of αἰσθήσεις as κινήσεις διὰ τοῦ σώματος ἐπὶ τὴν ψυχὴν φερόμεναι (43c4-5), i.e. motions which, having passed through the body, are strong enough that they are communicated to the soul conjoined with the body, and set up disturbances in the soul itself (similar descriptions elsewhere in the Timaeus and the Philebus). it is clear that when he wrote Physics VII Aristotle subscribed to this same theory of sensation, which he firmly rejects in the De Anima.

And even being awake--the strangest of Θ6α's examples of κίνησις from the point of view of Θ6β, since it is named by the perfect verb ἐγρηγορέναι--is, as we saw, described as a κίνησις at Protrepticus B80. And while in some of the texts where Aristotle speaks of sensation or pleasure or being awake as a κίνησις, he may be merely speaking with the vulgar and not giving his own considered view, there are other texts (including Physics VII,2-3) where there is no avoiding the conclusion that this is indeed Aristotle's own view.⁵⁵ It is possible (though in my view very unlikely) that when Aristotle wrote Θ6α he still believed that sensation was a κίνησις, but it is also possible that here he was just speaking loosely, in accord with his own earlier views and with general philosophical opinion (as we will see, he would have had a good reason for choosing to speak in this loose way here). Either way, in Θ6β he is saying that, at least when we are using language strictly, we ought to restrict what range of activities we call κινήσεις, and, in particular, we ought not to call sensation (or being awake) a κίνησις.

Aristotle's mature view, as expressed in the De Anima and Physics passages I have cited, is that not all ἐνέργεια, but only ἀτελεῖς ἐνέργεια, are κινήσεις: that is, he now thinks that some instances of ποιεῖν, and even some instances of πάσχειν (like sensation), do not involve a change of state in the subject that ποιεῖ or πάσχει.⁵⁶ Naturally, Aristotle continues to think that all κινήσεις are ἐνέργεια: the De Anima and Physics passages say so, and in any case there is an ἐνέργεια of whatever there is a δύναμις for, and there are δυνάμεις for κινεῖν and κινεῖσθαι. (When Θ1 says that "δύναμις and ἐνέργεια are broader than only those which are said πρὸς κίνησιν" (1046a1-2), it presupposes that κινήσεις are ἐνέργεια; when Θ3 says that "the name 'ἐνέργεια' ... has been extended to other things from [applying to] κινήσεις especially" (1047a30-31), it does not cease to apply to κινήσεις.⁵⁷) When Θ6β says that "we should call the one kind κινήσεις, the other ἐνέργεια" (1048b28, and likewise at the end, b34-5), the implication in context is not "we should say that the one kind are κινήσεις and not ἐνέργεια, and that the other kind are ἐνέργεια and not κινήσεις", but rather "we should call only the one kind κινήσεις, whereas the other, which we have in fact been calling κινήσεις, we should not call κινήσεις, but rather we should only call them ἐνέργεια". All the emphasis in this passage falls on the revisionist claim that some ἐνέργεια-in-the-activity-sense (some πράξεις, as Aristotle says here), in particular those that are τέλειαι, are not κινήσεις, as against

Aristotle also says similar things about pleasure in early works, which he repudiates later. see my "Origins of Aristotle's Concept of 'Ἐνέργεια: 'Ἐνέργεια and Κίνησις"

⁵⁵again reference to my papers on this

⁵⁶note again (perhaps this should be brought up into the text) that Aristotle in several places uses κίνησις as the name of a category, what in the "canonical" texts he splits into ποιεῖν and πάσχειν; presumably, the reason for making the split is to emphasize that not every ποιεῖν is thereby also κινούμενον. also: I am speaking for simplicity as if all ἐνέργεια--all activities or exercises of a δύναμις--were either ποιεῖν or πάσχειν. in fact there are cases not comfortably classified under either, such as the exercises of the δυνάμεις of resistance described in Θ1, and also God's activity of thinking. but ποιεῖν and πάσχειν remain the paradigmatic cases, and I paraphrase ἐνέργεια by "ποιεῖν or πάσχειν" in order to emphasize that the sense of ἐνέργεια which Aristotle is now dividing into ἀτελεῖς ἐνέργεια (κινήσεις) and τέλειαι ἐνέργεια is ἐνέργεια in the activity-sense, what in Θ6β he refers to somewhat awkwardly as πράξεις; there is no attempt to apply this division to substantial forms (contra Kosman, see below). it is worth noting that the De Anima, which does a lot of thinking about and dividing up ἐνέργεια, never describes the soul as an ἐνέργεια, much less a τέλειαι or ἀτελής one (Aristotle calls the soul an ἐνέργεια exactly once in the extant corpus, Metaphysics H3 1043a35-6): if Aristotle were going to apply the τέλειαι/ἀτελής ἐνέργεια distinction to forms, the De Anima would be where he would do it {also here or somewhere note the unfortunate homonymy in Latin and English between activity-vs.-potency and activity-vs.-passivity; there is absolutely no correlation between them in Aristotle; it should always be clear from context which I mean when I say "activity"}

⁵⁷likewise EE VI,14 = NE VII,14, οὐ μόνον κινήσεός ἐστιν ἐνέργεια ἀλλὰ καὶ ἀκινήσις (1154b26-7)

the normal background view that all ἐνέργειαι are κινήσεις, that every activity involves some change of state in its subject. And, to reinforce the point that this background view is what Aristotle needed to set himself off against, it is worth noting that, despite Aristotle's efforts here and elsewhere, this continued to be the normal background view for centuries afterwards: between Aristotle's death and the Aristotelian revival of the second century AD, Theophrastus is apparently the only philosopher to posit non-kinetic activities, and he only with hesitation (his Metaphysics 7b9-23).⁵⁸ The question, then, is why Aristotle departs from this normal background view: why does he now think it is wrong, and why does he think it is important to say so in Θ6β (and, given all that, why does he speak differently in Θ6α)?

There are, I think, reasons from several different contexts that lead Aristotle to reconsider the assumption that all ἐνέργειαι are κινήσεις. One, of obvious importance in the context of the Metaphysics, is the view argued for in Physics VIII, that the first principles of motion are unmoved movers. Several centuries afterwards, Sextus Empiricus, in a series of arguments against the different ways motion could be caused, briefly dismisses the possibility that something could be moved by something not itself in motion: "τὸ γὰρ κινουὼν ἐνεργεῖ τι, τὸ δὲ ἐνεργοῦν κινεῖται, τὸ ἄρα κινουὼν κινεῖται" (Against the Physicists II,76)--and indeed none of the Hellenistic schools would have objected to this argument. Thus in order to secure the possibility of an unmoved mover, Aristotle must distinguish conceptually between ἐνέργεια and κίνησις, and show that something can be active without changing its state. This is not simply a question of Aristotle's God, but also of more ordinary unmoved movers--an ordinary object of cognition, such as a color, causes us to perceive it without itself thereby being changed, and so it too must have an ἐνέργεια that is not its κίνησις⁵⁹--but in the context of the Metaphysics, whose account of ἐνέργεια leads up to an account of the first ἀρχή as pure ἐνέργεια, the ἐνέργεια of the first mover will be especially important. (If Θ6β is a later addition, and Θ had originally existed without it, then Aristotle might have been led to add Θ6β when he came to write Λ, or to integrate Θ and Λ into a single work; but it is very hard to believe that he was not already intending the conclusions of Λ when he first wrote Θ.)

Aristotle would also be led to distinguish ἐνέργεια from κίνησις by considering the exercises of the different powers of the soul: early on he had thought that at least some of these, including sensation, were κινήσεις of the soul, but in De Anima I,3 he argues that the soul is not moved at all (except per accidens, in that the animal is moved). One reason for this conclusion is that Aristotle thinks that all κίνησις, even alteration, is possible only in something that is in a place (DA I,3 406a12-16), apparently because the thing altered would have to be touched by the agent.⁶⁰ Aristotle thinks that the soul is not in a place per se, presumably because he thinks that only bodies are in place per se and that the soul is not a body, and so he infers that the soul is not moved per se, so that its ἐνέργειαι are not κινήσεις (or at least are not κινήσεις of it, though they may involve κινήσεις of its body). And presumably the same argument would apply to the movers of the heavens, which are also not bodies.⁶¹

However, in Θ6β itself, concerns about unmoved movers and about souls do not take the fore. Aristotle's arguments here turn on the relation between an activity and its τέλος, and on verbs in the present and perfect tenses. But these arguments too can be seen to arise from a

⁵⁸plus a fragment, cited in a footnote to my OSAP De Anima paper

⁵⁹this may be the point in DA III,7 (cited above), and objects of cognition are used as paradigms of cognition in Metaphysics Λ7

⁶⁰perhaps inferrable from Physics VII,2 and GC I,6; Ross cites Physics VIII,7 260b1-5, which might also serve. DA I,3 itself gives no clues to the reasoning here

⁶¹perhaps note on non-reciprocal touching

different context of Academic debate.

Issues about perfect verbs would first have arisen in arguing that a γένεσις cannot be a τέλος, since every γένεσις is for the sake of the γεγενῆσθαι, i.e. the actual presence of what was coming-to-be: this argument would be used especially to argue that since pleasure is a γένεσις, and no γένεσις is a τέλος, pleasure cannot be a τέλος. Indeed, Plato uses something much like this argument in the Philebus, arguing that every γένεσις is for the sake of some οὐσία (54a3-c5), and therefore that pleasure, being a γένεσις, must be for the sake of something else (54c6-7), and therefore must not belong to the class of goods (54c9-d2; presumably because goods are chosen for their own sake, other things for the sake of goods, cp. Gorgias 467e1-468b8). Plato does not here introduce the perfect "γεγενῆσθαι", using "οὐσία" for the state resulting when the γένεσις is completed. But Aristotle restates the argument in terms of γεγενῆσθαι in the Topics, reflecting what must have been Academic discussions. If your opponent has given a definition of some relative term (some πρὸς τι), then he must say what it is πρὸς, and he has not defined it rightly if he has described it as being πρὸς some intermediate thing rather than πρὸς the appropriate τέλος.

Also, check if what he has described it as related to is a γένεσις or an ἐνέργεια, since nothing of this kind is a τέλος: for the τέλος is having-acted and having-come-to-be [τὸ ἐνηργηκέναι καὶ γεγενῆσθαι], rather than coming-to-be and acting [τὸ γίνεσθαι καὶ ἐνεργεῖν]. Or perhaps this is not true in all cases: most people anyway [σχεδὸν γὰρ οἱ πλεῖστοι] want to enjoy pleasure [ἡδεσθαι] rather than to have ceased enjoying pleasure [πεπαῦσθαι ἡδόμενοι]; so that they would take acting [ἐνεργεῖν] rather than having-acted [ἐνηργηκέναι] as their τέλος.⁶² (Topics VI,8 146b13-19)

It is not entirely clear what Aristotle's own attitude is here toward this way of arguing. He may just be warning you that, although the argument is perfectly correct, your hedonistically inclined opponent and audience are not likely to accept it. But he may also think that they have a point, that a γένεσις or ἐνέργεια can at least sometimes be a τέλος. But if Aristotle does think the argument fails, he gives no diagnosis here of where it goes wrong, or of within what bounds it would hold. In particular, it does not occur to him to say that the argument holds for γενέσεις but not for all ἐνέργειαι, or that the ἐνεργεῖν and the ἐνηργηκέναι are not always distinct.

But Aristotle must soon have found that he had to confront this argument, since, although he never thinks that pleasure is the τέλος, he does, as early as the Protrepticus (B78-86), think that the τέλος of human life consists in the exercise or use [ἐνέργεια, χρῆσις] of something rather than in the bare possession [ἔξις, κτήσις], and that the possession, of an external good or of a psychic ἔξις like knowledge or virtue, is for the sake of using it, or more specifically for using it well. Here Aristotle is taking a stand in what seems to have been a major debate within the Academy, on whether the τέλος of human life is a ἔξις or an ἐνέργεια. Speusippus, in saying that happiness is a ἔξις, has on his side various Platonic texts taking virtue as constitutive of happiness, while Aristotle is following out thoughts from the Euthydemus (esp. 280b5-281a1).

⁶²note that the Philebus argument, although it does not use the word τέλος, does say that the person who holds that pleasure is merely a γένεσις will laugh both at οἱ φάσκοντες ἡδονὴν ἀγαθὸν εἶναι and at οἱ ἐν ταῖς γενέσεσιν ἀποτελούμενοι (54d4-2e), who sound much like Aristotle's hedonists who "would take acting as their τέλος" [τὸ ἐνεργεῖν ... τέλος ἂν ποιοῖντο]. I am not sure whether this means just that they act as if it were their τέλος, and implicitly believe that it is their τέλος, or whether it actually is their τέλος (or the τέλος of their desire, what their desire is πρὸς), even if perhaps it shouldn't be

But the *Protrepticus* goes beyond the *Euthydemus* in arguing, not just that the ἔξις of external goods is unbeneficial unless we use them and use them rightly (where merely possessing wisdom might suffice to ensure this), but that the ἔξις of the virtues and of wisdom itself also does not benefit us unless we exercise them in action or contemplation; Aristotle adds that appropriate ἐνέργεια are pleasurable, so that the life of exercising wisdom will also be the most pleasant (B87-92), agreeing with *Republic* IX but against the Academic view (apparently Speusippus', cf. Fr. 80-81 Tarán, and cited at *Philebus* 55a5-8) that the best life avoids both pleasure and pain.⁶³ Speusippus and his allies will surely have responded, using (*inter alia*) the argument Aristotle cites in *Topics* VI,8, that no γένεσις or ἐνέργεια can be a τέλος. The two parties can trade the same accusations as Socrates and Callicles: Aristotle will accuse Speusippus of preferring the life of a stone, while Speusippus will accuse Aristotle (like Callicles, who thinks the best life is one of pleasure, of constantly filling a leaky vessel) of preferring the life of a stone-curler.⁶⁴ To answer the *Topics* VI,8 argument, Aristotle will have to think about what kind of ἐνέργεια can be a τέλος and what cannot: this will lead him to distinguish ἐνέργεια from γένεσις, and to reconsider the relationship between ἐνέργεια and ἐνηρηκέναι.

Aristotle's answer is to say that alongside ἀτελείς ἐνέργεια, which presuppose some deficiency in the state of their subject and which cease when the subject has acquired its completed state, there are also τέλει ἐνέργεια, which are exercises of the completed ἔξις, which thus presuppose the completed ἔξις, and do not involve any further alteration in the ἔξις. The kinds of ἐνέργεια that we ordinarily observe are ἀτελείς, because the objects we ordinarily observe acting are ἀτελή, but we should not let this convince us that ἐνέργεια is impossible without incompleteness (so that, for example, the gods would be inactive). Once something has acquired its completed ἔξις, it will not stop acting, but will exercise that ἔξις if nothing obstructs it: Aristotle's favorite example (in *De Anima* II,5 and many parallels) is the ἔξις of ἐπιστήμη, which, once acquired, is exercised in θεωρεῖν. And while the coming-to-be of the ἔξις is for the sake of the ἔξις, Aristotle insists that the ἔξις is for the sake of the subsequent ἐνέργεια, and not vice versa, so that the ἐνέργεια can be a τέλος.⁶⁵ And so he can say in reply to the *Topics* VI,8 argument that a complete ἐνέργεια is not a γένεσις, because the thing of which it is an ἐνέργεια has already completely come-to-be; and an ἐνέργεια which is not a γένεσις need not be for the sake of a resulting γεγενῆσθαι.

Already in quite early works Aristotle is arguing that some ἐνέργεια are not γενέσεις. But

⁶³Speusippus says that happiness is a ἔξις τελεία ἐν τοῖς κατὰ φύσιν ἔχουσιν, ἢ ἔξις ἀγαθῶν (Fr. 77 Tarán; these goods may well include external things as well as virtue). Apart from texts in "Socratic" dialogues on the sufficiency of knowledge or virtue for happiness, and *Symposium* 204e1-205a8, which identifies happiness with the possession [κτῆσις] (or the perpetual possession) of goods, Plato says in *Republic* IV 444c1-445b4 that just acts are good because they tend to preserve the εὐεξία (444e1) of justice in the soul, with no suggestion that justice is valuable for the sake of just acts; Plato's conclusion is that one should want nothing other than that he acquire [κτῆσεται] justice and virtue (I owe this observation to Rachana Kamtekar). Aristotle deals with the issue at some length in NE I: as he says, "it makes not a small difference whether one thinks that the best is in κτῆσις or in χρῆσις, in ἔξις or in ἐνέργεια" (NE I,8 1098b31-3). Xenocrates Fr. 232 Isnardi-Parenti (cited in the same source as Speusippus Fr. 77, Clement *Stromata* II,22,133) may be taking a middle position, perhaps in response to Aristotle: there is no happiness without χρῆσις, but happiness properly consists in a possession, of virtues together with external goods, that is sufficient to ensure χρῆσις, and right χρῆσις, both of the virtues and of the external goods. But without context it may be impossible to be sure what stand Xenocrates is taking.

⁶⁴"a bird of messy habits and uncertain identity" (Dodds); *Gorgias* 492e3-6, 494a6-b7

⁶⁵although it need not be: if the ἐνέργεια of the completed ἔξις consists in the production of some new object (for instance, if the ἔξις is the art of housebuilding, then its ἐνέργεια is the production of a house), then the object rather than the ἐνέργεια is the τέλος; it remains true that the ἔξις is for the sake of the ἐνέργεια rather than vice versa, and that the ἐνέργεια is closer to the τέλος than the ἔξις is. thus Aristotle in Θ8, to which I will return in IIIα3

it seems to have taken him some time to reach the stronger and more counter-intuitive conclusion that some ἐνέργεια are not κινήσεις. Thus the Magna Moralia argues vigorously against those who think that pleasure is a γένεσις, and concludes that it is instead a κίνησις καὶ ἐνέργεια of the soul (MM II,7 1204b25-8); and the Eudemian account of pleasure (EE VI,11-14 = NE VII,11-14), while arguing that pleasure is not a γένεσις but an ἐνέργεια, keeps silent on whether it is a κίνησις until the very last lines, which speak of an ἐνέργεια ἀκίνησίας in gods but apparently not in humans (1154b24-8). By contrast, the Nicomachean parallel says that pleasure is "neither a κίνησις nor a γένεσις" (NE X,4 1174b13).⁶⁶ And Aristotle's mature view is that the ἐνέργεια of the completed ἔξις is not only not a γένεσις, but not a κίνησις: this is the claim of the Physics and De Anima texts cited above, which say not only that κίνησις is an ἀτελής ἐνέργεια, but also that it is an ἐνέργεια of something ἀτελής (so both Physics III,2 201b31-3 and DA III,7 431a6-7).

This claim is certainly not immediately obvious. The ἐνέργεια of the completed ἔξις it will not be an alteration of the ἔξις, but it seems that it might involve some other kind of change. There are at least three problem cases. First, once an art has been perfectly acquired, its exercise does not involve any alteration of the art in the artisan's soul, but it might involve, for instance, motions of the artisan's hands, or even the γένεσις of an artifact. In this case Aristotle will answer that although the ἐνέργεια of the art is a κίνησις or even a γένεσις of something, it is not the κίνησις of the art: "the ἐνέργεια is in the thing produced ... and the κίνησις in the κινούμενον" (Θ8 1050a31-4), so that although the ἐνέργεια of an unmoved mover (such as an art or a soul) in moving something is a κίνησις, it is not a κίνησις of the mover but only of what it moves. A second problem is the case of some water which becomes air, and thus becomes a light body: Aristotle says that it will then carry out the ἐνέργεια of an actually light body, which is to rise to its natural place, as long as nothing obstructs it, just someone who has acquired a science will carry out the ἐνέργεια of an actually knowing person, namely θεωρεῖν, as long as nothing obstructs him (Physics VIII,4 255a30-b13). This suggests that the rising of the light body should count as the ἐνέργεια of the completed ἔξις and as a τελεία ἐνέργεια, like θεωρεῖν; and yet it is certainly a motion. Here, though, the answer is that, although the rising of the light body is τελειότερα, and closer to being the τέλος, than the potentially light body's becoming actually light, it is not fully τελεία, because it depends on the body's being not yet in its natural place: the τελεία ἐνέργεια of the light body would be what it does once it reaches its natural place, if indeed it does do anything once it gets there.⁶⁷ This, however, raises the third and most problematic case, the circular motion of the heavenly spheres, which are already in their natural place: it seems hard to call them ἀτελή, and it is not obvious why their rotation could not be a τέλος in itself. Certainly Aristotle thinks that this is the closest of all motions to being a τέλος in itself; it is also true that the rotation of a circle or sphere around its center is the closest of all motions to being an ἐνέργεια without change of state. Indeed, it is not clear to me that Aristotle's arguments that a motion cannot be a τέλος (which seem more effective against motions toward a determinate final state) are good arguments in the case of a circular motion,

⁶⁶refer to Cooper's article (now reprinted in Reason and Emotion) on the problematic authenticity of the MM (the development of Aristotle's thought on ἐνέργεια/κίνησις/γένεσις adds further support to Cooper's view that the MM reflects an early, pre-Eudemian, stage of Aristotle's thinking on ethics). for a fuller account of all of this see my "Origins of Aristotle's Concept of Ἐνέργεια: Ἐνέργεια and Κίνησις"

⁶⁷in fact, in the Physics VIII,4 passage, Aristotle says not that the ἐνέργεια of the light body qua light is to rise (though he does say this at De Caelo IV,1 307b31-3), but that it is "to be up": so being in the natural place, rather than rising (which presupposes being out of the natural place) would be the analogue of the τελεία ἐνέργεια of θεωρεῖν. but this is not an ἐνέργεια in the activity-sense, either kinetic or non-kinetic

although he does indeed claim that this motion too is not a τέλος. Still, to make it plausible that this motion is a τέλος, we would have to explain why the motion is good without offering the usual explanation that it is motion toward a better state. Aristotle thinks we cannot explain this without referring to something beyond the circle or sphere, which would be the real τέλος for the sake of which the motion happens: indeed, it is far from obvious how to explain it even with such a cause. But let these perhaps intractable issues be deferred to IIIβ below.

In Metaphysics Θ6β, Aristotle's main intention is to show that some ἐνέργειαι-in-the-activity sense, including some of those he had described as κινήσεις in Θ6α, are not κινήσεις. This was his settled view, and the facts that he thinks it is true, and that he had written in Θ6α as if it were not true, would by themselves be enough to explain why he adds Θ6β. Still, as I have noted above, he has a special reason in the context of the Metaphysics for wanting to make clear that some ἐνέργειαι-in-the-activity sense are not κινήσεις, since he is building up to an account of the first ἀρχή as eternally acting, indeed as essentially acting, so that it is not only an ἀρχή ἐνεργοῦσα but itself an ἐνέργεια, while at the same time insisting that this ἀρχή is not in motion, since it could not be in motion without some δύναμις, and without some prior ἀρχή to move it. A connected point is that this ἐνέργεια is an ἀρχή by being a τέλος, an ultimate final cause; Θ8 will prepare for this conclusion by arguing that "everything that comes-to-be proceeds toward an ἀρχή and τέλος (for that for the sake of which is an ἀρχή, and the coming-to-be is for the sake of the τέλος), and the ἐνέργεια is a τέλος, and the δύναμις is acquired for its sake" (1050a7-10), so that the ἐνέργεια is prior to the δύναμις. So it will be important for Aristotle to confront the Topics VI,8 argument that no ἐνέργεια can be a τέλος. And to defuse the argument effectively, he needs to say not only that some ἐνέργειαι are not γενέσεις, but that some ἐνέργειαι are not κινήσεις, since a κίνησις too seems to be for the sake of the final state toward which it is moving:⁶⁸ if you think, as most people do, that all ἐνέργειαι are κινήσεις, this will give you a reason against thinking that any ἐνέργεια can be a τέλος, and so Aristotle preemptively explains that while some ἐνέργειαι are κινήσεις and are thus disqualified from being τέλη, this disqualifying reason does not apply to various other ἐνέργειαι, including some of those that in Θ6α he had described imprecisely as κινήσεις.

As Θ6β puts it, "of those actions [πράξεις] which have a limit [πέρας], none is a τέλος, rather they are things existing in relation to a τέλος" (1048b18-19); but the emphasis falls on the claim that some actions are not disqualified from being τέλη. Aristotle calls these actions τέλειαι πράξεις, and argues that they cannot be κινήσεις, for reasons coming out of reflection on the Topics VI,8 argument, since when something is in motion "the things the motion aims at [ὧν ἔνεκα ἡ κίνησις]"--the resulting completed state--"are not [yet] present" (b20-21). The claim that "every κίνησις is ἀτελής" (b29) is familiar from the Physics and De Anima, but here, by contrast with those texts, Aristotle's justification for the claim turns on the issue, from Topics VI,8, of the present and perfect tenses of the verbs describing the actions. It is not simultaneously true that "he is building a house and has built a house, or comes-to-be and has come-to-be, or moves and has moved" (b31-2). The perfect verbs here do not mean that the action was entirely in the past (or else no verb could be true both in the present and in the perfect), nor do they mean even that there has been any past action (someone who sees X now for the first time still "has seen X"): the perfect verb signifies rather the present completed state resulting from the action,

⁶⁸again, this does not apply to the rotations of the heavenly spheres, a case that seems to contradict some of what Aristotle says about κίνησις in Θ6β, and certainly does not seem to be on his mind there

whenever the action may have happened.⁶⁹ So if the γίγνεσθαι is becoming-X, the γεγενῆσθαι is the resulting being-X, and if the κινεῖσθαι is moving-to-X, the κεκινήσθαι is the resulting being-at-X: it is a specific fact about κίνησις, and not simply a consequence of the meanings of the tenses, that while the κίνησις is still going on the completed state of κεκινήσθαι is not yet present. Now this fact is supposed to establish the claim that κίνησις is ἀτελής, and this must be because Aristotle assumes, as a matter of grammar, that a perfect verb signifies the τέλος of the action that the verb signifies in the present. And indeed this is how Aristotle is arguing: "these things are not a πρᾶξις, or at least not a complete [τελεία] one, for they are not a τέλος; but in that [sc. in a τελεία πρᾶξις, or in the case of a τελεία πρᾶξις] both the τέλος and the πρᾶξις are present: for instance, he both sees and has seen at the same time [etc.]" (b21-3): so to say that he sees is to say that the πρᾶξις of seeing is present, and to say that he has seen is to say that the τέλος of seeing is present.⁷⁰ It is not far from here to the later grammarians' descriptions of the perfective tenses (perfect, pluperfect and aorist) as συντελικοὶ (χρόνοι), i.e. signifying the συντέλεια or completion of an action, and of the perfect tense specifically as the "present [ἐνεστώς] συντελικός", signifying a present state of completion.⁷¹ Indeed, it is clear that the

⁶⁹so, rightly, Aryeh Kosman, "Substance, Being, and Energeia," Oxford Studies in Ancient Philosophy v.2 (1984), pp.123-4. also: the issue is not really whether the same verb can be true both in the present and perfect tenses (as I said for short), but whether the same action can be truly predicated of the same subject both in the present and perfect tenses. thus he might have built a house, and be building a house (there's no separate word for house in the Greek, it's just the verb οικοδομεῖν), but not the same house and so not the same action. question: if the state no longer obtains, can we still apply the perfect tense? as a matter of ordinary language, I'm sure at least sometimes we can (though probably not always, and probably with more resistance in some cases than in others), but Aristotle and the other philosophers and grammarians I will cite would presumably think that the case described would be more properly signified by the pluperfect. once again, the issue is not really about language, but about the different realities (the action and the resulting condition) which are indicated at least roughly by the different grammatical forms

⁷⁰(as noted above?) rejecting Bonitz' emendations in b22-3, accepted by Ross and Jaeger, which produce nonsense. presumably what troubles Bonitz and the others is that the transmitted text seems to say that in a certain kind of πρᾶξις, both the τέλος and the πρᾶξις are present; and what does it mean to say that the πρᾶξις is present in a πρᾶξις? but Bonitz' emendation is simply not an option (other remedies might be tried, but I haven't thought of any that seem palaeographically plausible), and the transmitted text is acceptable: ἐκείνη refers back specifically to a τελεία πρᾶξις, and to say that in a τελεία πρᾶξις both the τέλος and the πρᾶξις are present is like saying that in white man both man and whiteness are present. and (see my discussion above), the next clause (next sentence, according to the editors, but I would print a comma rather than a full stop before οἶον) is indeed asserting that both the τέλος and the πρᾶξις are simultaneously "present," i.e. that the verbs signifying them are simultaneously true of the same subject; whatever the awkwardness, we cannot emend to eliminate the assertion that the πρᾶξις is present. we can, and perhaps should, soften the awkwardness of saying that the τέλος and πρᾶξις are present in the τελεία πρᾶξις by saying merely that they are present in the case of the τελεία πρᾶξις (man is not really present in the white man, but in the case of white man, i.e. wherever white man is present, man is also present), i.e. that the verbs signifying this action or state are true (ἐνυπάρχειν is being used here as ὑπάρχειν was just above, μὴ ὑπάρχοντα ὦν ἔνεκα ἢ κίνησις, b20-21), and probably what they are present in would be what they are true of, i.e. the subject of the action, what the action is itself present in, rather than the τελεία πρᾶξις itself (or perhaps what they are present in is the time or moment when they are true; again, this recommends the vaguer translation "in the case of the τελεία πρᾶξις")

⁷¹give full references on the συντελικοὶ tenses in the Scholium on Dionysius Thrax (more or less the same thing is found four times). actually, instead of "present state of completion," the grammarians say something like "recent completion," but this looks to be a misunderstanding of the original reason why the terminology was given, apparently first by the Stoics (or even the Megarians before them): Stephanus, cited in the Scholium on Dionysius Thrax, (also printed by Hülser as FDS Fr.819), says that the Stoics called the present the "present imperfect," ἐνεστώς παρατατικός [against the later standard terminology, which reserves παρατατικός for the imperfect tense]; presumably they contrasted this, not only as Stephanus says here with the παρωχημένος παρατατικός "past

grammarians' terminology for the tenses evolves out of philosophers' terminology for the realities signified by the different tenses, and that the philosophers' need for such terminology in turn arises from discussions of dialectical arguments, such as the Topics VI,8 argument that the τέλος is not the γένεσις but the γεγενῆσθαι and the arguments arising from Diodorus Cronus' claim that there is no κίνησις but only κεκινήσθαι (in the discussions of Diodorus' claim reported by Sextus Empiricus Against the Physicists II,85-102, it is said that the συντελεστικός is the πέρας of the παρατατικός, where these are obviously not the verbs but the realities they signify: the examples given are that γεγενῆσθαι is the πέρας of γίνεσθαι [= γίγνεσθαι] and that κεκινήσθαι is the πέρας of κινεῖσθαι, which is very close to what Aristotle says in Θ6β).⁷²

Aristotle thus takes the present and perfect tenses of a verb to signify different realities connected with the same action, namely the action itself and its τέλος or πέρας. He can therefore use the two tenses to give a linguistic test (reminiscent of many tests in the Topics and Categories) for whether some action is a κίνησις, by testing whether the action and its τέλος are present simultaneously. Naturally the linguistic test, "would you say of the same thing at the same time both that it is V-ing and that it has V-ed?", is not infallible for discovering whether V-ing is a κίνησις, since the linguistic expressions may fail to track the reality (we can say that someone is walking and has walked, or even is building-a-house and has built-a-house, but the verbs would signify two different activities of housebuilding, and on Aristotle's view two different activities of walking, one now happening and one already completed); and even if the action and its τέλος are present simultaneously, they might not be the same thing. Certainly the relation between the present and perfect tenses does not define what it is for an activity to be a κίνησις, and Aristotle does not mention the tense-test in any of the other places where he distinguishes κινήσεις from other ἐνέργειαι.⁷³ It is perhaps not obvious how Aristotle knows, for the supposedly τέλει ἐνέργειαι that he discusses (seeing and its intellectual analogues, and living, and living well), that the thing that is V-ing also has V-ed. Or, if it is obvious that I now both am seeing and have seen this book, it is not obvious that my having-seen-the-book is

imperfect," but also with what he goes on to call the ἐνεστώδες συντελικός "present perfect" (he also describes the pluperfect, at least implicitly, as the παρωχημένος συντελικός: the whole 2-by-2 array is probably Stoic)
⁷²in the Sextus passage the παρατατικός is indifferent between the present and the imperfect, as in the view Stephanus (cited in the last note) attributes to the Stoics; this, together with the use of συντελεστικός [a word not elsewhere attested in anything remotely like this sense] where we would expect συντελικός, suggests that what Sextus is reporting comes from quite an early stage in the development of the grammatical terminology. at Against the Physicists II,97, Sextus apparently ascribes the terminology of συντελεστικός and παρατατικός to Diodorus himself, and the ascription may be correct. for the purposes of the argument, the difference between present and imperfect is unimportant, since the dispute is whether e.g. κινεῖσθαι "exists," i.e. if the verb signifying κινεῖσθαι is true, of some subject, at some time. it hardly matters whether the verb in question is κινεῖται or ἐκίνητο: the present and imperfect share the same infinitive, naming the same action that they both signify in different ways, and if the present is true of S at some time then the imperfect is true of S at some time, and vice versa, whereas what is in dispute is whether it also follows that if the perfect (or the aorist, as in the examples in II,97-8--any semantic difference seems to be entirely ignored) is true of S at some time then the present is true of S at some time. incidentally, on philosophers' using these terms before grammarians do, note the pseudo-Demetrius of Phalerum's use of συντέλεια, noted in my "Origins ... E and D" paper
⁷³although apparently the same point is made, parenthetically, at De Sensu 446a29-b4. It is not, however, present at Sophistici Elenchi SE c22 178a9-11, which discusses an invalid dialectical reductio ad absurdum of the claims (which Aristotle apparently accepts) that is possible to see and have seen the same thing at the same time and in the same respect, and that it is not possible to do [ποιεῖν] and have done the same thing at the same time. This is not an allusion to an ἐνέργεια/κίνησις distinction: Aristotle thinks the fallacy turns on taking seeing [ὄρν] as a ποιεῖν, in accordance with the active form of the verb, when it is really a πάσχειν (178a16-19), and the whole context is a discussion of fallacies that turn on placing something in the wrong category: the ποιεῖν/πάσχειν distinction is a category-distinction, fit for solving such fallacies, and the ἐνέργεια/κίνησις distinction is not.

the same as my present activity of seeing-the-book: it might be the result of my activities of seeing-the-book at earlier moments (so that it would be a having-seen-earlier-book-stages). This would be right if we analyze seeing as "acquiring information about something via the eyes," so that the having-seen, would be "having information about something (where this information was acquired via the eyes)"; and so the information itself, or the ἔξις of having it, would be the τέλος for the sake of which seeing is valuable. But, Aristotle thinks, possessing knowledge is valuable only for the sake of exercising it, in this case recollecting the thing seen, and visual recollection is a mere imitation of actual seeing, and less valuable than actual seeing is. So any analysis that makes seeing a mere transition to a ἔξις, rather than the exercise of an already complete ἔξις, must be mistaken; and a similar conclusion holds for the intellectual analogue of seeing, which is not learning but contemplating. And similar considerations about value help to explain the claim that the person who is living well [εὖ ζῆ or εὐδαιμονεῖ] also has lived well: if not, then the τέλος would be not the activity of living well, but a subsequent condition of having lived well: as Aristotle says here, "he would have to stop," or, as he says elsewhere, someone would be most fully happy only once he is dead, "which is entirely absurd, especially for us who say that happiness is an ἐνέργεια" (NE I,10 1100a12-14), as we must say if we think a ἔξις is valuable for the sake of its exercise. Such considerations of value, and not simply arguments from ordinary usage, are needed to determine whether seeing and living well are κινήσεις.⁷⁴ Which is as we should expect: it was considerations of value, in Academic anti-hedonist arguments, that raised the issue in the first place, and it is considerations of value that will lead Aristotle to conclude that the first ἀρχή, being a τέλος and supremely valuable, will be an ἐνέργεια, which must be τελεία and therefore cannot be a κίνησις.

What remains to be explained, then, is why Aristotle described seeing and the like as κινήσεις in the first place, in Θ6α. (And if he did so through sheer carelessness in the first draft of Θ6α, why not just change it, rather than adding Θ6β?) But in fact, in the context of Θ6α, Aristotle has no reasonable alternative. The aim of Θ6α is to show that the terms ἐνέργεια and δύναμις can be legitimately extended by analogy from their original application, where the ἐνέργεια is an activity--either a ποιεῖν or a πάσχειν, but in either case what most philosophers would be happy to call a κίνησις--to cover also the case of a substance and the appropriate matter for that substance. Aristotle expresses this by saying that "some [cases of ἐνέργεια] are as κίνησις to δύναμις, others as οὐσία to some matter" (1048b8-9). This is not accurate, since not all activities (and not all the activities that Aristotle has given as examples) are κινήσεις,

⁷⁴note Rijksbaron's point that many of Aristotle's examples do not, in fact, correspond to ordinary Greek usage: Rijksbaron points out (Aristotle, Verb Meaning and Functional Grammar, pp.44-5) that Aristotle seems to have invented the forms εὐδαιμόνηκε and perhaps also ἔζηκε for this occasion, and that ἑώρακα is not in fact used for an object one is now seeing (nor, in later writers who use ἔζηκε, does it seem to be used of living persons. on the other hand, why would you need to use these forms in an affirmation, if the present would also be true? these forms would be perhaps most often used in negations, and the condition κἂν εἰ μὴ ἑωράκειμεν τὰ ἄστρα, "even if we had never seen the stars" (Metaphysics Z16 1040b34-1041a1) surely would not apply if we were currently seeing them, any more than if we had seen them in the past). Aristotle is regimenting the Greek language for his point, and legislating the perfect to signify the τέλος and the present to signify the πράξις. {perhaps discuss worries about whether the perfect really depends on the resulting state persisting, or whether it could be said even after. also perhaps discuss SE c22 178b23-9, where perfect and imperfect seem to be part of the point, although the solution turns mostly on a τόδε/τοιόνδε distinction and perhaps the whole thing could be done without the perfect. where Ross prints γέγραφε in 178b25, ἔγραφε is certainly correct. the inference from perfect to imperfect is invalid, since in "a false sentence has been written" it is consigned that it is now false, in "someone was writing a false sentence," that it was then false, note γέγραπται νῦν in b25 and ὅτ' ἐγράφετο in b26. the problem is not in going between passive and active}

even though most philosophers think they are. In most texts, once he has become aware of the ἐνέργεια/κίνησις distinction, Aristotle avoids this problem by saying "ἐνέργεια" rather than "κίνησις" for "activity." But he can hardly do that here: to say "some [cases of ἐνέργεια] are as ἐνέργεια to δύναμις, others as οὐσία to some matter" would undermine the point he is trying to make, that actualities in every category including οὐσία, and not just in the categories of ποιεῖν and πάσχειν, are legitimately described as ἐνέργεια of some δύναμις. And so he speaks here in an old-fashioned way that he now recognizes is inaccurate, using κίνησις as the name of a category under which all activities fall, which can be put in parallel with οὐσία. And so he now has to take it back in Θ6β, explaining that not all activities--he now uses, awkwardly, the non-technical "πράξεις" to cover both ποιεῖν and πάσχειν--should be called κινήσεις.⁷⁵

On the scope of the ἐνέργεια/κίνησις distinction

The beginning of Θ6β makes clear that the distinction between κίνησις and ἐνέργεια, or rather between κινήσεις and ἐνέργεια which are not κινήσεις, is a distinction entirely within the class of what Θ6β calls πράξεις; and these are what Θ6α calls κινήσεις. Nonetheless, several recent scholars, most influentially Aryeh Kosman, have denied this, and have tried to find greater metaphysical depth in the κίνησις/ἐνέργεια distinction by seeing in it a contribution to the understanding of οὐσία. Kosman takes Θ6β's distinction between κίνησις and ἐνέργεια (or rather, between κίνησις and τελεία ἐνέργεια)⁷⁶ to be the same as Θ6α's distinction between κίνησις and οὐσία, or between the κίνησις/δύναμις and οὐσία/ὑλη relations. So Kosman must take the "πράξεις" that are divided up in Θ6β to include both sides of Θ6α's distinction, οὐσία as well as κινήσεις. Kosman wants this distinction, the main theme of both Θ6α and Θ6β on his reading, to be the high point of the argument of Θ as a whole, and to be making a fundamental contribution to the understanding of οὐσία: "this distinction, as Aristotle's remarks at the beginning of Θ suggest, is introduced as a moment in the argument concerning ousia and being that occupies the central books of the Metaphysics," so that this discussion "[does] not make up an appendix to the account of ousia in the earlier books of the Metaphysics; [it is] meant to serve, we should suspect, a purpose in the development of that account" (Kosman OSAP v.2 p.137 and p.122; in fact, as we saw in IIIα1, Θ1 makes clear that the investigation περὶ οὐσίας is over and that we are now investigating something else). Θ1 had said that there were two kinds of δύναμις, and correspondingly of ἐνέργεια: one kind of δύναμις, the kind said κατὰ κίνησιν, is the linguistically stricter (and the more accessible) sense of δύναμις, but the other is "most useful for what we are now aiming at" (1045b34-1046a2). Discussion of the deeper kind of δύναμις was deferred to the περὶ ἐνεργείας διορισμοί (1046a2-4), and when in Θ6α Aristotle says "since it has been spoken about the δύναμις that is said κατὰ κίνησιν, let us διορίσωμεν περὶ ἐνεργείας" (1048a25-6), and in so doing distinguishes a new sense of δύναμις not related to κίνησις, he is obviously taking up this promise from Θ1.⁷⁷ So the two kinds of δύναμις and ἐνέργεια referred to in Θ1 are the two kinds distinguished in Θ6α, the κίνησις/δύναμις pair and

⁷⁵perhaps note, drawing on Bonitz' Index, of various uses of "πράξεις". it is used mostly for activities of humans and other animals, and is sometimes equivalent to κίνησις in this context, but πράττειν/πράξεις are sometimes opposed to πάσχειν/πάθος as active to passive, and also sometimes to ποιεῖν/ποίησις as activity without an external product to activity with an external product. it is certainly never the name of a category

⁷⁶Kosman, like many recent scholars, tends to speak as if κίνησις and ἐνέργεια were two non-overlapping classes; but Kosman concedes (OSAP v.2 p.128) that this is not in fact correct, and that κίνησις = ἀτελής ἐνέργεια is a subclass of ἐνέργεια.

⁷⁷reference to discussion above (eliminate duplication?)

the οὐσία/ύλη pair. But Kosman, by identifying Θ6α's κίνησις/οὐσία distinction with Θ6β's κίνησις/ἐνέργεια distinction, concludes that Θ1's two kind of δύναμις are also respectively the δύναμις related to κίνησις and the δύναμις related to ἐνέργεια.⁷⁸ Kosman thinks that what the second kind of δύναμις is "most useful" for is the inquiry into οὐσία, which he thinks Θ is continuing. The reason it is supposed to be useful is that there was a problem about οὐσία, specifically about the unity of matter and form within a composite οὐσία (and a closely allied problem about the unity of a definition), left over from ZH. H6 says that this ἀπορία is unsolvable on some (especially Platonist) assumptions, but that "if, as we say, one [constituent] is matter and the other form, and the former is δυνάμει and the latter ἐνεργεία, what we are seeking will no longer appear to be an ἀπορία" (1045a23-5).⁷⁹ But, Kosman thinks, what Aristotle says here in H6 is not sufficient, unless we understand "in what sense matter and form are correlated with potentiality and actuality, and how this may be thought to solve the problem of the unity of substance-being with which we are left after Z and H" (OSAP v.2 p.122); and this is what Θ, above all Θ6, are supposed to show. The specific difficulty Kosman finds here is that, in ordinary δύναμις-as-related-to-κίνησις, when the δύναμις has been fully actualized it is destroyed ("when there is a house, it is no longer housebuildable," Physics III,1 201b12), whereas the matter still exists when it is informed; the solution will come in discovering the deeper δύναμις-as-related-to-ἐνέργεια, in which, when the δύναμις has been fully actualized, the δύναμις is preserved and indeed is only then most fully manifested (OSAP v.2 p.131). Metaphysics Θ, by showing that the matter is δύναμις in this deeper sense, and the form is the correlative ἐνέργεια, will complete the solution of the problems about οὐσία begin in ZH.⁸⁰

⁷⁸this is certainly not how Aristotle speaks: consistently in Θ, every δύναμις is correlated with an ἐνέργεια, never with something other than an ἐνέργεια. in Θ6α, Aristotle says not that some things are as ἐνέργεια πρὸς δύναμιν and others as κίνησις πρὸς δύναμιν, but rather that some things are as οὐσία πρὸς ύλην and others as κίνησις πρὸς δύναμιν, and that both of these are types of ἐνέργεια/δύναμις relation. however, Kosman will presumably say that Aristotle is here using "ἐνέργεια" "broadly," to include ἀτελείς ἐνέργεια, and that he, Kosman, is using it "strictly" for only τέλει ἐνέργεια. I agree with Kosman that some δυνάμεις are for τέλει and others for ἀτελείς ἐνέργεια, but I deny that this yields the distinction between δυνάμεις for οὐσία and for κίνησις. indeed, since according to the De Anima and Physics an ἐνέργεια is complete or incomplete according as the δυνατόν of which it is the ἐνέργεια is complete or incomplete, it seems that soul as first ἐνέργεια or first ἐντελέχεια of the potentially living body would be incomplete, whereas seeing etc. as ἐνέργεια of the completed ensouled body would be complete, if the complete/incomplete ἐνέργεια distinction applied to substantial forms, as it does on Kosman's view but not on mine

⁷⁹in context, the ἀπορία here is about the unity of genus and differentia within a definition, not about the unity of matter and form within a composite substance. but Kosman thinks (OSAP v.2 p.138), and I agree, that Aristotle is giving the same solution to both ἀπορία, and that he thinks they have the same status. further on in H6 Aristotle does turn to the ἀπορία about the unity of matter and form within a composite substance, describes the vain efforts of other philosophers to solve the ἀπορία, and then says how it stands on his own view: "but, as we have said, the ultimate matter and the form are the same thing, the former δυνάμει and the latter ἐνεργεία, so that [seeking the cause of their unity] is like seeking the cause of some one, i.e. of its being one: for each thing is some one, and what is δυνάμει and what is ἐνεργεία are one in a way, so that there is no other cause [for the unity of what is δυνάμει and what is ἐνεργεία], unless there is something which [is a cause] as what moved it from δύναμις to ἐνέργεια" (1045b17-22; cp. De Anima II,1 412b6-9)

⁸⁰while this is not the main issue I want to argue with Kosman about, I am sceptical that Aristotle intends such a contrast between δυνάμεις destroyed or preserved by their actualities. the Physics passage is arguing that the ἐνέργεια of the buildable qua buildable must be the process of building on the ground that it can't be the house, since when the house exists the buildable does not exist: this seems to presuppose a general principle that the ἐνέργεια of a δύναμις can't exist unless the δύναμις itself does. and when Θ6β contrasts τέλει ἐνέργεια with κινήσεις, it does not seem to say that in this case the δύναμις is preserved--it talks about the ἐνέργεια and the resulting state, but says very little about the δύναμις.

Kosman must thus maintain that, since Θ6α's κίνησις/οὐσία distinction coincides with Θ6β's κίνησις/ἐνέργεια distinction, the examples of activities from Θ6α that would fall under (complete) ἐνέργεια rather than κίνησις by the criteria of Θ6β cannot be meant by Θ6α as examples of κίνησις, but must instead be intended as examples of οὐσία. That is: even if seeing, for instance, cannot be strictly an οὐσία, Kosman thinks it falls under the class of things that are said as οὐσία to some matter, rather than those that are said as κίνησις to δύναμις; or else Aristotle would be introducing the same example to illustrate κίνησις in Θ6α and the class opposed to κίνησις in Θ6β. When Kosman goes through Aristotle's examples of ἐνέργεια and δύναμις from Θ6α to determine which are said as οὐσία and matter, which as κίνησις and δύναμις, these are his results: (i) the Hermes in the wood and the half-line in the whole are said as δύναμις to κίνησις, since the potentiality would be replaced by an actuality; (ii) the person able to contemplate something is said as matter to οὐσία, since the potentiality is preserved and manifested by the actuality; (iii) housebuilding, being awake, and seeing are said as οὐσία to matter, since at least the last two are clearly τέλει ἐνέργεια; (iv) what has been separated out of the matter and the finished product (in Kosman's translation, the shaped and the wrought) are said as κίνησις to δύναμις, since here again an actuality has replaced a contrary potential condition (OSAP v.2 pp.135-6). These results are catastrophic. Of the eight examples that must be classified under οὐσία/matter or κίνησις/δύναμις, Kosman gets a perfect 0/8. It is obvious, for instance, that Hermes and the shaped and the wrought are examples of οὐσία, not of κίνησις;⁸¹ when Aristotle gives, as one example of his analogy, that it is "as what has been separated out of the matter is to the matter" (1048b3), and then just a few lines further says that some of his examples are "as κίνησις to δύναμις, others as οὐσία to some matter" (1048b8-9), it is clear that what has been separated out of the matter falls under the second class. Although contemplation, housebuilding, being awake, and seeing, are on Aristotle's mature view not strictly κινήσεις,⁸² they are still examples of ποιεῖν or πάσχειν, thus members of what he elsewhere calls the category of κίνησις, very far from the category of οὐσία, and both the senses and the arts (and specifically housebuilding) were examples of (kinetic) δυνάμεις in Θ1-5; as we have seen, Aristotle in several places describes sensation, and in one place being awake, as a κίνησις, and even in the *De Anima*, "second ἐνέργεια" like contemplation and seeing and being awake are contrasted with the οὐσία, the soul, which is the first ἐντελέχεια of the body, and is present whether the animal is awake or asleep. But perhaps the clearest evidence against Kosman's classification of the examples is from the Δ7 parallel, discussed above, where Aristotle first gives the examples of what is actually and potentially seeing, knowing, and resting, and then says "and likewise with οὐσία: for we say that Hermes is in the stone, and that the half of the line is, and that what is not yet ripe is grain" (Δ7 1017b6-8). The procedure in passing from activities to οὐσία is the same as in Θ6α, and Hermes and the half-line are clearly introduced as examples of οὐσία, contrasted with seeing and contemplating, which are non-οὐσία: it would be bizarre to think that Θ6α, without any warning, is reversing the point of these four examples, taking the two earlier examples of οὐσία as examples of non-οὐσία and vice versa.

⁸¹Aristotle sometimes counts artifacts as οὐσία and sometimes not, but obviously they are not motions. anyway, in the examples he gives here it's not so important whether what he cites as an οὐσία might on close examination turn out not to be an οὐσία, as long as it's generally regarded as one: he's just trying to get you to grasp the concept of the two kinds of ἐνέργεια-δύναμις relations and the analogy that unites them. lines, while not properly οὐσία on Aristotle's own view, are οὐσία according to one of the views discussed in B#12, and cited in Z2, a view which has not been refuted by anything said up to this point in the *Metaphysics*.

⁸²housebuilding is a κίνησις of the material, and of the builder as soul-body composite, but not of the art and thus presumably not of the builder qua builder

The fact is that the way Aristotle is sorting the examples in Θ6α between κίνησις and οὐσία has nothing to do with the way Kosman is sorting them between destroyed and preserved δυνάμεις. And this is because Aristotle is not trying to solve the problem that Kosman is trying to solve, about the unity of matter and form within a composite οὐσία. Although Kosman says that "the problem of Metaphysics Θ" is "the problem of explaining (the very possibility of) the unity of substance-being" (OSAP v.2 p.144), as far as I can see Θ shows no awareness of this problem at all: Θ1 makes clear that we are no longer investigating περὶ οὐσίας, and Θ seems never to suggest that there are aporiai about οὐσία remaining to be solved. Although Kosman takes the H6 passages about matter as δύναμις and form as ἐνέργεια as indicating a further topic that must be explored in Θ in order to solve the aporia of the unity of a substance, Aristotle seems instead to be saying that for us, who take as matter for X what is δυνάμει X and as the form the ἐνέργεια of that δύναμις, there is no aporia and no need to look for a further explanation of unity. Aristotle is studying δύναμις and ἐνέργεια in Θ, not as a means to ousiology, but as a means to archeology, because most earlier philosophers regard the ἀρχαί as in some sense δυνάμεις, and because Aristotle wants to defend a revisionist conception of the ἀρχαί as pure ἐνέργεια. (For this purpose the main conclusions of Θ are in Θ7-9, especially Θ8; by contrast, Kosman sees the main conclusions as being in Θ6, and actually never mentions Θ8 in his OSAP article.) Aristotle does, of course, have something to say about οὐσία in Θ6α, and the thesis that an οὐσία is to its matter as ἐνέργεια to δύναμις is important for the argument of Θ, but it is important, not as a further contribution to ousiology (and certainly not to the aporia about unity), but to investigating the claims of δυνάμεις and ἐνέργεια as ἀρχαί: it will be used in Θ7 to show that what is potentially all things is not τὸδε τι, and in Θ8 to show that ἐνέργεια is prior to δύναμις in οὐσία. On the other hand, there are no ousiological concerns at all in Θ6β, none of whose examples involve οὐσία. Kosman says that, on non-ousiological readings of Θ6β, it is "unclear ... why [Aristotle] should have thought it important to make the distinction here and in this context ... what interest could a mere criterion [for distinguishing motions from activities] have at this moment in the argument of Metaphysics Θ that would justify the important place it occupies in Chapter 6?" (OSAP v.2 p.125).⁸³ But as we have seen, even without ousiological interest, Aristotle's argument that some activities are not κινήσεις and can be τέλη is important for his claim in Θ8 that a thing's ἐνέργεια is its τέλος, and especially for his claim in Λ that the ultimate ἀρχή and τέλος of all things is an unchanging pure ἐνέργεια. The ousiological subtleties that Kosman sees in Θ6 come from conflating the concerns of Θ6β with those of Θ6α; but no such subtleties are there in Θ6, nor are they needed for Aristotle's aims in Θ. Both halves of Θ6 make important clarifications to the notion of ἐνέργεια, Θ6α by showing that it can be applied, beyond the domain of activities, to οὐσία, and Θ6β by showing that it can be applied to activities which are not motions. But these clarifications are only preliminary to the investigation περὶ ἀρχῶν. The archeological conclusions are drawn, in the context of the investigation of δύναμις and ἐνέργεια, in Θ7-9, and in a full exposition of Aristotle's theory of the ἀρχαί in Metaphysics Λ.

⁸³incidentally, Kosman seems never to acknowledge the troubled textual situation of Θ6β.