

The Origins of Aristotle's Concept of 'Ἐνέργεια: 'Ἐνέργεια and Δύναμις'

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Aristotle's philosophy makes crucial use of the distinction between being as potentiality (δύναμις) and being as actuality (ἐνέργεια, ἐντελέχεια). The separate intelligible substances are pure actuality, but sensible substances involve both actuality and potentiality, and Aristotle uses this distinction to analyze the status of sensible things. Indeed, Aristotle uses the actuality-potentiality distinction to secure the very possibility of a science of physics, by explaining the possibility of coming-to-be, and resolving the contradictions that Plato, following the Eleatics and Sophists, had detected in changeable things. Those who think that 'contradictories and contraries occur simultaneously', Aristotle says, 'have come to this opinion from the sensibles, for they see that contraries come-to-be out of the same thing: so if it is not possible for what is not to come-to-be, the preexisting thing was both' (*Metaphysics* 1009a22-26). Although these people are somehow right that the sensibles are both being and not-being, Aristotle saves the principle of contradiction: 'for being is said in two ways, so that there is a way in which something can come to be out of what is not, and a way in which it cannot, and the same thing can be simultaneously being and not-being, but not in the same way: for the same thing can be the contraries simultaneously in potentiality, but not in actuality' (1009a32-36).

I propose to elucidate Aristotle's potentiality-actuality distinction by investigating the *origins* of this distinction. I consider both the pre-Aristotelian (especially Platonic) conceptual resources and the origins of the conception in Aristotle's own thought: the problems that led him to formulate the distinction and the stages through which it developed. But in seeking origins, we must be clear from the start that Aristotle is (and knows that he is) the first formulator of this distinction, however much he may have been stimulated by the work of earlier philosophers. We must not confuse the distinction between actuality and potentiality, two senses of *being*, with the distinction between form and matter, two kinds of *cause*: although Aristotle believes that the matter of X must be something that is X potentially, he regards this not as a tautology but as a new and important principle governing the assignment of material causes.²

¹ There will be a sequel, 'The Origins of Aristotle's Concept of ἐνέργεια: ἐνέργεια and κίνησις'. I would like to thank John Cooper, the editor of *Ancient Philosophy*, and an anonymous reader, for helpful comments on earlier versions of the present paper.

² Aristotle thinks that Plato posited a single material principle for all things; Aristotle stresses,

Although Aristotle repeatedly credits Plato with the matter-form distinction, he never credits him with the potentiality-actuality distinction, and he implies that Plato did *not* have this distinction. At the beginning of *Physics* i 9, having given his own solution to Parmenides' challenge to the possibility of coming-to-be, Aristotle says that 'some others [Plato] have also touched on [matter], but not sufficiently' (191b35-36); part of the insufficiency is that 'it seems to them that if it is one in number, it must also be only one δυνάμει; but this differs a great deal' (192a1-3). In effect Aristotle is saying that Plato did not have the concept of being δυνάμει: for if a single thing cannot be δυνάμει anything other than the thing it actually is, the concept of being δυνάμει collapses into the concept of actual being. Plato defies Parmenides, and says that a thing X may come-to-be from not-being; Aristotle agrees, but insists that Plato has not properly explained the kind of not-being from which X can come-to-be: X must come-to-be, not from absolute not-being, but from some Y that exists not as X but as X potentially. Using the new concept of being δυνάμει, Aristotle can declare a new solution to the problem of coming-to-be: 'all things come-to-be out of what is, but out of what is δυνάμει, and is not ἐνεργεία' (*Meta.* 1069b19-20).

Plato uses δυνάμει adverbially only once, and there the diagonal is 'δυνάμει two feet', two feet 'in square' (*Statesman* 266b3, cf. κατὰ δύναμιν at *Timaeus* 54b4-5). When Aristotle speaks of τὸ ὄν δυνάμει, he is not referring back to an already established adverbial sense of δυνάμει; he must be referring to some available sense of the noun δύναμις, and using the concept of δύναμις to draw out the deeper conception of being δυνάμει as a way of being. Discarding clearly irrelevant senses (like 'square'), what Plato means by δύναμις is 'active or passive power': he proposes, as if equivalently, that the mark of being is δύναμις (*Sophist* 247e3-4), or that every real being must have some δύναμις εἴτ' εἰς τὸ ποιεῖν...εἴτ' εἰς τὸ παθεῖν (247d8-e1). Aristotle himself regards these powers to move or to be moved as the original meaning of δύναμις and the strictest sense of the term (*Meta.* ix 1.1045b35-1046a2). Indeed, when Aristotle reviews the different senses of δύναμις in *Metaphysics* v 12, he makes no mention at all of τὸ ὄν δυνάμει, and derives all non-equivocal senses of δύναμις from the powers to move and to be moved: although other things, including 'what is not necessarily false', are also called δυνατά, 'these are not δυνατά according to a δύναμις; the things which are called [δυνατά] according to a δύναμις are all so-called with reference to the primary [sense of δύναμις], which is a principle of change in another or in [the thing itself] *qua* other' (1019b34-1020a2). Similarly in *Metaphysics* ix Aristotle says that all other senses of δύναμις must be derived from this primary sense (1046a4-16); how then will he derive the concept of τὸ ὄν

against Plato, that it is necessary to posit 'some appropriate (οἰκεία) matter for each thing' (*Meta.* 1044a17-18), i.e., that 'we must posit for each thing what is potentially it' (1089b15-16). The context of the latter assertion shows that Aristotle thinks the Academics have not followed this principle in looking for a single material principle: there is no one matter that could be potentially substance, potentially quality, etc., and the Academics have not claimed that their matter is potentially all these things, or potentially anything.

δυνάμει?

An active or passive power is a principle that is *able* to do or suffer something; and we might suppose that Aristotle, by reflecting on δύναμις as the *ability* to do or suffer, isolates the more fundamental notion of ability-in-general, and extends δύναμις and the δυνατόν by analogy, from the ability (or what is able) to do or suffer, to the ability (or what is able) to *be*. But even if Aristotle did generalize the concept of δύναμις in this way (and we should be suspicious of this assumption, given the denial of such a generalization in *Metaphysics* v 12), this by itself will not provide us an adequate account of Aristotle's ways of speaking about δύναμις: in particular, it leaves it unclear how the term opposed to the various senses of δύναμις comes to be ἐνέργεια.

The problem has several aspects. In the first place, the origins of the word ἐνέργεια are obscure. As far as we know, Aristotle invented it: ἐνέργεια and ἐνεργεῖν do not occur in Plato or in the fragments of the Old Academics, and the dictionary cites no earlier uses.³ Yet Aristotle seems to assume that his readers (or hearers) understand what the word means. This is not by itself so disturbing: the Greek language was expanding its philosophical vocabulary, and perhaps this word (coined by Aristotle or by someone else) had become current in the Academy. What is worse is that the etymology of the word is unconnected with the meaning 'actuality', and suggests instead the meaning 'activity': and this latter is in fact the only meaning in which ἐνέργεια, ἐνεργεῖν occur in any writers except Aristotle and those obviously influenced by him.⁴ Furthermore, in addition to ἐνέργεια, Aristotle uses another word to mean 'actuality', namely ἐντελέχεια, and this term is agreed to be Aristotle's own coinage. Why should Aristotle have invented *two* new words for actuality, or (if the term ἐνέργεια already existed), why did he both create a new word for actuality, and then also (side by side with his new 'clean' technical term) use for 'actuality' a word which already had the different meaning 'activity'?

Beyond the problem of the origin of the words, ἐνέργεια seems to be ambiguous in Aristotle himself between 'actuality' and 'activity', whereas ἐντελέχεια always means 'actuality'. Aristotle says in *Metaphysics* ix 3 that 'the name

³ Only one treatise in the Hippocratic Corpus, the *Diseases of Women*, uses the verb ἐνεργεῖν. Since the word is not a technical term of gynecology, the presence of the word exclusively in this treatise would suggest a late date for the treatise. (I do not know what other evidence there may be for dating this treatise.)

⁴ It is important to be clear, however, that ἐνέργεια 'activity' does not imply 'action' as opposed to 'passion': there are both active or productive activities (*making* or *affecting* something) and passive or receptive activities (*suffering* something, and so *becoming* something), corresponding to the active and passive δυνάμεις; sensation, Aristotle's most frequent example of ἐνέργεια, is a passion, not an action. The unfortunate homophony between activity-versus-passivity and activity-versus-capability is an inheritance from Latin, and does not occur in Aristotelian Greek. (In later Greek, however, ἐνεργεῖν can connote activity as opposed to passivity: ἡ ἐνεργητικὴ διάθεσις in the grammarians is the active voice of a verb, contrasted with ἡ παθητικὴ διάθεσις, the passive voice.) In what follows it *should* be clear when 'active' means ποιῶν-versus-πάσχον and when it means ἐνεργοῦν-versus-δυνάμενον.

ἐνέργεια, which is applied to ἐντελέχεια (ἡ πρὸς τὴν ἐντελέχειαν συντιθεμένη), has been extended to other things especially from motions, for it is motion which appears especially to be ἐνέργεια' (1047a30-32). Aristotle thinks that this appearance is deceptive, both because there are ἐνέργεια in the strict 'activity' sense (e.g., God's operation on the heaven of fixed stars) which involve no motion on the part of the ἐνεργοῦν, and because he thinks that the name ἐνέργεια can properly be applied to actual existence (ἐντελέχεια) in all categories including substance, which is certainly not a motion; but Aristotle thinks nonetheless that the most *manifest* instances of ἐνέργεια are motions, and that his predecessors have succumbed to the natural temptation to identify ἐνέργεια with motion.⁵ So Aristotle begins from a concept of ἐνέργεια as activity (the sort of activity that *suggests* motion, even if it does not strictly *imply* it) and extends it by some analogy to include actuality in all categories, whereas he uses ἐντελέχεια only for 'actuality'. He opposes both of them, however, equally to δύναμις without any terminological distinction between two different kinds of δύναμις.

If we turn to Bonitz' *Index Aristotelicus* for clarification on the relations of the terms ἐνέργεια, ἐντελέχεια, and δύναμις, we find only puzzlement. Bonitz first suggests that 'Aristotle distinguishes ἐντελέχεια from ἐνέργεια in such a way that ἐνέργεια signifies the action by which something passes from possibility to full and complete reality, and ἐντελέχεια signifies this completeness itself'; but he concludes that 'it is evident from Aristotle's constant practice that this distinction is not maintained, and that both names are used promiscuously', and he suggests that 'this can perhaps be explained from the ambiguity of the word ἐνέργεια', i.e., its fluctuation between the senses of 'activity' and 'actuality' (Bonitz 1870, s.v. ἐντελέχεια).⁶ But Bonitz offers no explanation for how the senses of 'actuality' and 'activity' are connected, and merely notes that ἐντελέχεια, like ἐνέργεια, is opposed to δύναμις, and that the two words are fre-

⁵ So, in the immediate continuation of the quote from *Metaphysics* ix 3, Aristotle says that 'for this reason they do not attribute κινεῖσθαι to non-existents, whereas they do attribute other predicates, e.g., that non-existents 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]' (1047a32-b1). The 'they' who do not attribute motion to non-existents are Plato, and the reference is to the fifth hypothesis of the second part of the *Parmenides*, esp. 162c6ff.; Aristotle is implying that the only ἐνέργεια Plato could imagine was motion, since motion is the only predicate Plato sees fit to deny to things which are not in ἐνέργεια. Aristotle is not necessarily attributing a use of the word 'ἐνέργεια' to his predecessors; as I have noted, we have no evidence of any pre-Aristotelian use of the word. Nonetheless, it seems defensible to say that Plato assumed that all activity was motion; this assumption was continued by the Hellenistic philosophers, and (as I will argue in the sequel to this paper) was shared by Aristotle himself at one stage in his thought.

⁶ Cf. Michael of Ephesus (the pseudo-Alexander) on the *Metaphysics* ix 3 passage about ἐνέργεια and ἐντελέχεια: 'ἐνέργεια is said in two ways, in one way the ends themselves (for the end of whitening, i.e., the white, in which whitening ceases and rests, is called ἐνέργεια, and in the same way the ends of the other κινήσεις are called ἐνέργεια, but these are what he [Aristotle] especially calls ἐντελέχεια)—so in one way ἐνέργεια is said of these things, but in another way the κίνησις itself is called ἐνέργεια' (Alexander *In Aristotelis Metaphysica Commentaria* 573).

quently substituted for each other. But surely there must be some intimate connection between Aristotle's conceptions of activity and actuality, if Aristotle freely uses the one term ἐνέργεια for the two concepts, and the one term δύναμις for their opposite. There are two immediately plausible ways of reconstructing a connection between actuality and activity: the first way reduces activity to actuality, and makes 'actuality' the English equivalent of ἐνέργεια, by making activity a *special case* of actuality (a man is engaged in the *activity* of thinking when he is *actually* thinking, merely *capable* of thinking when it is merely *possible* that he should think);⁷ the second way reduces actuality to activity, and makes 'activity' the English equivalent of ἐνέργεια, by interpreting the actual existence of a thing (in any category including substance) as itself an activity, in the Thomist phrase an 'act of being'.⁸ Either view can admit that Aristotle's starting-point for thinking about ἐνέργεια was a concept of activity (paradigmatically illustrated by motion); then either (i) Aristotle recognizes by reflection on the concept of activity that this is a special application of the more abstract modal concept of

⁷ Both Ross' translation of the *Metaphysics* (revised version in Barnes 1984) and Furth 1985 render ἐνέργεια by 'actuality' as consistently as they can, thus apparently committing themselves to the view that ἐνέργεια in Aristotle primarily signifies a general modal concept, and means 'activity' only by specialization. Furth's vocabulary list gives for ἐνέργεια both 'actuality' (which is usually wrong) and 'actualization' (which is *always* wrong) but not 'activity' (which is usually right).

⁸ So Kosman 1984 in his first footnote explaining his policy on translating the crucial terms: although Kosman, as a matter of convention, will render ἐνέργεια by 'actuality', 'the text demands in an enormous number of contexts that "energeia" be rendered as "activity" if the argument is to be understood, though it equally demands 'actuality' in a great number of other contexts. I've tried to avoid the common but unhappy solution of using different terms in different contexts because I think it purchases felicity in the particular context at the cost of obscurity in the larger argument. If it were not so cumbersome, we might want to use "actuality-activity" throughout, or if it were not so barbaric, a neologism such as "actualuality," or if it were not so historically and ideologically laden, the simple Thomistic "act." The point of this paper is to argue that Thomas is right to see at the heart of Aristotle's ontology the claim that actuality is activity, and that being therefore is act; in any case, I'd like "activity" to be heard throughout my readings of "actuality" (121). In fact it is not easy to decide to what extent Thomas interprets the 'act of being' as an activity, since Thomas sticks to the term 'actus' that he found in the Latin translations of Aristotle, and whose interpretation is precisely in question. Thomas' position is somewhere on a continuum between the interpretation of Aristotle that reduces activity to actuality and the interpretation that reduces actuality to activity; it is not clear exactly where on this continuum Thomas is located, although it is plausible to put him near the 'activity' end, as Kosman does. I will not need to determine Thomas' precise position in this paper, since my concern will be to argue against the assimilation between activity and actuality fundamental to this whole continuum of interpretations of Aristotle. Thomas is committed, at a minimum, to the thesis that *potentia* in every proper signification denotes the subject that can receive some perfection or completion, and that *actus* denotes the perfection that completes this subject; and Thomas says that existence stands to essence as *actus* to *potentia* (see *Summa Theologiae* Part I, Q4a1, ad 3, and especially *De Potentia* Q7a2, ad 9). So a non-existent object has some potency for existing, and when the object actually exists this potency is fulfilled; the potency for existing must be *somehow* analogous to the active and passive powers (e.g., of fire to heat and of a stone to be heated), and actual existence must be analogous to the exercise of these powers (i.e., to the active activity of heating and the passive activity of being heated, which perfect or complete these powers); how precise the analogy is, and whether the *actus* of existence would itself be properly described in English as an activity, may be left open.

actuality, which may be called ἐνέργεια from its most obvious case; or (ii) Aristotle recognizes, by reflection on the existence of different kinds of things, that actual existence in each case consists in the appropriate activity, that ‘to be for living things is to live’ (*De anima* 415b13), so that every actuality is an instance of ἐνέργεια.

In what follows, I will try to trace the origins of Aristotle’s concept of ἐνέργεια, and to show how, starting from a concept of ἐνέργεια as activity, Aristotle develops the new conception of the opposition of being-in-potentiality and being-in-actuality. The concept of activity remains fundamental, and never becomes a specialization of an abstract concept of actuality; at the same time, while the concept of actuality is derivative from the concept of activity, actuality is *not* an instance of activity, and there is no ‘act of being’. By setting Aristotle’s works in their historical and (so far as possible) developmental context, I hope to elucidate Aristotle’s distinctive and surprising way of approaching questions of actuality and potentiality, beginning from the concept of activity, particularly as it occurs in ethics, psychology and the theory of knowledge.

A. The original concept of ἐνέργεια as activity

We can best understand the development of Aristotle’s concepts of δύναμις, ἐνέργεια, and ἐντελέχεια, by beginning with his earliest works, which remain close to the terminology of Plato and the Academy. I will accept Ingemar Düring’s reconstruction of the *Protrepticus* as substantially correct, and as giving the earliest work of Aristotle to have survived to any significant extent.⁹ The extant fragments of the *Protrepticus* use the noun δύναμις 14 times, and forms of the verb δύνασθαι another 14 times. Disregarding one passage where ‘δύναμις’ apparently means political power (B98), and four where ‘δυνατόν’ just means ‘possible’ (B31, 41, 57, 71), Aristotle is always referring to a power of the soul, generally a power of theoretical or practical cognition: beyond the basic ‘living’, the examples are sensing and especially seeing, intellectual contemplation (φρονεῖν), the virtues, and arts such as medicine. In calling such things δυνάμεις, Aristotle is close to Academic texts like the pseudo-Platonic *Definitions*, which use δύναμις as the genus for prudence, continence, piety, knowledge, and education. But although the *Protrepticus* is interested primarily in *psychic* δυνάμεις, Aristotle considers these as instances of the general Platonic notion of a δύναμις εἴτ’ εἰς τὸ ποιεῖν εἴτ’ εἰς τὸ παθεῖν. Thus Aristotle notes that understanding and seeing and the like are said ‘either through ποιεῖν or through πάσχειν’ (B81); and when he explains how a secondary sense of ‘living’ is derived from the primary sense, he says that the person who lives in the secondary sense is ‘such as τὸ πάσχειν or ποιεῖν in that particular way (ἐκεῖνως)’ (B83), presupposing that, when we spell out the primary sense of living, it will be some particular variety either of ποιεῖν or of πάσχειν.

Where the *Protrepticus* goes beyond Plato is not in its use of δύναμις but in its

⁹ I will cite the *Protrepticus* according to Düring’s edition (Düring 1961).

use of the novel term ἐνέργεια, which (with the verb ἐνεργεῖν) occurs nine times in extant fragments of the *Protrepticus*. But on examination we can see that ἐνέργεια does not yet have the meaning ‘actuality’, and that the *Protrepticus* represents only a first step toward Aristotle’s later doctrine of potentiality and actuality. Aristotle wishes to argue in the *Protrepticus* (as in later writings) that the most desirable life is a life of knowledge or science (ἐπιστήμη), not the bare possession of science but an ἐνέργεια, the activity of contemplating (θεωρεῖν). In the *Protrepticus*, as elsewhere, Aristotle illustrates the difference between contemplating and merely having science by the contrast between waking and sleeping: this is an analogy and more than an analogy, since the geometer retains his science, without contemplating, even when he is literally asleep. Aristotle builds up an elaborate argument about the superiority of ἐνέργεια on the opening sentence of B79: ‘living (τὸ ζῆν) seems to be said in two ways, one in the sense of a δύναμις and the other in the sense of an ἐνέργεια’.¹⁰ Since living is constituted first by sensing, and then by analogous higher powers, Aristotle illustrates the difference between the two ways of being alive by referring to the example of sensation. ‘For we call “seeing” both those animals which have sight and are naturally capable of seeing, even if they happen to have their eyes closed, and also those animals which are using this capacity (χρώμενα τῆ δυνάμει) and directing their vision towards something’ (B79). Thus the difference between seeing in the δύναμις-sense and seeing in the ἐνέργεια-sense is explained as the difference between merely possessing the δύναμις of sight and using this δύναμις: ‘sensing is twofold, principally using (χρησθαι) the senses but also being capable (δύνασθαι)’ (B80). Now one might think that Aristotle is speaking of use (χρησις) simply as a vivid and metaphoric way of getting across what he means by activity or actuality (ἐνέργεια) in the case of a faculty like sensation: when we are sensing in actuality, or engaging in the activity of sensing, we are then ‘using’ our senses, as in English someone may be told to ‘use your eyes’ or ‘use your head’. But in fact this is quite inadequate to describe how Aristotle is thinking about χρησις and ἐνέργεια.

In fact Aristotle uses the words χρησις and ἐνέργεια, χρησθαι and ἐνεργεῖν, interchangeably and all-but-synonymously; furthermore, it is χρησις that is the original technical term for activity, ἐνέργεια having begun as an explanatory synonym or alternate for χρησις before coming to displace it. In the *Protrepticus* itself the words χρησις and χρησθαι are significantly more common than ἐνέργεια and ἐνεργεῖν, and Aristotle switches back and forth freely between the two sets of terms.¹¹ Where, as in the *Protrepticus*, ἐνεργεῖν is an alternate for

¹⁰ ‘X κατά Y’ means ‘X in the sense of “Y”’, where ‘X’ in some circumstances means something different; the phrase may be taken as an abbreviation for ‘X λεγόμενον κατά Y’. So περὶ οὐσίαν τὴν κατὰ τὸν λόγον, ‘about οὐσία in the sense of the λόγος’ (*Meta.* 1025b27-28); ὁ κατὰ φρόνησιν λεγόμενος νοῦς, ‘νοῦς in the sense of “φρόνησις”’, contrasted with νοῦς in a different sense (*De anima* 404b5).

¹¹ Thus where B83 speaks of a person ἐνεργῶν τῆ ψυχῆ, B91 begins by speaking of ψυχῆς χρησις, and then at the end of the fragment calls such a χρησις an ἐνέργεια. B79 contrasts the strong

χρησθαι, it mimics the syntax of χρησθαι, taking a dative of the instrument or power (typically ψυχή or ἐπιστήμη) which is being used.¹² Thus the *Eudemian Ethics* says that ‘ἐπίστασθαι and εἰδέναι is twofold, one having and the other χρησθαι τῇ ἐπιστήμῃ’ (1225b11-12); the *Magna Moralia*, making the same point, says that ‘ἐπίστασθαι is twofold, of which one is having ἐπιστήμη (for we say that someone ἐπίσταται when he has ἐπιστήμη), and the other is already ἐνεργεῖν τῇ ἐπιστήμῃ’ (1201b10-12). In what are apparently the earliest parts of the corpus, Aristotle often uses χρῆσις where later ἐνέργεια would be the technical term: in these early texts his habit is to alternate between χρῆσις and ἐνέργεια, or to link the two terms together. So in *Eudemian Ethics* ii χρῆσις and ἐνέργεια alternate almost indifferently, with χρῆσις καὶ ἐνέργεια at 1219b2; *Physics* vii has χρῆσις καὶ ἐνέργεια three times, ἐνέργεια alone once (244b11), and χρῆσις alone once (247b16), to indicate the activity-sense of knowledge by contrast with the ability-sense.¹³ The *Magna Moralia*, like the *Protrepticus*, uses χρῆσις and ἐνέργεια, alternating or conjoined, in arguing that ‘the χρῆσις is more choiceworthy than the possession (ἔξις), for the χρῆσις and ἐνέργεια is an end, and the possession is for the sake of the χρῆσις’ (*MM* i 3).¹⁴ When the *Topics* contrasts two senses of αἰσθάνεσθαι and of ἐπίστασθαι, these are called αἰσθησιν ἔχειν and αἰσθήσει χρησθαι, ἐπιστήμην ἔχειν and ἐπιστήμην χρησθαι, without mention of ἐνέργεια (*Topics* v 2); but while *Topics* iv 4 contrasts δυνάμεις with χρήσεις, the following chapter contrasts ἔξεις with ἐνέργεια, and *Topics* iv 4 itself suggests that ‘the χρῆσις is an ἐνέργεια’.

If Aristotle originally introduced the word ἐνέργεια as an alternative term for χρῆσις, we can describe more accurately what the word means. The original Aristotelian meaning of ἐνέργεια is clearly ‘activity’ rather than ‘actuality’, but ‘activity’ is not precise enough: ‘exercise’ is better. My ἐνέργεια of something is my χρῆσις of that thing, my putting-to-work of some power or instrument that I

sense of knowing as χρησθαι τῇ δυνάμει with the weaker sense of κεκτησθαι τὴν δύναμιν καὶ τὴν ἐπιστήμην ἔχειν, and B81 similarly contrasts ὁ χρώμενος with ὁ τὴν ἐπιστήμην ἔχων, but B83, making exactly the same point and relying on what has gone before, contrasts the waking man to the sleeper as ὁ ἐνεργῶν τῇ ψυχῇ τὸ ὀμόνον ἔχων; B84 goes back to the more usual χρήσθαι.

¹² In later writings Aristotle speaks not of ἐνεργεῖν τῇ ἐπιστήμῃ (or τῇ ἀρετῇ) but of ἐνεργεῖν κατὰ τὴν ἐπιστήμην (or τὴν ἀρετὴν).

¹³ These are passages where Aristotle uses χρῆσις in contexts (of knowing etc.) where based on Aristotle’s own later usage we have come to expect ἐνέργεια; he also, in early writings, uses ἐνέργεια where we would expect χρῆσις. Thus in *Rhetoric* i 5 he says that being-wealthy (πλουτεῖν) consists ‘in χρῆσις rather than in κεκτησθαι: for it is the ἐνέργεια and χρῆσις’ of acquired goods (1361a23-25). This shows that Aristotle originally introduced ἐνέργεια as a supplementary synonym for χρῆσις in *all* of its uses, whether it is (as usual) a question of χρησθαι some knowledge or (as here) of χρησθαι external goods.

¹⁴ Similarly, in the same treatise Aristotle says that since happiness is an ἐνέργεια, reading a treatise on ethics is not enough to guarantee happiness: ‘in this case too knowing these things does not provide the χρῆσις (for, as we say, happiness is an ἐνέργεια), but only the ἔξις, and happiness is not in knowing the things-from-which [happiness results], rather happiness results from having used them. It does not belong to this treatise to provide the χρῆσις and the ἐνέργεια of these things, for neither does any other science provide the χρῆσις, but only the ἔξις’ (*MM* ii 10).

already possessed but had not been using, as I put my eyes to work when I open them. If Aristotle first introduces ἐνέργεια to supplement χρήσις, then all-but-abandons χρήσις for ἐνέργεια, this is because he found χρήσις too awkward to use as a technical term: perhaps because χρήσις too immediately suggests χρήσις τινος, while ἐνέργεια more easily designates the general class; perhaps also because χρήσις suggests that something is being used not for its own sake, but as an instrument to some further end.¹⁵ But χρήσις is much broader than the English ‘use’, and often it does not carry this implication: χρησθαι τῆ τέχνῃ is to practice a trade,¹⁶ and this is surely a model for what Aristotle means by the χρήσις or ἐνέργεια of an ἐπιστήμη.

We can make fuller sense of how Aristotle is thinking about δυνάμεις (especially the δυνάμεις of the soul) and their respective χρήσεις or ἐνέργεια, if we turn back to Plato. Though Plato does not have the words ἐνέργεια or ἐνεργεῖν, he does draw a distinction between possession and use, and he argues, as will Aristotle, that the use is more choiceworthy than the possession, that the possession is desirable for the sake of the use. Two key passages where Plato draws this distinction, in the *Euthydemus* and *Theaetetus*, show us the origins of Aristotle’s concept of χρήσις or ἐνέργεια, and confirm that χρήσις was the original Platonic and Academic term, the term Aristotle himself must first have accepted as part of the standard philosophical vocabulary, and that ἐνέργεια is Aristotle’s own later alternative to this term.

At *Euthydemus* 280b5-282a6, Socrates gives protreptic arguments (the models for the corresponding sections of Aristotle’s *Protrepticus*) to show that, while the possession of good things is necessary if we are ‘to be happy and to do well’, it is not sufficient: the possession is necessary but not sufficient for the *use* (χρήσις) of goods, and the use is necessary for happiness (what is necessary and sufficient is *right* use, guided by wisdom). To illustrate the distinction between mere possession and use, Plato contrasts the person who possesses food and drink but does not use them with the person who eats and drinks; more suggestively, he contrasts the craftsman who has acquired all the instruments and materials necessary for his ἔργον, but does not use them, with the craftsman who is practicing his craft. Here Plato contrasts χρήσις, not with ἔχειν or ἔξις, but with weaker terms for possession: sometimes he says εἶναι ἡμῖν or παρεῖναι ἡμῖν, but most often κεκτήσθαι (once the aorist κτήσασθαι), and when he wants a noun to contrast

¹⁵ The connection with χρήσιμος, useful, might give a ‘merely utilitarian’ connotation to χρήσις: something is desirable-because-χρήσιμον if it is desirable-as-productive-of-other-goods. In *Metaphysics* i 2 Aristotle says of those who sought wisdom that ‘they pursued knowledge on account of knowing, and not for the sake of any χρήσις’ (982b20-21); a few lines later Aristotle says, more cautiously, that ‘we are not seeking [wisdom] on account of any *other* χρεία’ (b24-25), but it is easy to slip into saying that we are not seeking any χρήσις of wisdom at all. Aristotle’s terminology of ἔξις and χρήσις commits him to saying that we are seeking such a χρήσις, and he says this in the *Protrepticus*; but perhaps he later turned against this mode of expression, and so preferred ἐνέργεια. (This is the suggestion of Cooper 1986, 73n99.)

¹⁶ So in Xenophon, at *Memorabilia* iii 10.1, *Oeconomicus* iv 4, *Symposium* iii 10.

with *χρήσις* he says *κτῆσις*. Since *κτᾶσθαι* is to acquire, *κτῆσις* should mean the act of acquisition, but in fact *κτῆσις* very commonly means *τὸ κεκτηῖσθαι*, the having-acquired, the possession, and this is how Plato means it here. In the *Euthydemus* Plato avoids describing possession as *ἔξις*, because of an ambiguity in the word *ἔξις* that he describes in the *Theaetetus* passage on the use-possession distinction. While in the *Euthydemus* Plato is concerned (ostensibly) with bodily goods, in the *Theaetetus* he is talking about knowledge. Although people say that *ἐπίστασθαι* is *ἔξις ἐπιστήμης* (*Tht.* 197a8-b1), Plato proposes to say instead that it is *κτῆσις ἐπιστήμης* (b4). The difference is not obvious, since *κτῆσις* here means possession rather than acquisition: but Plato wants to describe *ἐπίστασθαι* in the weaker sense (*ἐπίστασθαι κατὰ δύναμιν*, as the *Protrepticus* will call it), the sense in which even the sleeping geometer knows geometry, and he says that this is better described as *κεκτηῖσθαι* than as *ἔχειν*. For in one sense we may say that someone who has bought a cloak, but is not now wearing it, *has acquired* the cloak but does not *have* it (197b9-10); and in this sense the sleeping or distracted geometer does not *have* his *ἐπιστήμη*. Plato compares the sciences to birds that someone might catch and then allow to fly around in an enclosed space; while he does not have them in hand he may be said not to *have* them, although they continue to belong to him. So Plato prefers not to say (as Aristotle will) that the geometer always *ἔχει* geometry, or to call the knowledge that always belongs to him a *ἔξις*.

But Plato is much closer to Aristotle than this would suggest, because he recognizes that *ἔχειν* has two senses, and that in the weaker sense the geometer does always have his science. Thus at *Euthydemus* 277c-278a, in response to the sophistical argument that a science cannot be learned either by those who already have the science nor by those who do not already have it, Plato distinguishes between two kinds of learning, one ‘when someone originally having (*ἔχων*) no *ἐπιστήμη* about some object afterwards grasps the *ἐπιστήμη*’, the other ‘when, already having (*ἔχων*) the *ἐπιστήμη*, he looks around for this *ἐπιστήμη* in order to practice (*πράττειν*) or describe (*λέγειν*) this same object’. Clearly the person who, in this passage, already has an *ἐπιστήμη*, but must ‘learn’ it in the sense that he must retrieve it, is the same person who, in the *Theaetetus*, has already captured the birds but does not have them in hand, and must ‘hunt’ them indoors to take hold of them again. While in the *Theaetetus* Plato describes this person as *κεκτημένος* but not *ἔχων*, in the *Euthydemus* he is willing to describe the person as *ἔχων*, thus recognizing that *ἔχειν* has a weak sense in which it may be identified with *κεκτηῖσθαι* and contrasted with *χρησθαι*. Indeed, he recognizes this weaker sense of *ἔχειν* even in the *Theaetetus* passage itself, for he says that the person who has caught the birds ‘in one way always has them, because he has acquired them...but in another way does not have any of them, but he has gained (*παραγεγονέναι αὐτῷ*) a *δύναμις* over them’ (197c4-8), enabling him to ‘hunt’ the birds (‘learn’ the *ἐπιστήμῃ*) whenever he wants to take hold of them again. Putting the *Theaetetus* and *Euthydemus* passages together, we can see how Aristotle in the *Protrepticus* and in other early writings would have taken up the dis-

inction between *χρήσις* on the one hand, and *ἔξις* (in the sense of *κτῆσις*) on the other; we see why, despite the occasional bodily illustrations, he would be most concerned with the *χρήσις* and *ἔξις* of knowledge, which yield a stronger and a weaker sense of *ἐπίστασθαι*; and we see why, taking up the argument of the *Euthydemus*, he would argue that, if happiness consists in knowing, it must be the *χρήσις* and not the mere possession.¹⁷

We can also understand more clearly Aristotle's language of *δύναμις* and *ἔξις*. The pseudo-Platonic *Definitions* use these two terms more-or-less interchangeably, and Aristotle is willing in the *Protrepticus* to use either terminology to express the weaker condition presupposed by *χρήσις* or *ἐνέργεια*. The noun *ἔξις* occurs only in B40 and B67, in each case alternating with a synonymous *δύναμις* in the same short fragment; we learn more from the uses of the cognate verb *ἔχειν*. As we noted above, Aristotle repeatedly contrasts *ἔχειν*, possessing, with *χρησθῆναι* or *ἐνεργεῖν*, exercising (twice in B79, once each in B81 and B83); and the mere possession without use consists in a *δύνασθαι*, a being-capable. Thus the weaker sense of living or sensing is called *κατὰ δύναμιν* in B79, and τὸ *δύνασθαι* twice in B80, and animals that *possess* sight are those that are *capable* of seeing (*δυνατὰ ἰδεῖν*, B79). The possession is a *δύνασθαι* because what is possessed, then subsequently exercised, is a *δύναμις*, following Plato's remark that the person who 'has' the birds only in the weaker sense has a *δύναμις* over them: thus at B79 the weak sense of knowing is 'to have acquired the *δύναμις* and to possess the *ἐπιστήμη*', while the strong sense of seeing is 'to use the *δύναμις*'. The opposition between *ἔξις* or *δύναμις* on the one hand and *χρήσις* or *ἐνέργεια* on the other remains a major theme in the treatises of the *Corpus Aristotelicum*: thus the *Eudemian Ethics* divides the things which exist in the soul into '*ἔξεις* or *δυνάμεις*' on the one hand and '*ἐνέργεια* and motions' on the other (1218b36-7), and it continues the argument of the *Protrepticus* about the superiority of the *ἐνέργεια* or *χρήσις* to the mere possession of the *δύναμις*. In the later *Nicomachean Ethics* Aristotle generally does not speak of the *χρήσις* of sciences or virtues, having largely replaced the term by *ἐνέργεια*, but he maintains the same contrast using *ἔξις* and *ἐνέργεια*;¹⁸ once, in *NE* i 1098b31-33,

¹⁷ Another Platonic passage gives an even closer parallel with the *Protrepticus*' identification of waking life with the *χρήσις* of the soul (or of sense and knowledge), and of happiness with the right *χρήσις* of the soul (or of virtue). In the *Clitophon* Socrates is described as maintaining (as in the *Euthydemus*) that 'whenever somebody does not know how to use (*χρησθῆναι*) something, it is better to refrain from the *χρήσις* of that thing' (407e8-9). He gives as examples the *χρήσις* of the eyes, the ears, and the whole body, and then of a lyre or any other *ὄργανον* or *κτῆμα*. 'And then your [Socrates'] argument concludes that whoever does not know how to use his soul (*ψυχῆ...χρησθῆναι*), it is better for him to put his soul to rest and not to live, than to live acting on his own behalf' (408a4-7); if such a person must live, it is best for him to be a slave, and to put his soul at the disposal of someone who knows how to use it. The *Clitophon*'s *ψυχῆ* *χρησθῆναι* is the only parallel I know (outside Aristotle himself) for the *ψυχῆς* *χρήσεις* of *Protrepticus* B91; this strongly suggests that, if the *Clitophon* is not actually by Plato, it is at least Old Academic, and (like the *Protrepticus*) reflects the usage of the Academy in Plato's lifetime.

¹⁸ As Kenny 1978, 68 observes, the concept of *χρήσις* is prevalent in the *Eudemian Ethics*

Aristotle uses the terminology of *χρησις* alongside that of *ἐνέργεια*: ‘it makes no small difference whether the best is taken to be in *κτῆσις* or in *χρησις*, i.e. (*καί*), in *ἔξις* or in *ἐνέργεια*’.

The implication of all this is that when Aristotle says that knowing (in the weaker sense) is a *ἔξις*, he means that knowing is the *ἔξις ἐπιστήμης*, the *possession* of a science, enabling the possessor (unless obstructed) to exercise that science when he desires. The language of *ἔξις* presupposes the aviary model of knowing. The aviary passage from the *Theaetetus* does indeed deny that knowing (in the weaker sense) is a *ἔξις ἐπιστήμης*, but Plato simultaneously admits that this knowing is a *κεκτηῖσθαι* which is in one sense *ἔχειν* and in another sense not. Aristotle says the same, in a passage of *Eudemian Ethics* vi (= *NE* vii) where he is arguing that incontinent action is incompatible with knowledge in the sense of the *χρησις* or *ἐνέργεια*, but compatible with knowledge in a weaker sense: ‘again, having the *ἐπιστήμη* happens to people in another way than what has been described: for in having but not using we see that the *ἔξις* is different, so as to be somehow both having and not having, as someone who is sleeping or mad or drunk [has and does not have the science]’ (1147a10-14), and ‘we must say that the incontinent “have” in the same way that these do’ (a17-18).¹⁹ Thus although Aristotle usually speaks of *ἔχειν* or *ἔξις* in the weak sense, as something that is not an *ἐνέργεια*, he (like Plato) is aware that there is also a stronger

(including *NE* v-vii = *EE* iv-vi), but largely absent in (the other books of) the *NE*, while *ἐνέργεια* is considerably more common in the *NE* than in the *EE* or the common books. Kenny apparently does not realize that *χρησις* and *ἐνέργεια* are quasi-synonyms; nor does he recognize that *χρησις* is the preferred term in uncontroversially early works like the *Protrepticus*, a fact that does very serious damage to Kenny’s claim that the *EE* and the three common books are later than the *NE*. John Cooper had already noted the difference between the *Eudemian* and the *Nicomachean* usage of *χρησις* and *ἐνέργεια* in Cooper 1986 (originally published in 1975), 73n99.

¹⁹ There are two difficulties in this text. (i) ‘In having and not using’ may mean ‘within having and not using’, so that what follows will be true not for all who have and do not use, but only for some of them, namely, those who are hindered from use. If this is what Aristotle means, then he is not making quite the same point as Plato about having and not having: Aristotle would be allowing more people to ‘have’ unequivocally than Plato would, namely, all those who are not hindered from using, whether they are using or not. (But in *Physics* viii 4 Aristotle rejects any distinction between ‘having but not using’ and ‘having but being hindered from using’: the *ἔχων ἐπιστήμην* ‘unless something hinders him, *ἐνεργεῖ* and contemplates; otherwise he will be in the contradictory and in ignorance’ (255b4-5). So, though the sleeping geometer is more *obviously* hindered from geometrizing than the geometer who is just thinking about literature, their situation must be really the same.) Even if the passage is construed this way, Aristotle will still be making the same general point as Plato, namely, that *ἔχειν* sometimes means having-to-hand and sometimes means having-in-store, and that people sometimes have *ἐπιστήμη* in the stronger sense and sometimes only in the weaker. This is all I need for my argument. (ii) *ἔχειν πῶς* in line 13 and *ἔχειν ὁμοίως* in line 17 might be taken as *ἔχειν* intransitive with the adverb. I think this is wrong: the implied object is *ἐπιστήμη*, and Aristotle is asking in what sense someone has or does not have it. It would be silly to translate *ἔχειν πῶς καὶ μὴ ἔχειν* as ‘is and is not disposed in a given way’; but if we translate *ἔχειν* as transitive here, we should also translate *ἔχειν ὁμοίως* transitively, ‘have [knowledge] in the same way [as sleepers etc.]’, since it refers back to the earlier *ἔχειν πῶς*. The Revised Oxford Translation (Barnes 1984) agrees with me on the first but not the second instance; Irwin 1985 agrees with me on both.

sense of ἔχειν or ἔξις, an ἔχειν κατ' ἐνέργειαν. Aristotle distinguishes these two kinds of having in the chapter on ἔξις in *Metaphysics* v: 'ἔξις in one sense means a certain ἐνέργεια of the ἔχον and the ἐχόμενον... as in the case of someone who ἔχει (wears) clothes and the clothes which are ἐχόμενα (worn) there is a ἔξις in between them' (1022b4-8); 'ἔξις in another sense means the disposition (διάθεσις) according to which that which is disposed is well or ill disposed, either toward another or toward itself: as health is a ἔξις, for it is a disposition of this kind' (b10-12). Although this looks at first sight like a distinction between ἔχειν transitive 'to possess' and ἔχειν intransitive with adverb, like διατίθεσθαι 'to be disposed', Aristotle does not in fact seem to be aware of any such distinction.²⁰ If the second kind of ἔξις came only from intransitive uses of ἔχειν, the division would be grossly inadequate, since the first kind of ἔξις applies only when someone ἐνεργεῖ, when he is actually wearing his clothes, not when he merely has them in his closet. Having clothes without wearing them, which Plato prefers to call a κτήσις but which Aristotle is willing to call a ἔξις, is clearly a ἔξις of the second kind, just as health is. The closest Aristotle comes to a transitive-intransitive distinction is the distinction within the second kind of ἔξις, between dispositions toward another and toward oneself: my having the clothes enables me to do something *to them* (to wear them), while health perhaps enables me only to perform some internal activities and not to affect anything else. But Aristotle draws this distinction only to note its irrelevance. Any verb of action or passion, when it occurs in its ἔξις-sense rather than its ἐνέργεια-sense, denotes the disposition according to which one is well disposed, i.e., enabled, to perform the correlative ἐνέργεια; and the sort of disposition according to which one is well disposed is analyzed as *having* something, namely, having the relevant ἔξις or δόναμις.

Throughout the ethical works, when Aristotle describes virtues as ἔξεις, he is asserting that they are κτήσεις, possessions, and not merely that they are διαθέσεις, dispositions.²¹ A ἔξις is, of course, a particular kind of διάθεσις:

²⁰ Besides this chapter on ἔξις, *Metaphysics* v also has a separate chapter (23) distinguishing four senses of ἔχειν: every example Aristotle gives is transitive. Similarly for the somewhat different account of ἔχειν at the end of the *Categories*. It is not that Aristotle wants to stress that the verb is transitive; the question of transitive or intransitive did not occur to him in those terms. The account of verbs in the *De interpretatione* does not distinguish between transitive and intransitive verbs, except in distinguishing between the existential and the copulative sense of εἶναι: and this exception proves the rule, for Aristotle would not have had to go to the length of denying that copulative εἶναι signifies anything if he had had the concept of a transitive verb whose meaning (though real) is incomplete until its object is supplied. Aristotle certainly uses ἔχειν intransitively with an adverb (and in other intransitive constructions, e.g., ἔχειν with infinitive 'to be able to...'); but in each case he would be willing to paraphrase it by a transitive construction.

²¹ I do not mean to deny that Aristotle's conception of virtue as a ἔξις is influenced by intransitive as well as transitive senses of ἔχειν; but it is the transitive sense that is first connected with virtue (it is the only sense we find in the *Protrepticus*), and it is the transitive sense that explains the ἔξις-χρήσις or ἔξις-ἐνέργεια distinction. It is easiest to understand virtues as possessions in the case of intellectual virtues (the sciences), and these are the cases Aristotle is primarily thinking of in the *Protrepticus*. "Ἐξις also has a meaning clearly deriving from an intransitive sense of ἔχειν, the medical meaning 'good or bad condition of the body'; and Aristotle draws on this usage, as at *EE* 1220a24

Aristotle approaches ἔξεις from this angle at *Categories* 8b27-9a13, and in *Eudemian Ethics* ii 1 he defines ἀρετή in general (not necessarily moral or intellectual virtue, but the excellence of any given kind of thing) as ‘the best διάθεσις or ἔξις or δύναμις of each of those things which have some χρήσις or ἔργον’ (1218b38-1219a1).²² But διάθεσις is a uselessly general description: Aristotle cites ‘the best διάθεσις’ only as a dialectical starting-point on the path to a scientific conception of the essence of virtue.²³ Ethical knowledge depends on recognizing that happiness is a χρήσις or ἐνέργεια, and that virtue is the thing which is used or exercised; and to recognize this we must analyze the διάθεσις that virtue is as consisting in a ἔξις, in the possession of something that can then be used. Aristotle never anywhere describes a χρήσις or ἐνέργεια as being of a διάθεσις, but only (following the model of the *Euthydemus* and *Theaetetus*) of a ἔξις or of a thing possessed. The usual translations of ἔξις as ‘habit’ or ‘state’ have obscured the dependence of Aristotle’s ethics on the aviary model of knowledge and virtue, and have thus made it mysterious what sort of things a ἔξις and an ἐνέργεια are supposed to be. So Irwin, who translates ἔξις as ‘state’, although noting that its literal meaning is ‘having, possession’, is bound to be taken aback by a passage like *Nicomachean Ethics* vii 3 (= *EE* vi 3) saying that ‘we say “to know” in two ways, for both he who possesses and does not use the knowledge

where the εὐεξία of the body is analogous to virtue in the soul (though he does not use ἔξις here, only διάθεσις), and in *Meta.* v 20 where health is an example of a ἔξις. But ἔξις is not very common in this medical sense; ἔξις becomes a favored genus for virtues only in the pseudo-Platonic *Definitions* and in Aristotle, and at least in Aristotle this is clearly because of its contrast with χρήσις or ἐνέργεια, which depends on the κτήσις-sense of ἔξις and has no medical antecedents (nor, apparently, any philosophical antecedents except the *Euthydemus* and *Theaetetus* passages I have cited, which use only transitive senses of ἔχειν). The medical metaphor is a significant part of the background for the discussion of the moral virtues as ἔξεις, although not for the intellectual virtues: cf. especially *NE* ii 5 for a virtue as that according to which εὖ ἔχομεν. But here too we have the virtue, and the transitive sense of ἔχειν analyzes the intransitive sense.

²² Aristotle’s definition of virtue here is strikingly close to some elements of the account given in the pseudo-Platonic *Definitions*: virtue is ‘the best διάθεσις; a ἔξις of a mortal animal which [sc. ἔξις] is praiseworthy in itself; a ἔξις according to which the ἔχον is said to be good; a just participation in the laws; a διάθεσις according to which the διακείμενον is said to be perfectly excellent; a ἔξις productive of lawfulness’ (411d1-4). The *Definitions* use ἔξις, διάθεσις, and δύναμις interchangeably in defining the virtues, though ἔξις is the most common term; officially, ἔξις is a species of διάθεσις, ‘a διάθεσις of the soul according to which some of us are said to be such’ (414c8), and δύναμις is a species of ἔξις, a ἔξις according to which the possessor is δυνατόν (416a34-5). In *EE* ii 1, and in the other passages (there are not many) where Aristotle describes a virtue or a vice as a διάθεσις, he is alluding to what must have been the common Academic maxim that virtue is ‘the best διάθεσις’ of a thing.

²³ So explicitly at *EE* ii 1.1220a15-22: the result of the Academic dialectical definition of virtue is ‘as if we knew that health is the best διάθεσις of the body and that Coriscus is the darkest man in the marketplace: for we do not know what either of these is, but being thus is a contribution toward knowing what they are’. Note, incidentally, that the Greek διάθεσις does not have the sense of English ‘disposition’ that we use in saying that someone is ‘disposed’, i.e., inclined, to act in a certain way. This sense of the English word, spilling over to the Greek, helps to suggest that Aristotle is saying more than he really is when he calls virtue a διάθεσις.

and he who uses it are said to know' (1146b31-33). Irwin says that 'the literal meaning of ἔξις is exploited at 1146b31' (Irwin 1985, Glossary, s.v. 'state'), and he is bound to see this as a kind of play or pun; but in fact Aristotle is merely restating the fundamental distinction of the *Protrepticus* that had introduced the concept of ἔξις, probably not long before he wrote this passage of the *Eudemian Ethics*. Irwin (and most other scholars) think that they are not in any difficulty about the normal meaning of ἔξις in Aristotle's philosophy, because they can explain ἔξις in terms of a general theory of δύναμις and ἐνέργεια. But if we refuse to assume that we already understand Aristotle's mature theory of δύναμις and ἐνέργεια, and instead attempt to discover what this theory meant by retracing how and why Aristotle constructed it, we are sent back to Aristotle's discussion of ἔξις and χρῆσις in the *Protrepticus*, and to the Platonic background of that work: this is, at least, the grain of sand around which the theory of δύναμις and ἐνέργεια accreted. Aristotle's starting point is the *Theaetetus* image of the aviary, and the *Euthydemus* image contrasting the craftsman who has acquired the tools of his trade but does not use them with the craftsman who is practicing his craft. The craftsman's ἔξις consists fundamentally in a δύναμις, whether the craft in his soul or the powers residing in his ὄργανα; and what he does when he finally makes these powers useful for himself is, as Plato calls it, an ἐργασία τε καὶ χρῆσις (*Euthydemus* 281a2)—surely the likeliest origin we can propose for the χρῆσις καὶ ἐνέργεια of the *Protrepticus* and the *Eudemian Ethics*.

B. ἐνέργεια and actuality

B.1. The old and the new senses of ἐνέργεια and δύναμις

According to the picture I have presented so far, Aristotle's words δύναμις and ἔξις indicate the bare possession of some active or passive power, while χρῆσις and ἐνέργεια indicate the *exercise* of such a power; the paradigm of a δύναμις is the knowledge that a man of science possesses even while sleeping, and the paradigm of an ἐνέργεια is the activity of contemplation that he engages in when awake and not distracted. I think this is an adequate picture of Aristotle's thought on δύναμις and ἐνέργεια through the time of the *Eudemian Ethics*, but it is certainly not an adequate picture of Aristotle's thought on these subjects taken as a whole. I have not mentioned the contrast between δύναμις as potentiality and ἐνέργεια as actuality, or the contrast between δύναμις and ἔξις, or the term ἐντελέχεια; neither does Aristotle, in the *Protrepticus*, *Topics*, *Magna Moralia*, or *Eudemian Ethics*.²⁴ Can we develop this simple picture of Aristotle's starting-points into an understanding of his complex later theory of δύναμις, ἐνέργεια, and ἐντελέχεια?

We could integrate the power-activity distinction with the potentiality-actual-

²⁴ There is a distinction between ἔξις and δύναμις drawn at *EE* 1220b10-20, and expanded at *NE* 1105b19-1106b13, but this seems to be a different distinction from that drawn in (for instance) the *De anima*; possibly there is some connection, but the texts do not give us much help.

ity distinction by means of what I will call ‘the standard picture’. According to this picture, standard already in the Greek commentators, Aristotle distinguishes between potentiality (δύναμις) and actuality (ἐνέργεια or ἐντελέχεια) at each of two levels, yielding two kinds of potentiality and two kinds of actuality. When something is in first potentiality, it can come to be in first actuality, which is identical with second potentiality; once something is in second potentiality, it can next come to be in second actuality. This general picture has a specific application to the ethical theory of ἔξις and ἐνέργεια: there is not a twofold but a threefold division of things in the soul into δυνάμεις, ἔξεις, and ἐνέργειαι, where δύναμις proper is first potentiality, ἔξις is first actuality and second potentiality, and ἐνέργεια proper is second actuality; a virtue is first actuality and second potentiality, where the second actuality is the actual exercise of the virtue and the first potentiality is the faculty whose good condition constitutes the virtue.²⁵ The standard picture integrates the power-activity distinction and the potential-existence-actual-existence distinction by interpreting the former as separating second potentiality from second actuality, the latter as separating first potentiality from first actuality; by identifying second potentiality with first actuality it fits the two distinctions together into a hierarchical structure, and by drawing an analogy between the two levels of the structure it interprets the two distinctions as applications of a distinction between δύναμις-in-general and ἐνέργεια-in-general. While it seems most straightforward, on this picture, to render ἐνέργεια-in-general as ‘actuality’ (first ἐνέργεια is actually existing, second ἐνέργεια is actually operating, and the adverb ‘actually’ is the common element), the standard picture might also be filled out in the Thomistic manner, according to which actuality at any level involves activity, so that ἐνέργεια-in-general could be translated by ‘activity’ as well as by ‘actuality’.

The standard picture is not entirely false, but I think it is inadequate and misleading as a basis for understanding the way Aristotle thinks about δύναμις and ἐνέργεια. The philosophers who laid out this picture were trying to expound and defend Aristotelian philosophy as a finished product; I want rather to understand Aristotle’s thought about ἐνέργεια and δύναμις by retracing the process of its formation, beginning with the power-activity distinction of the early works. By retracing this process, we can see that the power-activity distinction always remains fundamental for Aristotle, that it never becomes (as the standard picture might suggest) a mere instance of a general conceptual scheme applying at different levels of the system. The Thomists are right to insist on the primacy of ἐνέργεια-as-activity, but actuality is not a *kind* of activity; the relation of ἐνέργεια-as-ἐντελέχεια to the original concept of ἐνέργεια-as-activity must be understood in a less simple and direct way. To see how they can be related, we

²⁵ For the standard picture in the Greek commentators, see Alexander of Aphrodisias *Quaestiones* iii 2-3 (in his *Praeter Commentaria Scripta Minora* pt. ii 81-86). The first sentence of this text refers to the first δύναμις-second δύναμις distinction as if it were standardly known; Alexander identifies ἐνέργεια with τελειότης, and this can occur at either of two levels: the virtues, as ἔξεις, are τελειότητες of human nature, and the ἐνέργειαι of the virtues add a further τελειότης.

must first call into question the standard picture of ‘first’ and ‘second’ potentiality and actuality.

The standard picture offers a reasonable systematization of Aristotle’s uses of the terms δύναμις, ἐνέργεια, and ἐντελέχεια, and it is composed of assertions each safely grounded in a text of Aristotle. But the picture depends on a very small set of texts, and it has the effect of summarizing Aristotle’s *conclusions* about δύναμις and ἐνέργεια and ἐντελέχεια, as stated in these few texts, while obscuring the process of thought that generated these conclusions. There seem to be only five passages (three are in the *De anima*) where Aristotle explicitly refers to something like a ‘first’ and a ‘second’ potentiality or actuality; after briefly describing these passages, I will compare Aristotle’s mature thought on δύναμις and ἐνέργεια (as illustrated by these passages) with the theory of power and activity we have seen in Aristotle’s early works, showing how Aristotle’s original way of thinking about δύναμις and ἐνέργεια led him into his later use of these concepts to describe two ways of being.

According to the standard picture, Aristotle should have six phrases available to him: πρώτη δύναμις, δευτέρα δύναμις, πρώτη ἐνέργεια, δευτέρα ἐνέργεια, πρώτη ἐντελέχεια, δευτέρα ἐντελέχεια. But only one of these phrases actually occurs, πρώτη ἐντελέχεια, and it occurs only twice, in *De anima* ii 1.412a27 and 412b5: here, having already established that the soul is an ἐντελέχεια of a certain kind of body (a natural body potentially having life, or equivalently an organic natural body), Aristotle adds that ‘this is said in two ways, one like ἐπιστήμη and one like θεωρεῖν; but it is clear that [soul] is like ἐπιστήμη, for the presence of soul includes both sleep and waking, and waking is analogous to θεωρεῖν and sleep to ἔχειν καὶ μὴ ἐνεργεῖν’ (412a22-26), and he concludes that soul must be the *first* ἐντελέχεια of the appropriate kind of body. The four other passages which support the distinction between ‘first’ and ‘second’ δύναμις-ἐνέργεια distinctions all concern different ways of being δυνάμει (although not, at least not explicitly, different kinds of δύναμις). Thus *Physics* viii 4 argues that τὸ δυνάμει is equivocal (255a30-31), since the learner is said to be δυνάμει ἐπιστήμων in one sense, and someone ἔχων καὶ μὴ ἐνεργῶν is said to be δυνάμει ἐπιστήμων in a different sense (255a33-34, elaborated down through 255b5); Aristotle then generalizes from this model to argue that ‘heavy’ and ‘light’ are said in as many ways as ἐπιστήμων, i.e., that even when a heavy body has been generated and is no longer (in the first sense) merely δυνάμει heavy,²⁶

²⁶ Aristotle says that the condition of the light thing, before it was altered so as to become light, was δυνάμει πρῶτον (255b9-10); this, taken together with the earlier remarks that τὸ δυνάμει is said in many ways (255a30-31), and that the learner goes from being δυνάμει knowing to being δυνάμει knowing in another way (255b1-3), is apparently Aristotle’s closest approach to a terminological distinction between πρώτη δύναμις and δευτέρα δύναμις. But πρῶτον at 255b9-10 does not seem to be used as a technical term: it is just that the thing that is now light was previously δυνάμει light, and this condition was chronologically the first (this is how the Oxford translation takes it). In any case, even if Aristotle distinguishes between a ‘first’ and a ‘second’ way of being light (or knowing) δυνάμει, this does not imply that he distinguishes between a ‘first’ and a ‘second’ kind of δύναμις, where a first δύναμις would be a ‘potentiality for being’; this concept is not Aristotelian.

it may still be prevented from exercising its natural δύναμις to be at the center, so that (like a knower who is ἔχων καὶ μὴ ἐνεργῶν) it will be genuinely heavy but not ἐνεργῶν as a heavy body. With *Physics* viii 4 we may compare a shorter passage in *De anima* iii 4, saying that ‘when [the intellect] has become each thing in the way that the ἐπιστήμων κατ’ ἐνέργειαν is said to do so (and this happens when he is able [δύνηται] to ἐνεργεῖν on his own), even then he is still somehow δυνάμει, although not in the same way as before he learned or discovered’ (429b5-9); this last phrase is very close to the comment of *Physics* viii 4 that the person who possesses knowledge but is not contemplating ‘is somehow δυνάμει ἐπιστήμων, but not in the way he was before he learned’ (255b2-3). Aristotle also gives a complex discussion of δύναμις and ἐντελέχεια in *De anima* ii 5, that he hopes to apply to his theory of sensation, but which he illustrates by considering three kinds of people who may be called ἐπιστήμονες. Both people-in-general (since man is an animal capable of knowledge) and the person who already possesses a science may be called ἐπιστήμονες, both being δυνατοί (417a26) or κατὰ δύναμιν ἐπιστήμονες (417a30) but in different ways, ‘the former because his genus and matter are thus-and-such, the latter because he is capable (δυνατός) of θεωρεῖν whenever he wishes, if nothing external prevents him’ (417a27-28); this second knower is in a state of ἔχειν καὶ μὴ ἐνεργεῖν (417a32-b1), and is contrasted with the third and strictest knower, ‘he who is already θεωρῶν, and is actually and primarily knowing (ἐντελεχεία καὶ κυρίως ἐπιστάμενος) this-alpha-here’ (417a28-29). Toward the end of this chapter Aristotle says, in summary, that ‘what is said to be δυνάμει is not simple, but one [sense] is as if we said that a boy is capable (δύνασθαι) of being a general, another as if we say this of someone who is of the appropriate age’ (417a30-32). Finally, in *Generation of Animals* ii 1, Aristotle describes the seed as ‘having soul δυνάμει’ in much the way that a boy is potentially a general: ‘the same thing can be δυνάμει in a more proximate or a more remote way, as the sleeping geometer is more remote than the waking geometer, and he than the geometer who is θεωρῶν’ (735a9-11).

What can we make of these passages in the light of our earlier discussions of δύναμις and ἐνέργεια? The most striking point is that in all of these passages, whether he is trying to elucidate sensation or the presence of soul or the heaviness and lightness of bodies, Aristotle brings in ἐπιστήμη as a model: this is the case for which Aristotle had initially worked out his theory of δύναμις and ἐνέργεια, and he thinks that his conclusions will apply by analogy at least to sensation (that, accompanied by intellectual knowledge or not, is constitutive of an animal’s life) and perhaps also by a more remote analogy to inanimate powers. This ἐπιστήμη, of course, is the case Plato had considered in the *Theaetetus* in working out his ἔξις-κτῆσις distinction, and in the *Euthydemus* in distinguishing the two kinds of learning; and already in the *Protrepticus* this was Aristotle’s primary example for distinguishing χρήσις or ἐνέργεια from the ἔξις or κτῆσις of a δύναμις. To what extent is Aristotle making the same points in the *De anima* or *Physics* viii by means of the model of ἐπιστήμη that he had made in the *Protrep-*

ticus, and to what extent is he using the old example to say something different?

In the *De anima* and *Physics* passages, as in the *Protrepticus*, Aristotle distinguishes between merely possessing the *ἐπιστήμη* and *θεωρεῖν*; the former is described as *ἔχειν* and the latter as *ἐνεργεῖν*; a person is in the former condition by having a *δύναμις* to be in the latter condition, a *δύναμις* that is exercised unless obstructed from without. In the *De anima* as in the *Protrepticus*, the distinction between *ἐνεργεῖν* and *ἔχειν καὶ μὴ ἐνεργεῖν* is illustrated by the difference between waking and sleeping, and the value of this illustration is backed up by the definition of sleep as a non-*χρήσις* of the senses arising from an obstructing condition of the primary organ of sensation (*De somno* 455b2-13). What is new is that while the person who *ἔχει καὶ μὴ ἐνεργεῖ* still in one sense knows only *δυνάμει*, he is now also contrasted with a person who does not yet possess the science but is still in some weaker sense *δυνάμει* knowing. Aristotle even suggests that it is this weaker condition of being *δυνάμει* that is most strictly called *δύναμις*: ‘the matter is *δύναμις* and the form is *ἐντελέχεια*, and this latter is twofold, one like *ἐπιστήμη* and one like *θεωρεῖν*’ (*De an.* ii 1.412a9-11). Aristotle could hardly have contrasted ‘what is like *ἐπιστήμη*’ with *δύναμις* in the *Protrepticus*, where *ἐπιστήμη* is isolated as the paradigm-case of a *δύναμις* by precisely the same considerations (concerning sleep and waking) that the *De anima* uses to isolate *ἐπιστήμη* as the paradigm-case of a ‘first *ἐντελέχεια*’. Nor, again, could Aristotle have used *ἐπιστήμη* to represent a class opposed to *δύναμις* in the *Eudemean Ethics*, where ‘some things in the soul are *ἕξεις* or *δυνάμεις*, and others are *ἐνέργεια* and *κινήσεις*’ (1219b36-37), and where *ἐπιστήμη* and *ἀρετή* are the chief examples of the former class. In order to understand what is new in the later developments of Aristotle’s thought about *δύναμις* and *ἐνέργεια*, we have chiefly to understand the new sense of ‘*δύναμις*’, or of ‘being something *δυνάμει*’, that can be opposed to things like *ἐπιστήμη*; and we also have to understand the new *opposite* to ‘being something *δυνάμει*’, i.e., the sense in which the sleeping geometer can be said to be *ἐπιστήμων* *not* merely *δυνάμει* but in some stronger way. Clearly, if Aristotle is using a new concept of *δύναμις*, he must also be using a new concept of something opposed to *δύναμις*, but it is no longer so straightforward to say that this is a concept of *ἐνέργεια*. In *De anima* ii 1 Aristotle contrasts *δύναμις* not with *ἐνέργεια* but with *ἐντελέχεια*, and he goes on to say that the presence of soul includes not only the condition like *θεωρεῖν* but also the condition like *ἔχειν* [τὴν *ἐπιστήμην*] καὶ μὴ *ἐνεργεῖν*; this suggests that the soul is *not* an *ἐνέργεια*, and that the opposite to the new sense of *δύναμις* is the new word *ἐντελέχεια*. However, although Aristotle never affirms (and repeatedly denies) that a person like the sleeping geometer *ἐνεργεῖ*, he does in *De anima* iii 4 call such a person *ὁ ἐπιστήμων ὁ κατ’ ἐνέργειαν* (429b6-7), and he does (never in the *De anima*, and apparently only once elsewhere) say that the soul is ‘the οὐσία and *ἐνέργεια* of a certain body’ (*Meta.* 1043a35-6).²⁷ Evidently we must investigate both the devel-

²⁷ In *Physics* viii 4 Aristotle seems deliberately to avoid such a use of *ἐνέργεια*: although he has

opment of the concept of ἐντελέχεια as an opposite to the new sense of δύναμις (for ἐντελέχεια means unambiguously ‘actuality’, never ‘activity’), and also the grounds on which Aristotle is willing, not in some places but in others, and especially in *Metaphysics* viii-ix and xii, to use ἐνέργεια in the sense of ἐντελέχεια.

We might formulate the problem, using Aristotle’s terms from *Metaphysics* ix, as a problem about ‘the δύναμις which is said with respect to motion’ (1048a25) and some other kind of δύναμις, that Aristotle does not name but that we might call δύναμις with respect to οὐσία. Aristotle tells us that the first kind is the only δύναμις people commonly talk about, and that this is the sense to which the word δύναμις most strictly applies; since this is the familiar sense, he will begin with it and use it as a starting-point for investigating the other and deeper sense of δύναμις, that is what most interests him (1045b34-1046a4). ‘We do not call δυνατόν only that which is of such a nature (πέφυκε) as to move something else or be moved by something else whether absolutely or in some particular way, but [we apply the word δυνατόν] also in a different way’ (1048a28-30), and there will be a corresponding variation in the opposite of δύναμις, that Aristotle in *Metaphysics* ix uniformly calls ἐνέργεια: ‘ἐνέργεια is the thing’s obtaining [or existing, or being present: τὸ ὑπάρχειν τὸ πρῶμα] *not* in the way which we call δυνάμει’ (1048a30-32). As Aristotle tells us, ‘The name ἐνέργεια, which is applied to ἐντελέχεια (ἢ ἐνέργεια τοῦνομα, ἢ πρὸς τὴν ἐντελέχειαν συντιθεμένη), has been extended to other things especially from motions, for it is motion which appears especially to be ἐνέργεια’ (1047a30-32), and Aristotle’s progression in this book from ἐνέργεια-as-motion and its corresponding δύναμις to ἐνέργεια-as-ἐντελέχεια and *its* corresponding δύναμις must recapitulate the path he himself had taken from the original sense of the δύναμις-ἐνέργεια contrast to something deeper. But how are we to understand this deeper sense? δύναμις and ἐνέργεια are primitive concepts that cannot be properly defined, so Aristotle tries to induce an understanding of the terms by enumerating different examples in which one thing is proportioned to another as ἐνέργεια to δύναμις, ‘in some cases as κίνησις to δύναμις and in others as οὐσία to a matter’ (1048b8-9). But Aristotle’s examples are not especially enlightening: several are just the old examples (the θεωρῶν to the person who merely possesses the ἐπιστήμη, the waker to the sleeper, the person who is seeing to the person who possesses sight but has his eyes shut, the house-builder house-building to the mere house-builder), while others are ‘what has been differentiated out of the matter to the matter, and the worked-up to the unworked’ (1048b3-4), and Aris-

said that water which has not yet become air is δυνάμει light, he identifies the ἐνέργεια of lightness, not with the state the water will possess when it has become air, but with being-up (255b11). In *De caelo* iv 1 the ἐνέργεια of the heavy and light are things that do not have names in common use, but perhaps ‘ρόπή’, signifying the upward or downward striving of the body, will suffice (307b32-33). The ἐνέργεια of the light seems to be something different in *De caelo* iv 1 from what it is in *Physics* viii 4, but in neither case is it the *actuality* of lightness. So it is remarkable that the soul, which is analogous to the actuality of lightness, can be called an ἐνέργεια in *Metaphysics* viii 3; we need to give an explanation for this apparently new usage.

totle says nothing more to indicate how these latter examples are supposed to represent a deeper sense of ἐνέργεια and δύναμις. More striking than the particular examples is what they are said to be examples of: every pair (the geometrizing geometer and the sleeping geometer, the Hermes carved out of the wood and the ‘Hermes in the wood’ of 1048a32-3) share a single predicate (ἐπιστήμων, ‘Hermes’), but the predicate is said of the two terms in different ways, of one ἐνεργεία and of the other δυνάμει (‘δυνάμει’ twice at 1048a32, then b10, b14, b16; ‘ἐνεργεία’ a35, b6, b10-11, b15). These datives functioning as adverbs now seem to be at the core of the meaning of δύναμις and ἐνέργεια: ‘ἐνέργεια is the thing’s obtaining *not* in the way which we call δυνάμει’ (1048a30-32), so that ἐνέργεια is the condition common to all things which are ἐνεργεία, as δύναμις is the condition common to all things which are δυνάμει. These adverbial datives float freely enough that they can attach to any predicate, and Aristotle isolates their meaning in its pure state by attaching them to εἶναι: τὸ ὄν δυνάμει and τὸ ὄν ἐνεργεία (or more usually τὸ ὄν ἐντελεχεία) in the *Metaphysics* are fundamental divisions of the senses of ‘being’, whether we construe this being as existential or copulative or veridical.²⁸ This level of generality, and especially the application to εἶναι, are very far from the Aristotle of the *Protrepticus*, and in tracing his thought from the *Protrepticus* to the *De anima* or *Metaphysics ix* much of what we must do is to understand how Aristotle came to generalize his notion of δύναμις, and how this notion came to embrace the new kinds of examples that *Metaphysics ix* or the *De anima* consider as the core of the notion of δύναμις.

‘ἐνέργεια is τὸ ὑπάρχειν τὸ πρᾶγμα not in the way which we call δυνάμει’. The awkwardness of the statement results in part from the general difficulties of elucidating any notion so basic as actuality, but it reveals something more than this. *There was no expression for actuality in Greek before Aristotle introduced ἐνέργεια or ἐντελέχεια in this sense.* Aristotle does not have a commonly known synonym that he can use to explain ἐνέργεια, so he settles for an antonym, τὸ δυνάμει, that he hopes to explain by displaying different contexts in which this adverb could be used. And this order of proceeding is natural enough: we do not need a concept of actuality until we have a concept of potentiality or possibility to contrast it with. Pre-Aristotelian Greek got by fairly well with adverbs such as ὄντως or ἀληθινῶς when it wanted to emphasize that some predicate belonged to some subject really and truly, and not in any diminished sense; but these words do not yet signify precisely actuality as opposed to potentiality, and they are obviously inadequate for Aristotle’s project in the *Metaphysics* of distinguishing the different senses of being, and in particular of distinguishing

²⁸ *Metaphysics i-v*, which do not use either ἐνέργεια or ἐντελέχεια very often, keep their functions strictly distinct: ἐνέργεια means activity, and ἐντελέχεια is an abstraction from an adverbial dative marking a sense of being. But in the solitary occurrence in vi (1026b1-2), and then repeatedly thereafter (though never in vii) Aristotle uses ἐνεργεία adverbially to mean ‘actually’. I will return at the end of this paper to the question of Aristotle’s willingness or unwillingness to use ἐνεργεία adverbially as an equivalent to ἐντελεχεία.

being as actuality-and-potentiality from being as truth and not-being as falsehood. We can best study the emergence in Aristotle of a concept of being-as-actuality by studying the emergence of a theory of non-existent objects (or non-present attributes, or non-obtaining states of affairs), and of the sense in which these things, although they *are not simpliciter, are* in some way, namely, δυνάμει. It is not immediately obvious that ‘δυνάμει’ is the right way to describe the diminished sense of ‘being’ possessed by the greenness of this sheet of paper (if the paper is actually white) or by my first-born child (if actually I have no children). The only serious discussion of this sort of being before Aristotle is in the fifth hypothesis of Plato’s *Parmenides*, where Plato discusses ‘a one which is not’ (160b5-163b6):²⁹ Plato says there that this thing that is hypothesized not-to-be ‘must also participate somehow in being’ (161e3), if we are to distinguish it from other non-existent objects, or even to affirm truly that it *is* non-existent. Plato concludes that a non-existent object both *is* in one sense and *is not* in another sense, but he does not try to establish a terminology for these different senses of being, and if he had he would not have called the ‘being’ the non-existent object possesses ‘being δυνάμει’: it is more like Aristotle’s ‘being as truth’, the being required to be a subject of predication. Plato would presumably admit that a non-existent object is δυνατόν, in that it is *possible* for the thing that does not yet exist to come-to-be;³⁰ but this possibility is an incidental consequence of the thing’s having the sort of being it now has, and ‘possibility’ or ‘ability’ is not used to explicate this mode of being. Aristotle is innovating over Plato in explicating this being through δύναμις, and (typically) his innovation was not accepted by anyone outside his own school: we know that the Megarians rejected the theory of δύναμις (*Meta.* ix 3), and the Stoic theory of τινὰ οὐκ ὄντα responds directly to the *Parmenides* without taking note of Aristotle.³¹ We

²⁹ Aristotle’s discussions of things-that-are-not (but that are *capable* of existing) refer back to this passage, and are largely reactions against it. This is especially clear from *Physics* v 1.225a20-b3, discussed in a subsequent note; it is also clear from *Metaphysics* ix 3.1047a32-b2, discussed in a previous note. These Aristotelian texts very strongly support Cornford’s interpretation (in Cornford 1939) of the fifth hypothesis of the *Parmenides* as being about ‘a non-existent entity’ (at least, they support the claim that Aristotle read this part of the *Parmenides* Cornford’s way); neither Cornford nor Ross seem to have noticed the connection between these Aristotelian texts and the fifth hypothesis of the *Parmenides*.

³⁰ This seems to be implied at *Parmenides* 162b9-e3, but the aspect of potentiality is not explicitly stated (forms of δύνασθαι are used only in the negative), and certainly not emphasized.

³¹ Aristotle reports the Megarians as saying that ‘something is capable only when it acts (ὅταν ἐνεργῇ μόνον δύνασθαι), and when it is not acting it is not capable, e.g., that he who is not housebuilding is not capable of housebuilding, but [only] the housebuilder while he housebuilds [is so capable], and similarly in the other cases’ (*Meta.* ix 3.1046b29-32). This is sometimes taken to commit the Megarians to the claim that nothing is possible except what is actual, or even the claim that there is no change. But the text does not warrant either of these claims, since it speaks not of actuality and possibility, but only of activity and capacity: ἐνέργεια sometimes means merely ‘actuality’, but ἐνεργεῖν is always ‘to act’ in the full sense, never merely ‘to be actual’. What the Megarians were denying was neither change nor possibility (in the sense of a realm of non-actually-existing objects; presumably the Megarians, like Aristotle, did deny a realm of *never-actualized* objects), but Aristo-

will have the key to Aristotle's mature doctrine of δύναμις and ἐνέργεια-as-ἐντελέχεια if we can grasp how he came to construe non-existent objects (or non-present attributes, or non-obtaining states of affairs) as having their being through a δύναμις.³²

B.2. From living κατὰ δυνάμιν to being δυνάμει

We may start again with the *Protrepticus*. The *Protrepticus* does not have the adverbial dative δυνάμει: nor did Plato, and nor will the Hellenistic philosophers. But *Protrepticus* B79 says that 'living (τὸ ζῆν) is said in two ways, one κατὰ δυνάμιν and the other κατ' ἐνέργειαν': the correct translation is 'one in the sense of an ability and the other in the sense of an exercise'. These are not two senses of *being*, either existential being or predicative: the ambiguity is in the predicate 'to live', not in any copula that might be attached to it, and the ambiguity arises from the particular nature of living. In *Protrepticus* B79-80 Aristotle illustrates the two kinds of 'living' by the examples of αἰσθάνεσθαι and ἐπίστασθαι, each of which can constitute living, and each of which can be attributed in a stronger or a weaker sense. The weaker sense is constituted by a δύναμις, for 'the person who is awake must be said to *live* truly and primarily, and the sleeper [is said to live] on account of his being able (διὰ τὸ δύνασθαι) to pass over (μεταβάλλειν) into that κίνησις on account of which we say that someone is awake and senses some object' (B80). Aristotle assumes that the primary sense of 'living' will consist in some kind of ποιεῖν or πάσχειν: this is stated in B83, and is also implied in the description of the waking state as a κίνησις, since every κίνησις is an action of the mover and a passion of the thing moved. B81 and B83 show that Aristotle thinks that all predicates indicating ποιεῖν or πάσχειν, and only these predicates, admit distinctions analogous to his distinction

tle's analysis of change and possibility in terms of active and passive capacities and their exercise. Quite likely the Megarians stuck with the analysis from the fifth hypothesis of the *Parmenides*. Certainly the Stoics (whose logic seems very often to develop that of the Megarians) assert that things-that-are-not have predicates and that they come-to-be, without saying that they in any way *are*, and in particular without saying that they *are* δυνάμει (and without attempting to paraphrase 'the non-existent X comes-to-be' by 'an existent thing becomes or produces X', let alone 'an existent thing exercises its active or passive power'). Neither the Stoics, nor any other Hellenistic school, accept Aristotle's solution to the Eleatic problem about coming-to-be, through distinguishing two senses of being: they seem to think that if being-potentially is really being, then Aristotle has accepted the Eleatic conclusion that nothing can come-to-be which does not already exist, and that if it is not really being, then Aristotle has given only a nominal reply to the Eleatic argument.

³² I will not worry about the differences between non-existent objects, non-present attributes, and non-obtaining states of affairs, or between sentences of the form 'X exists δυνάμει' and sentences of the form 'X is Y δυνάμει'; Aristotle is perfectly comfortable transforming these different descriptions into each other, transforming the sentence 'X is Y' into 'Y-ness exists' or (more precisely) 'Y-ness exists in X' or 'the Y-ness of X exists'. We can simplify by framing our questions in terms of sentences of the form 'X exists', and asking how Aristotle comes to assert 'X exists δυνάμει'. The situation will differ somewhat according to what *category* X is in, but I will argue that (on Aristotle's final analysis) there will not be *much* difference, and there will be no difference at all between substance ('my first-born child') and quality ('greenness' or 'the greenness of this sheet of paper'), although there will be some difference between these and action or passion.

between living κατ' ἐνέργειαν and living κατὰ δύναμιν (although Aristotle does not in fact use such distinctions except in the cases of living or sensing or knowing or practicing an art); but these texts also show that Aristotle does not have a general terminology that could apply analogically to all the cases where such a distinction is to be drawn, and in particular that κατὰ δύναμιν and κατ' ἐνέργειαν are not adverbs capable of modifying verbs of ποιεῖν and πάσχειν (let alone εἶναι). B81 says:

whenever each of two beings is called some one-and-the-same thing, and one of these two is so-called either through ποιεῖν or through πάσχειν, then we will grant that the predicate (τὸ λεχθέν) applies to *this* one in a stronger sense, as knowing (ἐπίστασθαι) applies more strongly to him who uses than to him who possesses the ἐπιστήμη, and seeing (ὄραν) applies more strongly to him who directs his sight (προσβάλλειν τὴν ὄψιν, i.e. looks at something) than to him who is capable (δυνάμενος) of directing it.

What is most striking here is that ποιεῖν and πάσχειν apply only to the stronger sense of each pair, that they generalize τὸ ζῆν κατ' ἐνέργειαν rather than τὸ ζῆν simply: as the scholiast notes in the margin, ποιεῖν ἢ πάσχειν is said 'ἀντὶ τοῦ κατ' ἐνέργειαν' (reported in Düring's apparatus to B81). The most we can say of the sleeper, the person who has life in the sense of the δύναμις, is that he is 'such as (τοιούτος οἶος) to ποιεῖν or πάσχειν in that particular way' (B83), not that he ποιεῖ or πάσχει, even κατὰ δύναμιν. The upshot is that the ἐνέργεια-δύναμις distinction is a distinction between doing or suffering something on the one hand, and merely being or having something on the other: the terms cannot be used to distinguish between two ways of being, or two ways of having a predicate not involving activity. Aristotle cannot yet say (as he will in *Physics* viii 4) that the water is δυνάμει light and the air light in some stronger sense, even when it is detained down here οὐκ ἐνεργοῦν; nor can he say (as he will in *De anima* ii 1) that the seed has life δυνάμει and the mature animal has life as an ἐντελέχεια (or even, according to *Metaphysics* viii, as an ἐνέργεια), even while it is sleeping and therefore οὐκ ἐνεργοῦν.

Nevertheless, the *Protrepticus*' distinction between living (or sensing or knowing) κατὰ δύναμιν and κατ' ἐνέργειαν is the starting-point for the later distinction between being δυνάμει and being ἐνεργεία or ἐντελεχεία. I will first offer a thought-experiment of how the first distinction might have been transformed into the second, and then I will try to document this transformation.

How, from the *Protrepticus*, can we get to a position where we can say not just that something lives or senses or knows κατὰ δύναμιν, but that it *exists* δυνάμει? Suppose Socrates possesses the ἐπιστήμη that the sum of the angles of a triangle is equal to two right angles: he is ἐπιστήμων κατὰ δύναμιν, he has a δύναμις or ἔξις of knowledge, he is capable of knowing the theorem κατ' ἐνέργειαν whenever he wants, if nothing external prevents him. Consider, not Socrates, but his act of perceiving the theorem. While Socrates sleeps, how does

his perceiving-the-theorem exist? We cannot say that it does not exist at all, for this would be saying that he does not perceive the theorem at all, and (according to Aristotle's account) he *does* perceive it in a way, namely, κατὰ δύναμιν. We should therefore say that the perception exists κατὰ δύναμιν, in the sense of an ability, or δυνάμει, in virtue of an ability, or ἐν δυνάμει, within an ability.³³ This is a different sort of predication from saying that Socrates knows κατὰ δύναμιν, in the sense of an ability, because there it is *Socrates'* ability: the perception, however, does not exist because it, the perception, is able to exist whenever it wants if nothing external prevents it; it has the predicate 'being' not because of *its own* ability but because of the ability of *something else*, namely Socrates, to produce it. If Aristotle began with this sort of predication of being κατὰ δύναμιν, and then later extended being κατὰ δύναμιν from actions and passions to objects in general, he would have an alternative to the *Parmenides'* account of non-existent objects (which we know from *Physics* v 1 and from *Metaphysics* ix 3 that he was interested in outdoing). Plato says, roughly, that a non-existent object X has the characteristics it has (and the diminished sort of being it has) just through its own eternal essence, indeed that this is what anything is like until it comes to participate in being in the relevant way; it is then possible for X to come-to-be, just because X is intrinsically the sort of thing which could participate in being (perhaps because it consists in the combination of some set of characteristics that can exist consistently with each other)—X can 'move', as Plato says, from not-being to being. Aristotle, by contrast, says that a non-existent object has the diminished sort of being it has through a δύναμις, i.e., through the ability of some other thing Y to produce X, or through the ability of Y to act so as to produce X and the ability of Z to suffer simultaneously so as to become X. Aristotle thus gives a different account from Plato's of how X can come-to-be. X does not simply 'move' from not-being to being, as if these were two adjacent rooms in a house:³⁴ anything that 'moves' must possess at least a passive power

³³ Thus in the chapter of the *Rhetoric* (ii 19) on τόποι of the possible and impossible (δυνατόν, ἀδύνατον), Aristotle says that 'what is in [someone's] ability and in [that person's] will (τὸ ἐν δυνάμει καὶ βουλήσει ὄν) will be' (1393a1-2): here for something to be ἐν δυνάμει ὄν is for it to be in the active power of the agent, and this is why it is δυνατόν for it to be or to come-to-be.

³⁴ *Physics* v 1, directed specifically against this passage of the *Parmenides*, denies that γένεσις is a κίνησις, a claim that elsewhere (as in the *Physics* iii account of κίνησις) Aristotle admits. Here Aristotle says that γένεσις is a μεταβολή but not a κίνησις: the distinction between the narrower κίνησις and the broader μεταβολή is not intuitively obvious, but Aristotle claims that it ought to be made, on the ground that κίνησις implies a persisting κινούμενον that passes from one contrary to another, whereas μεταβολή need not imply a persisting μετάβαλλον. If γένεσις were a κίνησις, then τὸ μὴ ὄν would be κινούμενον, which in *Physics* v 1 Aristotle is concerned to deny; among other difficulties that would follow from admitting that a non-existent object is in motion, Aristotle suggests the further argument that 'everything which is moved is in a place, and that-which-is-not is not in a place; for it would be somewhere' (225a31-32). This comes from the *Parmenides*, where Plato argues that since that-which-is-not is 'nowhere among the beings' (162c7), it does not have locomotion, and therefore (in this respect) is not moved but at rest. However, Plato is busy deriving pairs of contrary attributes, and he also argues that 'that-which-is-not is evidently κινούμενον, since it has μεταβολή from being to not-being or vice versa' (162c4-6); Aristotle's distinction between κίνησις and

to be moved (perhaps also an active power to move itself), and it is absurd to attribute any powers to non-existent objects. Rather, ‘if the γενητικόν is ποιητικόν, then γίνεσθαι is ποιείσθαι and γένεσις is ποίησις’ (*Top.* 124a29-30):³⁵ coming-into-being or generation is analyzed in terms of the generative or productive or active (ποιητικόν) power, and in terms of the correlative passive (παθητικόν) power. The non-existent object X is δυνατόν, in the sense that it is possible for X to come-to-be, only because the already existent objects Y and Z are δυνατόν in the more primary sense that they are capable of ποιεῖν and πάσχειν in such a way as to bring X into being. This Aristotelian analysis of the modal status of non-existent objects is very different from the analysis that Plato suggests in the *Parmenides*, and also from most more recent analyses. For Aristotle, possibility is parasitic on actuality: X is possible, not because it is an eternally possible essence or an irreducible individual *possibile* (or an inhabitant of a separate possible world), but only through the actually existing powers of actually existing substances. *Possibilia* are not causally separated from actual things: the actual powers of actual substances cause the possible existence of X, as the exercise of these powers cause its actual existence.

This analysis of possibility has implications for actuality. When X does not yet exist in the full sense, it exists δυνάμει, through an ability that is not X’s own ability; once X has come-to-be, we may say that it exists ἐνεργείᾳ, through an activity or through the exercise of this ability: but as it is not X’s δυνάμεις, so it is not X’s ἐνεργεία through which X exists. If the actual existence of X can be called an ‘ἐνέργεια’, this is not because (as St. Thomas would have it) existence consists in an ‘act of being’—it is true that ‘to be for living things is to live’ (*De an.* 415b13), but living in this sense is not an activity but a bare possession—but because X cannot exist unless *something else* exercises a power: not a power to exist, and not a power to be X, but simply the active and passive powers to produce and become X.³⁶

μεταβολή allows him to reject this claim and to maintain that that-which-is-not is simply not moved (although neither is it at rest (*Physics* 225a29-30), since it is not *capable* of motion).

³⁵ Nothing in the context of the *Topics* suggests that this remark is directed against Plato, and indeed Aristotle seems to be inspired by Plato’s remark that ‘the ποιούμενον and the γινόμενον differ in nothing but name’ (*Philebus* 27a1-2). Still, this is how Aristotle prefers to analyze γένεσις, and he does elsewhere use this analysis to draw anti-Platonic conclusions about the status of non-existent objects.

³⁶ The Thomistic analysis of essence as a potency completed by the act of existing implies that a non-existent object does have within itself a power for existing, just as cold water has a power for being heated and a man at rest has a power for walking; this radically subverts the Aristotelian analysis of being δυνάμει, and substitutes for it something closer to the Stoic position. But not all scholastics agree with this Thomistic analysis: many of them retain a position much closer to Aristotle’s as I interpret it. Thus Suárez says that the ‘*potentia* from which an *ens in potentia* is denominated’ is not an active or passive power but a *potentia objectiva* (Suárez 1965, ii 233), where ‘to be in *potentia objectiva* is nothing other than to be able to be the *object* of some power, or rather of the action or causality of some power’ (ii 234). In scholastic terms, this means that the objective *potentia* of a possible being is an ‘extrinsic denomination’ from the real active or passive *potentiae* of its causes, and is not itself a real thing really existing in the possible object: the sentence ‘my first-born child is capable

Once the story has been laid out in this way, I think it is easy to see that the evidence supports it. If we look at texts where Aristotle generalizes his theory of the production of active and passive ἐνέργειαι to other kinds of beings, we can see how he extends the δύναμις-ἐνέργεια opposition beyond its original application to other cases including substance. We can also shed light on Aristotle's invention and application of the new term ἐντελέχεια, and finally on his willingness in some places to apply the word ἐνέργεια in the sense of ἐντελέχεια.

We may begin with the easier side, δύναμις: it will be harder to describe the status δύναμις is opposed to. Aristotle insists in *Metaphysics* ix 3 that if something is to come-to-be, it must first be δυνατόν through some δύναμις (not merely δυνατόν as 'what is not necessarily false', which does not require a δύναμις, *Meta.* v 12.1019b30-35): these δυνάμεις, in Aristotle's examples and in the whole context of *Metaphysics* ix, are the active and passive powers that, when exercised together, produce or become the thing. Likewise in *Physics* viii 4, 'whenever the ποιητικόν and the παθητικόν are together, what is δυνατόν comes-to-be ἐνεργεία, as the learner, from being δυνάμει, comes-to-be δυνάμει in another way' (255a34-b2). The student who is (in the first sense) δυνάμει knowing, simply has the passive power to be taught: the δυνατόν comes-to-be ἐνεργεία when this passive power and the teacher's active power are exercised together. If there were no such powers, the future knower could not come-to-be in actuality, and so would not exist δυνάμει at all. These powers (or the things that bear them) are what Aristotle in *Physics* ii 3 calls causes ὡς δυνάμενα, as having a capacity, like the house-builder, as opposed to causes ὡς ἐνεργοῦντα, as exercising the capacity, like the house-builder house-building(195b4-6):

[causes] which are ἐνεργοῦντα and individual exist and do-not-exist at the same times as the things of which they are causes, as this-person-healing [exists for just as long as] this-person-being-healed and this-person-house-building [exists for just as long as] this-house-being-built, whereas [causes] κατὰ δύναμιν do not always [exist for just as long as the things of which they are causes], for the house and the house-builder do not perish at the same time (195b17-21).

Aristotle adds here that for each effect we should assign causes of the appropriate degree of precision or generality, assigning 'δυνάμεις for the things which are δυνατά, and [causes which are] ἐνεργοῦντα for the things which are

of existing' should be paraphrased as 'I am capable of producing a first-born child' to make the structure of the sentence reflect the structure of the reality, since the grammar of the second sentence ascribes a *potentia* to me rather than to my child, and there is a real *potentia* really existing in me, whereas there is not a real *potentia* really existing in my non-existent child. Suárez denounces the doctrine that a non-existent object's *potentia* for being is a *potentia subjectiva* or *receptiva* (equivalent to *potentia passiva*), that would be a real *potentia* really existing in its subject and enabling the subject to move from its current state (non-existence) to the contrary state (existence), or to receive existence as an added perfection. In all this Suárez seems to be spelling out Aristotle's doctrine correctly.

ἐνεργούμενα' (195b27-28). So things that are possible (δυνατά) are explained in terms of causes that are or possess powers (δυνάμεις), and so are capable (δυνάμενα) of producing the effects in question, as a house is possible because there is a housebuilder capable of producing it (although Aristotle suggests that this will apply to all four kinds of cause, this really only makes sense for an efficient cause like the housebuilder, which has an active δύναμις, or for a material cause, that has a passive δύναμις). The immediate corollary is that wherever the cause is specified not merely as δυνάμενον but as ἐνεργοῦν, its effect will not be merely possible (δυνατόν), but will exist in actuality, and its actuality will be explained through the ἐνέργεια of its cause: here Aristotle says that the thing caused is ἐνεργούμενον. This takes a step toward the terminology of being-ἐνεργεία, but the ἐνεργούμενον here is not the house but the house-being-built, that persists only as long as its cause is ἐνεργοῦν: the ἐνέργεια is simply the κίνησις, in this example the οἰκοδόμησις. Aristotle has in this passage a non-Platonic way of formulating the distinction between the diminished 'being' of non-existent objects and 'being' in the full sense, according to which merely possible objects have being-through-a-δύναμις, and fully actual objects have their being in a way connected with ἐνέργεια; but Aristotle is unwilling here to describe their actuality as itself ἐνέργεια, for the ἐνέργεια exists only while the object is being produced.

B.3. Actuality

This is why Aristotle invented the word ἐντελέχεια, the only word that is always safely translated by 'actuality', since it is defined in opposition to δύναμις as possibility-for-being (i.e., as existing-in-the-power-of-the-cause) rather than to δύναμις as capacity-for-action. The word ἐντελέχεια occurs only in Aristotle and in writers who are obviously imitating him, and Aristotle never gives an explicit account of its origin or etymology, but the meaning is clear enough: as Alexander of Aphrodisias and other Greek commentators remark, Aristotle coined the word as a technical equivalent of τελειότης, being-complete.³⁷ As Aristotle says in the *Metaphysics* v 16.1021b23-30,

those things in which the τέλος (being something good) is present are called τέλεια, for they are τέλεια through possessing the τέλος (κατὰ τὸ ἔχειν τὸ τέλος); thus, since the τέλος is something which is last (ἔσχατον), by a transference to *bad*

³⁷ Alexander uses ἐντελέχεια and τελειότης as equivalent (as in *Quaestiones* iii 2, cited in a previous note); in his *De anima* he explains ἐντελέχεια in terms of τελειότης, and says that 'it was Aristotle's custom to call the τελειότης also ἐντελέχεια' (*Praeter Commentaria Scripta Minora* pt. i 16). Similarly Simplicius in his *Physics* commentary says that Aristotle 'uses ἐντελέχεια to mean τελειότης' (*In Aristotelis Physicorum Libros Quattuor Priores Commentaria* 414). The Greek commentators on the *Categories*, when they defend Aristotle's choice to extend the meaning of 'κατηγορία' from 'accusation' to 'predication' (or the like), mention the alternate possibility of coining a neologism, and they cite Aristotle's coining of ἐντελέχεια as the standard example of neologism: so especially Porphyry *Isagoge et In Aristotelis Categories Commentaria* 55.

things [from good ones] we also say that something has been destroyed *τελείως* (totally, utterly), or that it has perished *τελείως* (totally, utterly), when there is nothing missing from the perishing and the evil, and it is at the last (*ἐπὶ τῷ ἐσχάτῳ*); thus the end of something (*ἡ τελευτή*) is called a *τέλος* by transference, since they are both last things, but a *τέλος* [properly] is a last thing for-the-sake-of-which.

Disregarding the distinction between good and bad *τέλη*, we may elucidate Aristotle's picture as follows: a thing X is *τέλειον*, or has come-to-be *τελείως*, when the process of producing X has been completed, when the last part of X has been added (whether 'parts' in a strict sense, or more loosely factors combining to constitute X), and X therefore exists on its own, apart from the process producing it. The building of a house can serve as an example, but the most obvious case is the generation of an animal: thus at *Generation of Animals* ii 1 Aristotle says that some kinds of animals *τελειουργεῖ*, i.e., produce a *τέλειον* offspring, and 'bring forth outside something similar to themselves, as those which bear live into the visible [outside world], whereas others bear something which is unarticulated and has not taken on its own proper form' (732a25-28); these others produce eggs or larvae, animals that are not yet *τέλεια* and must still be brought to completion, but even here the eggs may be *τέλεια* or *ἀτελῆ*, considered *qua* eggs (732b1-6); the process of producing offspring and bringing them to completion is *ἀποτελεῖν* (732a32). Since the result that finally emerges from the cooperation of the active and passive powers is called *τέλειον*, as Aristotle puts it in *Metaphysics* v 16, *κατὰ τὸ ἔχειν τὸ τέλος*, Aristotle forms the abstract noun *ἐντελέχεια* to describe this condition.³⁸ The consequence is that Aristotle does not conceive actuality, *ἐντελέχεια*, simply as 'full, complete reality' (LSJ's translation) by opposition to some diminished sense of being, nor as 'perfection' understood without reference to the process of perfecting: *ἐντελέχεια* has reference to the process of production, and indicates that the process has reached its term, and that the effect exists outside its efficient and material causes. The word is thus opposed to being-in-*δύναμις*, and says nothing about whether the thing in *ἐντελέχεια* is *ἐνεργῶν* or merely possesses its own *δυνάμεις*; the *δύναμις* to which *ἐντελέχεια* is opposed is the *δύναμις*, not of the thing itself (e.g., the animal), but of its efficient and material causes (e.g., its father and mother).

This interpretation of Aristotle's concept of actuality is supported if we look at other Greek philosophical terms for actuality: Aristotle's predecessors do not use such terms, but his successors sometimes do, and unless they are Aristotelians (or

³⁸ Ross 1924 ii 245-246 discusses the etymology of *ἐντελέχεια*, and comes to the wrong conclusions. The word might have been just *τελέχεια*, like *νουνέχεια*, but the form *ἐντελέχεια* is not surprising; *ἐν-X* is the adjectival form for 'containing X', like *ἔννοον*, *ἔμφρον*, and *ἐντελέχεια* is not just 'having a *τέλος*' but 'having one's *τέλος* within one'. There is no need to suppose (with Ross and LSJ) that the compound *ἐντελέχεια* depends on a prior compound *ἐντελέξ*, as *τὸ ἐντελέξ ἔχον*: this is not an Aristotelian phrase (*ἐντελέξ* is not an Aristotelian word), and its meaning would be unclear, whereas *τὸ ἔχειν τὸ τέλος* is an Aristotelian phrase having just the right sense.

Aristotelizing Platonists) they do not say ἐντελέχεια (nor do they use ἐνέργεια to mean ‘actuality’). I will cite two passages that use different terms for actuality, both containing the root -τελ- and referring to the completion of a process of production. The pseudo-Pythagorean writer Ocellus Lucanus, syncretizing Plato and Aristotle while trying to pass himself off as prior to both of them, describes the preconditions necessary for coming-to-be, one of which is the substratum of change: he calls this πανδεχῆς and ἐκμαγεῖον, following the *Timaeus*, but also ὕλη, following Aristotle. After giving examples of the substrata of various changes, Ocellus comments that ‘everything is in these [substrata] δυνάμει prior to coming-to-be, but συντελεία once it has come-to-be and taken on its φύσις’ (Ocellus *On the Nature of the Universe* ii 3). Clearly συντέλεια is Ocellus’ way of saying ἐντελέχεια while trying to conceal his dependence on Aristotle; and this helps to show, not only how a later Greek philosopher might paraphrase Aristotle’s sense when barred from transcribing his words, but also how a Greek philosopher might create a term to indicate actuality in contrast to being δυνάμει. The usual meaning of συντέλεια (ignoring some clearly irrelevant senses) is ‘completion’, in the sense of the carrying-through-to-completion of something that has been begun; in Christian literature, beginning with St. Matthew (13:39,40,49), it is used for ‘the consummation of the age’. Pseudo-Demetrius of Phalerum praises the rhetorical effectiveness of a dying man who writes ἀπωλόμην (I have perished) instead of ἀπόλλυμαι (I am perishing), since this ‘is more vivid through the συντέλεια itself: for what has-come-to-be is more manifest than what will-be or what is still coming-to-be’ (*On Style* 214): συντέλεια here perhaps indicates the aorist tense, but it primarily refers to the completion-of-action that would be signified either by the aorist or the perfect tense (but not by the present or imperfect): it implies that a process of producing (here destroying) something has been completed, that the thing is now all there and exists on its own.³⁹ The verbs συντελεῖν, ἐπιτελεῖν, and (most commonly)

³⁹ LSJ say that συντελικός in the grammarians means the aorist tense, but this is certainly not *always* true, and I am not certain that it is ever true; LSJ themselves give as the technical grammatical sense of συντέλεια not ‘aorist form’ but ‘completed action’ (and so, correctly, they take it in the passage of Pseudo-Demetrius). The usual terms for the past tenses are (besides παρατατικός ‘imperfect’), παρακείμενος ‘perfect’, ἀόριστος ‘aorist’, and ὑπερσυντέλικος ‘pluperfect’. Although ὑπερσυντέλικος is the standard name for a tense, συντελικός is not: when it is used, it seems to be the generic name for the group of tenses that indicate συντέλεια or completed action, namely, the perfect, the aorist, and the pluperfect. The *Scholia on Dionysius Thrax*, going catechetically through the meanings of the different tenses, also ask ‘what is συντελικός’, and answer ‘that is, completed (πεπληρωμένος)’ (p. 405), but this cannot be a single tense, for there is no room for it alongside the παρακείμενος, ὑπερσυντέλικος, and ἀόριστος, and it is clearly not being identified with any of these. Indeed, we are told that ‘the παρακείμενος (perfect tense) is also called the present συντελικός, since it has the completion of the action adjacent and present (ὡς παρακειμένην καὶ ἐνεστῶσαν τὴν συντέλειαν τοῦ πράγματος)’ (p. 404, cf. p. 251). The παρατατικός (imperfect) is not συντελικός, because it indicates an action that is not yet completed (οὐπω τετελεσμένην); the ἀόριστος and ὑπερσυντέλικος are also συντελικός, but indicate a different relation to the συντέλεια (the completion of the action) than does the παρακείμενος: the meanings of these tenses, and their technical names, are analyzed as ‘ὑπερσυντέλικος from having the action completed (συν-

ἀποτελεῖν all mean to produce a work and bring it to completion, whether this work is a concrete substance or an event (we have already seen Aristotle using ἀποτελεῖν in the *Generation of Animals* for the perfecting of offspring, and in the same work he speaks of ἐπιτελεῖν τὴν γένεσιν); Ocellus Lucanus (who uses all three of these verbs) surely intends συντέλεια to indicate the result of συντελεῖν, and immediately after saying that things that have come-to-be exist συντελεία he speaks of the conditions necessary in order that changes ἐπιτελῶνται (Ocellus ii 4). So Ocellus thinks he can best contrast actuality with potential being by using a term that describes it as the final result of a process of production; Ocellus thinks he is capturing Aristotle's intention in creating the word ἐντελέχεια, and it seems likely that he is.

The verb ἀποτελεῖν yields another post-Aristotelian equivalent for ἐντελέχεια, that again supports the same interpretation of Aristotle. Ἄποτελεῖν τὸ ἔργον is a standard phrase already in Aristotle, and in the Hellenistic period this phrase is used to give a description of the condition of an ἔργον when it has been brought forth by its efficient cause out of its material cause. Instead of ἔργον, the Stoics say ἀποτέλεσμα, that which is produced: this word is a post-Aristotelian coinage, but it becomes quite common, and Sextus uses it as the standard technical term for what we call the 'effect', whatever it is of which a cause is the cause.⁴⁰ Sextus (drawing presumably on Stoic sources) contrasts the ἀποτέλεσμα either with the αἴτιον or with a pair, the ποιῶν and the πάσχον; but any reference to the αἴτιον is also a reference to the ποιῶν and the πάσχον, since the Stoics (following Plato, *Philebus* 26e-27a) say that cause and ποιῶν mean the same, while the πάσχον is the necessary correlate of the cause.⁴¹ Usually the ἀποτέλεσμα is the concrete body that is produced by the cause, but once Sextus uses the term like ἐντελέχεια (or like Ocellus' συντέλεια) to indicate the status the effect enjoys of having-been-produced. Sextus is arguing, in *Against the Musicians*, that sound does not exist, and he argues in particular that a sound is not complete at any instant, but only over a period of time: 'sound is not con-

τετελεσμένον) a long time ago, ἀόριστος from it not being determined when the action was completed (ἀπὸ τοῦ μὴ ὀρίζειν πότε τετελεσμένον ἔσχε τὸ πρᾶγμα)', where the perfect tense is interpreted as indicating *recent* completion (p. 404; this is a bit disturbing, given the way we now conceive Greek grammar). If there were a single tense that indicated συντέλεια, it would certainly be called συντελικός, but as there is not, it is better not to appropriate this name for any single tense. The Latin grammarians, not being troubled by the duality of perfect and aorist tenses, call their tenses of completed action simply *perfectum* and *plus quam perfectum*, translating συντελικός and ὑπερσυντελικός.

⁴⁰ Thus Sextus presents it as commonly agreed that αἴτιον is δι' ὃ ἐνεργῶν γίνεται τὸ ἀποτέλεσμα (*Outlines of Pyrrhonism* iii 14).

⁴¹ It is strange that Frede 1987 seems to think that the restriction of the notion of 'cause' to *active* causes is a post-Aristotelian, Stoic innovation. Frede certainly knows *Philebus* 26e6-8 ('the nature of the ποιῶν differs from the αἰτία in nothing but name, and ποιῶν and αἴτιον would rightly be called one'), since he mentions Iamblichus' interpretation of this passage (Frede 1987, 127) without telling us what the passage itself said: Frede manages to leave his readers with the impression that it was not Plato's text, but only Iamblichus' post-Stoic interpretation of Plato, which identified the cause with the ποιῶν.

ceived in ἀποτέλεσμα or in ὑπόστασις, but in coming-to-be and temporal extension; but what is conceived in coming-to-be is coming-to-be and does not yet exist, just as neither a house which is coming-to-be, nor a ship nor any of the many other things, is said to exist; so sound is nothing' (*Adv. Math.* vi 57). Here ἀποτέλεσμα, like ὑπόστασις, indicates the status of full existence, as opposed perhaps to things that do not exist at all, but most emphatically to things that do not yet fully exist because they are still coming-to-be; Sextus chooses to express this concept by creating an abstract sense, 'producedness', for his standard term for the 'product' of the active and passive powers. It seems clear that Sextus' intended sense is the same as Ocellus', and once again it seems likely that Aristotle's intention was also the same. Hippolytus, writing probably not long after Sextus, after stating Aristotle's doctrine that the soul is the ἐντελέχεια of the body, confidently paraphrases it by saying that the soul is 'the ἔργον and ἀποτέλεσμα of the body' (*Refutation of All Heresies* vii 24.2): Hippolytus is taking ἐντελέχεια to be a peculiar Aristotelian variant of the normal Hellenistic word ἀποτέλεσμα.⁴² Indeed, Aristotle all but forces an identification between ἐντελέχεια and the status of an ἔργον (what a Hellenistic philosopher would call ἀποτέλεσμα) in *Metaphysics* ix 1, when he notes that being is said not only of the different categories, but also 'κατὰ δύναμιν and [κατ'] ἐντελέχειαν and κατὰ τὸ ἔργον' (1045b33-34), and then immediately proposes an investigation of 'δύναμις and ἐντελέχεια' (b34-35); κατὰ τὸ ἔργον is just a paraphrase of κατ' ἐντελέχειαν, explaining that it means existing as something already produced, and not merely as something someone might some day decide to make.

I think what has been said so far is sufficient to explain why Aristotle establishes, alongside the original distinction between δύναμις as power and ἐνέργεια as activity (the 'second potentiality-second actuality' distinction of the standard picture), a new distinction between being δυνάμει and being ἐντελεχεῖα (the 'first potentiality-first actuality' distinction of the standard picture). Only the latter distinction is really a distinction between potentiality and actuality: the power-activity distinction is originally Platonic, and is originally unconnected with any distinction between being-in-the-full-sense and the diminished being of not-yet-existent objects; it is only Aristotle, and only the relatively mature Aristotle, who uses the power-activity distinction to develop a potentiality-actuality distinction (that is, a way of conceiving the difference between full and diminished being), and this potentiality-actuality distinction, while *connected* with the

⁴² I am grateful to Ian Mueller for showing me both this passage, and his forthcoming article 'Hippolytus, Aristotle, Basilides'. Mueller thinks Hippolytus is simply confused about the meaning of ἐντελέχεια, and this is possible (Hippolytus is confused about enough other things in Aristotle); but I do not think we must (or should) assume this, especially given the text of Sextus using ἀποτέλεσμα in the sense of ἐντελέχεια. Hippolytus is perhaps taking Aristotle's doctrine of the soul as ἐντελέχεια too concretely, interpreting the soul as the *product* of the seed's action on the appropriate matter, rather than the *producedness* resulting from this action; but this is not a *gross* misinterpretation, and Aristotle himself slides between more abstract and more concrete ways of describing the soul.

power-activity distinction in the way I have described, must not be confused with it. When Aristotle says in *De anima* ii 1 that the soul is the ἐντελέχεια of the body having life δυνάμει (i.e., of the seed), he means that the state of possessing soul is the state of having been generated from the appropriate active and passive powers. If Socrates has a soul, then at some previous time Sophroniscus and Phainarete must have exercised their δυνάμεις, but Socrates (if he is sleeping) is not now exercising any δυνάμις of his own: the intention of *De anima* ii 1 is clearly to distinguish the possession of soul both from merely potential life on the one hand, and from ἐνέργεια on the other (cf. 412a22-26). Aristotle says that the soul, since it is said like ἐπιστήμη and not like θεωρεῖν, is 'ἐντελέχεια ἢ πρώτη of a natural body potentially having life' (412a27-28), but this does not mean that there is such a thing as a δευτέρα ἐντελέχεια. What Aristotle says (after saying that the soul is 'an ἐντελέχεια of such a body' [412a21-22]) is that 'this is said in two ways, one as ἐπιστήμη, the other as θεωρεῖν' (412a22, repeating 412a10-11); he says further on that the act of seeing (ὄρασις) is ἐντελέχεια in one way, and the power of sight (ὄψις) is ἐντελέχεια in another (412b27-413a1). This means, not that there are two kinds of ἐντελέχεια, but that any given ἐντελέχεια (such as seeing or living) can be predicated in two ways, through ἔχειν and through ἐνεργεῖν, and therefore that identifying the soul with the ἐντελέχεια of living is ambiguous between saying that soul is present whenever something is living in the weak sense, or only when it is living in the strong sense. 'Ἐντελέχεια by itself indicates the weaker sense of living; it is the ἐνέργεια of the ἐντελέχεια that indicates the stronger sense.

B.4. ἐνέργεια as actuality

It remains more obscure how Aristotle comes to use ἐνέργεια in the sense of ἐντελέχεια, and to speak of τὸ ὄν ἐνεργεία or τὸ ὄν κατ' ἐνέργειαν, and not merely κατ' ἐντελέχειαν or κατὰ τὸ ἔργον. I think this usage is always somewhat improper: the description of ἐντελέχεια as ἐνέργεια is an analogical extension of the term ἐνέργεια beyond its strict meaning. Aristotle usually, but not consistently, avoids this usage in his physical treatises, and he consistently avoids it in *Metaphysics* i-v and vii (not in other books of the *Metaphysics*). But in *Metaphysics* ix (and xii), to the contrary, Aristotle avoids the term ἐντελέχεια, and uses ἐνέργεια for 'actuality' as freely as for 'activity': we must give some account of why he does this.

Metaphysics ix is a book with a thesis: Aristotle wants to show that ἐνέργεια is prior (in several ways) to δυνάμις, and to conclude (in *Metaphysics* xii) that the first principles are pure ἐνέργεια without (unexercised) δυνάμις, thus answering a question from *Metaphysics* iii (1002b32-1003a5). He argues, in particular, that ἐνέργεια is prior to δυνάμις in οὐσία, not only because eternally unchanging things (which contain no unexercised δυνάμις) are prior to changeable things, but also because, even within the realm of changeable things, 'the οὐσία and the form is an ἐνέργεια' (1050b3-4). This conclusion is not supposed to be obvious without argument, and Aristotle tries in *Metaphysics* ix to justify describing the

actual existence of a substance as ἐνέργεια.

Aristotle gives some justification in chapter 6, where he lists a series of pairs of things related as ἐνέργεια and δύναμις, and says that these relations are all one by analogy, although they fall into two different classes, ‘some [being said] as κίνησις to δύναμις, and others as οὐσία to a matter’ (1048b8-9). Here a clarification is in order. Aristotle is trying to pass in this chapter from a more superficial to a deeper sense of δύναμις and ἐνέργεια, but it is often misunderstood what the difference between the two senses is supposed to be. Furth gives the whole chapter the heading ‘ἐνέργεια-δύναμις distinction distinguished from κίνησις-δύναμις distinction’, and certainly at 1048b18 and following Aristotle is distinguishing in some way between ἐνέργεια and κίνησις;⁴³ but this is not the point of the whole chapter. The distinction between those activities that may be called κινήσεις and those activities that should only be called ἐνέργεια is a relatively fine point; the major distinction is between ἐνέργεια as activity and ἐνέργεια as actuality, and between the corresponding kinds of δυνάμεις. This is the distinction Aristotle means when he says that some ἐνέργεια are said ‘as κίνησις to δύναμις, and others as οὐσία to a matter’: clearly ‘what has been differentiated out of the matter’ and ‘the worked-up’ and ‘Hermes’ are said as οὐσία in relation to ‘the matter’, ‘the unworked’, and ‘the wood’; the other examples all indicate activities, and it is these that Aristotle means to be related to their correlates as κίνησις to δύναμις. But the activities listed are θεωρεῖν, seeing, being awake, and house-building, of which at least the first three are not κινήσεις in the technical sense of *incomplete* activities. So this narrow sense of κίνησις is not what Aristotle means at 1048b8-9 when he distinguishes the κίνησις-δύναμις relation from the οὐσία-ύλη relation. But this passage answers the passage at the beginning of the chapter, where Aristotle promises that the process of distinguishing the different kinds of ἐνέργεια will also show that things are not called δυνατόν only with regard to κινεῖν and κινεῖσθαι, but also in some other way (1048a27-30). So the distinction between the two kinds of δύναμις is not a distinction between δύναμις to κίνησις and δύναμις to some other kind of activity, but rather the distinction between δύναμις to ἐνέργεια as κίνησις (i.e., activity) and δύναμις to ἐνέργεια as οὐσία (i.e., actuality). In using κίνησις broadly to cover all activities, Aristotle is reverting to the terminology of the *Protrepticus* and the *Magna Moralia*, where he had not yet distinguished activity from motion, and so referred to all activities as κινήσεις;⁴⁴ he

⁴³ Κίνησις is a subclass of ἐνέργεια (ἐνέργεια ἀτελής, ἐνέργεια τοῦ ἀτελοῦς, ἐνέργεια τοῦ κινουμένου) and so is not properly contradistinguished from ἐνέργεια: but κινήσεις, being ἀτελείς, are not the best examples of the class of ἐνέργεια, so that Aristotle can say ‘this kind of thing I call ἐνέργεια, that κίνησις’ (*Meta.* 1048b34-35, cf. 1048b28). Aristotle is not here denying (what elsewhere he plainly affirms) that κινήσεις are ἐνέργεια, any more than I deny that men are animals when I say ‘this kind of thing I call an animal, that a man’. I will discuss these issues in the sequel on ἐνέργεια and κίνησις.

⁴⁴ *Protrepticus* B80 (cited above) says that a sleeper is said to live ‘on account of his being able to pass over (μεταβάλλειν) into that κίνησις on account of which we say that someone is awake and

goes back to this terminology here, obviously, because he cannot use ἐνέργεια to mean activity in a passage whose point is to show that not only activity but also actuality merits the name ἐνέργεια. Precisely because he has used κίνησις loosely for all activities in the first part of *Metaphysics* ix 6, Aristotle must go back at the end of the chapter (1048b18-36) to repair the damage by distinguishing κινήσεις from other kinds of activity.

We can best interpret Aristotle's analogy between κίνησις and οὐσία if we recognize that κίνησις, like οὐσία, is the name of a *category*: although it is not on the canonical list of categories in the *Categories*, Aristotle clearly refers to a category of κίνησις at *Metaphysics* 1029b22-25, 1054a4-6, 1069a21-22, and 1071a1-2: this is what is elsewhere divided into the categories of ποιεῖν and πάσχειν.⁴⁵ In *Metaphysics* ix Aristotle draws an analogy between the relation of accidents to their underlying οὐσία and the relation of an οὐσία to its underlying matter (1049a27-36): in each case the subject is δυνάμει what is predicated of it, and the analogy is supposed to make clear the sense in which the matter is potentially the substance. 'Prior in time to this man who already exists κατ' ἐνέργειαν and the wheat and what-is-seeing (ὄρων) are the matter and the seed and the capable-of-sight (ὄρατικόν), which are δυνάμει man and wheat and seeing, but not yet ἐνεργεία' (1049b19-23). The substance that has the power of sight can, under the right conditions, exercise this passive power, so yielding a κίνησις (in the category-sense) of vision, and becoming seeing in ἐνέργεια after being seeing only in δυνάμει; analogously, Aristotle now suggests, some kind of matter, e.g., the menstrual blood, can, under the right conditions, exercise its passive power of becoming a man, so yielding the οὐσία of humanity, and becoming a man in ἐνέργεια after being a man only in δυνάμει. As a κίνησις like seeing, prior to the exercise of the active and passive powers, is present only δυνάμει in its underlying οὐσία, so an οὐσία like the man, prior to the exercise of the active and passive powers, is present only δυνάμει in its underlying matter. By the same analogy, Aristotle describes the full existence of the οὐσία in its underlying matter as being ἐνεργεία or κατ' ἐνέργειαν, just as the full existence of a κίνησις in its underlying οὐσία is ἐνεργεία or κατ' ἐνέργειαν.

In the case of the οὐσία, as in the case of the κίνησις, there must be an exercise (ἐνέργεια) of the powers to bring about the full existence of the object: so, as

senses some object', where apparently the only license for calling being-awake-and-sensing a κίνησις is that it is a ποιεῖν or πάσχειν. For the mature Aristotle, this would license only the claim that it is an ἐνέργεια, not the more specific claim that it is a κίνησις (note that being-awake is expressed by the perfect ἐρηγορέναι); nor could the mature Aristotle possibly speak, as here, of μεταβάλλειν εἰς τὴν κίνησιν (*Physics* v 2 explicitly denies the possibility of such a thing). *MM* ii 7 says that pleasure is not a γένεσις but rather a κίνησις καὶ ἐνέργεια of the soul. I will discuss these texts, and their relation to Aristotle's other statements about κίνησις and ἐνέργεια, in the sequel.

⁴⁵ The category of κίνησις also appears at *EE* 1217b26-33: but while κίνησις is mentioned singly in line 33, κινεῖσθαι and κινεῖν are a pair in line 29. Aristotle needs to divide the category of κίνησις into ποιεῖν and πάσχειν, or κινεῖν and κινεῖσθαι, to make sense of the claim that not every agent or mover is *ipso facto* itself affected or moved. Once more, I will return to these issues in the sequel.

we have seen, *Physics* ii 3 describes the house-being-built as ἐνεργούμενον, and as being the effect not just of δυνάμεις or δυνάμενα but of ἐνεργοῦντα. There is a difference between the οὐσία and the κίνησις, however, in that the powers must *remain* exercised to *maintain* the full existence of the κίνησις, while they need not remain exercised (or even remain in existence) in order to maintain the full existence of the οὐσία. The seer and the thing seen must remain existent and exercised for as long as the act of seeing remains existent, but the housebuilder does not have to remain at work or even alive for as long as the house remains standing, and the seed *cannot* continue to exist *qua* seed if the wheat is to come into being.⁴⁶ This is why it is not strictly proper for Aristotle to describe the actually existent οὐσία as existing κατ' ἐνέργειαν: he should say that it exists κατ' ἐντελέχειαν or (as in ix 1) κατὰ τὸ ἔργον, implying an ἐνέργεια in the perfect or aorist, rather than κατ' ἐνέργειαν, suggesting an ἐνέργεια in the present. But even if there is no longer strictly an ἐνέργεια, by virtue of the analogy Aristotle says κατ' ἐνέργειαν rather than κατὰ τὸ ἔργον; and, just as an ἐνέργεια in the strict sense may be called an ἔργον and a τέλος, so by analogy Aristotle calls any ἔργον and τέλος an ἐνέργεια. This is how he concludes, in particular, that 'the οὐσία and the form is an ἐνέργεια' (1050b3-4), or at least that it is closer to an ἐνέργεια than to a δύναμις, which is what he needs for the argument of *Metaphysics* ix.

Aristotle consistently describes the ἐνέργεια of non-productive powers as being their ἔργα: this comes up originally in the *Protrepticus*, where Aristotle must argue that φρόνησις is not a productive but a theoretical science, or, equivalently, that its ἔργον does not consist in any external product, but simply in the ἐνέργεια of the science, τὸ φρονεῖν or contemplation.⁴⁷ Aristotle expands on the ἔργα of productive and non-productive powers in the *Eudemian Ethics*:

ἔργον is said in two ways: for of some things the ἔργον is something beyond the χρῆσις, as the ἔργον of the art of housebuilding is a house rather than the act of housebuilding, and the ἔργον of medicine is health rather than healing or the practice

⁴⁶ It might be suggested that, at least in the case of the passive power of matter, the proper analogue of the power of seeing is not the matter's power of *becoming* the substance but its power of *being* the substance, and that the latter power (though not the former) must survive and must continue to be exercised for the substance to continue to exist. But Aristotle does not seem to intend such a distinction in *Metaphysics* ix 6: one of the examples of δύναμις is the ἀνέργαστον, which does not sound like something that survives and continues to be exercised. More seriously, it is just un-Aristotelian to assert that something must continue to *happen*, that something must continue to *do* or *suffer* or generally ἐνεργεῖν, for a substance at rest to continue to exist.

⁴⁷ 'The φρόνιμος will choose τὸ φρονεῖν most of all things, since this is the ἔργον of this δύναμις' (B40); 'τὸ φρονεῖν and τὸ θεωρεῖν is the ἔργον of the soul and most choiceworthy of all things for men' (B70); 'this science must be said to be a theoretical one, since it is impossible for its τέλος to be a production' (B69). In B68-70 Aristotle distinguishes φρόνησις as a theoretical science from productive sciences, which have their ἔργον and τέλος outside them: this is a response to the challenge of *Euthydemus* 291d-292e, and especially *Clitophon* 409a7-410a6, to name the ἔργον of wisdom or of the highest virtue.

of medicine; but of other things the *χρήσις* is itself the *ἔργον*, as seeing is the *ἔργον* of sight and contemplation is the *ἔργον* of mathematical knowledge. (1219a13-17)

Here Aristotle concludes that ‘of those things whose *χρήσις* is their *ἔργον*, the *χρήσις* must be better than the possession’ (1219a17), since ‘the *τέλος* of each thing is its *ἔργον*’ (1219a8), and the *τέλος* is always better than that of which it is the *τέλος*; in a *productive* power, by contrast, the external *ἔργον* is the *τέλος*, and the *ἐνέργεια* or *χρήσις* is not the *τέλος* and need not be better than the possession. But in *Metaphysics* ix 8 Aristotle argues that ‘the *ἔργον* is the *τέλος*, and the *ἐνέργεια* is the *ἔργον*’ (1050a21-22), and that the *ἐνέργεια* is therefore superior to the *δύναμις*, for all *δυνάμεις* including housebuilding. Aristotle is now arguing, not merely that *some* *ἐνέργειαι* are identical with the *ἔργα* they produce, but that in some sense they *all* are: it is this identification that allows him to assert that ‘the *οὐσία* and the form is *ἐνέργεια*’ (1050b2-3).

Aristotle of course continues to recognize the distinction between the two kinds of activities, but he does not think this distinction is fatal to his claim that the *ἐνέργεια* is the *ἔργον* and the *τέλος*:

since in some cases the *χρήσις* is the last thing (as seeing is the last thing for sight, and nothing else comes-to-be from sight beyond this), while from some things something comes-to-be (as from the art of housebuilding, beyond the act of housebuilding, a house also comes-to-be), yet nonetheless [the *ἐνέργεια*] is the *τέλος* in the former cases, and in the latter cases it is more *τέλος* than the *δύναμις* is. (1050a23-28)

We might think that in cases like housebuilding the *ἐνέργεια* or *χρήσις* (what takes place in the soul of the builder) and the *ἔργον* (the house) would be two entirely distinct things, and that the superiority of the *ἔργον* to the *δύναμις* would not imply any superiority in the *ἐνέργεια*, considered in itself and without regard to what it produces. But Aristotle denies this; and he gives an argument based on his general theory of the *ἐνέργειαι* of the active and passive powers.

For the act of housebuilding is in the house-being-built, and it comes-to-be, and is, simultaneously with the house. And of whatever things there is something else which comes-to-be beyond the *χρήσις*, the *ἐνέργεια* of these things is in the *ποιούμενον*, as the act of housebuilding is in the house-being-built and the weaving is in the thing-woven, and similarly in other cases, and in general the *κίνησις* is in the *κινούμενον*. (1050a28-34)⁴⁸

⁴⁸ Instead of saying that something comes-to-be *παρὰ τὴν ἐνέργειαν*, Aristotle says here *παρὰ τὴν χρήσιν*, as in *EE* ii 1. In the *EE* *χρήσις* was a standard term for *ἐνέργεια*, but in *Metaphysics* ix it is not: Aristotle chooses this obsolescent term to make his old point that the product of a productive activity is something other than the activity or exercise of the power, because if he made the point with the term *ἐνέργεια*, he would clash with his new claim that the *ἐνέργεια* of the maker is in the thing made (nonetheless, he goes back to *παρὰ τὴν ἐνέργειαν* at 1050a35).

Plato had spoken (in the ‘Heraclitean’ account of sensation at *Theaetetus* 156-157) of the active and passive powers as coming together and giving birth to the ‘fast motions’ (as Plato calls them), the ἐνέργεια of the sense and the sensible, or more generally of the passive and active powers: these offspring are always ‘twins’ (156a8-b1), in that the active and passive powers must always be exercised simultaneously. Aristotle builds on this discussion in Plato, but he prefers to say, not that there are ‘twin’ ἐνέργεια or κινήσεις, but that the two powers have brought into existence a single ἐνέργεια or κίνησις with two aspects (like the road from Athens to Thebes, that may be considered from either direction), and that this single ἐνέργεια takes place in the πάσχον or κινούμενον, not in the ποιοῦν or κινουῦν. So Aristotle argues in *Physics* iii 3, where his motive is plainly to avoid the consequence that ‘the κίνησις [as τὸ κινεῖν] will be in the κινουῦν...so that either every κινουῦν will be moved, or else it will not be moved even though it contains a κίνησις’ (202a28-31): the consequence that all movers are moved does indeed follow from the *Theaetetus* account, according to which a ‘generation’ or transition from δύναμις to ‘fast motion’ occurs simultaneously in *each* of the two interacting powers. But Aristotle denies that all movers are moved, and in particular he denies that the sensible undergoes a real change of state when it operates on the sense: the only real change occurs in the πάσχον or κινούμενον, and this is to be described as the operation (ἐνέργεια) of the ποιοῦν, not on itself, but on the πάσχον and taking place in the πάσχον.⁴⁹ Aristotle applies this principle in *Metaphysics* ix 8 to conclude that even in cases like housebuilding, where there is an external ἔργον produced by the exercise of the power, the ἔργον and the ἐνέργεια are not entirely distinct: the ἐνέργεια of the art of housebuilding takes place in the ἔργον, in the house that is being built, ‘it comes-to-be, and is, simultaneously with the house’. In a strict sense, the only ἐνέργεια here is the γένεσις of the house, that does not persist once the house is complete, and is not the τέλος but a means to the τέλος. But by the analogy between the production of an external ἔργον and the production of an internal ἔργον like contemplation, Aristotle describes not just the process of teaching or healing, but the resulting ἔργον of knowledge or health (which are not actions or passions but ἕξεις and qualities) as the ἐνέργεια of the ποιοῦν in the πάσχον: that by which we know is knowledge and that by which we are healthy is health, and ‘knowledge and health are a certain figure and form and λόγος and as-it-were

⁴⁹ I will discuss Aristotle on unmoved movers, and his doctrine that the ἐνέργεια of the ποιοῦν takes place in the πάσχον, in the sequel on ἐνέργεια and κίνησις. While God is an important example of an unmoved mover, sensible qualities are an example we can understand much more easily (and provide Aristotle with his model for God’s causality). The argument I describe here about sensible qualities is Aristotle’s argument at the beginning of *De anima* iii 7: ‘it is evidently the αἰσθητόν which makes the αἰσθητικόν, from being δύναμις, to be ἐνεργεία; for *it* [the αἰσθητόν] does not suffer and is not altered’ (431a4-5); therefore the αἰσθητόν is the ποιοῦν and the αἰσθητικόν is the πάσχον, rather than vice versa. The last part of the sentence is usually misunderstood as denying that the αἰσθητικόν suffers or is altered; this sacrifices the logic (and the grammar) of the present passage for the sake of a parallel with *De anima* ii 5. The true meaning of the present passage is evident once it has been pointed out.

(οἶον) ἐνέργεια of the recipient, of the capable-of-knowledge or the healable, for it seems that the ἐνέργεια of the ποιητικοί inheres in the πάσχον and the thing-disposed' (*De anima* 414a8-12).

Aristotle's argument in *Metaphysics* ix 8 turns on this identification of ἐνέργεια with ἔργον. Aristotle's thesis is that ἐνέργεια is always prior-in-οὐσία to δύναμις. He takes it as agreed that the τέλος, the final stage of natural or artificial coming-to-be, is prior in οὐσία to the starting point of generation, as a mature animal is prior to the seed (1050a4-9); he then states the more controversial premise that in each case 'the ἐνέργεια is the τέλος, and the δύναμις is acquired for the sake of this' (1050a9-10). In arguing for this claim, Aristotle first gives the standard examples of ἐνέργεια and δύναμις: people have sight in order to see, the art of housebuilding in order to house-build, and theoretical knowledge in order to contemplate. But he wants the conclusion to hold not only 'in cases where the τέλος is a κίνησις' (1050a17), but also for the natural productions of substances, where the τέλος is the form: 'also matter is δυνάμει, because it *would* [under appropriate conditions] go into the form; whenever it is ἐνεργεία, then it is in the form' (1050a15-16). Why, in this case, should the τέλος be described as an ἐνέργεια? Aristotle says: 'for the ἔργον is the τέλος, and the ἐνέργεια is the ἔργον, and for this reason the word "ἐνέργεια" is said in the sense of the ἔργον (λέγεται κατὰ τὸ ἔργον), and is extended (συντείνει) to the ἐντελέχεια' (1050a21-23). Bonitz and Ross take 'συντείνει' here as meaning that the ἐνέργεια *contributes to* the resulting ἐντελέχεια (Bonitz 1870, s.v. 'ἐντελέχεια'; Ross 1924 ii 245): but although this seems possible in the abstract it yields nonsense in the context, where Aristotle is trying to show that form is included under 'ἐνέργεια' rather than that it is the result of ἐνέργεια; it also ignores the fact that the subject of 'συντείνει' is 'ὄνομα' rather than 'ἐνέργεια', and it fails the test of the parallel in *Metaphysics* ix 3, that says that 'the name "ἐνέργεια," which is applied to ἐντελέχεια (ἢ ἐνέργεια τοῦνομα, ἢ πρὸς τὴν ἐντελέχειαν συντιθεμένη), has been extended to other things especially from κινήσεις' (1047a30-31). Aristotle is saying that the word 'ἐνέργεια' originally applies to κινήσεις (whether narrowly 'changes' or more broadly 'activities'), and that it applies by extension to the οὐσία that an agent produces in a matter. Given this reading of the 'συντείνει' phrase, 'λέγεται κατὰ τὸ ἔργον' must mean, not (as Ross thinks) that the word 'ἐνέργεια' is etymologically derived from the word ἔργον, but that the word 'ἐνέργεια' is said in the sense of 'ἔργον': as we know from *Metaphysics* ix 1.1045b33-34, 'κατ' ἐντελέχειαν' means the same as 'κατὰ τὸ ἔργον', and whatever λέγεται κατὰ τὸ ἔργον also συντείνει πρὸς τὴν ἐντελέχειαν. As Aristotle immediately goes on to say, there is a difference between the case of non-productive powers, where the ἔργον is simply identical with the ἐνέργεια, and the case of productive powers, where the ἐνέργεια is *in* some external ἔργον: but he mentions this difference only to conclude that his thesis (that the ἐνέργεια is the τέλος for the sake of which the δύναμις is acquired, and, therefore, that the ἐνέργεια is prior-in-οὐσία to the δύναμις) is safe in either case, since the ἐνέργεια 'is the τέλος in the former cases, and in the

latter cases it is more τέλος than the δύναμις is' (1050a27-8). Since the ἐνέργεια, strictly speaking, is closer to a thing's natural τέλος than the δύναμις is, it is prior to the δύναμις in the order of substance: sometimes the ἐνέργεια simply is the τέλος, and there it is an ἔργον in the category of κίνησις, but even where the ἐνέργεια constitutes a further ἔργον in the category of substance, this new ἔργον, though not an ἐνέργεια in the strict sense, can be called ἐνέργεια by analogy with the former type of ἔργον, and is at any rate more properly described as ἐνέργεια than as δύναμις. This may not seem like a very strong argument for the conclusion Aristotle immediately draws, that 'the οὐσία and the form is ἐνέργεια' (1050b2-3), or (perhaps better) it may not seem to justify this conclusion in a very strong sense, but this is the only argument he ever offers for this conclusion, and the sense of the conclusion that this argument justifies is the only sense of the conclusion he ever justifies, and perhaps the only one he ever requires.

The ἔργον that is said to have its being through an ἐνέργεια is thus a generalization of τὸ φρονεῖν or τὸ θεωρεῖν, the accident in the category of κίνησις that is the ἔργον of intellectual virtue. From knowing κατὰ δύναμιν, we come to know κατ' ἐνέργειαν; our act of knowledge, from existing in our δύναμις, comes to exist in our ἐνέργεια; the act of knowledge is the ἔργον that we produce, and our ἐνέργεια exists in our ἔργον, and is identical with our ἔργον. As we have seen, Aristotle takes knowledge κατὰ δύναμιν (the kind of δύναμις he had originally considered in the *Protrepticus*) as the paradigmatic case of δύναμις; so he takes the production of knowledge κατ' ἐνέργειαν as the paradigmatic case of production, not only the production of accidents but also the production of substances. Aristotle solves the problem of coming-to-be in terms of δύναμις and ἐνέργεια, power and activity, that is, he explains how a thing can come-to-be (and in what sense it already *was* before coming-to-be) by explaining how its efficient and material causes, as active and passive powers, can produce it (and in what sense it already existed in these causes). While Aristotle takes over Plato's general theory of powers as active and passive (correcting this theory by the ἐνέργεια-κίνησις distinction, and the assertion that the ἐνέργεια of the agent is in the patient), his detailed understanding of what a δύναμις does when it operates is taken over from the only special case Plato cared about enough to discuss in detail, the case of knowledge. Aristotle is unimpressed by Plato's answer (as given in the fifth hypothesis of the second part of the *Parmenides*) to the Eleatic argument against coming-to-be, a merely logical answer that distinguishes senses of being without grasping the *causes* of coming-to-be; but Aristotle is very much impressed with Plato's answer (as given in the *Euthydemus*, and elaborated in the *Theaetetus* parallel) to the eristic argument against coming-to-know. If we know in the sense of a κτήσις or (in the weak sense) a ἔξις, then we can come to know in ἔξις (in the strong sense) or χρήσις; as the *Theaetetus* says, what we have in the first stage is a δύναμις, and, as the *Protrepticus* infers, when we pass from knowing in the first way to knowing in the second we are *exercising* this active or passive δύναμις, so that some ἐνέργεια,

some κίνησις of ποιεῖν or πάσχειν, comes-to-be through our activity. Starting from this one peculiar case of coming-to-be, Aristotle turns Plato's answer to the eristics into an answer to the Eleatics. For Aristotle (unlike Plato) a simple distinction in the senses of being is not sufficient to explain why things are possible, and so why they may come-to-be: we can only understand possibility by understanding the powers whose conjunction makes things possible, and we can best understand powers by examining the powers of theoretical and practical knowledge that we ourselves possess.⁵⁰

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⁵⁰ As an appendix, I would like to note an odd and little-discussed passage that might seem to contradict a basic thesis of this paper, in that it might seem to show that Aristotle thought of εἶναι ἐνεργεία as an *activity* of existing; and I will explain why I do not think the passage gives me any trouble. The text is *NE* 1168a5-9: 'existence (τὸ εἶναι) is an object of choice and love for everyone, and we *exist* [i.e., we live] through activity (namely through living and doing, ἐσμὲν ἐνεργεία, τῷ ζῆν γὰρ καὶ πράττειν), and he who has produced a work in some way *exists* through his activity (ἐνεργεία δὲ ὁ ποιήσας τὸ ἔργον ἔστι πῶς); so he loves his work, because he loves existence. And this is natural: for the work testifies by activity to what he is in capacity [or: what is in his capacity] (ὁ γὰρ ἐστὶ δυνάμει, τοῦτο ἐνεργεία τὸ ἔργον μὴνύει)'. This passage does *not* use the phrase εἶναι ἐνεργεία in the sense of 'be or exist in actuality'; in ἐσμὲν ἐνεργεία, ἐνεργεία is an instrumental dative parallel to τῷ ζῆν and [τῷ] πράττειν, and ζῆν and πράττειν specify the activity or activities in question. The two following datives ἐνεργεία are again instrumental: Aristotle is claiming that the ἔργον is somehow partially constitutive of the producer's existence, and so he says that the producer exists through his ἐνέργεια, i.e., through his production of the ἔργον (in the example Aristotle is considering, the ἐνέργεια is a εὐεργεσία, the conferral of a benefit; Aristotle is trying to explain why the εὐεργέτης loves the εὐεργετηθείς more than vice versa). Similarly in the last sentence of the passage, the ἐνέργεια is the production of the work, and *res ipsa loquitur*, by the concrete evidence of this production (rather than by possibly deceptive verbal declarations), what the producer is capable of. It is surprising that Aristotle says we exist through the ἐνέργεια of living and doing (and conferring benefits etc.), when normally he thinks that we exist (i.e., we are alive rather than dead) simply through possessing the δυνάμεις of these things. But clearly he is extending the normal meaning of 'existence', claiming that it has senses stronger than the normal minimal sense, and that, beyond desiring to exist in the normal sense, we would also like to exist in the stronger senses (Aristotle needs this claim to explain why the εὐεργέτης loves the εὐεργετηθείς; cf. the *Symposium*, and *De anima* ii 4, on desiring immortality, and achieving it in a way by begetting offspring). εἶναι is not a verb of action or passion, so it should not have an ἐνέργεια-sense and a δυνάμεις-sense; but εἶναι for living things like us is identical with ζῆν, and ζῆν (from the *Protrepticus* onward) does have a stronger ἐνέργεια-sense and a weaker δυνάμεις-sense. Properly speaking, εἶναι should be identified only with the δυνάμεις-sense of ζῆν; but already in *Protrepticus* B86, after asserting that 'to live is, for every animal, the same thing as to exist', Aristotle concludes that the φρόνιμος will exist more than other people do, and that he will exist most when he ἐνεργεῖ and is θεωρῶν, since it is when he is performing the highest activity of life that he is living in the strongest sense (the implicit conclusion is that we should desire contemplation just because we desire existence). The *NE* passage is just extending the *Protrepticus*' argument from the case of contemplating to the case of performing benefits, which is (like contemplating) a high human ἐνέργεια not performed for the sake of anything else. Existing through an activity, as described in these passages, is not εἶναι ἐνεργεία in the sense of *Metaphysics* ix, which is bare existence and nothing more.

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