

Potentiality as Power

...not the most useful for what we want now

The Basic Divisions of Θ1

- * 1046a4-9: what is to be considered and what not
- * 1046a9-19: homonymous and non-homonymous cases
- * 1046a19-29: active and passive capacities
- * 1046a29-35: a coda on privation

Θ 1: A Change of Topic

- * *Metaphysics* Θ begins with the thought that one topic having been assayed, another requires attention:
- * We have spoken about what is primarily and to which all other categories of being are referred—about, namely, *ousia* (all other beings are spoken of in accordance with the account of *ousia*, quantity and quality, and all the others spoken of in this way, for all will involve the account of *ousia*, just as we said in the earlier discussions); and since being (*to on*) is on the one hand either what something is, or what sort, or how much, and on the other in accordance with potentiality (*dunamis*) and actuality (*entelecheia*) and in accordance with function (*ergon*), let us make some determinations about potentiality and actuality. . .
- * Περί μὲν οὖν τοῦ πρώτως ὄντος καὶ πρὸς ὃ πάσαι αἱ ἄλλαι κατηγορίαι τοῦ ὄντος ἀναφέρονται εἴρηται, περὶ τῆς οὐσίας (κατὰ <γὰρ?> τὸν τῆς οὐσίας λόγον λέγεται τὰλλα ὄντα, τό τε ποσὸν καὶ τὸ ποιὸν καὶ τὰλλα τὰ οὕτω λεγόμενα· πάντα γὰρ ἔξει τὸν τῆς οὐσίας λόγον, ὥσπερ εἶπομεν ἐν τοῖς πρώτοις λόγοις)· ἐπεὶ δὲ λέγεται τὸ ὄν τὸ μὲν τὸ τί ἢ ποιὸν ἢ ποσόν, τὸ δὲ κατὰ δύναμιν καὶ ἐντελέχειαν καὶ κατὰ τὸ ἔργον, διορίσωμεν καὶ περὶ δυνάμεως καὶ ἐντελεχείας. . . (*Met.* Θ 1, 1045b27-35)

A Surprising Redirection

- * . . . and first about what is most authoritatively called potentiality, which is not however the most useful for what we want now; for potentiality and actuality (*energeia*) extend further and are not spoken of only in accordance with change (*kinêsis*). But by speaking about this, we come to clarity also about the others in our determinations about actuality (*energeia*).
- * . . . καὶ πρῶτον περὶ δυνάμεως ἢ λέγεται μὲν μάλιστα κυρίως, οὐ μὴν χρησιμωτάτη γέ ἐστι πρὸς ὃ βουλόμεθα νῦν· ἐπὶ πλεόν γάρ ἐστιν ἡ δύναμις καὶ ἡ ἐνέργεια τῶν μόνον λεγομένων κατὰ κίνησιν. ἀλλ' εἰπόντες περὶ ταύτης, ἐν τοῖς περὶ τῆς ἐνεργείας διορισμοῖς δηλώσομεν καὶ περὶ τῶν ἄλλων. (*Met. Θ* 1, 1045b35-1046a4)

Some Questions about our New Topic

- * What exactly is our new topic?
- * What is its relation to our old topic, about *ousia*?
- * Why, having conducted our discussions about *ousia*, should we, must we, make some new determinations about our new topic?

Three First Approaches

- * A Gentle Approach, simply looking at our text
- * A Philological Approach, simply looking at these words
- * An Aporetic Approach, looking at the problems Aristotle understands himself to face

A Gentle Approach (I)

- * Our new topic deals with actuality (*entelecheia/energeia*) and potentiality (*dunamis*).
- * These notions are said to be somehow co-ordinate with the doctrine of categories within with our investigation into *ousia* has proceeded.
 - * . . .and since being (*to on*) is **on the one hand [i]** either what something is, or what sort, or how much, and **on the other [ii]** in accordance with potentiality (*dunamis*) and actuality (*entelecheia*) and in accordance with function (*ergon*), let us make some determinations about potentiality and actuality.
- * The suggestion seems to be that being (*to on*) is subject to high-level characterizations, one *categorial* and one *modal*, and further that these high-level characterizations are independent of one another but never the less co-ordinate.
 - * The categorial characterization is plainly taxonomical; the modal characterization seems orthogonal to that taxonomical concern, but still some manner of fundamental feature of being.

A Gentle Approach II

- * Co-ordinating the categorial and the modal.
- * According to Aristotle's categorialism, all beings (*onta*) fall into ten kinds, and among these kinds, one kind, *ousia*, is primary.
 - * In our passage, he explicates this by saying the the accounts (*logoi*), presumably the essence-specifying definitions of the non-primary beings refer back to the accounts, that they will all somehow involve (ἔξει) the accounts of the primary beings.
- * Since, however, the account of the primary beings have been given in terms of hylomorphism, and we have seen a persistent alignment of potentiality and matter, on the one hand, and form and actuality on the other, we will not have a clean grasp of categorialism without understanding these modalities.

A Gentle Approach III

- * Recall, e.g., the end of *Metaphysics* H 6, immediately preceding our introduction to *Metaphysics* Θ 1:
- * It is the case, just as has been said, that the proximate matter and the form are one and the same, the one in potentiality, the other in actuality. As a result, seeking the the cause of their being one is like seeking the cause of their being one; for each thing is a one, and what is in potentiality and what is in actuality are in a way one, so that there is no other cause here except what causes as moving something from potentiality into actuality. And all things which have no matter are without qualification essentially unities.'
- * ἔστι δ', ὡσπερ εἴρηται, ἡ ἐσχάτη ὕλη καὶ ἡ μορφή ταὐτὸ καὶ ἓν, δυνάμει, τὸ δὲ ἐνεργείᾳ, ὥστε ὅμοιον τὸ ζητεῖν τοῦ ἓνός τί αἴτιον καὶ τοῦ ἓν εἶναι· ἓν γάρ τι ἕκαστον, καὶ τὸ δυνάμει καὶ τὸ ἐνεργείᾳ ἓν πῶς ἐστίν, ὥστε αἴτιον οὐθὲν ἄλλο πλὴν εἴ τι ὡς κινήσαν ἐκ δυνάμεως εἰς ἐνέργειαν. ὅσα δὲ μὴ ἔχει ὕλην, πάντα ἀπλῶς ὅπερ ἓν τι (Met. H 6, 1045b17-26)

A Philological Approach (I)

- * Our modal terms:
- * Since being (*to on*) is on the one hand either what something is, or what sort, or how much, and on the other in accordancy with **potentiality** (*dunamis*) and **actuality** (*entelecheia*) and in accordancy with function (*ergon*)
- * Yes, but what do these words mean?
 - * This is in a way the topic of our seminar.

A Philological Approach (II)

- * For now, Aristotle has two words for actuality, both his own coinages: twice uses *entelecheia* and *energeia*, and basically one for potentiality, *dunamis*, though he proceeds to use it in two (significantly?) different ways, as *capacity* and *potentiality*.
- * The word *entelecheia* is relatively uncommon for him in *Metaphysics* Θ.
 - * He uses *entelecheia* only six times in this entire book (1045b33-34, 1045b35, 1047a30, 1047b2, 1049a5-6, 1050a23), twice in the introduction and then bunched towards the end.
 - * In general, *entelecheia* is used much less frequently by Aristotle, with most of its uses concentrated in *De Anima*, where it is used 40 times (39 of them in its second and third books), which is the highest relative frequency in all his works. Elsewhere it occurs frequently in the corpus only in *Physics* (34), *Metaphysics* (40), *On Generation and Corruption* (21), and then rarely also in *De Caelo* (3) and *On the Generation of Animals* (2), and just once each in *The Parts of Animals* and the *Meteorology*.
 - * In the introduction to *Metaphysics* Θ 1, they seem interchangeable.
- * The word *dunamis* is used very frequently indeed.
 - * Here too it is noteworthy that in its dative form, 'in potentiality' or, simply, 'potentially' (*dunamei*), it is used infrequently in the first half of the book, namely three times in *Metaphysics* Θ 1-5 and 23 times in *Metaphysics* Θ 6-9.

A Philological Approach (III)

- * The neologism *entelecheia* has a vexing and disputed etymology:
 - * Aristotle gives a clue in Θ 8 (1050a21-3) that it involves the having a of an end (*telos*), so ‘having an end in oneself’ (scil. *en [heautô(i)] telos echein*) or from the adjective *enteles*, so ‘having completion’ (*to enteles echein*)
- * By contrast, the neologism *energeia* is reasonably clear:
 - * It is likely developed by Aristotle from a verbal form (*energein*) derived from the adjective *energōs*, which means in ordinary Greek to be active or employed, as opposed to being inactive or idle.
 - * It is also likely earlier and is definitely far more frequent (671 > 138)

An Aporetic Approach

- * A Problem Involving Actuality and Potentiality
 - * *Metaphysics* B 1, 996a10-11:
 - * Are the principles potential or actual?
 - * *Metaphysics* B 6, 1002b32-1003a5:
 - * If the principles are potential, and priority is prior to actuality, then we lack a causal explanation of why what is has come to be.

Power Puzzles

- * Nelson Goodman, writing in the mid-twentieth century, nicely captured one motivating concern about powers, or, in his lingo, dispositions:
 - * Dispositions are ‘ethereal’.
 - * Dispositions seem to be present in their bearers in a way unlike a subject’s categorial properties:
 - * A pane of glass is, let us say, rectangular-shaped and also fragile.
 - * Its categorial feature, being rectangular, is manifest and present for all to see.
 - * Its fragility, by contrast, seems neither currently manifest nor present for inspection.
 - * In fact, it may never be manifested at all: a pane of glass may exist all the while without its ever being shattered.
 - * Yet its disposition to be shattered is evidently, in some sense, there all along. In what sense, though?

Met. B 1, 996a10-11

- * Again we ask whether of the principles they exist in potentiality or in actuality; further, whether they are in potentiality or in actuality in any other sense than in reference to movement; for these questions too would present much difficulty.
- * [καὶ πότερον αἱ ἀρχαὶ] δυνάμει ἢ ἐνεργείᾳ· ἔτι πότερον ἄλλως ἢ κατὰ κίνησιν καὶ γὰρ ταῦτα ἀπορίαν ἂν παράσχοι πολλήν.
- * This is a problem about the modality of the principles (ἀρχαί).
- * N.b. a distinction between two ways of being potential: (i) in reference to motion (κατὰ κίνησιν); and (ii) in an unspecified other way (ἄλλως).

Met. B 6, 1002b32-1003a5

- * Closely connected to these is running through whether the elements are in potentially or in some other way. If in some other way, something other will be prior to the principles (for the potency is prior to that cause, and it is not necessary for everything potential to be in that way).—But if the elements exist potentially, it is possible that everything that is should not be. For even that which is not yet is able to be; for that which is not comes to be, but nothing comes to be from what is incapable of being.
- * σύνεγγυς δὲ τούτων ἐστὶ τὸ διαπορῆσαι πρότερον δυνάμει ἔστι τὰ στοιχεῖα ἢ τιν' ἕτερον τρόπον. εἰ μὲν γὰρ ἄλλως πως, πρότερόν τι ἔσται τῶν ἀρχῶν ἄλλο (πρότερον γὰρ ἢ δύναμις ἐκείνης τῆς αἰτίας, τὸ δὲ δυνατὸν οὐκ ἀναγκαῖον ἐκείνως πᾶν ἔχειν)· εἰ δ' ἔστι δυνάμει τὰ στοιχεῖα, ἐνδέχεται μὴθὲν εἶναι τῶν ὄντων· δυνατὸν γὰρ εἶναι καὶ τὸ μήπω ὄν· γίγνεται μὲν γὰρ τὸ μὴ ὄν, οὐθὲν δὲ γίγνεται τῶν εἶναι ἀδυνάτων.
- * Here we have a concern about the elements (τὰ στοιχεῖα) and their modal status.
 - * If they are actual, a question arises as to whether they are prior to the principles; if potential, then we lack a sufficient cause for the existence of what is, since if all elements are merely potential, as they must be if not actual, then since what is potential may not be, it remains open that nothing would be.
 - * N.b. that we are two issues here: (i) a specific question about the modal relations between the elements (τὰ στοιχεῖα) and the principles (αἱ ἀρχαί); and (ii) a more general question about the priority relations between the actual and the potential.

Aporia 14

1. The elements exist either (a) in potentiality or (b) not.
2. If (1b), then something else will exist prior to the elements, which is absurd.
3. If (1a), it is possible that none of the things that are should exist, which is absurd.
4. So, the elements cannot exist in either potentiality or actuality.

* cf. *Met.* Λ 6, 1071b22-24: 'And yet there is an aporia; for it seems that everything that acts is capable of acting, while not everything that is capable of acting acts, so that potentiality would be something prior to actuality.'

Some Driving Precepts in Aporia 14

- * Nothing is prior to the principles, though some principles may stand in priority relations to other principles.
- * There are some respects in which potentiality is prior to actuality; still, in the important respects, actuality is prior to potentiality.
- * Possibly, x exists in potentiality and not in actuality.
 - * Still, every such x can exist in actuality, though not all do of necessity.
- * What is not capable of being never comes to be.

For Consideration

* We have shown elsewhere that potentiality and being potential are meant in many ways (*legetai pollochôs*). Of these, those that are called potentiality homonymously should be set aside (for some are so called because of some similarity, as in geometry and we speak of what is possible and impossible because things are or are not in a certain way); but those that relate to the same form (*to auto eidos*) are all sources (*archai*) and are spoken of with reference to the primary one [viz. the primary source (*archê*)], which is the source (*archê*) of change in something other than itself or in itself *qua* other. For one is the capacity (*dunamis*) of being acted upon, which is the source (*archê*) of being changed in what is itself affected and acted upon by something else or by itself *qua* another; another is the state of not being liable of being acted upon for the worse and so as to be destroyed by something else or by itself *qua* something else, that is, by a source (*archê*) of change. For there is in all these definitions the account (*logos*) of the primary power (*dunamis*) (*Met.* 1046a4-15).

To Be Explicated

- * Being meant in many ways (*legetai pollochôs*).
 - * Types of homonymy
- * Being the source (*archê*) of change in something other than itself or in itself *qua* other
- * Types of powers:
 - * active
 - * passive
 - * self-preservative

Homonymy

* We must distinguish *mere* homonymy from *connected* homonymy.

* Synonymy:

* a and b are synonymously $\phi =_{df}$ there exists a single, non-disjunctive, essence-specifying account of ϕ , and applied to a and b .

* Homonymy:

* Negatively

* a and b are homonymously $\phi =_{df}$ there does not exist a single essence-specifying account of ϕ .

* Equivalently, on the assumption that ϕ at least admits of an account, in more positive terms:

* a and b are homonymously $\phi =_{df}$ there are two or more essence-specifying accounts of ϕ .

Mere *vs.* Connected Homonymy

- * Mere homonymy:

- * *a* and *b* are merely homonymously $\phi =_{df}$ (i) there does not exist a single essence-specifying account of ϕ ; (ii) the accounts of ϕ as applied to *a* and *b* exhibit no overlap.

- * Connected homonymy:

- * *a* and *b* are merely homonymously $\phi =_{df}$ (i) there does not exist a single essence-specifying account of ϕ ; (ii) the accounts of ϕ as applied to *a* and *b* exhibit overlap

The Appeal to Homonymy Here

- * Ruled out: *mere* homonymy

- * An illustration in English: (i) the *power* of the throne and (ii) 2^3 , that is, 2 to the third *power*.

- * Ruled in: connected homonymy.

- * Indeed, ruled in is core-dependent homonymy:

- * *a* and *b* are homonymously ϕ in a core-dependent way iff:

- * (i) *a* is ϕ ; (ii) *b* is ϕ ; (iii) the accounts of ϕ -ness in '*a* is ϕ ' and '*b* is ϕ ' do not completely overlap; and (iv) the account of ϕ in '*b* is ϕ ' necessarily makes reference to the account of ϕ in '*a* is ϕ ' in an asymmetrical way (or *vice versa*).

A First Approximation

- * ϕ is a core instance of powers =_{chdf} ϕ is the source (*archê*) of change in something else or in itself *qua* other.
- * One question: if this is so, how does does this source show up in the accounts of the other, non-core instance of powers?

Types of Powers

* Initially three:

* active

* passive

* self-preservative

* These then are given normatively keyed correlates (IO46a15-16)

* being efficiently active, or ϕ -ing well

* being readily affected, or being- ϕ -ed well or receptively

* being effectively self-preservative, or being ϕ in such a way as to make it difficult to dislodge being ϕ .

The Primacy of the Active

- * Taking them in reverse order:
 - * Δ is a power of self-preservation =_{df} Δ is not liable to be acted upon by *a source of change* (1046a15-19)
 - * Passive powers emerge as a more demanding case:
 - * Δ is a passive power =_{df} Δ is categorially suited to be acted upon *by a source of change* (1046a15-19)
 - * Question: wherein resides the asymmetry? After all
 - * Δ is an active power =_{df} Δ is categorially suited to act upon, as a source of change, some *categorially suited passive power* (1046a15-19)

Active and Passive Capacities

- * Two claims:
 - * The (categorially paired) active power Δ to ϕ and the passive power Δ to be ϕ -ed are one and the same.
 - * The (categorially paired) active power Δ to ϕ and the passive power Δ to be ϕ -ed are distinct.
 - * These are both true because they are one in one way and not in another (1046a19-22).

Why different?

- * They have different homes (1046a22-28):
 - * The passive power is in the affected item.
 - * The active power is in the agent.