

# Preface to *Metaphysics* $\Lambda$

An Aporematic Introduction

# 'The inquiry is about substance.'

- Aristotle opens *Metaphysics* Λ with a terse preview, undergirded by a somewhat cryptic explanation of his procedure:
  - 'The inquiry is about substance [or, being; οὐσία]; for the principles and causes of substances are being sought' (*Met.* Λ 1, 1069a18-19; Περί τῆς οὐσίας ἡ θεωρία· τῶν γὰρ οὐσιῶν αἱ ἀρχαὶ καὶ τὰ αἴτια ζητοῦνται).

# Three Key Phrases

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# General Coherence

- Because there is a general scholarly question about the relation of *Metaphysics A* to the rest of the *Metaphysics*, it is worth emphasizing at the outset that in this respect at least the work exhibits a general coherence about its objects and methods.
- Already in *Metaphysics A*:
  - It is evident that this (viz. wisdom, σοφία) is a science (ἐπιστήμη) of certain principles and causes (ἀρχαί and αἰτίαι). But since this is the science we are seeking, this is what we must consider: of what sorts of principles and causes is wisdom (σοφία) a science (ἐπιστήμη)? (*Met. A* 1-2, 982a1-6)
  - It (wisdom, σοφία) must be a science (ἐπιστήμη) of first principles and causes (πρῶται ἀρχαὶ καὶ αἰτίαι) (*Met. A* 2, 982b9-10)
  - It is from them and through them [the first principles and first causes] that other things are known; but they are not known through the things under them (*Met. A* 2, 982b2-4).

# Requisite Background

- If the inquiry is about substance (οὐσία), then to approach this inquiry, we must know something about substance.
- There are five issues propaedeutic to understanding substance, three of which we can touch upon now, in one way dogmatically but in another way only aporematically. Each issue in a way holds a promise and a problem:
  - Categoricalism
  - Hylomorphism
  - Change
  - The modalities of being, namely being actually and being potentially
  - Separation

# Requisite Background

- If the inquiry is about substance (οὐσία), then to approach this inquiry, we must know something about substance.
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  - Change
  - The modalities of being, namely being actually and being potentially
  - Separation

# A Linguistic Observation

- Aristotle's preferred way of referring to substance is *ousia* (οὐσία), an abstract noun formed off the feminine participle *ousa* (οὔσα) of the verb *einai* (εἶναι), *to be*.
  - One might as readily speak in this connection of *beings* or *basic beings* as substances.
  - Indeed, although οὐσία is traditionally translated as “substance”, this is a very misleading rendering if it is taken to indicate, as it more often does than not does in English usage, some *stuff* or *quantity*.
    - Neither of these qualifies as a substance in Aristotle's technical sense.
      - Rather, a substance is a basic being, something capable of existing in its own right.
        - Our inquiry, then, concerns basic beings—which things they are and what sorts of things they are, and then, of course, why those that are are and those are not are not.
          - In brief, in virtue of what does a basic being qualify as basic?

# Principles and Causes

- Aristotle's appeal to principles (ἀρχαί) and causes (or, explanatory factors, αἴτια) reflects his deep seated conviction that to know or understand something is to grasp that thing's causes and principles (*APo.* 71b9–16, 71b33–72a5; *Top.* 141b3–14, *Phys.* 184a10–23; *Met.* 1029b3–13)
- If we are careful and self-reflective, we will also want to know what causes and principles are—both *what* they are and *how many* they are.



# Knowing the Causes and Principles

- Having made these distinctions, we must examine causes, both what they are like and how many they are in number. For since our work is for the sake of knowledge, but we do not suppose ourselves to know something before we grasp that because of which it is (and this is to grasp its primary cause), it is clear that we must also do this regarding generation and destruction, and for all the kinds of natural change, so that, knowing their principles, we might attempt to lead each of the things we are investigating back to them.
  - One way in which cause is said, then, is as that out of which something comes to be and which is present in it, for example, the bronze of the statue and the silver of the cup, and the genera of these.
  - And another way is the form or paradigm—this is the account of the essence—and their genera (for example, the ratio 2:1 of the octave, and number in general), as well as the parts in the account.
  - Further, the primary source of the change or rest; for example, the one who has deliberated is a cause, and the father of the son, and in general the maker of what is made and that which changes something of what it changes.
  - Further, as the goal: this is that for the sake of which; for example, health of walking about. Why does he walk about? We say, “so that he may be healthy”, and speaking thus we take ourselves to have given the cause. (*Phys.* ii 3, 194b16–35)

# Some First Questions

- ...concerning Aristotle's contentions and procedures pertaining to substance:
  - Certain beings, substances (οὐσίαι), are primary or basic.
    - In virtue of what are they so?
    - Are such beings uniform? Or do they themselves admit of further divisions?
  - Some substances, but not others, we learn, change.
    - In what, precisely, does change consist?
      - In analyzing change, Aristotle appeals to two sets of distinctions, which he later co-ordinates: (i) form and matter; and (ii) actuality and potentiality.
        - What is each of these contrasts taken individually?
        - How are they co-ordinated?

# Type of Substance

- *Met. A 1 1069a30-36* affirms that there are three types of substances, falling under to general headings:
  - ‘There are three [kinds of] substance’ (οὐσίαι δὲ τρεῖς; *Met. A 1 1069a30*)
  - perceptible substances
    - which are perishable (plants and animals)
    - which are eternal (heavenly bodies)
  - unchanging substances (which are imperceptible)

# Perceptible Substances

- The first thing we know about perceptible substances (the existence of which ‘everyone grants’; *Met.* Λ 1 1069a30):
  - ‘Perceptible substance is subject to change’ (ἡ δ’ αἰσθητὴ οὐσία μεταβλητή; *Met.* Λ 1, 1069b3).
    - We also know, then, that the study of these substances falls within the province of natural philosophy ( *Met.* Λ 1, 1069a36-37)
- So, to mark this distinction and determine their character, we need to turn to the *Physics*, the doctrines of which are very plainly presupposed in much of *Metaphysics* Λ.

# Two *Phainomena* about Change

- Accept as a sort of a datum: things change.
  - Only slightly more controversially: things change in two ways:
    - Accidental change (AC): one thing, remaining numerically one and the same, is at  $t_1$   $\phi$  and at  $t_2$  not- $\phi$
    - Substantial change (or, generation and destruction) (SC): some things come into existence, and some things go out of existence.
  - Taken together: human beings, for instance, are born (SC), grow (AC), move about (AC), age (AC), decline (AC), die (SC).

# Two Problems about Change

- Copi (*apud* Gallois), on the assumption that there is change, we cannot have both (1) and (2):
  - (1) If a changing thing really changes, there can't literally be one and the same thing before and after the change.
  - (2) However, if there isn't literally one and the same thing before and after the change, then no thing has really undergone any change.
    - So, there is no change.
- Parmenides: change implicates one in non-being, and non-being is not and cannot be.

# Parmenides Rendered

- (1) Necessarily, what is and what can be thought are co-extensive.
- (2) Hence, it is not possible to think non-being.
- (3) It is possible to think of generation only if it is possible to think of non-being.
- (4) Hence, it is not possible to think of generation.
- (5) It is possible to think of change only if it is possible to think of generation.
- (6) It is not possible to think of generation.
- (7) Hence, it is not possible to think of change.
- (8) There is change *iff* it is possible to think of change.
- (9) Therefore, there is no change.

# Either Or

- Either one or both of our *phainomena* must go
- Or we must produce an analysis of change showing where these nay-sayers have gone awry.
- This is Aristotle's response to Parmenides: his analysis of change attempts to do justice to the *phainomena* whilst defanging Parmenides's argument.



# A Continuity

- It is easy to conceive of many kinds of change in the manner of the earliest Presocratic philosophers, as occurring on a kind of continuum.
  - Thus, in qualitative change, we readily conceive of a quality space, for instance a colour spectrum with *termini* as light and dark, along which change occurs.
    - Each change involves the supplanting and displacing of one quality on that spectrum by another: a leaf goes from green to red by being such as to underlie the displacement of green by red.
      - We are given a model: change involves two (or if you like, three) factors (*Phys.* i 7, 191a11-21):
        - There is an underlying subject, which remains the same, and a quality space along which its alteration occurs (or, if you like, a pair of points on the continuum between the termini of the quality space)

# The General Picture

- A change involves two factors:
  - The continuing existence of something underlying—call it the subject or substrate of the change
  - The loss of one feature in favour of another—call this the form of the change.
- Taken together, we have the introduction of *matter* and *form*.
  - Matter =<sub>df</sub> what underlies change
  - Form =<sub>df</sub> what is acquired or lost in change

# A Little Argument

- We can even offer a little argument to that effect:
  - (1) A necessary condition of (the possibility) of there being change is the existence of matter and form.
  - (2) There is change.
  - (3) So, there are matter and form.

# Change: Promise

- Aristotle's account of change secures the *phainomena*:
  - things come in and out of existence
  - some of those things, while remaining numerically one and the same, undergo alteration

# Change: a Problem

- Once that basic picture is generalized, Aristotle seems to lose the continuity it bears to the Presocractic model.
  - To begin, in the case of non-qualitative accidental change, there are no ready contraries delimiting some sort of continuum, say, a quantity space or a pair of locations.
  - So, one way to go: generalize the notion of a quality space delimited by contraries to (what seem to be) contradictories: not being- $\phi$  and being- $\phi$ , so, a privation, or still more generally, a lack, and a positive trait.
    - One worry here is that vacuity threatens: a change involves being not one sort of thing and then becoming that sort of thing.
      - So, when something changes, it, you know, undergoes a change.
  - This matter seems especially acute in the area of generation, where something new comes into existence.
    - It hardly seems that when the American socialist campaigner Eugene V. Debbbs was born, there was a contrary space delimited by two *termini*, along which something continuing displaced and supplanted some intermediary.
      - This indeed seems to be Aristotle's own frequent observation that no substance has a contrary.

# Change: Another Problem

- The analysis seems to require that in every change something *persists*.
  - This was a plausible concession to Parmenides, namely that there is no generation from nothing: *ex nihilo nihil fit*.
- So, there must be a substrate underlying every instance of substantial generation.
  - If so, it seems as if SC collapses into AC, and one of our *phainomena* is lost after all.
    - It may also seem, in consequence, that the real substances, the real basic beings, are the ever persisting atoms, or, if there are no atoms, the primordial plastic of all.
      - Then it further seems that the primordial plastic, which is nothing in its own right at all, qualifies as the basic being.
        - This seems odd to say the least, that what is not anything in particular manages to be the fundamental entity in our ontology.

# The Modalities: a Promise

- Perhaps this is part of the reason Aristotle introduces the modalities of potentiality and actuality.
  - This is one way of solving the difficulty [*scil.* regarding change]. Another is to observe that the same things can be spoken of in terms of potentiality and actuality' (*Phys.* i 8, 191b27–29; cf. *Met.* Δ 7 and *Met.* Θ 1-9).
- One thought: since whatever is a basic being must actually be something, then the primordial plastic, if it is really only something in potentiality, is disqualified (so, e.g. *Met.* Z 3, 1029a26-34).

# The Modalities in Change

- A definition, of sorts:
  - Since with respect to each thing, its being in actuality and potentiality is distinguished, the actuality (ἐντελέχεια) of being in potentiality, *qua* such, is change (διηρημένου δὲ καθ' ἕκαστον γένος τοῦ μὲν ἐντελεχείᾳ τοῦ δὲ δυνάμει, ἢ τοῦ δυνάμει ὄντος ἐντελέχεια, ἧ τοιοῦτον, κίνησις ἐστίν; *Phys.* iii 1, 201a9-11).
  - Change (κίνησις) =<sub>df</sub> the actuality of what is potentially  $\phi$ , *qua* such.
    - One crucial point here: change (κίνησις) is evidently said to be a kind of—or to be subordinate to—actuality (ἐντελέχεια) in our definition, of sorts, of change.



# The Modalities: a Problematic Question

- About this definition, of sorts, the French priest and scientist Pierre Gassendi (1592-1655) grew positively dyspeptic:
  - Great God! Is there any stomach strong enough to digest that? The explanation of a familiar thing was requested, but this is so complicated that nothing is clear anymore ... The need for definitions of the words in the definitions will go on *ad infinitum* (Gassendi, *Exercises against the Aristotelians* [1624], II, 2, 4).
- Gassendi's remonstrations notwithstanding, we now know at least that those substances subject change, the perceptible ones, are also subject to being in potentiality and being in actuality.
  - What is that?

# The Modalities: a Problem

- It is not immediately clear what these words mean.
- To start, the two words for actuality are both Aristotelian neologisms
  - The neologism *entelecheia* (ἐντελέχεια) has a vexing and disputed etymology:
    - Aristotle gives a clue in  $\Theta$  8 (1050a21-3) that it involves the having a of an end (*telos*), so 'having an end in oneself,' or from the adjective *enteles* (ἐντελής) so 'having completion' (τὸ ἐντελής ἔχειν).
  - By contrast, the neologism *energeia* (ἐνέργεια) is reasonably clear:
    - It is likely developed by Aristotle from a verbal form *energein* (ἐνεργεῖν) derived from the adjective *energos* (ἐνεργός), 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)

# The Modalities: another Problem

- Sometimes, as we have seen (*Phys.* iii 1, 201a9-11) change seems to be a kind of actuality.
- Elsewhere, however, change and actuality are contrasted with one another:
  - Of these processes, then, we must call the one set changes, and the other actualities. For all changing is incomplete—reducing, learning, walking, building; these are changes, that is, incomplete changes. For it is not true that at the same time one walks and has walked, or builds and has built, or comes to be and has come to be or is being changed and has changed—that is different—and one initiates change and has initiated change; but it is the same thing that at the same time has seen and sees, or thinks and has thought. The latter sort, then, I call an actuality, and the former a change (*Met.* Θ 6 1048b28-35).
  - It is hard to see how change can both be a kind of actuality and contrasted with actuality.

# The Modalities: a Deeper Problem

- Actuality is prior to potentiality:
  - Since the several ways in which priority is meant have been distinguished, it is clear that actuality (ἐνέργεια) is prior to potentiality. I mean potentiality not only as defined as what is called a source of change in another [or in itself] *qua* other, but generally every source of change or rest. For nature too is in this same class as potentiality; for it is a source of change, though not in another, but in itself *qua* itself. Hence, actuality is prior to all this sort of potentiality both in account and in being, and in time it is in one way prior and in another way not. (*Met.* 1049b4-11; cf Δ 11; cf. *Met.* Z 7 1028a33-34; *Cat.* 12, 13)
  - Ἐπεὶ δὲ τὸ πρότερον διώρισταί ποσαχῶς λέγεται, φανερόν ὅτι πρότερον ἐνέργεια δυνάμεώς ἐστίν. λέγω δὲ δυνάμεως οὐ μόνον τῆς ὠρισμένης ἢ λέγεται ἀρχὴ μεταβλητικὴ ἐν ἄλλῳ ἢ ἢ ἄλλο, ἀλλ' ὅλως πάσης ἀρχῆς κινητικῆς ἢ στατικῆς. καὶ γὰρ ἡ φύσις ἐν ταύτῳ [γίγνεται· ἐν ταύτῳ γὰρ] γένει τῆ δυνάμει· ἀρχὴ γὰρ κινητικὴ, ἀλλ' οὐκ ἐν ἄλλῳ ἀλλ' ἐν αὐτῷ ἢ αὐτό. —πάσης δὲ τῆς τοιαύτης προτέρα ἐστίν ἡ ἐνέργεια καὶ λόγῳ καὶ τῆ οὐσίᾳ· χρόνῳ δ' ἐστὶ μὲν ὡς, ἐστὶ δὲ ὡς οὐ.

# An Instance

- It is necessary, then, that the soul is a substance as form of a natural body having life in potentiality. But substance is actuality (ἐντελέχεια); hence it is the actuality of this sort of body. (*DA* ii 1 412a19-22)
- ἀναγκαῖον ἄρα τὴν ψυχὴν οὐσίαν εἶναι ὡς εἶδος σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος. ἢ δ' οὐσία ἐντελέχεια· τοιούτου ἄρα σώματος ἐντελέχεια

# The Problem Comes Closer

- The soul, as form, is predicated of the body, as matter.
- When  $\phi$  is predicated of a subject  $S$ , then  $\phi$  is *posterior* to  $S$
- So, the soul, as form, is both prior and posterior to its subject.
- This, though, is not peculiar to souls, as forms; it holds of all forms.
  - Generally, if forms are predicated of matter, then the matter must be there, as the subject of the predication, in order to receive the predicate.
    - Yet if it is already there, then the matter is not merely potentially  $\phi$ —unless it is already actually  $\psi$ , and (perhaps of some nomic necessity) whatever is actually  $\psi$  is thereby potentially  $\phi$ .

# The Modalities: a Problem

- If what is potentially  $\phi$  is of necessity already actually some  $\psi$  or other, then there is nothing which is potentially  $\phi$  *simpliciter*.
- Circling back to our point about change and persistence:
  - We were meant to wriggle out of our problem about the necessity of persistence, and its attendant collapse of SC in AC, by appeal to the modalities.
  - Now, however, the appeal to modalities seems merely to reshuffle the problem, by suggesting that anything which is potentially anything is already actually something else, with the result that what persists is after all something actual.
    - So, we end of jettisoning a *phainomenon* after all?
      - Maybe Parmenides had a point?

# Separation: Promise

- Perhaps, one might think, these problems result from not fully grasping the priority of substance as a category.
- Substances are privileged, in that everything depends upon them: no substances, no anything else either.
- Aristotle sometimes expresses this priority by saying that substances, as a category, are separate (*χωριστόν*), by which he means that that are capable of independent existence.
  - There is, he implies, an *asymmetry* between substances and other categories of being, in that substances require nothing—they exist ‘in their own right’—whereas all other things exist by dint of their relation to substance.
  - If this is so, one might think, we can hardly reduce SC to AC: there could not so much as be AC without the existence of substances.



# Separation: Problem

- Yet it is difficult to capture the wanted asymmetry.
  - Sometimes Aristotle speaks generally as if the asymmetry were somehow *existential* (so, e.g. *Cat.* 5 2a34-b6: possibly substances can exist without other entities in other categories of being, but they cannot exist without substance (so, e.g., every quality is a quality *of* some substance)
    - Yet this is far too course-grained: substances cannot exist without their having some qualities or other, and so forth.
  - Sometimes Aristotle speaks as if the asymmetry turned on a *priority in account* (in λογῶν) (so, e.g. *Met.* H 1, 1042a26-31: possibly one can give an account of substance without reference to any other category of being, while, necessarily, accounts of entities in other categories of being must make reference to substances).
    - Yet this seems plainly false: one might rightly define the *cosine function* (*viz.* the ratio of the lengths of the side of the triangle adjacent to the angle and the hypotenuse) without mentioning anything about substances—and this remains true even if one were to maintain that all geometric entities were existentially dependent on material substances.
  - Sometimes Aristotle speaks of separateness in being (yes, in οὐσίᾳ), where this suggests that *what it is to be x* does not depend upon *what it is to be y*, whereas *what it is to be y* does perforce make reference to *what it is to be x*.
    - Lots of questions, but first among them: how does this differ from being separate in account (in λογῶν)?

# A Way Forward?

- One crucial claim which may help us move forward:
  - If there is no substance other than those which are constituted by nature, physics would be the first science (πρώτη ἐπιστήμη); but if there is some other, immovable substance, the science of this will be prior and will be first philosophy—and universal in this way, because it is first. And it would belong to it to study being *qua* being—both what it is (τί ἐστί) and the attributes belonging to it *qua* being (*Met.* E 1, 1026a27-33)