

# A Surprising Science

*The sought science found?*



# No Science of Being

- (1) Every science begins with principles which are necessary, invariant, and explanatorily basic (NIE).
- (2) A property  $\phi$  is (NIE) only if  $\phi$  is (i) predicated *per se* (*kath' hautō*) and (ii) essential.
- (3) A property  $\phi$  is predicated *per se* (*kath' hautō*) and essential only if  $\phi$  is (or is subordinate to) a generic property.
- (4) Being (*to on*) is not a genus; so, being is not a generic property.
- (5) Hence, nothing is subordinate to being.
- (6) Hence, no science is a science of being.



# Yet, There is

There is a science (*epistêmê*) which studies being *qua* being, and the attributes belonging to this *per se* (*Met.* 1003a21-2).

Ἔστιν ἐπιστήμη τις ἥ θεωρεῖ τὸ ὄν ἢ ὄν καὶ τὰ τούτῳ  
ὑπάρχοντα καθ' αὐτό.



# *Vel Sim*

- ✿ There is a science which studies being *qua* being and the things belonging to it in itself. This is in no way the same as any of the sciences which are called departmental. For none of the others investigates being universally, *qua* being; instead, each cuts off a certain part of it (i.e. of being) and studies what coincides, as does, e.g., among the sciences, mathematics.
- ✿ Since we are seeking the principles (*archas*) and the highest causes (*aitias*), it is clear that these must be causes of some nature in its own right. If, then, those seeking the elements of being were also seeking the principles, these would need to belong to being not coincidentally, but *qua* being. Hence, it is also necessary for us to find the first causes of being *qua* being (*Met.* 1003a21–32).



# A Science of Causes

- ✦ It is evident that this (*sophia*) is a science (*epistêmê*) of certain principles and causes (*archai* and *aitiai*). But since this is the science we are seeking, this is what we must consider: of what sorts of principles and causes is wisdom (*sophia*) a science (*epistêmê*)? (*Met.* 982a1-6)
- ✦ It (*sophia*) must be a science (*epistêmê*) of first principles and causes (*prôtai archai* and *aitiai*) (*Met.* 982b9-10)
- ✦ It is from them and through them [the first principles and first causes (*prôtai archai* and *aitiai*)] that other things are known; but they are not known through the things under them (*Met.* 982b2-4)



# The Science Sought

- A science (*epistêmê*) of being should:
  - Take as its object being *qua* being (τὸ ὄν ᾗ ὄν).
  - State the features belonging *per se* to being *qua* being (τὸ ὄν ᾗ ὄν)
  - State the causes (*aitia*) of being *qua* being (τὸ ὄν ᾗ ὄν)
    - This Aristotle appreciates: ‘Hence, it is also necessary for us to find the first causes of being *qua* being’ (*Met.* 1003<sup>a</sup>31-2).
    - We ask, though: what could the causes of being possibly be?



# One Thought

- ✦ Being (or substance, *ousia*) is the cause and source of being (*to on*) or, more generally, of beings (*ta onta*):
  - ✦ And indeed the question which, both now and of old, has always been raised, and always been a puzzling matter, viz. what being (*to on*) is, is just the question, what is [5] substance (*ousia*)? (For it is this that some assert to be one, others more than one, and that some assert to be limited in number, others unlimited.) And this is the very reason why we must consider chiefly and primarily and almost exclusively what that is which is in this sense. (*Met.* 1028b2-7)
  - ✦ καὶ δὴ καὶ τὸ πάλαι τε καὶ νῦν καὶ ἀεὶ ζητούμενον καὶ ἀεὶ ἀπορούμενον, τί τὸ ὄν, τοῦτό ἐστι τίς ἢ οὐσία (τοῦτο γὰρ οἱ μὲν ἓν εἶναί φασιν οἱ δὲ πλείω ἢ ἓν, καὶ οἱ μὲν πεπερασμένα οἱ δὲ (5) ἄπειρα), διὸ καὶ ἡμῖν καὶ μάλιστα καὶ πρῶτον καὶ μόνον ὥς εἰπεῖν περὶ τοῦ οὕτως ὄντος θεωρητέον τί ἐστίν.



# One Approach: Making the Problem its own Solution

- ✦ The general principles of "first" Philosophy are applicable alike to God, to a geometrical figure, to a physical corpuscle, since each of these three is something of which you can say that it has being or is. At the same time, there is one class of "things which are" which may be regarded as constituting in a very special sense the object of "first" Philosophy, conversant though that science is, in a way, with everything. This is the class of immutable entities which have neither bodies nor spatial form of any kind, and are therefore excluded from the purview both of Physics and of Mathematics. The chief of such entities is God, the immaterial and immutable source of the vital movement in the universe, and hence the appropriateness of the name "Theology" or "Science of God" as a synonym for "first Philosophy" itself. . . . hence, the "doctrine of God" is the necessary crown and culmination of the physical sciences themselves. This explains how, in his conception of "first" Philosophy, the notion of a "Science of God" and that of a most universal science of the "principles of Being as such" come to be so completely fused. The business of "first" Philosophy thus comes to consist in the analysis of the conception of individual Being or Substance (οὐσία) as such, i. e., the determination of the fundamental meaning, the τί ἐστί (or what is it?) of Being, and the analysis of individual Being into its logical factors or elements. These constituent factors constitute, in Aristotelian language, the Causes or First Principles of Being. (A. E. Taylor, 1907).



# Another Approach

- ✦ Being is spoken of in many ways, but with respect to one source. For some things are called beings because they are substances; others because they are attributes of substance, others because each is a route toward substance: either destructions or privations or qualities or productive or generative of substance; things spoken of in relation to substance, or negations of one of these or of substance. For this reason we say that even non-being is a non-being. (*Met.* 1003b6–10)



# What does this claim mean?

- ✿ Four approaches:
  - ✿ Brentano: a four-fold multiplicity
  - ✿ Owen: translation and reduction
  - ✿ Patzig: ways of being
  - ✿ Grice: from the categories to homonymy



# A Four-fold Multiplicity

- ✿ A. Brentano, relying on Met. iv 1, together with the following passage, argues for a four-fold homonymy of being
  - ✿ Being, spoken of simply, is spoken of in many ways, one of which was the accidental, another was the true (with non-being as the false), and beyond these there are the schemes of the categories (e.g. what , quality, quantity, place, time, and if anything signifies something else in this sort of way); and further beyond all these as in potentiality and actuality. (*Met.* 1026a33–b2)
- ✿ The Four-fold Homonymy of Being:
  - ✿ Accidental being as opposed to being in itself (*on kata sumbebêkos* as opposed to *on kath' hautou*)
  - ✿ Being as truth (*on hôs alêthes*)
  - ✿ Categorical being
  - ✿ Being in potentiality as opposed to being in actuality (*on dunamei* as opposed to *on energeia(i)*)



# Translation and Reduction

- ✿ “The claim that 'being' is an expression with focal meaning is a claim that statements about non-substances can be reduced to—translated into—statements about substances.” (G. E. L. Owen, ‘Logic and Metaphysics in Some Earlier Works of Aristotle’, 180)



# Ways of Being

- ✦ [L]et us try to understand how it is that theology is not concerned only with a particular kind of beings, but with a particular way of being, peculiar to its objects, and how it addresses itself to this way of being. By distinguishing a kind of beings and a way of being I mean to make a distinction of the following sort. Horses are a kind of beings, and camels are a different kind of beings, but neither horses nor camels have a distinctive way of being, peculiar to them; they both have the way of natural substances, as opposed to, e.g., numbers which have the way of magnitudes, or qualities which have yet a different way of being. The way magnitudes can be said to be is different from the way qualities or natural substances can be said to be. The claim, then, is that the way separate substances can be said to be is peculiar to separate substances. (Frede, 'The Unity of General and Special Metaphysics: Aristotle's Conception of Metaphysics,' 87)



# From the Categories to Homonymy: The Short Way

1. If there are irreducibly distinct categories of being, then there is no genus of being.
2. If there is no genus of being, then being is meant in many ways (λέγεται πολλαχῶς).
3. So, being is meant in many ways (λέγεται πολλαχῶς).



# From the Categories to Homonymy: The Medium Way

- (1) There are ten categories of being (or, for that matter, there are  $n$  categories of being, where  $n > 1$ ).
- (2) If (1), there are irreducibly distinct kinds of beings.
- (3) So, there are irreducibly distinct kinds of beings.
- (4) It is possible to predicate *is a being* of items in these various categories. (One may say, that is, 'x in  $c_1$  is a being' and 'y in  $c_2$  is a being' and 'z in  $c_3$  is a being' and so on for the  $n$  categories of being).
- (5) If being were univocal, it would not be possible to predicate being across the categories in this way. (The case is like goodness: if goodness were something universal, common and single, 'it would not be spoken of in all the categories, but in one only'; *EN* i 6 1096a28–9).
- (6) Hence, being is meant in many ways (λέγεται πολλαχῶς).
- (7) Hence, there is no science of being



# From the Categories to Homonymy: Grice's Way

1. Every simple declarative sentence contains a verb phrase signifying something of something else--i.e. attributing a universal to some subject.
2. (1) holds true for existentials.
3. Hence, existentials attribute universals to subjects.
4. If 'exist' signified a single universal, it would signify a generic universal (since the different categories would be different ways of being, and so different species of being). [Grice: "This step has been supplied by me."]
5. Existence is not a genus.
6. Hence, 'exist' does not signify a single universal.
7. Hence, 'exist' signifies a plurality of universals.
8. If 'exist' signifies a plurality of universals, that plurality should satisfy two conditions: (i) it should be as small a plurality as possible; and (ii) each universal in the plurality should attach essentially to whatever it primarily attaches to.
9. The only set of universals satisfying both conditions are the category-heads themselves.
10. Hence, 'exist' signifies precisely the plurality of universals answering to the ten categories (that is, being a substance, being a quality, etc.).



# Synonymy

- ✿ Those things are called homonymous of which the name alone is common, but the account of being corresponding to the name is different . . .  
Those things are called synonymous of which the name is common, and the account of being corresponding to the name is the same (*Cat.* 1a 1-4, 6-7).
- ✿ Synonymy:  $x$  and  $y$  are synonymously  $\phi$  iff (i) both are  $\phi$  and (ii) the definitions corresponding corresponding to ' $\phi$ ' in ' $x$  is  $\phi$ ' and ' $y$  is  $\phi$ ' are the same.
- ✿ Homonymy:  $a$  and  $b$  are homonymously  $\phi$  iff: (i)  $a$  is  $\phi$ ; (ii)  $b$  is  $\phi$ ; (iii) the accounts of  $\phi$ -ness in ' $a$  is  $\phi$ ' and ' $b$  is  $\phi$ ' do not completely overlap.



# *A Tertium Quid:* Core-Dependent Homonymy

- ✦ Core-dependent homonymy:  $a$  and  $b$  are homonymously  $\phi$  in a core-dependent way iff: (i)  $a$  is  $\phi$ ; (ii)  $b$  is  $\phi$ ; (iii) the accounts of  $\phi$ -ness in ' $a$  is  $\phi$ ' and ' $b$  is  $\phi$ ' do not completely overlap; and (iv) the account of  $\phi$  in ' $b$  is  $\phi$ ' necessarily makes reference to the account of  $\phi$  in ' $a$  is  $\phi$ ' in an asymmetrical way (or vice versa).

- ✦ An Illustration

- ✦ Socrates is healthy.
- ✦ Socrates' complexion is healthy.
- ✦ Socrates' diet is healthy.
- ✦ Socrates' regimen is healthy.



# The Controlling Meaning

- ✦ In cases of core-dependent homonymy, that meaning upon which all satellite meanings depend in an asymmetric way for account-specification is the source (*archê*) or controlling (*to kuriôs*) meaning.
- ✦ Here the controlling sense of is substance (*ousia*)



# Topics i 15: Tests for Non-Univocity

- ★ Univocity:

- ★  $\phi$  is univocal =<sub>df</sub> there exists a single, non-disjunctive, essence- specifying account of  $\phi$ .

- ★ Multivocity:

- ★ Negatively

- ★  $\phi$  is multivocal =<sub>df</sub> there does not exist a single essence-specifying account of  $\phi$ .

- ★ Equivalently, on the assumption that  $\phi$  at least admits of an account, in more positive terms:

- ★  $\phi$  is multivocal =<sub>df</sub> there are two or more essence-specifying accounts of  $\phi$ .

- ★ Test of Contraries

- ★ Paraphrase Test



# Paraphrase Test

- ✿ Phillipe is sharp.
- ✿ Before beginning work each day, the chef makes sure her knives are sharp.
- ✿ Starring as Violetta, Mirella Freni had some pitch problems, often singing sharp.
- ✿ If we paraphrase these occurrences of sharp, we end up with:
  - ✿ Phillipe is intelligent.
  - ✿ Before beginning work each day, the chef makes sure his knives have a beveled edge suitable for cutting.
  - ✿ Freni had some pitch problems, too often singing higher than the designated pitch.
- ✿ Since these are not intersubstitutable *salva veritate*, the original predicate is multivocal.



# What belongs *per se* to being?

- ✿ Since being (*to on*) is said in one way with reference to what something is, or some quality or quantity, and in another way with respect to potentiality and actuality (*entelecheia*) and with respect to function, let us make determinations about potentiality and actuality—first about potentiality most properly so called, even though this is not the most useful for what we want now (*Met.* 1045b32-1046a1).
- ✿ Three *per se* features of being:
  - ✿ Beings are as beings logically circumscribed.
  - ✿ Beings are as beings categorially delineated.
  - ✿ Beings are as beings modally enmeshed.



# Our Argument Reconsidered

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