

A Simple Sentence

... with a complex pedigree

The Opening Line of Aristotle's *Metaphysics*

- * 'Every human being, by nature, desires to know.'
- * Πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει.

—Aristotle, *Metaphysics* 998a21

Some Implied Commitments

- * Every human being has a definite and identifiable nature.
 - * This nature (φύσις) is a human being's essence (τὸ τί ἦν εἶναι, οὐσία)
- * That nature is to be knowledge-seeking.
 - * This implies that every human being has, as a matter of essence, a faculty or capacity (δύναμις) for coming to know; this is mind (νοῦς).
- * 'We think we know when we know the explanation [or, cause: αἰτία]' (ἐπίστασθαι οἴομεθα ὅταν εἰδῶμεν τὴν αἰτίαν; *APo.* ii 11 94a20; cf. i 2 71b10-13; *Phys.* ii 3, 194b18-20; *Met.* i 3 983a25-26).
 - * Accordingly, humans seek knowledge by seeking explanations.
 - * Some explanations satisfy without being good; explanations divide into the good and the bad, as well as the subjective and the objective.
 - * Good explanations cite *causes*.

Citing Causes in Scientific Explanation

- * Since we think we understand whenever we know the explanation [or cause], and there are four types of explanation [or cause]—one, the essence; one, when certain things obtain, it is necessary that this does; another, what first initiated a change; and the fourth, that on account of which—all these are proved through the middle term (*APo.* ii 11, 94a20-24; cf. *Phys.* ii 3)
- * Ἐπεὶ δὲ ἐπίστασθαι οἴομεθα ὅταν εἰδῶμεν τὴν αἰτίαν, αἰτίαι δὲ τέτταρες, μία μὲν τὸ τί ἦν εἶναι, μία δὲ τὸ τίνων ὄντων ἀνάγκη τοῦτ' εἶναι, ἕτερα δὲ ἢ τί πρῶτον ἐκίνησε, τετάρτη δὲ τὸ τίνοσ ἔνεκα, πᾶσαι αὐταὶ διὰ τοῦ μέσου δείκνυνται.

The First Cause Mentioned

- * N.b. that the first cause mentioned is here not called the 'formal cause' but rather, simply, the 'essence' (94a21, τὸ τί ἦν εἶναι).
- * This seems in fact to be a subset of formal causes, some of which are essential and some not.
- * What distinguishes the essential from the inessential?

Essentialism Motivated

- * Two categories of properties: deep and shallow.
- * Some features S might well lose while continuing to exist.
 - * For instance, Socrates would continue to exist if he lost his pallor by spending the day at the beach.
 - * Call these *shallow properties*.
- * Some features are such that should S lose them, S would cease to exist.
 - * For instance, Socrates would cease to exist if he were put into a compactor and forged into a doorknob. Along the way, he would lose, for instance, the property being human, since no doorknob is a human being.
 - * Call these *deep properties*.
- * The difference between deep and shallow properties has traditionally thought to approximate a distinction between *essence* and *accident*.

Competing Notions

- * Essence₁: simple *de re* necessity.
- * Essence₂: binding *de re* necessity.
- * Essence₃: sortal necessity.

Essence₁: simple *de re*

- * ϕ is an essential₁ property of $a =_{df}$ regardless of how one specifies a , a is necessarily ϕ
- * So, for example, the number 6 is necessarily even.
- * If it is true that 6 is Liu's lucky number, then it is true of Liu's lucky number that it is necessarily even.
- * It's of course *not* true that it is necessary *that Liu's lucky number is even*.
- * Liu, being fickle, might just change her lucky number to 7, without notice.

Essence₂: binding *de re*

- * ϕ is an essential₂ property of a =_{df} (i) a is essentially₁ ϕ ; and (ii) anything which has ϕ has ϕ necessarily.
 - * So, e.g., one might say, this human is essentially₁ ϕ (say, rational), but this android is contingently ϕ .
 - * On this second conception: being essential *binds* an entity to its kind.
 - * Further, it is not possible that we have any ϕ such that ϕa and ϕb such that a is essentially ϕ while b is contingently ϕ .
 - * Compare, then, *being human* and *being red*
 - * First contrast: it seems that magenta is essentially (or at least necessarily) red; but Olaf's barn is now red and now white.
 - * Perhaps, by contrast, whatever is a human is essentially a human; nothing is such that it is now a human and now a barn (or a fish or a doorknob. . .)
 - * Yet may we not say that this body, or this quantity of matter is now a human and now not a human?
 - * If so, then whereas Socrates is essentially a human, his body is only contingently a human.

Essence₃: sortal necessity

- * ϕ is an essential₃ property of a =_{df} (i) a is necessarily sorted *up* by ϕ ; (ii) a is necessarily sorted *down* by ϕ ; and (iii) a is not sorted *across* by ϕ .
- * sorted up: a is ϕ , and is not a proper part of anything that is ϕ .
- * sorted down: a is ϕ , and has no proper part which is ϕ .
- * sorted across: possibly, some things are not- ϕ .

Aristotle on Sortal Necessity

- * ...for it is impossible for a thing still to remain the same if it is entirely transferred out of its species, just as the same animal could not at one time be, and at another not be, a man. (*Topics* iv 5, 125b37-9)
- * This implies (or near enough states), that nothing can switch from one essential kind to another.

Essence and Modality

- * One proposal: essential properties are just those a subject has *necessarily*.
- * Let us call this the *merely modal theory of essence* (MMTE):
 - * ϕ is an essential property of x =_{df} necessarily, x is ϕ .
 - * This is just to say, then, that x cannot exist without being ϕ .
 - * ϕ is an accidental property of x =_{df} (i) x is ϕ ; and (ii) possibly, x is not- ϕ .

MMTE Rejected

- * Various properties are trivially true of everything that exists:
 - * logical and categorial properties
 - * (i) being red or not-red; (ii) being identical with the number nine or not
 - * set theoretic properties
 - * Socrates is necessarily a member of the singleton set {Socrates}.
- * These properties do not tell us *what* their bearer is.
- * Further, some properties stand in asymmetric dependency relations to others, even though they are equally necessary.
 - * The deeper properties here are candidates for being essential.

Aristotelian Essentialism (AE)

- * As traditionally conceived, philosophical definitions (seek to) reveal the essence-specifying features of things; essences constitute the natures of their bearers.
- * So, e.g., Socrates is essentially rational.
- * He is also necessarily capable of grammar, though an account of his grammatically asymmetrically depends upon an account of his rationality.
- * This remains so even though: Necessarily, Socrates is rational *iff* Socrates is capable of grammar.
- * AE: ϕ is an essential property of x =_{df} (i) necessarily, x is ϕ ; and (ii) ϕ is in an objective sense an explanatorily basic feature of x .

Two Questions from Scotus

* *QMA* I q. 2: Do all men naturally desire to know?

* *Utrum haec sit uera: 'Omnes homines naturaliter scire desiderant'.*

* *QMA* I q. 9: Does it pertain to the metaphysician as such to know the quiddities of all things in particular?

* *Utrum ad metaphysicum, in quantum talis, per se pertinet cognoscere omnes quidditates in particulari.*

Is this (DNK) true: 'all human by nature desire to know'?

* Some arguments against:

* (i) If DNK were true, then the mere removal of an impediment would suffice for coming to know; (ii) the mere removal of an impediment does not so suffice; hence, (iii) DNK is not true. (*QMA* I q. 2 n. 2)

* (i) If DNK were true, then no-one would have *scientia*, or at any rate, if they had it, they would not desire it; (ii) some do have *scientia* and, when they do, they continue to desire it; hence (iii) DNK is not true. (*QMA* I q. 2 n. 3)

* (i) Some people want to remain ignorant; (ii) if DNK, (i) cannot be; hence, (iii) DNK is not true. (*QMA* I q. 2 n. 4)

An Interlude from the Prologue

- * 'There are in general two ways to make DNK clear: one is *a posteriori*, the other *a priori*.' (QMA prol. n. 2)
- * Three *a priori* approaches combined into one grand approach:
 - * (i) Everything desires its own perfection, in terms both (first) of its formal cause and then also (second) of the operation of the form through which a human is joined to her *principium*; (ii) knowledge as a habit is the first perfection of human beings, while actively knowing is the second perfection through which a human is joined to her *principium*; hence, (iii) every human being desires knowing as both first and second actualities; if (iii), then DNK (QMA prol. n. 5); hence, (iv) DNK. (QMA prol. n. 11)

An Essential Potency

- * 'And with the same desire, at least in a univocal sense (as will be explained later), the science [i.e. the habitual knowledge] is wanted immediately and the actual understanding is wanted as mediated by that science. Indeed, the desire corresponds to the essential potency —for what lacks form is in essential potency to both first and second act' (*QMA* prol. 12.)
- * *Et eodem desiderio uel saltem uniuoce dicto (sicut exponetur postea), appetitur scientia immediate et intelligere mediante scientia. Quod quidem desiderium correspondet potentiae essentiali, quia non habens formam est in potentia essentiali ad actum primum et secundum)*

A Query for Consideration

- * We expect a *habitus* or ἔξις to be a developed, acquired *state* of some entity—to have actualized some capacity already present.
- * Something or someone desiring to be in that state will thus already be enformed by the form ϕ in virtue of which it is in the first instance able to desire at all. (So, e.g., a human but not a tea kettle may manifest a desire to develop a *habitus* to speak Chinese. . . .)
- * Such a being is not essentially potential, but rather already essentially ϕ .
- * What is it, then, to have an essential potentiality?

Desire to Know *What?*

- * *QMA* I q. 9: Does it pertain to the metaphysician as such to know the quiddities of all things in particular?
 - * ‘We suppose first, then, that the wise person knows all things as far as far as is possible, although he has no knowledge of them taken as individuals.’ (*Met.* A 2, 982a8-10)
 - * ὑπολαμβάνομεν δὴ πρῶτον μὲν ἐπίστασθαι πάντα τὸν σοφὸν ὡς ἐνδέχεται, μὴ καθ’ ἕκαστον ἔχοντα ἐπιστήμην αὐτῶν.
 - * It is commonly said that it pertains to the metaphysician to know each quiddity *qua* quiddity and *qua* this, but not according to every accidental aspect that this quiddity has.’ (*QMA* I q. 9 n. 6)
 - * *Respondetur communiter quod ad metaphysicum pertinet cognoscere quamlibet quidditatem secundum quod quidditas et secundum quod haec, non tamen secundum omnem rationem cuiuscumque accidentis huic quidditati.*

The Role of *Per Se* Accidents

- * The second point is explained in this way. This quiddity is prior to any accidents it may have, and *per se* accidents are prior to *per accidens* accidents. Hence it happens that even though the fact that the quiddity is a this [*haec*] pertains to the *per se* accidents considered by metaphysics, the fact that it is mobile or some such thing—that is insofar as it is understood formally under some *per accidens* accident—pertains to some other science, because its accidental status is posterior to what can be understood of the quiddity without these accidents. (*QMA* I q. 9 n. 15)
- * *Secundum declaratur sic: haec quidditas prior est accidentibus, et accidentia per se respectu eius priora accidentibus per accidens. Licet ergo secundum quod "haec", et quantum ad per se accidentia, pertinet ad metaphysicam, in quantum tamen mobilis uel huiusmodi (hoc est formaliter intellecta sub aliquo accidente) per accidens pertinet ad scientiam aliam, quia sic est posterior se ipsa intellecta sine illis.*