

Matter and Form

A Puzzle and a Dissolution

The Genesis of the Puzzle

- Montgomery Furth has written, "given a suitable pair of individuals ... there is no reason of Aristotelian metaphysics why the very fire and earth that this noon composes Callias and distinguishes him from Socrates could not, by a set of utterly curious chances, twenty years from now compose Socrates ...". He does not specify what these "curious chances" might be. But we may suppose that Socrates eats Callias for his lunch and that, owing to the superiority of Callias' flesh and bone, it is the matter of this which remains in Socrates after the period of twenty years.
- That such an exchange of matter is possible is a point on which many Aristotelian scholars could agree. However, I wish to argue that such a case gives rise to a fundamental difficulty; for its possibility runs into conflict with certain basic metaphysical principles which are commonly attributed to him and which would also be commonly accepted.

Some Stipulations

- Let:
 - $A = \text{Axiothea}$
 - $P = \text{Plato}$
 - $m^1 = \text{the matter of Axiothea at } t_1$
 - $m^2 = \text{the matter of Plato at } t_2$
 - $\phi(m) = \text{the compound of } m \text{ and a form}$
 - $F = \text{the form of Axiothea}$
 - $G = \text{the form of Plato}$

The Difficulty

- $A \neq P$
- $A = F(m^1)$
- $P = G(m^2)$
- $m^1 = m^2$
- $F = G$
 - So, by LL:
 - $F(m^1) = F(m^2)$ and $G(m^1) = G(m^2)$; and $F(m^1) = G(m^2)$ and $G(m^1) = F(m^2)$
 - But then $(A = P)$ & $(A \neq P)$
 - Not good.

Some Explanations I

- $m^1 = m^2$ is just the thesis of material migration.
 - This is the view that possibly the matter of some compound C^1 at t_1 could become the matter of some other compound C^2 at t_2 , in the standard case, $C^1 \neq C^2$
 - Certainly this seems possible: setting aside colourful cases of mutual cannibalism, the planks of two ships could be shifted in tandem or the bronze of two statues could be replaced piecewise.

Some Explanations II

- ✦ $F = G$ is just the thesis that forms are universals, and as such can be instantiated by more than one token at a given time.
- ✦ By itself this does not state that forms are not also particulars.
 - ✦ The puzzle as stated seems indifferent to that hypothesis.

Two Obvious but Unhelpful Responses

- $m^1 = m^2$ should be indexed to times, such that $m^1 \neq m^2$ because, upon full disclosure, it is really $m^1\text{-at-}t_1$ and $m^2\text{-at-}t_2$ and $m^1\text{-at-}t_1 \neq m^2\text{-at-}t_2$
 - Not helpful, if we think that a quantity of matter m at t_1 can be the same quantity of matter as m at t_2 , that is, that matter can exit through time.
- $F \neq G$, since forms particulars, and, e.g., Plato's soul is not the same as Axiothea's soul.
 - Not helpful, at least not as a pre-emptory move, since the puzzle as stated does not deny it.
 - Amusingly, Fine notes: 'For Aristotle seems to have a possible basis for the belief, viz. that individual forms are real and active principles in the world, which is denied to any right-minded modern.' (1994, 19)

Perhaps Denying Migration?

- Entrapment: migration is false—that is, it is not possible for the matter constituting compound C^* to become the matter for compound C^{**} .
 - Strong entrapment: if the same matter composes x and y , then $(x = y)$
 - No matter can compose more than one thing.
 - Material individuation: If ϕx and ϕy , then if the same matter composes x and y , then $(x=y)$
 - No matter can compose more than one thing with the same form.
- Counterexamples abound to all of these theses.

Perhaps Split the Solution?

- Given the implausibility of the case against migration for living things, one might think of combining the two solutions so far given. The puzzle would be solved for animate things on the grounds that their form is unique (and hence cannot be shared); it would be solved for inanimate things on the grounds that their matter is unique (and hence cannot migrate). Thus on this view there would be two fundamentally different kinds of substance (and two correspondingly different kinds of substantial form): those which are life-like and individuated by their form; and those which are matter-like and individuated, within their specific form, by their matter.

—Fine (1994, 30)

Perhaps deny $\phi(m) = C$?

- ✦ That is, perhaps we should not say that a substance is a compound of matter and form *tout court*:
 - ✦ Relativize compounds to times, such that:
 - ✦ $\phi(m) = C^1$ at t_1 , but $\phi(m) = C^2$ at t_2 , where $C^1 \neq C^2$
- ✦ Yet we need to bear in mind the unifying role of form in both synchronic and diachronic identity

Beginning a Solution

- Reflections on form
 - What form is *not*:
 - a form is *not* a shape
 - a form is *not* a structure
 - a form is *not* an autonomous part
 - that is, a part (i) the essence of which does not depend upon the essence of the whole of which it is a part; such that (ii) it can exist as what it is independently of the whole of which it is a part.
 - a form is not a parasitic part
 - that is a part (i) the essence of which depends upon the essence of the whole of which it is a part, such that (ii) it can exist independently of the whole of which it is a part.

Forms and Parts

- So, is a form a part?
 - Certainly it is not a material part, since every material part is either a parasitic part or an autonomous part.
- Perhaps a form is a *degenerately contributing* part
 - degenerate because it is not a part in any righteous sense of the term (though, we must always remember: degenerate persons and persons all the same. . .)
 - contributing because they determine well, in part, the identity of the compound whose form they are

So, what is a form?

- First formulation:
 - ϕ is a form =df ϕ is an office
 - An office?
 - An office is a role played by some particular, such that it is determined by a set of requisites.
 - A role is thus not a material particular, and indeed not a material being at all, but an abstract configuration.
 - To take a simple example to begin: the President of the United States is an office.
 - It is occupied by exactly one material particular, namely the one and only person who satisfies the requisites of that role.
 - Further, there cannot be two such offices: same requisites, same office

First Suggestion

- ✦ C is a material hylomorphic compound =_{df} (i) there is some matter *m* and some office ϕ ; and (ii) *m* occupies ϕ
- ✦ One crucial claim: when one says that ‘*m* is a ϕ ’ (e.g. ‘the lump of bronze is a statue’) the *is* in question is neither the *is* neither the *is* of identity nor the *is* of predication.
 - ✦ It is, rather, the *is* of occupancy.

Second Suggestion

- This solves our puzzle about matter and form.

A Second Puzzle: Grounding

- ✦ Evidently, two objects can be in the same place at the same time.
 - ✦ Indeed, evidently, two objects can be in the same place at the same time for their entire careers.
- ✦ Definitely this is true for the hylomorphist who accepts embodiment:
 - ✦ y embodies ϕ =_{df} $\exists x(y = x/\phi)$.
- ✦ Question: how can there be a modal difference without there being a worldly difference?