

Basic Hylomorphism

Form, Matter, Enformed Matter

Humean Honesty

- ‘...I am persuaded, there might be several useful discoveries made from a criticism of the fictions of the ancient philosophy concerning substances, and substantial forms, and accidents, and occult qualities, which, however unreasonable and capricious, have a very intimate connexion with the principles of human nature.’ (Hume, *A Treatise on Human Nature* I. 3. 4)

Flummoxed

- ‘Suddenly, one can be flummoxed by the following very ordinary fact: When certain items come to stand in certain relations, such as being glued together, being coupled with, or being bonded to each other, there then comes to be some further item which has those original items as parts. That is presumably how we have such complex items as model airplanes, trains, and molecules. Well, just why are those relations and their ilk, “item generators,” while other relations, such as being six feet from, seem impotent in the production of new items? Whence this invidious ontological distinction? The science of matter does not even consider the invidious distinction as an object of explanation, it simply takes it for granted, and instead explores the forces that hold apparently complex items together. So what does explain the invidious ontological distinction? Could it just be a projection of our idiosyncratic way of experiencing and conceptualizing reality, so that things considered in themselves are not complex, but are so only relative to a scheme of clumping or bundling?’
- ‘Somehow, I doubt it.’ (Johnston, ‘Hylomorphism,’ 652)

Somehow Doubts Secured

- Preliminaries:
 - An object o is intention-dependent =_{df} (i) o is not a simple; and (ii) the essence of o is (at least partially) constituted by the psychological attitudes of some intentional agent or agents.
 - An object o is intention-independent =_{df} (i) o is a simple; or (ii) o is mereologically complex and the essence of o is in no way constituted by the psychological attitudes of any intentional agent.
 - Claim: not every mereologically complex object can be intention-dependent.

An Argument which is also a Map

1. If x is an intrinsically intentional, mereologically complex, intention-dependent being, then x is constituted either (i) internally (= by its own intentional activity) or (ii) externally (= by the intentional activity of others).
2. No being which is itself intrinsically intentional can be externally constituted.
3. No being which is itself intrinsically intentional can be internally constituted.
4. There are some mereologically complex, intrinsically intentional beings.
5. So, there are mereologically complex, intrinsically intentional, intention-independent beings.
6. This is either a brute or a principled fact.
7. This is not a brute fact.
8. So, there are principles grounding the existence of the mereologically complex, intrinsically intentional, intention-independent beings there are.

A Want of Principle

- ‘Of any item in any category, be it a state, event, activity, material object, artifact, organism, person, quantity of stuff, property, fact, proposition, kind, group, set, or mereological sum, we may inquire whether it is simple or complex, in the sense of having parts. Of any item that has parts we may inquire as to what principle unifies those parts into the whole that is the complex item. The principle had better not be merely another part, for the question would remain: Consider that part along with the other parts; what relation is such that its holding of all these parts gives us the whole? And that would be the principle we really seek.’ (Johnston, ‘Hylomorphism,’ 652)

A First Precept

- We also affirm [i.e. along with these thinkers] that nothing comes to be without qualification from what is not. Nevertheless, we maintain that a thing may come to be from what is not in a certain way, for example, accidentally (*Phys.* 191b13–15)

Parmenides: a Challenge about Change

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.

A Simple Argument

1. There is change.
2. A necessary condition of there being change is the existence of matter and form.
3. So, there are matter and form.

Matter and Form

First Characterisation

- x is matter $=_{df}$ x underlies change in the acquisition or loss of a form.
- ϕ is form $=_{df}$ ϕ is a positive attribute gained or lost by matter in the process of change.

Simple Hylomorphism: First Characterization

- Hylomorphism =_{df} ordinary physical objects are complexes of matter and form.
- o is an ordinary physical object =_{df} o is a complex of matter and form such that the presence of the form makes the matter exist as some ϕ .
- Let us speak of hylomorphic compounds as *vertically complex*.

Vertical Complexity

- Hylomorphic compounds are *vertical complexes* (first approximation):
 - C is a vertical complex =_{df} (i) C is not a simple; (ii) possibly the matter (M) composing C exists when C does not exist; and (iii) C overlaps M; (iv) C has an *archê* of unity which is not identical with any one of its material parts.
- What differentiates a hylomorphic whole from a heap is the presence of a functionally defined *archê*, or principle.
 - The *archê*, let us stipulate (for now), is the form.
- Our next question, then, is: what makes a form the relevant sort of principle?

Hylomorphism Extended

- Thinking about change and generation:
 - ‘This, then, is one way of solving the difficulty. Another is to observe that the same things can be spoken of in terms of potentiality and actuality’ (*Phys.* 191b27–29).
 - ‘Matter exists in potentiality, because it may move into a form; and to be sure, when it exists actually, it is in its form’ (*Met.* 1050a15–16).
- Actuality and Potentiality
 - x is matter = $_{df}$ x exists in potentiality.
 - x is form = $_{df}$ x makes what exists in potentiality exist in actuality.

Kinds of Forms

- Only substances (*ousiai*) are said to come to be without qualification. Now in all cases other than substance, it is plain that there is necessarily something underlying, namely the thing which comes to be [a certain way] . . . But that substances, things said to be without qualification, also come to be from some underlying thing, will be clear to one examining the matter. For there is always something which underlies what comes to be, from which what comes to be comes, for instance, animals and plants come from seed (*Phys.* 190a32-b5).
- The Kinds:
 - x is a substantial form = $_{df}$ x is what makes what exists potentially exist unqualifiedly.
 - x is an accidental form = $_{df}$ x is what makes what is potentially ϕ , where ϕ is not a substantial form, actually ϕ .

Is Every Compound an HM Compound?

- Any random chunk of matter can change; change requires that the changer be an HM compound; so, every random chunk of matter must be a HM compound. So, if hylomorphism is true, we must embrace Universal Hylomorphism(= everything whatsoever is a hylomorphic compound).
- Sic et Non:
 - Sic: Any random chunk of matter has a BS form.
 - (A Basic Structural Form)
 - In this sense, we may safely accept Universal Hylomorphism
 - Non:
 - A BS Form may as yet be intention-dependent.
 - Further, not every non-intention-dependent form is a substantial form.
 - Most importantly, every chunk must be, so to speak, chunked.
 - Yes, of course, everything is a thing—the question all along was, however: which things are there, and, further, which things among the things there are are privileged things?

Hylomorphism and Unity

- There is, indeed, a difficulty about part and whole, perhaps not relevant to the present argument, yet deserving consideration on its own account—namely, whether the part and the whole are one or more than one, and in what way they can be one or many, and, if they are more than one, in what way they are more than one (*Phys.* 185b11–14).