

Hylomorphism

Two Routes In

Beginning with PPC

- If it appears to a subject *S* as if *p*, then, in the absence of evidence to the contrary, *S* has grounds for accepting *p*.
- Two things seem to be the case, one inescapably, one pervasively if unreflectively
 - Inescapable: some things seem to change
 - Well, *almost* inescapable: *if* in fact things so seem and we are met with a powerful argument to the contrary, then, evidently, we are enjoined to change our beliefs—which is to say, then, to change our thinking.
 - Pervasive: there are at least some mind- and language-independent composite beings.
 - I myself seem to be one such, and so does the tree in the quad, and the trout in the stream.

Noticing that Seemings are Variiegated and Multivalent

- Change seems to come in two flavours:
 - categorial continuity, where S changes in respect of ϕ while remaining numerically one and the same
 - This occurs when S is in the category of BB (= 'substance'), and when the change is initiated at t_2 and ends at t_3 , S persists from t_1 through to t_3 as a BB.
 - This we may call shallow or accidental change.
 - categorial commencement, where nothing in the category of BB remains numerically one and the same through the change.
 - This occurs when S , a BB, comes to be at t_2 where S had not been at t_1 .
 - This we may call deep change, or generation.
 - We may further say the correlative things at the back end, as regards destruction.

Noticing that Seemings are not so Always Innocent

- Beyond the familiar point that PPC is an evidential principle but not one that pretends to provide indefeasible evidence, one may notice:
 - Some seemings are *pure*:
 - ϕ is a pure seeming *iff* the seeming/being distinction collapses in the case of ϕ . In these cases, it makes no ready sense to ask: x seems to be ϕ , but is it really ϕ ?
 - Such pure seemings might include what philosophers of an earlier generation imagined sense data to be.
 - Other (most, all?) seemings are impure:
 - ϕ is impure *iff* ϕ is a seeming and ϕ is not pure
 - It makes ready sense ask, e.g., of the Müller-Lyer lines: they seem to be of different lengths, but are they really?

Our *Phainomena*

- Neither change nor MLI-composition presents an instance of a pure seeming.
 - Still less does our distinction between accidental and substantial change.
- Even so, both present us with a reasonable posture of presumption:
 - We speak and act as if things change, and indeed we speak and act as if some things are generated and perish, while other things remain one and the same while undergoing alteration.
 - We equally speak and act as if there are MLI-compounds floating about—though here, as we shall find, the phainomenal data is less than crystalline.
 - The murkiness turns, evidently, on the force of ‘I’ in the moniker ‘MLI-compound’.

Our Baseline Argument

- All that acknowledged these *phainomena* provide us our baseline argument for hylomorphism (which may, if you like, be disaggregated into two baseline arguments):

(1) There is change and there are MLI-compounds.

(2) The only or best explanation of the *phainomena* recorded in (1) is hylomorphism.

(3) So, we should endorse hylomorphism.

Modest Confirmation?

- Irving Copi once defined the problem of identity through time by noting that the following two statements both seem true but, on the assumption that there is change, appear to be inconsistent:
 - If a changing thing really changes, there can't literally be one and the same thing before and after the change.
 - However, if there isn't literally one and the same thing before and after the change, then no thing has really undergone any change.
- Traditionally, this puzzle has been solved in various ways. Aristotle, for example, distinguished between “accidental” and “essential” changes. Accidental changes are ones that don't result in a change in an objects' identity after the change, such as when a house is painted, or one's hair turns gray, etc. Aristotle thought of these as changes in the accidental properties of a thing. Essential changes, by contrast, are those which don't preserve the identity of the object when it changes, such as when a house burns to the ground and becomes ashes, or when someone dies. Armed with these distinctions, Aristotle would then say that, in the case of accidental changes, (1) is false—a changing thing can really change one of its “accidental properties” and yet literally remain one and the same thing before and after the change.
- Of course, this solution to the puzzle depends on there being a coherent distinction between accidental and essential changes, and between accidental and essential properties. Some philosophers find this distinction problematic and have developed other solutions that don't require this distinction.

Gallois, 'Identity over Time,' *SEP*)

Another Agreeable Observation

- ‘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

A Simple Three-Part Account

- ✦ ‘We may make a distinction between a complex item’s parts, its principle of unity, and its origin (or more generally its place in a pattern of generative operations.) All three factors may enter into the account of what it is for a specific item to be, the account of the essence of the item.’ (Johnson, 653)
- ✦ Note that this treats the principle of unity non-mereologically.

Compare an Earlier Fellow Traveller

- ✦ Regarding that which is compounded out of something so that the whole is one—not like a heap, but like a syllable: the syllable is not its elements, for ba is not the same as b and a. . . . The syllable is, then, not only its elements, but something else. . . . If that something were an element, the same argument would apply. . . . This is not an element, but a principle, an element being that into which a thing is divided and which is present in it as matter (Aristotle, *Met.* Z 17, 1041b11-33).

A point for them both?

- (1) Possibly ($e_1 \dots e_n$ are the elements of O at t_1 , and at t_2 $e_1 \dots e_n$ exist while O does not).
- (2) (1) only if at t_1 there exists some x whose presence unifies $e_1 \dots e_n$ in such a way that O exists.
- (3) If x is another element of O on ontological par with $e_1 \dots e_n$, then the same argument will apply.
- (4) Hence, at t_1 there exists some x which is not an element, but a principle (*archê*) in virtue of whose presence O is a unified whole.
- (5) Further, if this *archê* is complex, then there will be a further question ad infinitum as to the principle in virtue of which it forms (as well as it and $e_1 \dots e_n$ form) a synchronic unity.
- (6) Hence, this *archê* is not complex, but simple.

But, then again, *parts*. . . .

- Some are *fiat* and some are, for want of a better word, natural.
 - Natural parts correspond to divisions, either spatial or temporal, that do not depend *solely* on an arbitrary act of division; they will have themselves some principle of unity not given solely by the act of division itself.
 - Fiat parts are parts that are so given.
- We remain open, at the start of our inquiry that (i) there are hylomorphic compounds (nihilism is false); (ii) not every aggregate is a hylomorphic compound—or, not every list lists the parts of a hylomorphic compound); and (iii) hylomorphic compounds have parts that are not fiat parts.

Johnson's Canonical Schema for Hylomorphism

- In general, every hylomorphic compound (HC) answers to this schema:
 - *What it is for...*(the item is specified here)...*to be is for...*(some parts are specified here)...*to have the property or stand in the relation...*(the principle of unity is specified here).
 - N.b. that as introduced, this schema rejects understanding hylomorphism in terms of CEM, because it eschews the suggestion that the principal of unity, which will be the form, can be a part.
 - It is, rather, a principle, and a principle is not a part.

Some Aspects of this Schema I

- It is expressly conceived as being essentialist-friendly.
- Forms, as principles of unity, might be static or dynamic.
- Further, since an HC involves a principle of unity unifying various parts, it follows (on the evidently undeniable assumption) that different principles of unity can simultaneously unify the same parts, that two entities can be in the same place at the same time.
 - Still, some version of the Wiggins Principle may be salvageable, depending, though, on some further reflection about kind individuation.
 - ‘Absent a difference in origin, there cannot be two items with the very same parts and the very same principle of unity’ (Johnson, 679)

Some Aspects of the Schema II

- ✦ The axiom of the uniqueness of composition is false, or at least hard to fathom.
- ✦ Recall:
 - ✦ $\exists x (x \text{ is a member of } A) \rightarrow \exists x (x \text{ is a sum of } A \ \& \ (\forall y) y \text{ is a sum of } A \rightarrow x = y)$
 - ✦ the existence of sums: every non-empty set has an object which its sum
 - ✦ the uniqueness of sums: every non-empty set has at most one object which is its sum
- ✦ Yet if we now treat the principle of unity as a part, or as partlike, we end up with some queer parts which are also shared parts.

Some Observations on Johnson's Scheme

- The basic schema is promising, yet in need of development.
- The notion of *parthood* remains crucially underdetermined. Three notions of part (not mutually exclusive, but not the same either):
 - Ur-parts
 - material parts
 - parasitic parts
- The notion of *kind membership* remains crucially underdeveloped.
- The metaphysics of form, as a principle of unity, remains crucially underdeveloped.
 - When—and how—does a relational property suffice to unify? (The same can be asked of Fine's rigid embodiment.)
- The schema is thus crucially underdeveloped in almost every way until it is expressed within the framework of an articulated category theory.
 - Again, it is *not* therefore wrong; on the contrary, it is basically apt, but now needs serious development.