
Hylomorphism

Two Routes In

Basic Hylomorphism: Four Theses

- ❖ Objects are *metaphysical complexes*:
 - ❖ Ordinary objects have two irreducibly distinct components or aspects, namely matter and form.
- ❖ Forms are *identity-providing*.
- ❖ Matter and form are *correlative*.
- ❖ Hylomorphic compounds are *privileged unities*.
 - ❖ As such they both temporally and modally ductile.

Metaphysical Complexes I

- ❖ One of the primary drivers of contemporary hylomorphism, Koslicki, puts this commitment with due concision:
 - ❖ ‘I propose that we once more follow Plato and Aristotle in assuming that the world is best described by taking ordinary material objects to be mereologically and ontologically complex in the sense that they are composed of both material and formal components.’ —Koslicki (2006, 172)

Metaphysical Complexes II

- ❖ A Contrastive Way
 - ❖ Hylomorphists deny that objects can be explicated solely in material terms.
 - ❖ As a clear contrast, no one who accepts the view that every object, for whatever range of objects posited, is exhaustively describable in material terms, qualifies as accepting hylomorphism.
 - ❖ To simplify, let us suppose the world contains three material simples, m_1 , m_2 , and m_3 , and further, that universal mereological aggregation obtains.
 - ❖ Then to say what exists according to what we might call the *matter only approach* to objects, one need specify only, in addition to m_1 , m_2 , and m_3 , the compound objects $m_1 + m_2$, $m_2 + m_3$, $m_1 + m_3$, and $m_1 + m_2 + m_3$.
 - ❖ A hylomorphist might or might not accept the existence of objects co-located with those objects, but would insist, for instance, that any object co-located with $m_1 + m_2$ must have another component, or feature, a form ϕ , without which one could not say which object $m_1 + m_2$ constituted, nor even whether $m_1 + m_2$ constituted an object at all.
 - ❖ Further in the presence of a different form, ψ , $m_1 + m_2$ would yield a different object altogether, such that $m_1 + m_2 + \phi$ and $m_1 + m_2 + \psi$ were necessarily distinct.
 - ❖ To illustrate, according to the hylomorphist, these n bricks might be a garden wall or a pizza oven, depending upon their form.
 - ❖ Or they might be nothing at all, not even a pile of bricks, were they distributed noncontiguously, some in San Diego, some in Berlin, and several more orbiting the earth in a satellite.

Identity Provision

- ❖ If one wants to know what a given object o is, one will need to appeal to o 's form.
 - ❖ This in a minimal way accords with a point Geach was fond of making, that nothing simply exists; everything which exists exists as some ϕ or other.
 - ❖ So, $(\exists x) \rightarrow \exists \phi (\phi x)$
 - ❖ The hylomorphist understands this to mean: everything which exists manifests some form or other.
 - ❖ She might then add, less innocently, that everything which exists manifests some form which specifies its identity, where this might be taken at first synchronically and then also, on the assumption that the object in question is a non-instantaneous entity, diachronically as well.
- ❖ One will thus want to know what makes—in some sense of 'makes'—some elements this ϕ -object rather than that ψ -object, what makes, for instance, these bricks now a pizza oven and now a garden wall.

Correlation

- ❖ In general, hylomorphists generally assume that matter and form are related in more than a coextensive way, more even than a necessarily coextensive way. They are more intimately related, that is, than, for instance, mass and shape, or being triangular and being trilateral.
- ❖ Two possible forms of correlation:
 - ❖ Form and matter are *existentially* interdependent.
 - ❖ Form and matter are *definitionally* interdependent.
 - ❖ An example of the latter sort: one might suppose that the human form is, as a matter of definition, the form of a body of a suitable sort.
 - ❖ This is namely an 'organic' body, says Aristotle, that is, one that is functionally suited to realize psychic activities, and so cannot be specified without reference to them.
 - ❖ At the same time a human body is already something making appeal to the notion of the form in its very specification.
 - ❖ What makes a body a human body, as opposed to just a lump of matter, is precisely its realizing human activities, like perceiving and thinking.

Privileged Unities

- ❖ Recall our map: we are looking to reject both mereological nihilism and universal mereological aggregation.
- ❖ Yet we hope to be principled in a non-intention dependent sort of way.
- ❖ The issue becomes quickly contentious, however, such that it is difficult to put the view neutrally, because though we prereflectively tend to think that Xanthippe is a unified being in a way that a heap of rocks is not, it remains true that a heap of rocks is itself, after all, some sort of thing, indeed some sort of single thing, namely a heap.
- ❖ We are then presented a fork in the road: either we say that the heap of rocks has a form, for instance, its shape, or that it lacks a form, because a shape is not yet a form.
 - ❖ If we take the second route, then we must provide an account of form explaining how it is more than a mere shape property.
 - ❖ If we take the first route, then we seem saddled with a kind of explosion, such that, as Sosa alleges, an ordinary snowball will contain an infinite number of objects, which he labels 'snowdiscalls'. As he puts his point, a snowdiscall is 'constituted by a piece of snow as matter and has as form any shape between round and being disc-shaped.'

Two Ways In

- ❖ The *phainomenon* of change.
 - ❖ Change seems a datum of both perceptual experience and introspection.
- ❖ The *phainomenon* of privileged unities.
 - ❖ The existence of privileged unities seems a datum both perceptual experience and reflexive awareness.

Seeming Changes

- ❖ 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.

Not So Innocent Seemings

- ❖ What should we make of these seemings?
 - ❖ 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 roaming 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'.

Aristotle's 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

A Second Way In

- ♦ '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.' (Johnston, 653)
- ♦ Note that this treats the principle of unity non-mereologically.

Recall our Argument from *Metaphysics Z 17*

- (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 principle (*archê*) is complex, then there will be a further question *ad infinitum* as to the principle in virtue of which it serves as the principle (as well as it and $e_1 \dots e_n$ form) a synchronic or diachronic unity.
- (6) Hence, this principle (*archê*) is not complex, but simple.

But, then again, *parts*. . .

- ❖ Some parts are *fiat* parts and some parts are, for want of a better word, *natural* parts:
 - ❖ 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, but only partly open, at the start of our inquiry we are assuming: (i) there are 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.

Johnston'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 (= there could not be two material items of the very same substance kind in the same place at the same time) 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 (2006, 679)

Some Aspects of This Schema II

- ❖ If so, the axiom of the uniqueness of composition is false, or at least hard to fathom.
 - ❖ Uniqueness:
 - ❖ $\exists x (x \text{ is a member of } A) \rightarrow \exists x (x \text{ is a sum of } A \ \& \ (\forall y) y \text{ is a sum of } A \rightarrow x = y)$
 - ❖ the existence of sums: every non-empty set has an object which is 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 Johnston'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 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.

A Worry from Williams

- ❖ The charm of hylomorphism:
 - ❖ 'Its charm lies in its heroic Aristotelian capacity for compromise.' —Williams (1986/2006, 218)
- ❖ Its charms notwithstanding, it begets concern:
 - ❖ Considering the fact that the soul, the form of the body, is held to be substance (a basic being, an *ousia*), Williams raises a natural sort of worry:
 - ❖ This claim is, categorially, puzzling. For soul is said to be substance, and there are references (as here [in *De Anima* ii 1, 412a16-20]) to *a* soul, or *the* soul. Yet the claim itself does not seem to introduce any particular item for any particular soul to be. It seems to introduce something more in the nature of a fact, or, possibly, a property.' —Williams (1986/2006, 219)

So: What are Forms?

- ❖ Some natural suggestions:
 - ❖ Forms are properties.
 - ❖ Forms are, especially, relational properties
 - ❖ Forms are structures.
 - ❖ From are, somehow, *active structures*.
 - ❖ . . . and an active structure = ?
 - ❖ Forms are co-ordinated intentions.
 - ❖ Forms are, after all, not parts at all.

A Suggestive, Peculiar Contention

- ❖ 'We may think of [a container with water in it] as a single object that has different water as a part at different times. Let us now make two modifications to our conception of the container. First, we suppose that it not merely a passive recipient of the water but somehow determines which water is to be in it at any one time. It plays an active role, as it were, in determining what its content is to be over time. Second, we suppose that the container is not another physical object but something of a more abstract or conceptual nature. Thus the varying contents of the container will be determined by conceptual rather than by physical means.'—Fine (1999, 69).

A Closing Heuristic Dilemma

(1) Form is either concrete or abstract.

(2) If it is concrete, form is but another element, and not an organizing principle.

(3) If form is abstract, then form is casually inert and thus not an organizing principle.

(4) So, form is not an organizing principle.

❖ Yet if form is not an organizing principle, then hylomorphism and its various touted benefits is untenable. Pointless, really.

❖ Oh dear.