Form and Matter

Basic Principles of Hylomorphism

A First Precept

* We also affirm [i.e. along with these thinkers] that nothing comes 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.

The Basic 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.

Some Observations I

* This seems to be an unreflectively realist conception of matter and form:
    * There is no suggestion that matter and form are mere explanatory posits; rather, they are objective MLI features of the world.
        * There might be change without minds; even if there were no minds, then, there would none the less be matter and form.

* The modality involved here suggests that in principle the basic argument for hylomorphism could be modalized, thus: (i) possibly, there is change; (ii) a necessary condition of the possibility of change is the existence of matter and form; hence (iii) there are matter and form.
    * In this sense, they seem to be structural requisites of the possibility of motion.
        * This, then, raises a further question about their status vis-à-vis generation and destruction.
            * Indeed, if one accepts the principle *ex nihilo nihil fit*, one seems already committed to the permanence of matter and/or form.

Some Observations II

* Matter and form seem initially to be *necessary correlates*: no matter, no form; no form, no matter.
    * This immediately raises question about decoupling them at the margins, as either *prime matter* or *pure form*.
* Matter and form seem initially to be *necessarily contrastive*: matter, *qua* matter, is inherently unformed; form, *qua* form, is inherently non-material or, if you like, immaterial.
    * This would be to say that form has no essential or even intrinsic material features.

Basic Hylomorphism first Characterisation

* Basic hylomorphism = $_{df}$ ordinary physical objects are complexes of matter and form.

* x is an ordinary physical object = $_{df}$ x 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*.

Our Approach

* Hylomorphic compounds are *vertical complexes* (first approximation):
    * C is a vertical complex $=_{df}$ (i) C is a hylomorphic compound of some matter M and some form ϕ; (ii) C overlaps M; (iii) necessarily, M is the matter of C only *in virtue* of ϕ; (iv) possibly the M exists when C does not exist.
        * x overlaps y $=_{df}$ there is a z such that z is a part of x and z is a part of y
* What differentiates a vertical complex from a heap is the presence of a functionally defined principle (ἀρχή; *archê*).
* 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:

    * ϕ is a substantial form $=_{df}$ ϕ is what makes what exists potentially exist unqualifiedly.

    * ϕ is an accidental form $=_{df}$ ϕ is what makes what is potentially ϕ, where ϕ is not a substantial form, actually ϕ.

Binarium Famosissimum

* Far downstream, 20th c. historians of Medieval Philosophy coined a term effectively unknown to medieval texts, characterizing a widely-shared commitment amongst (so-called) Augustinian philosophers, the *binarium famosissimum*:
    * *Universal hylomorphism*: every substance other than God is a compound of matter and form.
        * One easy thought: only God is absolutely simple; and anything other than what is absolutely simple is somehow composite; given the permanent possibility of change, the basic metaphysical constituents are composites precisely of matter and form.
* The *plurality of substantial forms*: hylomorphic compounds comprise a plurality of substantial forms.
    * One difficult thought: although one might suppose there is good reason to identify more than one substantial form in the case, say, of humans and racoons (namely, the form of humanity and the form of corporeity; the form of being a racoon and the form of corporeity), once we posit a plurality, we are faced with a question about unity.

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).

Wholes

* 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 (*Met*. 1041b11-33).

The Argument

(1) Possibly ($e_1 . . . e_n$ are the elements of O at t_1, and at t_2 $e_1 . . . e_n$ exist while O does not).

(2) (1) only if at t_1 there exists some x whose presence unifies $e_1 . . . e_n$ in such a way that O exists.

(3) If x is another element of O on ontological par with $e_1 . . . e_n$, 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 $e_1 . . . e_n$ form) a synchronic unity.

(6) Hence, this *archê* is not complex, but simple.

Heaps vs. Wholes

* Heaps seem to be mereological aggregates.
* So, Aristotle's suggestion would seem to be that there exist unities beyond mereological aggregates.
    * This is evidently entered as a *phainomenon*.
    * It is thus *not* something Aristotle undertakes to prove.

Some Elementary Puzzles I

* Once one accepts basic hylomorphism, some elementary puzzles come immediately to the fore:
    * Two already mentioned in the guise of the *binarium famosissimum*: (i) whether universal hylomorphism is correct, and (ii) whether the doctrine of the plurality of universal form should be countenanced.
    * A related but distinct puzzle regarding *how* form grounds unity as a principle (*archê*/*principium*).
    * A puzzle regarding the generation of form.
    * A puzzle regarding the particularity/ universality of form.
    * A puzzle regarding the individuation of members of an *infima species* from one another.

Some Elementary Puzzles II

* A puzzle regarding the priority of form relative to matter.

* A puzzle regarding the intrinsic nature of form: if form provides/is the essence of kind *K*, and *K* is an essentially material kind, then will not form itself be material—in which case, what of the necessary contrastivity of matter and form?

* A puzzle about the intersection of hylomorphism and the theory of categories: if our choices are form, matter, and the compound, which is the basic being (is there *a* basic being?)?

* A puzzle about the modal lineaments of form and matter: how and why is matter potential and form actual?