

Hylomorphism Reconditioned

Or not

Rea on Hylomorphism's Deficiencies

- 'Hylomorphism has strong intuitive appeal and a remarkable pedigree. It dominated medieval thought about the metaphysics of substance, was endorsed in some form or other by a variety of Enlightenment thinkers, and seems to be garnering increasing support from contemporary metaphysicians. But it is up to its neck in controversial commitments.' (Rea, 1)
 - These include:
 - a 'commitment to the universal-particular distinction';
 - a 'commitment to a primitive or problematic notion of inherence or constituency';
 - and an 'inability to identify viable candidates for matter and form in nature, or to characterize them in terms of primitives widely regarded to be intelligible.'

—Rea (2011,4)

First Concern

- ✦ It is not the universal-particular distinction as such, but rather:
 - ✦ Forms as universals or tropes must be *in* compounds as constituents.
 - ✦ They are thus:
 - ✦ parts—weird sorts of parts, unlike the parts of your car. ('But surely they would be odd sorts of parts.' — Rea, 2)
 - ✦ somehow located in space—but then again not.

Second Concern

- ✦ What, precisely, is problematic about inherence or constituency?
 - ✦ One worry: the relation, as primitive, is obscure.
 - ✦ Another worry: in so far as it is accessible, it seems to commit its proponents to believing that universals can be spatially separated from themselves.

Third Concern

- Where in nature are entities playing the roles posited by hylomorphism?
 - Matter is what exists in potentiality.
 - What is that?
 - Form makes what exists in potentiality exist in actuality .
- Are these empirically verifiable claims?
 - ‘Moreover, there is the looming danger of disconnecting our metaphysics of material objects from empirical reality. Where in physics, or chemistry, or biology do we find something answering to the description “something in a material object that actualizes its potential to be a dog [or a hydrogen atom, or a sodium chloride molecule]”? We can begin to answer, of course, by noting (again controversially) that physics, chemistry, and biology all make use of natural kind terms, and that it is the natural kind properties that are supposed to answer to the relevant description. But there is, again, the word ‘in’ to reckon with. In the straightforward senses of ‘in’, nothing in a hydrogen atom looks like a kind property.’ (Rea, 3)

Three to Two

- Probably these three worries are best reduced to two concerns:
 - Parts: form and matter are in some sense Ur-parts of composites.
 - What sorts of Ur-parts?
 - Do they, for instance, respect the principles of classical extensional mereology we have already noted?
 - How do parts of any sort vouchsafe the unity of the composites of which they are parts?
 - Are forms, for instance, *predicated* of matter?
 - Forms: what is the ontology of forms?
 - How do forms function in a categorial context?
 - How, precisely, do forms discharge their myriad obligations in the economy of hylomorphism?
 - How, for instance, do they serve as principles of unity?
 - How, further, should one construe forms as universals or particulars?
 - In either case, however they are to be understood, how are forms in compounds?

Rea's Reconditioning

- 'My proposal, then, is to try to characterize everything that the hylomorphists want to say in terms of the concepts of location and power (and a few other easy-to-understand concepts). The core, underlying ideas are that (i) there is no universal-particular distinction, (ii) properties are powers, (iii) powers can be located in spacetime, and (iv) objects can be reduced to or identified with powers.'
- My theory of natures has three central theses:
 - (T1) Natures are powers; the natures of substances are fundamental powers.
 - (T2) The natures of composite objects unite other powers (in particular, the powers that are the natures of their parts).
 - (T3) Natures can enter into compounds with individuators, and play the role of form.'

—Rea (2011, 345)

Substance Powers

- ‘So what does it mean to say that substance natures are fundamental powers? Here I mean three things.
 - First, the natures of substances are perfectly natural properties — not in the sense that contrasts with “supernatural”, but rather in the sense of marking objective similarities and joints in nature. (Cf. Lewis 1983)
 - Second, they are not reducible to other powers.
 - The power to tell a lie, for example, is reducible (if it is a genuine power at all). It is nothing over and above the more basic powers involved in its exercise: the power to form beliefs, the power to speak, the power to entertain false propositions and to intend to report them as true, and so on. Negative charge, on the other hand, is plausibly non-reducible, and so fundamental.
 - Third, they ground non-natural powers or, if there are no such things, they explain the truth of (putative) non- natural power-attributions.
 - For example: Fundamental particles have the power to repel other fundamental particles.’

—Rea (2011, 347)

Powers as Unifying

- A power p_0 of an object x unites distinct powers $p_1-p_n =_{df}$ (i) p_0 is intrinsic to x , (ii) each of p_1-p_n is a nature of at least one of x 's parts, (iii) p_0 is grounded in or identical to a certain sort of cooperative manifestation (CM) of p_1-p_n , (iv) every power intrinsic to x that is at least partly grounded in CM is identical with, reducible to, or at least partly grounded in p_0 , and (v) there is no power intrinsic to x that is distinct from both p_0 and CM and that grounds p_0 .

—Rea (2011, 349)

Some Handsome Definitions

- x is a constituent of y $=_{df}$ x plays in y the role of matter or the role of form.
- x is a matter-form compound $=_{df}$ something in x plays the role of matter and something in x plays the role of form
- m plays the role of matter in x $=_{df}$ m is an individuator (i.e., something that accounts for absence of numerical sameness) that exactly mereologically overlaps x ; and either m is not a nature or x lacks spatiotemporal parts.
- f plays the role of form in x $=_{df}$ f is a nature of x and f does not play the role of matter in x .

—Rea (2011, 353)

Marmodoro: Unreconditioned

- ‘This account however opens up a host of questions regarding how this power achieves what Rea requires of it; above all, the question whether **P** is a power at all, and if so, what it is that makes it a power, too, over and above the powers that it supposedly unifies. What is it that differentiates **P** from a structure of powers? In what sense is the manifestation of **P** over and above the manifestation of its constituent powers? Furthermore, how does the cooperative manifestation take place? There are alternative possible models: for instance, by means of holistic composition of the relevant powers, or by their arrangement in a structure, or by their being stimuli of the unifying power **P**'s manifestation, etc. In which way does the manifestation of power **P**, supposedly unifying all the other powers, depend on their cooperative manifestation?’

—Marmodoro (2013, 14)

Parts and Parts

- The question of mereology here is a red herring:
 - Form and matter can be parts of a compound without its being the case that they respect the principles of CEM.
 - Hylomorphic parts can also, as Lowe suggests, be unsaturated in something much like the way ' $3 > 2$ ' is complete but ' $x > 2$ ' is incomplete.
 - One question: which component is unsaturated? Or is it rather both?
- The question is at best unclear, and so the debate unmotivated, until such time as we distinguish types of parthood.

Autonomous Parts

- p is an autonomous part of o =_{df} (i) p is a proper part of o ; (ii) there is some ϕ such that (a) ϕ is essential to p and (b) p 's being ϕ is o -independent.
 - Note that (ii) entails that possibly, p can exist without being a part of o .
 - So, there is some essential feature of p , ϕ , such that possibly p is ϕ when o is not.
 - This is the sense in which p is autonomous of o : o does not control the conditions of p 's identity.

Parasitic Parts

- p is a parasitic part of o =_{df} (i) p is a proper part of o ; and (ii) p is not an autonomous part of o .
 - Some examples:
 - Autonomous parts: a marble is a part of a pile of marbles; a citizen is a part of a civil society; an atom of chlorine is a part of a sodium chloride molecule.
 - N.b. in this connection that some autonomous parts may have their non-essential properties subordinated when they become proper parts of other objects.
 - Parasitic parts: a tine, a tip, a coping stone, an intermission, a smile, a surface
 - Disputed: the body, the organs, form, matter, a hole, hammer claws

Conditions for Hylomorphism

- One must determine whether, and if so, in what way hylomorphism requires (or is) a defensible mereology.
 - This will require reflection on the nature of parts, including on the modality of parts
- One must determine the ontology of form, such that form can play its role as a unifier.
 - This will require:
 - deeper thought about roles, role-players, and their relations, and
 - a difficult appraisal of the normativity of forms
- One must determine the notion of kinds and kind membership, such that:
 - questions about co-location can be assessed responsibly, and
 - the kinds in question can be understood in the context of an articulated category theory
- One must come to terms with the nature of grounding, and in particular of the notion of grounding powers in (a) other powers; and (b) categorial properties.