**“Staunch Hylomorphism” and the Eleatic Principle**

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**I. Introduction**

What is the relation between the powers of a whole substance and the powers of its proper parts?

**a**) Staunch (SH) vs. Faint-hearted Hylomorphism (FH)

**b**) SH and the fundamentality of higher-level causal powers

“One simple proposal would be this: the powers of any substantial whole are identical to the sum of the powers of its parts. In other words, all of the powers of the whole are wholly grounded in the powers of its parts, together with their extrinsic (spatial) relations to each other. Let’s call this proposed principle the ‘wholly grounded’ conception of wholes. The wholly grounded conception of wholes has the consequence that no composite thing can have any fundamental powers. **This is clearly in tension with the staunch hylomorphist’s commitment to the fundamentality of composite substances.** Thus, staunch hylomorphist should reject the wholly grounded conception of wholes and should instead embrace *emergent* powers of composite substances” (Koons, “Staunch vs. Faint-hearted Hylomorphism,” 157, emphasis added).

**c**) Why infer the fundamentality of powers from the fundamentality of substances?

Merricks’s Overdetermination Argument (*Objects and Persons*, 79-80):

(1)  Object *O* – if *O* exists – is causally irrelevant to whether its parts *P*1...*P*n, acting in concert, cause effect *E*.

(2)  *P*1...*P*n cause *E*.

(3)  *E* is not over-determined. Therefore,

(4)  If *O* exists, *O* does not cause *E*…

Of van Inwagen, of the same eliminativist disposition, Jaworski says,

“Why does van Inwagen stop with organisms? Why not deny that all composites exist? Van Inwagen’s most compelling answer is that organisms have nonredundant causal powers that other alleged composites lack. The activities attributed to artifacts and natural bodies can be understood as disguised cooperative activities performed by simples. The chair, the mountain, and the planet don’t do anything that cannot be exhaustively described and explained by appeal to the activities of mereological simples, but according to van Inwagen, not all activities are like this. Organisms are capable of doing things that cannot be done by simples alone but only by composite individuals. We are thus forced to grant that they exist as distinctive individuals since they engage in activities (such as thinking) which, van Inwagen argues, cannot be performed by simples alone” (Jaworski, “Hylomorphism and the Metaphysics of Structure,” 192).

**d**) The Eleatic Principle, “To be is to bear causal powers,” as applied to composite substances, becomes

**F**: a composite *y* is unified *per se* at a time *t* only if *y* bears fundamental causal powers, i.e., powers not wholly grounded in the intrinsic properties of *y*’s parts, the *x*s, and the spatial relations obtaining among the *x*s at *t*.

**Thesis:** F is a misapplication of the Eleatic Principle to composite substances. On the contrary, the claim that a composite *y* is a substance only if *y* bears fundamental causal powers at the level of the whole is no part of Staunch Hylomorphism.

**II. Patrick Toner on Emergent Substance**

**a**) Motivation for ES: a moderate answer to SCQ

“It is not a difficult matter to show that there can be non-arbitrary, yet sharp, cut offs on the composition continuum. In my opinion, there is a sharp cut off at the point at which an entity emerges – ‘over and above the parts,’ as some might say - which has non-redundant (or irreducible) causal powers. So one can, without any vagueness, restrict composition. This response to the argument gives us an ontology that includes the little things that make up the putative composition continuum - things which I shall call ‘atoms’ - and macrophysical objects with non-redundant causal powers” (Patrick Toner, “Emergent Substance,” 283).

**b**) “Over and above the parts”?

**c**) What, for Toner, makes a causal power “non-redundant”? E.g., libertarian free will (Toner, “Emergent Substance,” 285).

**d**) Non-redundant powers conferred by substantial form

**e**) From ES, it follows that for any composite substance *y* having a substantial form *F* and materials parts, the *x*s, ***F* is not the substantial form of the any of the *x*s.**

Neo-Aristotelian Thesis (NAT): “The material and formal components of a mereologically complex object are proper parts of the whole they compose” (Kathrin Koslicki, *The Structure of Objects*, 181; cited in Toner, “On Aristotelianism and Structures as Parts,” 151).

A composite substance’s formal part, i.e., its structure, is the source of its non-redundant causal powers. Does it also confer powers of the material parts?

Consider this argument:

(1) Suppose that Mary’s substantial form *F* is the formal cause of each of her parts, the *x*s.

(2) From (1), for any *x*, *F* confers on *x* all *x*’s causal powers.

(3) If *F* is not required to explain *x*’s causal powers, (2) is otiose.

(4) According to Toner, *F* is not required to explain *x*’s causal powers.

(5) Therefore, (2) is otiose.

(6) Therefore, parsimony demands that we reject (1).

Consider, too, what Aquinas says about the way a substantial form permeates the substance it actualizes:

“But a substantial form is the perfection not only of the whole, but of every part. For since a whole is composed of parts, the form of the whole which gives being to the single parts of the body is a form which is a composition and an order, like a house’s form: and such is an accidental form. But a soul is a substantial form: hence it is necessarily that it is the form and act not of the whole alone, but of every part.”[[1]](#footnote-1)

**f) A worry about substance dualism**

“The thesis of emergent powers threatens to push the staunch hylomorphist into the position of substance dualism. If the ‘whole’ has emergent causal powers, in what sense can it be said to be wholly composed of its parts, as opposed to being a separate entity that interacts with those parts?” (Koons, “Staunch vs. Faint-hearted Hylomorphism,” 157).

**III. William Jaworski on Structured Individuals**

**a)** The notion of *structure*

For Jaworski, for a substance *y*, composed of the *x*s, *y*’s structure is abstract particular that confers on *y* and the *x*s non-redundant causal powers for the sake of *y*’s mature state:

If structures are properties, then they have all the characteristics of properties described earlier. First, they must be powers—powers in particular to configure (organize, order, or arrange) materials. Each structured individual organizes or configures the materials that compose it…Second, structures are particulars… Third, structures have the same directedness that all powers do. The structures of living things in particular appear to be directed toward developing and maintaining the organism’s mature state, as well as the powers that characterize that state and their manifestations… Fourth, structures confer whatever powers they do necessarily. (“Hylomorphism and the Metaphysics of Structure,” 189-190)

“If atoms and molecules are discovered to have powers distinct from those that can be exhaustively described and explained by appeal to fundamental physical materials alone, then there are grounds for claiming that they are not mere aggregates of fundamental physical materials, but distinctive individuals in their own right.” (Jaworski, “Hylomorphism and the Metaphysics of Structure,”195)

**b)** Jaworski’s property dualism

The hylomorphic view “implies that structured individuals have properties of at least two sorts: properties due to their structures (or their integration into individuals with structures), and properties due to their materials alone independent of the ways they are structured… A strand of DNA might always have various atomic or fundamental physical properties regardless of its environment, but it acquires new properties when it is integrated into a cell and begins making contributions to the cell’s activities. It becomes a gene, a part of the cell that plays a role in, say, protein synthesis. Some philosophers and biologists call the “new” properties acquired by structured systems *emergent properties*.” (Jaworski, “Hylomorphism and the Metaphysics of Structure,”193-94)

**Likewise, from Jaworski’s property dualism it follows that his “substances” are mere accidental unities.**

**IV. Koons’ Version of SH**

Koons theory, Parts as Sustaining Instruments (PASI) attempts to avoid both FH and substance dualism by combining two principles:

**Sustenance:**

“For any composite substance *y* with proper parts the *x*s and any moment *t* at which the substance exists, the existence of *y* at *t* is wholly grounded in the actual persistence of some process *P* in some interval of time beginning at some instant *t*0 and ending at *t*, which process *P* is such that its participants from *t*0 until and including *t* are exactly the *x*s (or exactly *y* itself and the *x*s).”

**Instrumentation:**

**“**For any composite substance *y*, any causal power *P* of *y* at any moment *t*, there is a proper part *x* of *y* at *t*, a power *P*\* of *x* at *t*, such that *P*\* is at least partly grounded in *P*, and the exercise of *P*\* at *t* would contribute to the natural end of *y*” (“Staunch vs. Faint-hearted Hylomorphism,” 172).

“Composite substances realize a hierarchical structure of functional parts. The secondary powers descend in a stepwise fashion, from the top of the lattice structure (the whole organism) to the bottom (the elementary particles). Similarly, the material process by which the whole organism is sustained in existence (together with its accidental properties) rises from the bottom to the top through the same series of functional stages. The intermediate levels consist of dependent parts, to which the Homonymy principle applies, while the lowest level consists of independent parts, the enduring substrate of substantial change” (“Staunch vs. Faint-hearted Hylomorphism,” 173).

**V. 2 Proposals**

**a)** A Commitment to Prime Matter as the Key to Substantial Unity

**b)** A Revised Restricted Eleatic Principle **F´**: a composite *y* is a *per se* unity of some *x*s at *t* only if the *x*shave powers at *t* different from those they had just before *t*.

**Works Cited**

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1. *Substantialis autem forma non solum est perfectio totius, sed cuiuslibet partis. Cum enim totum consistat ex partibus, forma totius quae non dat esse singulis partibus corporis, est forma quae est compositio et ordo, sicut forma domus: et talis forma est accidentalis. Anima vero est forma substantialis: unde oportet quod sit forma et actus non solum totius, sed cuiuslibet partis* (Thomas Aquinas, ST I, q. 76, a.8; ed. Leon, vol. 5, 232). [↑](#footnote-ref-1)