PHILOSOPHY & Sep 30, 2012

Notes, Reports & Discussions

ARTIFICIAL LANGUAGES

## Kathrin Koslicki on the Roles of Form within the Compound

Paolo Valore

At the Philosophy Department of Columbia University, New York, a Colloquium was held on the 8th of March 2012 on *The Roles of Form within the Compound*.

Mereologically complex objects, i.e. objects that have proper parts, are structured wholes and structured wholes are hylomorphic compounds, i.e. objects which are in some sense composed of matter and form. If the wholes are unified because they are a compound of matter and form and the form plays the role of the unifying component, the form is, litterally, a proper part. So the mereology considered by the Koslicki is not the classical Extensional mereology. Let's call the thesis that the form is a proper part the "Neo-Aristotelian Thesis" (NAT). But what are the formal components? Are they themselves objects? And, if so, what kind of objects (properties, relations, tropes, universals, powers, capacities, collections,...)? These are the options that Koslicki considered:

- (OT) Objects Thesis: Formal components belong to the category of objects;
- 2. (PRT) Properties, Relations, etc. Thesis: Formal components belong to the category of properties, relations, powers or capacities (or collections thereof);
- 3. (SET) Something Else Entirely Thesis: Formal components do not comfortably fit into any of these categories and are something else entirely.

Material components are best viewed as themselves belonging to the ontological category of objects. In particular they should be viewed as proper parts. Similarly, formal components should be able to function as proper parts of hylomorfic compounds. According to this, a popular view is that they should be assigned to the category of objects since just objects can be parts of other objects (OT). But we do not have to accept this thesis, Koslicki said. "Part" is a neutral notion: objects have, for instance, constituents such as tropes. Another consideration is that formal components must be able to place structural constraints on the material components composing the hylomorfic compound in question.

This can be used as an argument in favor of (PRT): only properties, relations, powers or capacities are of the right category to place structural constrains on other entities. But Koslicki didn't buy any of these two arguments. So, it seems that formal components must be something else entirely. In order to discuss this point, Koslicki considered a passage from the *Metaphysics* of Aristotle [Z 17, 1041b 5-33], in which Aristotle discusses what can distinguish an uniform compound from matter; and the presence of form is precisely that which does the job, so that, no matter how the category of form may be identified, it certainly cannot correspond to that of matter.

Against this argument, Trenton Merricks proposed an objection (reviewing the book by Koslicki *The Structure of Objects*, Oxford 2008): «suppose that [a big object of kind K] is constituted by a numerically distinct object of kind K\*. Suppose that this implies that that K\*-object is a proper part of the big K-object. Let us add that the K\*-object has a part that is itself of kind K, a small K-object. Suppose that the small K-object has the K-structure as a part. By the transitivity of parthood, the K\*-object has the K-structure as a part. WSP [weak supplementation principle] tells us that the big K-object must have a part that shares no parts with the K\*-object. That part cannot be the K-structure itself, since - as we have just seen - the K\*-object has the K-structure. Contradiction.» (*Journal of Philosophy*, 106 (2009), p. 304).

In answer to this objection, Koslicki added some further roles of formal components. They not only must be able to place structural constraints on the material components composing the hylomorphic compound, but also:

- provide the basis for a mereological difference between numerically distinct but spatiotemporally coincident objects;
- help to explain the apparent differences in the *modal* profile associated with numerically distinct but spatiotemporally coincident objects.

Furthermore, Koslicki added another one that comes from another passage of Aristotle (*Metaphysics*, Z 17, 1041b 11-27): Formal components

• are traditionally assigned the role of principle of unity within the compound, tying together the material components into a single unified whole.

What we should try to do is to find some sort of fundamentality, neither to be identified as the most elementary elements nor as the cosmos (which anything else would be a part of) but one that grounds the ontological *status* of the "things in the middle", i.e. things that have constituents and are constituents. Is there a way to make the "things in the middle" to come out as fundamental? One way is to use the fact that they are unified. Another important reference for this point that Koslicki reminded is Ingarden and the further dichotomies that she uses (dependence *vs* independence; essence, identity and necessity; determinable *vs* determinate; qualitative *vs* non-qualitative; constant *vs* variable; general/universal *vs* particular/individual).

According to Koslicki, in order to reply to the objection, we have the following options:

- 1 denying the transitivity of parthood
- 2 denying the existence of heaps
- 3 considering structures as objects

4 considering structures as tropes or universals

She decided not to explore structures as universals and refused (1): it is better not to touch the transitivity of parthood (maybe we could introduce constituents that are *not* parts, for which the transitivity does not hold). Option (2) was judged interesting but it does not seem to be sufficiently general, especially if you are not ready to deny the metaphysical possibility of such a scenario. The option (3) has been evaluated in detail.

Afterwards, she proposed the option to distinguish the matter/material components from the form/formal components using the dichotomy between independent and dependent parts. And here we have the choice of dependence from nucleus only or from nucleus (essential tropes) and periphery (accidental tropes). To discuss this point she referred to the conception of trope bundles offered by Husserl and Simons (independent parts are "pieces", i.e. trope bundles which have all their "needs" met and are "complete" in the sense that they can themselves exist separately as concrete particular objects; dependent parts are "moments", i.e. "incomplete" tropes or trope bundles which require supplementation from other tropes and cannot themselves exist separately as concrete particular objects).

And finally we get unity through independence: a hylomorphic compound is unified because all of its "needs", and the "needs" of its tropes, are met by tropes internal to its bundle.

The conclusion was that we can give a response to the challenge, with a sufficiently fine grained approach and, in particular, we can explain how formal components can provide the basis for a mereological difference between numerically distinct, but spatiotemporally coincident, objects.

There followed a bright discussion.

## About the author

## **Contact address**

Paolo Valore Università degli Studi di Milano, Italia Facoltà di Lettere e Filosofia Dipartimento di Filosofia Via Festa del Perdono 7 20122 - Milano - Italia Email: paolo.valore@unimi.it. Web: http://dipartimento.filosofia.unimi.it/index.php/paolo-valore. ResearcherID: A-1822-2010

## Copyright

🐵 🐵 🧿 2012 Paolo Valore. Published in Italy. Some rights reserved.