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## **The Bottom-Up, the Top-Down, and the Maurinian Analysis of Similarity Classes**

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### **1. Introductory words about philosophical discussions**

When relaxing, after an intense discussion with a philosophical opponent, one may happily conclude: “Nice, I don’t have to rethink anything.” Or, one may end up a bit distressed saying: “Damned, I have to revise some of my views.” Anna-Sofia Maurin is an opponent of mine with respect to the existence of universals; and we have had a journal exchange about it (Johansson 2007, 2010; Maurin 2007, 2009, 2010). I am since long quite relaxed about the outcome: “Let’s agree that we disagree.”

However, when this state entered my mind, it was accompanied neither by the reaction “Nice” nor by “Damned.” Instead it was: “Interesting, I need not revise my belief in universals, but there is a lacuna in my defense that I ought to think more about.”

One lacuna I became aware of already when reading what made me start the discussion, namely (Maurin 2007). In my defenses of universals, I should have added some words about the distinction between vicious and benign infinite regresses; not written as if all are vicious. Later, because of the discussion, I also realized that I ought to say more about the relation *exact similarity (resemblance)*, since it plays an essential role in my argument for the existence of universals. Now I will do so.

For brevity’s sake, I will in what follows often abstract “exact” away from “exact similarity (resemblance),” and talk simply of *the similarity (resemblance) relation*.

Also, I will focus on where the relation has two distinct relata, neither more nor less. Since the binary similarity relation is transitive, it can be used to analyze similarity classes with more than two members. On the other hand, since the relation predicate “similar” is reflexive, it can be applied to a single entity, too, as in “*a* is similar to *a*.” In such cases, however, we meet only empty tautological truths, and they cannot be used to analyze anything.

Soon, I will say some explanatory words about the expressions “bottom-up” and “top-down,” but in the next paragraph I use them unexplained.

Similarity classes are constituted by a similarity relation in tandem with the members of the class. In my opinion, the similarity relation has to be understood as emerging bottom-up from the members of the class. Resemblance nominalists, to the contrary, make the members of the class emerge as such top-down from the similarity relation to its relata. Maurin tries with her trope theory to steer a middle course between these to her Scylla and Charybdis in the ontological ocean.

### **2. Maurin, the trope nominalist, and I, the immanent realist**

The central difference between Maurin’s ontological views and mine can be stated thus: she claims that there is no need to postulate property and relation universals, tropes can do the work that universals do for realists, whereas I think that we cannot make ontological sense of the universe in which we live without postulating immanently existing universals. She is a trope nominalist of sorts; first put forward in (2002). I am an immanent realist of sorts; best presented in (2014). I defend the existence not only of property and relation universals, but of tropes and relation-tropes, too. I am not denying her view that there are tropes, but she is denying mine that there are universals.

A universals-plus-tropes ontology can also be found in philosophers such as E. Husserl, J. Cook Wilson, D.W. Mertz, E.J. Lowe, and J. Heil.

In her construction of what from my point of view is a substitute for property universals, Maurin claims that property universals, correctly conceived, are *equivalence classes of tropes held together by a similarity relation*. Her complete ontology, therefore, contains not only tropes, but *in some sense* classes and similarity relations, too: "all entities that exist besides tropes are constructed from tropes [...] saying that there is nothing but tropes is to say that tropes are the only metaphysically *fundamental* entities" (Maurin 2002: 5).

Maurin uses the class concept as if it is not in need of discussion; unlike Quine, though, she cannot possibly regard classes as universals. However, I leave the ontology of classes outside of this paper, and focus here only on the similarity relation.<sup>1</sup>

### 3. The notions of bottom-up and top-down

The metaphors bottom-up and top-down can be exchanged for more precise concepts, but depending on background assumptions such precisifications may differ ontologically. I would nonetheless like to say some words about how I look upon the metaphors.

In Platonist ontologies, the top-down notion is fitting. All identities/essences/natures down in our spatiotemporal world are regarded as derived from eternal entities up in a mind-independently existing world of ideas. This-worldly entities are claimed to get their qualitative identities thanks to a kind of participation in essences existing in another realm. Such ontologies I see no reason to bother about.

However, the top-down notion comes naturally also in ontologies that posit a creative mind as a top-level entity. In such ontologies, a mind is regarded as being able to create and project identities down on pre-given entities that in themselves lack such an identity. For instance, a mind may create and project a resemblance down on two entities that in themselves are not similar. Call such a view *subjective emergentism*.

Carefully seen, however, this view has a consequence that places it outside the topic of this paper. In subjective emergentism, the seemingly binary similarity relation is turned into a *ternary* relation. There is no longer a direct and unmediated binary similarity relation between two relata. Instead, there is a three-term relation that brings in also a mind. Such similarities can be represented by the three-term expression "similarity(relatum<sub>1</sub>, relatum<sub>2</sub>, a mind)."

The kind of minds and ternary relations just mentioned are absent from Maurin's analyses, and also from those of resemblance nominalists'. Maurin says: "unless otherwise indicated, the resemblance we are dealing with is *objective* and *primitive*" (2002: 80). Therefore, I confine my discussions to the truly binary similarity relation.

In common sense, the bottom-up conception of relations comes naturally. Normally, we discuss possible relations by investigating the relata of the presumed relations. With respect to the similarity relation, this means that if the relata have the same kind of property, then they are similar; otherwise not. As far as I am concerned, common sense may well be ascribed an implicit belief in property universals. This does not mean that I think that common sense is a reliable source for finding truths. To the contrary. But I happen to believe that a non-commonsensical proof can be given to the effect that there are both tropes and property universals (Johansson 2014).

Contemporary analytic philosophy contains attempts to find an asymmetric relation that might be used to characterize the asymmetry contained in both the bottom-up and the top-down conceptions of similarity. This is not the place to discuss them, but I will briefly mention two proposals and my preferred alternative.

First, if the notion *in virtue of* is taken as primitive, then in the bottom-up approach the similarity relation exists in virtue of the nature of the relata. In the top-down approach, the natures of the relata exist in virtue of the similarity relation.

Second, if a relation of *metaphysical grounding* is taken as ontologically basic (and not as defined by an in-virtue-of relation), then in the bottom-up approach similarity relations are regarded as grounded in the nature of their relata, whereas in the top-down approach the natures of the relata are regarded as grounded in the similarity relation.

Third, I have since the mid-80s worked with a notion somewhat similar to the ones mentioned. I have taken it from Husserl, and I call it *one-sided existential dependence* (Johansson 2004: ch. 9.3). Using this notion, the bottom-up approach claims that similarity relations are one-sidedly dependent on their relata, which means that similarities

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<sup>1</sup> I discuss Quine in my (2016), and my view of classes is put forward in (2015).

cannot possibly exist without their relata, whereas each of these relata can exist even if the relation does not exist. The top-down approach, conversely, claims that neither relatum can exist with its nature if the similarity relation does not exist, but the similarity relation can in some way exist without the relata.

Using a wide concept of explanation, one may say that in the bottom-up approach the similarity relation is meant to be explained by the nature of its relata, and that in the top-down approach the natures of the relata are meant to be explained by the similarity relation.

#### 4. Maurin, I, and resemblance nominalism

I take resemblance nominalism to be definable as essentially containing the top-down approach. “In short, in Resemblance Nominalism resemblance among concrete particulars is not *explained*, but is used to explain the properties of these particulars” (Rodriguez-Pereyra 2002: 26).<sup>2</sup> The general approach may then be specified in different ways by different philosophers. One philosopher may try to use the in-virtue-of relation, another may use grounding, and a third one one-sided existential dependence. I think all three kinds of resemblance nominalism founder when confronted with the following simple line of thought.

Most ontologists accept in their argumentation far-reaching thought experiments, and I am no exception. Let us first imagine a two-trope world where there are only two tropes,  $t$  and  $t^\#$ , and no similarities whatsoever; call it world-(A). Let us then in thought enter another two-trope world, world-(B), where  $t^\#$  has been exchanged for  $t^*$ , and where  $t$  and  $t^*$  are exactly similar. This world contains not only two tropes, but a similarity-trope, too. Third, let us imagine a one-trope world, world-(C), by deleting  $t^*$ ; it cannot possibly contain a similarity relation with two distinct relata.

In the move from world-(A) to world-(C), it seems unproblematic to think of  $t$  as being the same in all the three worlds, and therefore as having the same nature in all three. What, then, are here the options for resemblance nominalists? For them to claim that  $t$  has no nature in world-(C) seems absurd. And for them to claim that  $t$  has a nature because “ $t$  is similar to  $t^*$ ” makes their approach to relations with distinct relata superfluous. The sentence “ $x$  is similar to  $x$ ” is true for all entities independently of their similarity to other entities. However, to argue for a superfluous analysis is absurd. Therefore, on either option, resemblance nominalism falls prey to a *reductio ad absurdum*.

What, then, does Maurin say about resemblance nominalism?

[C]ompare the standard view [of tropes] with a view with which it is often confused: resemblance nominalism. On trope theory, tropes have the same nature if they resemble each other, and they resemble each other (or not) *in virtue of the (primitive) nature they each ‘have’* (or ‘are’). According to resemblance nominalism, on the other hand, two objects have the natures they do in virtue of the resemblance relations which obtain between them. This means that, whether they resemble or not, is not decided given the existence and nature of the objects themselves. Rather, the pattern of dependence is the other way around. [...] Perhaps for that reason, resemblance nominalism has no explicit proponent among the trope theorists. (2018: endnote 28)

When, in the next section, I discuss Maurin’s analysis of the similarity relation, I can do so quite confident that both of us find resemblance nominalism incredible.

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<sup>2</sup> Despite calling himself a resemblance nominalist according to the characterization presented, Rodriguez-Pereyra also makes the astonishing claim that there are no resemblances! Only as-if resemblances: “although there are resembling particulars, there is no entity over and above them that is their resemblance. [...] But for ease and simplicity of exposition I shall talk throughout the book about resemblance as if it were an entity, that is, a relation” (*ibid.*: 62). This statement simply contradicts his view that resemblance facts are objective (*ibid.*). As-if facts are subjective mind-phenomena. As has been noted before, his position is “an ontological version of the Indian rope trick” (Svennerlind 2008: 135n).

## 5. The Maurinian analysis: invoking pseudo-additions and haecceity-natures

Let me use an example to make the discussion more concrete. Look at the spots within the square brackets: [ • • ]. Each spot contains at least both a color-trope and a shape-trope. The color-tropes (being black) may be regarded as existing only in our perceptual fields, but the shape-tropes (being circular) may be ascribed a mind-independent existence. Now, whatever kind of tropes the reader would like to regard as being acceptable, let's call the left trope  $t$  and the right one  $t^*$ . The tropes are exactly similar,  $S$ .

With respect to the example, Maurin and I do on an *abstract semantic level* share the following views:

- (i)  $t$  and  $t^*$  are two different tropes, and as such each has a nature;
- (ii) they are related by a similarity-trope,  $S$ ;
- (iii) necessarily, if  $t$  and  $t^*$  exist, then  $S$  exists;
- (iv) necessarily, if  $S$  exists, then there are two relata,  $t$  and  $t^*$ ;
- (v)  $t$  can exist even if  $t^*$  does not, and vice versa, which – together with (iv) – entails that  $t$  and  $t^*$  can exist separately even if there is no  $S$ .

The differences between us pop up when we specify the term “trope nature” in (i) and the second occurrence of “exist” in (iii). I start with the latter.

Maurin says: “Resemblance may be understood in one of two ways: either as a pseudo-addition or as a genuine relation-trope” (2005: 138). For me, the second occurrence of “exist” in (iii) has the same sense as the first, which means that for me  $S$  is a genuine relation-trope that exists just as much as the tropes do. Maurin, on the other hand, allows my use of “exist” to have two senses:  $t$  and  $t^*$  genuinely exist, but  $S$  only pseudo-exists. The presumed latter fact is what allows her to reject the bottom-up approach that statement (iii) may seem to imply. According to Maurin, there really is no “up,” only a “pseudo-up.” To her,  $S$  is not only (as for me) less ontologically fundamental than  $t$  and  $t^*$ ,  $S$  is merely an ontological *pseudo-addition*. She says:

This will leave us with the third and final view [which is Maurin's option], a view according to which exact resemblance should be ontologically characterized as a *pseudo-addition* to our basic metaphysical scheme. (2002: 94)

She is from the start well aware of the fact that the term “pseudo” may in ontological contexts sound odd: “the invocation of ‘unreal’ additions to solve philosophical problems may seem nothing short of magic” (*ibid.*). And then she goes on to defend her view (2002: 109–115). After criticism, she briefly defends the notion of pseudo-addition again (2005: footnote 23). For good criticism, see (Svennerlind 2008: 129–142). In her SEP entry “Tropes,” she uses the notion in passing: “the trope theorist had the option of treating the relation [resemblance] as a ‘pseudo-addition’” (2018: sect. 3.2). To my mind, her argumentation proves only that  $S$  is less fundamental than  $t$  and  $t^*$ .

Next the term “trope nature.” To me, a trope's nature is a universal, since I regard a trope as an instance of a universal. To Maurin, on the other hand, the nature of a trope is as particular as the trope itself. Moreover, she regards them as identical: “tropes are nothing but their particular nature” (2002: 93). At least in everyday talk, the term “nature” has connotations that make it refer to something repeatable. My use conforms to this, Maurin's does not. From medieval scholasticism I will now borrow the term “haecceity,” which means thisness in contrast to universality. I will use it, for the sake of verbal clarity, to call Maurin's trope natures *haecceity-natures*. That is, natures that, necessarily, can be the nature of only one entity.

Looking at the history of European philosophy, one finds some entities that are regarded as having a haecceity-nature. First, Plato's mind-independently existing Ideas. There cannot be two Ideas that are exactly similar. Then there are Aristotle's the Unmoved mover and God in scholastic philosophy. All these entities have this feature: *nothing else can possibly resemble them exactly*. Exact similarity between trope natures, however, is absolutely central to Maurin's trope theory: “similarity relations do not afford us, but are rather a consequence of, the nature of individual tropes” (2010: 47; my translation). In spite of the fact that the haecceity-natures of tropes differ from the other ones mentioned, Maurin never explicates her notion of trope nature, i.e., a trope's particularity. After some reasoning, she concludes: “we must therefore simply accept the particularity of the trope as primitive” (2002: 21).

Conclusion: there is a lacuna in Maurin's defense of the view that each and every trope has its own haecceity-nature.

## 6. Concluding Russellian words about discussions of relations

Bertrand Russell, who was a firm believer in the existence of both property and relation universals, put forward the following claim in 1924:

The question of relations is one of the most important that arise in philosophy, as most other issues turn on it: monism and pluralism; the question whether anything is wholly true except the whole of truth, or wholly real except the whole of reality; idealism and realism in some of their forms; perhaps the very existence of philosophy as a subject distinct from science and possessing a method of its own. (Russell 1956: 333)

If what Russell says is true, then I hope to have shown that his list of opposing positions can definitely be augmented by the one between immanent realism and trope nominalism.

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