

## Is Trope Theory a Divided House?

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**Note:** What follows is the uncorrected proof for the chapter. There are a few typos and other minor errors and I've appended to the end of the chapter my list of requested corrections.

CHAPTER 6

*Is trope theory a divided house?*

*Robert K. Garcia*

Michael Loux draws an important distinction between ‘tropes’ and ‘troper’ (Chapter 1, this volume). My aim in this chapter is to explore the significance of this distinction. Before introducing my main theses, it will be useful to provide a provisional gloss on the trope/troper distinction as well as some terminology.

Both tropes and troper are ‘particularized properties’ in that they are non-shareable character-grounders. Tropes and troper are *character-grounders* in that it is in virtue of having a trope (troper) that an object is characterized in some way. For example, it is in virtue of having a sphericity trope (troper) that an object is spherical. Tropes and troper are *unshareable* in the following general way: Where  $f$  is a trope or troper, if  $f$  is had by object  $O$  at time  $t$ , then nothing wholly distinct from  $O$  has  $f$  at  $t$ . For example, if distinct spheres  $a$  and  $b$  exist at  $t$ , the sphericity of  $a$  and the sphericity of  $b$  are numerically distinct even if they are qualitatively exactly similar. (In contrast, on a theory of universals, properties are shareable and the sphericity of  $a$  and the sphericity of  $b$  are numerically identical.) The basic difference between tropes and troper can be put as follows: If the sphericity of an object is a troper, then the sphericity is itself spherical; if the sphericity of an object is a trope, then the sphericity *is not* itself spherical. In effect, a troper is a singly-charactered object, whereas a trope is a singly-characterizing property.

According to Loux, the concept of a troper is relatively novel, whereas the concept of a trope corresponds to what most contemporary philosophers have in mind when they use the term ‘trope.’ I agree that there are two distinct concepts mapped by this distinction. However, although I previously held that the concept of a troper is novel, I now think otherwise.<sup>1</sup>

<sup>1</sup> In Garcia (2009) I explore the relative merits of tropes and troper. Ultimately, I argue that troper theory is superior to trope theory. Although my working assumption there is that the concept of a troper is novel, my main arguments do not turn on this assumption.

As I show below, the notion of a troper is already at play in the literature. Arguably, in fact, it is the dominant concept of a ‘trope.’ Thus, Loux’s distinction between ‘trope’ and ‘troper’ is best described as a distinction between two different concepts of a *trope*. Regrettably, then, using ‘trope’ and ‘troper’ to label the distinction is potentially misleading. Accordingly, below I introduce the terms *modifier trope* (for Loux’s ‘trope’) and *module trope* (for Loux’s ‘troper’), and unless further qualified, ‘trope’ and ‘trope theory’ should be read as neutral between the two trope concepts.

In what follows, I argue that Loux’s distinction has far-reaching significance. First, the distinction throws into relief an ambiguity and discrepancy in the literature, revealing two fundamentally different versions of trope theory. Second, the distinction brings into focus unique challenges facing each of the resulting trope theories, thus calling into question an alleged advantage of trope theory – that by uniquely occupying the middle ground between its rivals, trope theory is able to ‘recover and preserve the insights of’ these views.<sup>2</sup> Ultimately, the distinction suggests that trope theory is a divided house.

In section 1, my aims are to clarify the distinction between two concepts of a trope and to note the more fundamental distinctions that underwrite it. I do so by considering the interrelationships between trope bundle theory and two of its rival mono-category non-relational ontologies: austere nominalism and realist bundle theory. Here I consider the suggestion that trope bundle theory monopolizes a sweet spot, so to speak, between austere nominalism and a realist bundle theory, uniquely incorporating the strengths and avoiding the weaknesses of these rival views. Ultimately, I argue that there are two fundamentally different trope theories that occupy that spot. In section 2 I show how distinguishing these theories sours the sweetness of the spot.

### **1. Splitting the sweet spot**

I will begin this section by detailing the interrelationships between realist bundle theory, austere nominalism and trope bundle theory. To set the stage, I start with a preliminary sketch of each of these views. Since it will be useful to contrast trope bundle theory with these other two traditional views, I will sketch them first. I will then go on to draw two key distinctions. These distinctions box a logical compass that will serve to introduce the distinction between module tropes and modifier tropes.

<sup>2</sup> This quote is from molnar (2003: 23), who will be discussed below.

*1.1 Interrelationships among mono-category constituent ontologies*

Like other so-called constituent ontologies, a realist bundle theory accounts for the character of concrete objects by taking them to have metaphysical structure.<sup>3</sup> A concrete object is structured in that it is identical with a bundle of properties, where these properties are construed as universals. There have been recent defenders (e.g. O’Leary-Hawthorne and Cover 1998) of this view, but the Bertrand Russell of *An Inquiry Into Meaning and Truth* (1940) is perhaps its most well-known exponent. Note that according to this view, concrete objects have metaphysical constituents, and all of these constituents are universals.

In contrast, the austere nominalist denies that properties exist. On her view, there exist only concrete objects like persons, potatoes, or electrons. In addition, she insists that an adequate account of the character of these objects can be had within this limited explanatory framework. Indeed, she limits herself to only one explanatory resource: the concrete object itself, taken as a whole – that is, taken as a metaphysically unstructured, simple, entity. She holds that we can account for the character of a concrete object *without* postulating properties of any sort – whether particularized properties (tropes), immanent (Aristotelian) universals, or transcendent (Platonic) universals. This sort of view has been attributed to W. V. O. Quine (1954) and has recent defenders (e.g. Devitt 1980; Parsons 1999). According to the austere nominalist, if we want a truthmaker for the sentence ‘This apple is red,’ we need only point to the apple itself, qua metaphysical simple.

Trope bundle theory is said to strike an advantageous compromise between the above rival ontologies. Philosophers typically said to defend this view include D. C. Williams (1953), Keith Campbell (1990), Peter Simons (1994), Douglas Ehring (1997, 2011), and Anna-Sofia Maurin (2002). Some of its usual doctrines are as follows: There are properties. Properties are tropes – they are particulars (where ‘being a particular’ is subject to some ambiguity, but usually means something like ‘not multiply-instantiable’ or ‘not possibly wholly located in more than one non-overlapping place at the same time’). Properties are fundamental metaphysical constituents of concrete objects. Every metaphysical constituent is a property. And, a concrete object is characterized as it is in virtue of having properties as metaphysical parts.<sup>4</sup>

<sup>3</sup> See Garcia (2014b) for a recent discussion of bundle theory and Loux (2006a) for a discussion of the distinction between a constituent ontology and relational ontology.

<sup>4</sup> One of the most promising versions of trope bundle theory is the so-called Nuclear Theory developed by Simons (1994) and Keinänen (2011). See Garcia (2014c) for discussion.

Both realist bundle theory and trope bundle theory affirm the existence of properties. On trope bundle theory, however, a property is not possibly multiply-instantiated. If there are two distinct round balls, the trope theorist insists that there are two numerically-distinct roundness tropes, one in (or for) each ball. Indeed, on her view, tropes are the only kind of constituents that go together (via ‘compresence’) to make up a concrete object. But tropes *also* go together (via similarity) to make up *ersatz universals*, or property-classes – sets of resembling tropes. These sets serve to provide semantic values for abstract singular terms, such as ‘redness’ and ‘triangularity.’ The latter, for example, would name the set of tropes that resemble in being triangularities. More on this below.

Having noted the interrelationships between the above views, we can now consider an alleged virtue of trope bundle theory. According to some prominent trope theorists, one advantage of trope theory derives from that fact that it uniquely holds the middle ground between rival mono-category ontologies. Maurin’s comments are representative:

To put it simply, when one considers the problems that have faced attempts to develop one-category ontologies without tropes one finds that, at least *prima facie*, these do not seem to be problems that a theory incorporating only tropes would ever have to face. Classical one-category nominalists – nominalists, that is, who postulate only the existence of particular concrete objects [i.e. austere nominalists] – run into trouble when trying to account for what we refer to as the ‘properties’ of these objects. It is as if concrete objects are simply too unstructured and too concrete to be the ultimate constituents of the world. One category universal-realists [realist bundle theorists] on the other hand, who postulate only the existence of universals, seem to run into trouble when trying to handle the world’s concrete ingredients. The fundamental entities postulated by the universal-realist simply turn out to be too universal to allow us to deal with the apparent existence of concrete objects. Trope theory seems to fill the gap between these two positions. The trope is particular and thus suitable for dealing with concrete objects, but it is also qualitative and thus suitable for dealing with properties. All of this indicates that the prospects of a one-category trope theory are unusually good. (2002: 6)

Others have expressed similar thoughts about the virtues of trope theory.<sup>5</sup> The general claim here seems to be this: Trope theory is superior to both austere nominalism and realist bundle theory because its account of concrete objects incorporates the strengths while avoiding the weaknesses of these views.

<sup>5</sup> E.g. molnar (2003: 23) and Beebe et al. (2011: 256).

Maurin's argument merits closer scrutiny. On her view, the problem with realist bundle theory is that its 'fundamental entities . . . simply turn out to be too universal to allow us to deal with the apparent existence of concrete objects.' The merits of this claim depend on what Maurin means by 'concrete' object. Although it is not entirely clear, presumably her thought is that objects are 'concrete' in that they are *particulars*, that is, not the sort of thing that can be wholly multiply-located. For example, at this moment this sheet of paper is wholly here and nowhere else. Yet, the realist bundle theorist tells us that a concrete object is nothing but a bundle of universals – each of which *can* be wholly multiply-located. Thus, on this reading, the problem with realist bundle theory is the difficulty of seeing why a bundle entirely comprised of wholly-multiply-locatable entities would not itself be wholly-multiply-locatable. The problem would be that universals do not provide a realist bundle theory with adequate resources to ground the particularity of concrete objects. Thus, the trouble with realist bundle theory is that it takes all of the constituents in a bundle to be universals, even though the bundle itself is supposed to be a particular. In contrast, trope bundle theory takes all of the constituents in a bundle to be particulars; so it is no surprise that the bundle itself is a particular.

So trope bundle theory fares better than realist bundle theory when it comes to grounding the particularity of concrete objects. Like trope theory, however, austere nominalism does not founder on particularity. It takes particularity to be a primitive fact about concrete objects and denies that those objects have any metaphysical parts – much less any *universal* parts which might threaten the particularity of the object. The trouble with austere nominalism concerns whether it can adequately account for phenomena attending the *character* of concrete objects. Indeed, there are reasons to think that austere nominalism is weak on this score. In large part, the trouble for the austere nominalist stems from her refusal to posit anything besides concrete objects, qua metaphysical simples. On the one hand, she refuses to postulate any immanent metaphysical structure – thereby rejecting a so-called constituent ontology. And on the other hand, she refuses to postulate any non-immanent, namely transcendent, sources of character – thereby rejecting a so-called relational ontology. The trope bundle theorist, in contrast, accounts for character by adopting a constituent ontology on which the concrete object has particular characteristics – tropes – as metaphysical parts.

Nevertheless, both austere nominalism and realist bundle theory have strengths, and it is said that these strengths are incorporated by trope bundle theory. According to George Molnar, what is right about austere

nominalism is that it abstains from the ‘needlessly reificatory move [of postulating] non-particulars over and above the particulars’ (2003: 24). And, what is right about realism is that ‘[b]y including properties among the irreducible contents of this world, realism allows us to construct the robust explanations, of the facts of predication, of causation, or nomological connection, etc., that are blocked by [austere] nominalism’ (2003: 24). The trope bundle theorist is supposed to uniquely preserve what is right about these views. First, she takes the basic entities to be properties (like universals) but particular (unlike universals but like the concrete objects of the austere nominalist). And second, she takes concrete objects to be structured (unlike those of the austere nominalist) out of more basic entities (like the objects on a realist bundle theory).

### 1.2 *Two kinds of trope theory*

So trope theory is said to be unique in its ability to salvage the insights of both realist bundle theory and austere nominalism (Molnar 2003: 23). However, the idea that trope bundle theory monopolizes a sweet spot between its rival mono-category ontologies is called into question by Loux’s distinction between tropes and troopers, or what I will call modifier tropes and module tropes, respectively. The distinction shows that between realist bundle theory and austere nominalism there are two fundamentally different trope theories. This, I will argue, shows that the alleged sweetness of the spot occupied by trope theory is illusory, the result of conflating module tropes and modifier tropes.

We can see that there is room for two concepts of a trope by drawing two traditional and fundamental distinctions: the particular/universal distinction and the object/property distinction. Unfortunately, conflicting terms have often been used to label these distinctions and sometimes a single term has been used to range over more than one relevant concept. In what follows, I have chosen what I take to be appropriate labels, but I am not so much concerned to defend their aptness as the genuineness of the distinctions they label. As we will see, both kinds of tropes are supposed to be particular. Thus, for the sake of getting clear on the distinction between them, it is less important to get clear on the particular/universal distinction than it is to get clear on the object/property distinction.

In the literature, the *particular/universal distinction* is usually drawn in terms of whether something can be multiply-located. On this view, universals are possibly wholly multiply-located at non-overlapping places at the same time, whereas particulars are not (cf. Campbell 1990: 12 and



O’Leary-Hawthorne and Cover 1998: 211–12). I will continue to use the distinction in this way.

The *object/property distinction* concerns what J. A. Cover and John O’Leary-Hawthorne call ‘*impredicability* – on which condition an individual substance is not said of (does not inhere in) anything in the way that properties are said of (inhere in) substances’ (1999: 11). One might say that this distinction marks the difference between the subjects of our discourse and what we say about them. However, putting the distinction this way can mislead one into thinking that the distinction is a linguistic one, or is at least justified only by an appeal to the structure or use of language. Loux’s gloss on the distinction is not misleading in this way; according to Loux, the object/property distinction maps the categorial gap between a *property* and a *property-possessor* (Chapter 1, this volume). Unfortunately, this construal also needs some refinement.

First, it won’t do to say that an object is simply a property-possessor. Arguably, if there are properties, some properties are themselves property-possessors. For example, it is reasonable to think that if there is such a thing as redness, then redness has the property of being a color. At the very least, the object/property distinction should accommodate those ontologies on which there are such higher-order properties. (Thus, first-order properties which have higher-order properties are not genuine objects, though they *function like* objects with respect to those higher-order properties.)

There is a second, more important worry about Loux’s gloss on the distinction. His notion of a ‘property-possessor’ might suggest that it is impossible that there be objects but no properties. But, at least for our purposes, the distinction should not have this implication, since it would thereby beg the question against the austere nominalist. The latter will insist that her ontology is entirely populated by objects, where those objects are truly *charactered* even though there are no properties, or characteristics, per se. In other words, the austere nominalist claims that there are objects but no properties. This point is especially crucial for understanding the concept of a module trope. As we will see, in an important sense both the austere nominalist and the module trope theorist deny that there are properties while affirming that there are charactered objects.

Fortunately, there is a way to draw the distinction that should suit our purposes. Traditionally, some metaphysicians have taken the concept of a property to be a basic one, typically introduced via ostension. We are invited to consider, say, the hard and smooth apple on the table. We notice its hardness and smoothness as distinct from that which is itself hard and smooth. That is, we notice the properties, or characteristics, of

the apple and we notice the thickly characterized apple. The latter is not a characteristic, or property, but a characterized, or propertied, thing – an object. And so we arrive at the relevant conceptual distinction. On the one hand, there is the concept of a *property* (characteristic, quality, etc.). And, on the other hand, there is the concept of something which is *characterized but not itself a property* or *characteristic*. I will call the latter the concept of an *object*.

This way of drawing the distinction allows the austere nominalist to affirm that only objects exist. In addition, this gloss on the distinction does not entail that a property cannot itself be characterized. It is consistent with there being some sense in which *sphericity is a shape*, *courage is a virtue*, etc.

The goal so far has been to draw attention to two important distinctions – the universal/particular distinction and the object/property distinction. These distinctions generate the following four complex notions: *universal-property*, *particular-property*, *particular-object*, and *universal-object*. Thus, the object/property and universal/particular distinctions box the following logical compass:

	Particular	Universal
Object	Box 1 <i>Particular-objects</i>	Box 3 <i>Universal-objects</i>
Property	Box 2 <i>Particular-property</i>	Box 4 <i>Universal-property</i>

I will refer to this compass to note the basic differences between austere nominalism, realist bundle theory, modifier trope theory, and module trope theory. I will first note the agreements and disagreements between austere nominalism and modifier trope theory. I will then discuss module trope theory and show how it falls in the theoretical space between the latter two views.

The basic agreement between austere nominalism and modifier trope theory can be put in terms of the universal/particular distinction. Both views agree that the universal side of this distinction necessarily has an empty extension. They thereby endorse *strict particularism*, the doctrine that, necessarily, there are only particulars. So they agree that Boxes 3 and 4 are empty. However, while the austere nominalist and the modifier trope theorist agree that there are only particulars, they disagree on what *kinds* of particulars there are. The austere nominalist insists that among

the particulars there are only objects, whereas the modifier trope theorist thinks that among the particulars there are both objects and properties. In other words, the austere nominalist thinks that Boxes 2, 3, and 4 are empty, whereas the modifier trope theorist thinks that only Boxes 3 and 4 are empty.

For the austere nominalist, all entities fall into Box 1 and are primitively thickly intrinsically characterized, in that each can be described in a multitude of ways. Supposing that a given ball is a particular, the ball will be said to be of a certain color, size, and shape – it is thus a thickly intrinsically characterized object. (Of course, the austere nominalist will, ex hypothesi, deny that she is thereby committed to there being either properties expressed by those predicates or some sort of metaphysical structure in the ball.)

For the modifier trope bundle theorist, the entities in Box 1 are somehow constructed out of the metaphysically more basic entities in Box 2. That is, the particular-objects are entirely constituted by particular-properties, or, more specifically, by particular fully-determinate characteristics. With respect to the ball, a modifier trope theorist might say that the ball has numerous constituent properties, such as scarlet-redness and sphericalness – which, along with the ball's other tropes, together thickly characterize the object.

We can now see that there are two primary differences between austere nominalism and modifier trope theory, and that these differences turn on the object/property distinction. First, whereas the austere nominalist denies that there are properties, the modifier trope theorist claims that there are properties and that properties constitute the metaphysical ground floor of being. Second, while both views affirm that there are objects, objects are metaphysically basic on austere nominalism, whereas objects are metaphysically constructed (out of tropes) and hence derivative on modifier trope theory. The basic entities of the austere nominalist are particulars, but they are also objects – they are characterized things but not characteristics. The basic entities of the modifier trope theorist are particulars but *not* objects – they are characteristics. For the modifier trope theorist, every object is 'constructed' entirely out of basic particulars, namely out of particular properties. Specifically, an object is a bundle of compresent tropes. It is thus apt to describe a modifier trope as a 'maximally-thinly characterizing particular,' since each modifier trope endows the object (of which it is a constituent) with a single specific fully-determinate characteristic. Or, put differently, each modifier trope characterizes an object in a single fully-determinate way. For example, on the modifier view

of tropes, if an object is spherical it is so in virtue of having a sphericity trope as a constituent – where that sphericity is not itself spherical.

So much for contrasting austere nominalism and modifier trope theory. We are now in a position to consider module trope theory, which occupies the theoretical turf between the latter two views. In fact, as we will see, module trope theory is closer in spirit to austere nominalism than is modifier trope theory. What I am here calling a module trope Loux introduces under the term ‘troper’:

one might propose a nominalistic ontology that has as its metaphysical atoms what we might call ‘tropers.’ Whereas tropes are particular properties – things like this redness, this triangularity, this pallor, tropers are thin individuals – things like *this individual red thing*, *this individual triangular thing*, and *this individual pale thing*. The claim would be that familiar objects are bundles of compresent tropers. (Chapter 1, this volume)

To fix on the concept of a module trope (troper), recall Box 1, which represents the concept of a particular-object. A module trope is a basic entity that would fall into Box 1. However, a module trope is not the *thickly*-charactered object of the austere nominalist. Rather, a module trope is a *singly*- or *maximally-thinly* charactered object.

We can get a better handle on the notion of a module trope by considering the upshot of austere nominalism’s failure. For a philosopher who concedes this failure but wants to provide an adequate account of the character of concrete objects, the natural move is to expand one’s explanatory resources by appealing to something besides the concrete object itself, taken as a metaphysically unstructured whole. Thus, one way to characterize the difference between the two versions of trope theory is in terms of the *extent* of their response to austere nominalism’s failure. In short, a module trope theorist responds by taking one step away from austere nominalism, whereas a modifier trope theorist takes an additional, second step.

The first step the modifier trope theorist takes is to adopt a constituent ontology: she posits metaphysical constituents within the concrete object. The second step she takes is to construe these constituents as belonging to a different category than that of the whole, or concrete object. She takes the constituents to belong to the category of *property*. In effect, this is a significantly bigger step away from austere nominalism than the first, since it concedes something to the traditional realist: that the category of property needs to be populated after all. Indeed, this second step opens a categorial gap between the concrete individual qua *object* and its constituents qua *properties*. Although this is not the place to discuss them, arguably this sort of gap raises challenges for a modifier trope theory (for discussion see

Garcia 2009 and MS a), and it is precisely this sort of gap that worries Loux in the above citation.

In contrast, the module trope theorist takes only *one* step away from austere nominalism. She, like the modifier trope theorist, adopts a constituent ontology and thus posits metaphysically more basic constituents out of which concrete objects are constructed. But unlike the modifier trope theorist, she does this without the concession to the realist – *without taking the further step of construing those constituents as properties*. Instead, the basic constituents are *objects*. To be sure, these are not the thickly characterized objects of commonsense – rather, we might describe them as one-dimensionally-charactered objects or maximally-thinly-charactered objects. But module tropes are objects nonetheless. And, in an important respect, a module trope is like the objects of the austere nominalist – each is a characterized object and not a characteristic. In other words, the austere nominalist and the module trope theorist both refuse to populate any box other than Box 1. Note that the single step taken by the module trope theorist does *not* seem to open a categorial gap between a concrete object and its constituents – both are objects, both are from Box 1. Rather, their difference is one of degree, in terms of the thickness of their character. By way of comparison, note that the basic particulars of the austere nominalist are also objects – they are characterized things which are not themselves characteristics. But the basic particulars of the *modifier* trope theorist are *not* objects – they are properties or characteristics (this is consistent with properties ‘having’ formal character such as being particular or being a property). Thus, while austere nominalism and module trope theory agree that all entities fall into Box 1, the latter theorist would say that some members of Box 1 are constituted by other members of Box 1. On module trope theory, while everything is a particular-object, concrete objects (*thickly*-charactered particular-objects) are constituted by module tropes (*thinly*-charactered particular-objects). It is in this sense that module trope theory has the virtue of being closer in spirit to austere nominalism than modifier trope theory. In virtue of eschewing properties altogether, module trope theory is a more thoroughgoing form of nominalism than modifier trope theory. (Indeed, elsewhere I argue that module trope theory threatens to collapse into austere nominalism.<sup>6</sup>)

To flesh out these differences, consider how a trope bundle theory looks on each way of thinking about tropes. Consider what we would ordinarily describe as two hard spheres. Call them Orbo and Orba. On both theories, each of these objects is entirely composed of tropes. For example, Orbo

<sup>6</sup> See Garcia (MS b).

has hardness<sub>1</sub> and sphericity<sub>1</sub>, whereas Orba has hardness<sub>2</sub> and sphericity<sub>2</sub> (the subscripts serve as a reminder that these are *non-shareable* character-grounders). And, on both theories, Orbo and Orba are similarly shaped in virtue of sphericity<sub>1</sub> and sphericity<sub>2</sub> being exactly similar. The theories differ as follows. On the one hand, modifier trope theory has it that sphericity<sub>1</sub> is not itself spherical and hardness<sub>1</sub> is not itself hard. More generally, none of the character-grounding constituents in Orbo is itself an object. Instead, these constituents somehow go together (via ‘compresence’) to *form* an object. Thus, on modifier trope theory, objects do not exist at the ground floor of being. On the other hand, module trope theory has it that sphericity<sub>1</sub> *is* spherical and hardness<sub>1</sub> *is* hard. Thus, Orbo is composed entirely of basic thinly-charactered objects including what might be more accurately described, following Loux, as spherical-thing<sub>1</sub> and hard-thing<sub>1</sub>. In addition, Orbo is a non-basic object: It is an object because its parts are objects, but it is a non-basic object because it is characterized derivatively, in virtue of its constituents being (primitively) characterized. Thus, on module trope theory, ordinary, thickly-charactered objects have their character derivatively, in virtue of the primitively thinly-charactered objects that occupy the ground floor of being.<sup>7</sup>

## 2. Souring the sweet spot

So far I have argued that there are two fundamentally different trope theories occupying the theoretical space between austere nominalism and realist bundle theory. The distinction between module tropes and modifier tropes calls into question the claim sometimes made on behalf of trope theory – namely, that by uniquely occupying the sweet spot between its rivals, trope theory is able to ‘recover and preserve the insights of’ these views. In the first two sections of section 2 I will argue that the sweetness of this spot is soured by being split between module trope theory

<sup>7</sup> An insightful referee asked whether spherical-thing<sub>1</sub> is aptly characterized as non-hard, and if so, whether it would follow that Orbo is derivatively non-hard, as well. This is an important and probing question. Arguably, a module trope theorist will want to affirm that spherical-thing<sub>1</sub> is non-hard on pain of thickening up the module trope’s primitive character to the point of collapsing module trope theory into austere nominalism (more on this below). But presumably, she needs to deny that spherical-thing<sub>1</sub>’s being non-hard entails that Orbo is non-hard. The difficulty here stems from the fact that such a module trope theorist needs to affirm both of the following general claims, where *t* is a module trope had by object *O*: (i) *O* is derivatively characterized in virtue of *t*’s being primitively characterized; and (ii) It is *not* the case that every true description of *t*’s primitive character also truly describes *O*. However, affirming both (i) and (ii) seems to require that there is a principled way to distinguish between the trope level character that is conferred to the object (e.g. being spherical) and the trope level character that is *not* conferred to the object (e.g. being non-hard, being metaphysically simple, etc.). Whether such a distinction can be drawn in a principled way is beyond the scope of this chapter. Nevertheless, the difficulty here seems significant.

and modifier trope theory. To do so I will discuss two projects that have been central to the development of trope theory, what Maurin calls *the construction of things* (in section 2.1) and *the construction of property classes* (in section 2.2). With respect to each issue, I aim to show two things. First, the distinction between module tropes and modifier tropes throws into relief a widespread discrepancy and ambiguity within trope theory. And second, disambiguation results in a clearer picture of the unique challenges facing each version of trope theory.

### 2.1 *Challenges concerning the construction of things*

I now turn to issues concerning a trope-theoretic account of concrete objects, or ‘things.’ My aim here is twofold. First, I aim to show that because trope theorists have been less than clear about the role(s) that substrata are supposed to play on rival ontologies, there is a resulting ambiguity concerning the concept of a trope – an ambiguity that maps onto the modifier/module distinction. Second, drawing this distinction shows that the resulting trope theories have different strengths and weaknesses when it comes to the task of ‘thing-construction.’ Indeed, each view seems to face significant challenges and that these challenges have been obscured by conflating the two kinds of tropes.

Keith Campbell has argued that an ontology of tropes can do without bare particulars. The argument is that bare particulars are both undesirable and unnecessary. They are undesirable because they are thought to be mysterious and/or paradoxical. They are thought to be unnecessary on the grounds that whatever role they are supposed to play can be played by tropes. Call the latter claim the *Parity Thesis*. Arguably, the Parity Thesis is interesting only if accompanied by the thesis that tropes are metaphysically simple. Maurin (2002: 101–15), at any rate, appears to concede this point (though see John Bacon (1995: 2), who seems to want to remain neutral on it). Call the thesis that tropes are simple the *Simplicity Thesis*. As Chris Daly (1997) has argued, unless a trope is simple, a bare particular-cum-universal *complex* would count as a trope, in which case trope theory fails to represent a genuine alternative to rival views. Indeed, the theoretical advantage of trope theory is said to consist in the fact that what the realist takes to be a complex consisting of a bare particular tied to a universal (categorially different entities playing distinct roles), the trope theorist takes to be a *simple* trope (a single entity playing multiple roles). This prima facie advantage is enjoyed by trope theory only if tropes are simple. At any rate, I will assume the Simplicity Thesis in what follows.



By way of the Parity Thesis, the trope theorist assigns to the simple trope various roles played by the items in the realist's bare particular-cum-universal complex. In this way, the concept of a trope has been introduced and partly defined in terms of the roles that bare particulars are supposed to play. Unfortunately, however, there are discrepancies concerning what these roles are supposed to be. This results in an ambiguity concerning the nature of a trope. Resolving the ambiguity yields the distinction between modifier tropes and module tropes.

Campbell's writing is not always sensitive to the distinction between the two kinds of tropes. His language sometimes suggests that he had modifier tropes in mind. For example, Campbell is comfortable illustrating his theory by talking about a *courageousness* trope and a *being a bamboo eater* trope. But it is hard to see how these even *could* be module tropes. If they were, the courageousness trope would itself be disposed to perform heroic deeds in certain circumstances, and the being a bamboo eater trope would itself be able to savor and munch plants. Nevertheless, on the whole, the thematic concept in Campbell's writings is that of a module trope. And Campbell has confirmed this interpretation in conversation.<sup>8</sup> One interesting place where Campbell can be (mis)read as positing modifier tropes is his defense of the Parity Thesis. He says that substrata are supposed to play only one role, that of *particularizing*. As we will see, this leads naturally to thinking of tropes as modifier tropes. In the context of the following passage, Campbell is comparing trope bundle theory to a rival two-category constituent ontology that takes an object to be constituted by a bare particular and universals. On such a view, the bare particular plays a crucial role of grounding the particularity of the object, a role that cannot be played by its universals. Campbell argues that trope theory improves on such a view because the particularizing role can be played by the constituent properties (because they are particulars), thus making bare particulars unnecessary:

A [bare particular] is a specialist at particularity: it is introduced into theory as that which performs the particularizing role and no other... Tropes are particular, but not bare particulars. Their role is dual: to be particular natures. (1990: 58)

As is made clear by the rest of this passage, Campbell is thinking of *particularity* in the sense of being non-repeatable (i.e. non-multiply-instantiable, or non-shareable), or having a unique dimensional location (here understood broadly, so as to include location either in time and space or in some

<sup>8</sup> I thank John Heil for discussing this issue with Campbell for me.



analogue to time and space). Thus, Campbell is arguing that if constituent properties are particular, then they can ground *both* the character and the particularity of the ordinary object – and so the uneconomical and embarrassing bare particular is unnecessary. On this understanding of substrata, they are only supposed to play one role – that of *particularizing*. The Parity Thesis, then, amounts to the claim that because tropes are *particular* properties, they ground the fact that a bundle of tropes is non-repeatable. Thus, on this understanding of substrata, if a trope is to be thought of as a simplified substrata-cum-universal complex, then tropes are simple non-repeatable properties, or *modifier tropes*.

It is true that some philosophers who have taken an ordinary object to be constituted by universals and a substratum have posited the latter in order to ground the particularity of the object. However, there is another reason philosophers have postulated substrata: *in order to provide an ultimate subject for properties, an entity that is characterized by properties*. The idea here is that unless there is, in a complex, a non-property constituent that is non-derivatively or fundamentally characterized by the constituent properties in that complex, the complex itself cannot be even derivatively characterized in the ways specified by those constituent properties. A bare particular is supposed to play this role; in terms of the above property/object distinction, a bare particular is an object – it is a characterized non-property. The claim that a *bare* particular is *charactered* might sound surprising, if not contradictory, since it is widely assumed that a bare particular is supposed to be something that essentially has no properties. But this assumption is mistaken, and arguably traces back to a footnote (!) by Wilfred Sellars (1963a: 282, fn. 1) in which bare particulars are caricatured in this way.<sup>9</sup> However, the bareness of a bare particular is supposed to lie in the fact that there is no property that it has essentially, not that it essentially has no property whatsoever. In addition, the bareness of a bare particular does not entail that a bare particular fails to satisfy any description. Rather, the predicates necessarily satisfied by a bare particular hold primitively, in that they do not name reified properties. Thus, the predicates ‘being a bare particular,’ ‘being such as to have no property essentially’ (etc.) do not name properties. J. P. Moreland and Timothy Pickavance (2003) have developed a theory of bare particulars along these lines. But the point here is not to defend the coherence of bare particulars.<sup>10</sup> Rather, the point is

<sup>9</sup> For a defense, see Garcia (2014a) and Pickavance (2014).

<sup>10</sup> Sellars argues that the sentence ‘Universals are exemplified by bare particulars’ is self-contradictory, and that this becomes evident as soon as we translate it into logical notation. The sentence then

that Campbell is mistaken in thinking that bare particulars are supposed to perform ‘the particularizing role and no other.’ There is another role that bare particulars are supposed to play – namely, that of the non-property haver of properties, which *has* properties in the sense of *being characterized by* them. The thought being that, for example, where the sphere is there is more than just *sphericalness*, there is also something that is *spherical, something charactered in a spherical way*.

In sum, there are at least two roles which bare particulars have been employed to play: First, a bare particular in a bare particular-cum-universal complex is supposed to *render the complex non-repeatable* (i.e. non-shareable or non-multiply-instantiable). Second, a bare particular in a bare particular-cum-universal complex is supposed to be *characterized by the universal* in that complex. The upshot is this. According to the Parity Thesis, tropes can play whatever roles bare particulars can play. Thus, if we think bare particulars play only the *first* role, then, via the Parity Thesis, we are led to think of tropes as modifier tropes. On this line of thought, for example, a sphericity trope is particular only in the sense that it is *non-shareable property*. However, if we think bare particulars play *both* roles, then, via the Parity Thesis, we are led to think of a trope as both a non-shareable entity and (via the Simplicity Thesis) a primitively charactered entity – a module trope. On this line of thought, a sphericity trope is particular in that it is itself a (merely-) *spherical-object*.

To sum up, Campbell assigns to the simple trope various roles played by the bare particular in a bare particular-cum-universals complex. In this way, the concept of a trope has been introduced and/or partly defined in terms of the roles that bare particulars are supposed to play. However, there are discrepancies concerning what these roles are supposed to be. The result is an ambiguity that resolves into the distinction between module tropes and modifier tropes and which represents two versions of trope theory. We are now in a better position to get a sense for how these versions have different strengths and weaknesses when it comes to the task of ‘thing-construction.’

As noted, an important role that bare particulars have been assigned is that of being that which is *characterized* or *propertied*. And it seems clear that *something* must play this role, otherwise, nothing would be (say) spherical. On pain of failing to account for the seemingly Moorean fact that there are

becomes  $(x)[(\exists\phi)(\phi x) \supset \neg(\exists\phi)(\phi x)]$ , which means ‘If a particular exemplifies a universal, then there is no universal which it exemplifies’ – a self-contradictory statement. This quotation is from Sellars (1963a). The logical notation is from Robert Baker (1967: 211–12) and is different from Sellars’ only in style.

charactered entities, a trope theorist who rejects bare particulars is under significant pressure to take tropes to play this role. That is, she is under pressure to take a trope to be a *simple* which plays the role of *that which is characterized by a property*, thereby construing a trope as a metaphysically simple, singly-propriety-object, or module trope. This theoretical pressure seems to be noticed by David Armstrong:

An important advantage that [a modifier tropes plus substrata] position has over a bundle of tropes account is that it gets us away from the idea that properties [tropes, in this case] are like things. Properties exist, they are entities, but they are not things. Rather they are *ways* that things are. (1997b: 25)

As my bracketed insertions suggest, in this passage I take Armstrong to have in mind a theory on which *modifier* tropes are accompanied by substrata, a view he takes to have the advantage of not construing tropes as objects (i.e. taking tropes to be module tropes). Accordingly, for a trope theorist who takes tropes to be modifier tropes, tropes do not play the second role noted above for bare particulars. Tropes are the characteristics, or properties, rather than the entities that *are* characterized, or proprietyed. But if tropes do not play the second role, then presumably some other kind of entity does. Thus, a modifier trope theorist faces significant pressure to accept something like bare particulars or substrata.

The upshot is that the trope theorist seems to face a choice between two views:

- (TT1) Taking tropes to be module tropes unaccompanied by bare particulars.
- (TT2) Taking tropes to be modifier tropes accompanied by bare particulars.

The numbers in the acronyms represent the fact that TT1 is a 1-category ontology, whereas TT2 is a 2-category ontology.

With respect to TT1, opting for module tropes has the advantages of making bare particulars unnecessary and avoiding a poly-category ontology. However, as I will discuss below, this view is not without costs. We will see that it is precisely the assumption that tropes are module tropes that makes them vulnerable to Goodman-style objections. Now consider TT2. Many trope theorists seem to find bare particulars either unacceptably mysterious or plainly incoherent. Nevertheless, accepting substrata along with tropes is precisely what Michael LaBossiere (1994) and C. B. Martin (1980) seem to recommend, arguably for reasons similar to the ones considered here.

Of course, to do so is to give up on the dream of a mono-category ontology. In sum, with respect to the task of ‘thing construction,’ module tropes and modifier tropes have different strengths and weaknesses. Conflating the two types of tropes has obscured the challenges facing each.

### 2.2 *Challenges concerning the construction of property classes*

In this section, I will consider how the distinction between module tropes and modifier tropes bears on a second issue that has been central to the development of trope theory: the construction of *property classes*. On trope theory, a property class is a resemblance class of tropes, where membership in the class is defined in terms of degrees of resemblance. More specifically, a class  $\Sigma$  of tropes is a property class iff (1) each member of  $\Sigma$  resembles every other member of  $\Sigma$  to some specific degree, and (2) no trope that is not a member of  $\Sigma$  resembles every member of  $\Sigma$  to that degree (Manley 2002: 77). According to Williams and Campbell, property classes of tropes can provide the semantic values for abstract terms while avoiding both the occult universals of the realist and the powerful objections raised by Nelson Goodman against object-class resemblance nominalism. Thus, property classes play an important role in trope theory, a role described by David Manley as follows: ‘In general, whenever we have irreducible need for reference to (or quantification over) a property, there is a class of objects called a “property class” suited to be the subject of our discourse’ (2002: 75). As we will see, however, the choice between module tropes and modifier tropes bears significantly on whether and how trope theory might be immune to Goodman’s objections. Indeed, we will see that a module trope theory is more vulnerable to these objections than a modifier trope theory – but opting for modifier tropes comes with significant costs.

To show this, I will consider David Manley’s challenge to the claim that the property classes of the trope theorist are immune to Goodman’s objections. Because space is limited, my aims are as well. My intention is neither to present all of Manley’s arguments nor to assess any of them in a comprehensive way. Instead, I will discuss the arguments for which the distinction between module tropes and modifier tropes is most relevant. We will see that Manley seems unaware of this distinction. He takes the tropes of Stout, Williams, and Campbell to be thinly-charactered objects, or module tropes. However, the tacit assumption that tropes are module tropes is not innocuous – it is a crucial premise in most of his objections to trope theory. Moreover, we will see that there are reasons to doubt that Manley’s objections would be as forceful if retooled to fit modifier tropes.

The primary target of Manley's objections is what he calls the 'standard' version of trope theory, on which both of the following hold:

- (i) Every trope is a determinate trope.
- (ii) Property-classes are resemblance classes of tropes and not all property-classes are constructed out of exactly-resembling tropes; some are formed out of inexact or loose resemblance. (Manley 2002: 82)

In taking the standard view to accept (i), Manley seems to have in mind what Campbell says is a 'well accepted' principle:

*Principle of Absolute Determinateness* (PAD): 'Nothing can have a determinable character without possessing *exactly one* fully determinate feature [under that determinable] . . .' (1990: 83–84)

Campbell does not add the bracketed qualification, but presumably, it was tacit; without it, PAD would preclude *everything* from having more than one fully determinate character. PAD expresses the intuitive idea that nothing has the merely determinable characteristic of, say, *being colored* unless it has some fully determinate shade of color, such as *crimson blue*. This is an extremely plausible principle. What is interesting is that Campbell takes PAD to bear not just on ordinary concrete objects but on *tropes as well*. From PAD he infers that 'there are . . . no free-floating determinables' (1990: 84), clearly meaning to affirm what we might call the

*Absolute Determinateness of Tropes* (ADT): Only fully determinate tropes exist; there are no merely determinable tropes.

The acceptance of ADT is what makes a version of trope theory 'standard,' in Manley's terms.

But notice that PAD entails ADT *only if tropes are construed as module tropes*. PAD bans entities that *have* a merely determinable character. Campbell is clearly thinking that a merely determinable trope, such as 'an instance of color' would itself have to *be colored* but somehow not colored in any specific way. It would be colored, but somehow neither scarlet, nor crimson blue, nor (etc.). Thus, in rejecting merely determinable tropes, Campbell is clearly working with the concept of a module trope.

Manley also thinks of tropes in this way. Throughout his paper, it is obvious that he thinks of tropes as thinly-charactered objects. This is clear in his objections and also from how he describes his examples of tropes (2002: 84–85):

- Some color tropes are reddish, some are bluish, and some are pale.
- Where A is shape trope of an equilateral triangle, A is itself equilateral.

- Where B is the shape trope of a square, B itself has perpendicular sides as well as an interior right angle.

To be sure, Manley is interpreting Campbell and Williams in a reasonable way. As indicated above, the thematic concept for both of these philosophers is that of a module trope. Thus, as they stand, Manley's objections are aimed at the module trope theorist. In what follows, I will consider whether the modifier trope theorist can dodge or at least resist Manley's objections.

Manley's first Goodman-style objection is the *Companionship Problem* (CP):

[T]he essence of CP is that resemblance classes conflate attributes that are intuitively distinct. . . Standard trope theory falls prey to a version of CP that concerns coextension between specific and general attributes. Consider a possible world where all objects are red. Here the class of colored tropes and the class of red tropes coincide exactly. In the actual world, of course, they do not, so the trope theorist seems to have succeeded in distinguishing *redness* from *coloredness*. In a restricted possible world, however, these collapse into the same property. But they are necessarily distinct properties, since things can be colored without being red. (2002: 82–83)

Call this restricted possible world 'Ruby.' Notice that in Ruby, PAD by itself does not entail that there is only one property class and thus a companionship problem. Rather, it is ADT that ensures that there is only one property class. In other words, Ruby presents a companionship problem only if there cannot be determinable tropes.

Notice, however, that a modifier trope theorist who accepts PAD can consistently deny ADT. For example, she could, consistent with PAD, take Ruby to contain both redness tropes and coloredness tropes. The existence of a coloredness modifier trope is consistent with PAD because they are not colored at all; a coloredness trope is not colored, just as a redness trope is not red and a sphericalness trope is not spherical. In this way, the modifier trope theorist can take Ruby to contain both fully-determinate and determinable tropes, in which case there would be the requisite diversity of property classes, and so no companionship problem. Of course, such a trope theorist will be accused of populating her ontology with superfluous items. This accusation may have some merit to it. But, because the introduction of determinables is also a natural response to Manley's next objection (the imperfect community), I will postpone discussion of the superfluity charge. For now it will suffice to note that if determinable module tropes are incoherent, then the module trope theorist does not even have the *option* of being extravagant in this way.

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Manley presents the problem of the *Imperfect Community* (IC) as follows:

[T]he essence of IC is that the criterion for the construction of resemblance classes fails adequately to gather all and only things with a certain property together . . . Consider a world with only three objects: an equilateral triangle, a square, and a right triangle. (For simplicity's sake, they are planar figures.) Let the letters 'A,' 'B,' and 'C' name the shape tropes of these objects, respectively. On standard trope theory, A will stand in various resemblance classes, one for each property that can be applied to the equilateral triangle. So the property *triangularity* should be a class of loosely resembling tropes, one of which is A. (The same should be true of *equilaterality* and *shapedness*.) Now, intuitively each of these shape tropes resembles every other one: A and B are both equilateral; A and C are both triangular; B and C each have perpendicular sides (and an interior angle). None of these tropes, however, shares any of the relevant attributes with *both* of the others. So none of the shared properties can be constructed as a property class out of only two of the shape tropes in this world. (2002: 82, 84–85)

The world Manley describes has three objects in it, so call it 'Trio.' In Trio, because every trope resembles the other two to the same (loose) degree, there is exactly one resemblance class and it has tropes A, B, and C as members. Thus, there is no suitable property class for (to play the role of) *triangularity*, nor for *equilaterality* or *perpendicularness*. Thus, the problem for standard trope theory is that its 'conditions for constructing resemblance classes' are not sufficient to produce the requisite property classes (2002: 85).

Manley considers the following 'tempting reply':

Posit tropes at every level of generality. Accordingly, take A, B, and C to each be a complex construction out of more fundamental tropes. Take A, for example, to be constructed out of 'a triangularity, an equilaterality, and many more such tropes, since we found that A could resemble other shape tropes in many different ways. (2002: 85)<sup>11</sup>

Notice that this view posits determinable tropes, thereby rejecting ADT (and so is not a 'standard' version of trope theory). This reply also would work for the Companionship Problem, since on this view Ruby would contain both determinate and determinable tropes, in which case there would be the requisite diversity of property classes.

Against the above reply, Manley raises the charge of superfluity. '[I]f there is a trope for squareness, it would seem superfluous to have tropes for rectangularity and quadrilaterality as well' (2002: 85). By way of a response, I wish mainly to point to how the superfluity charge presents a different and

<sup>11</sup> Manley calls this 'Abundant TRN' (TRN is for 'trope resemblance nominalism').



arguably greater challenge for a module trope theorist than for a modifier trope theorist.

To begin, it is worth noting that the notion of a merely determinable module trope appears to be incoherent. If so, then the module trope theorist forecloses on exploring the potential importance and use of determinable tropes. Notwithstanding this point, the superfluity charge would seem to have different force on each kind of trope theory. Consider the square (concrete object) that exists in Trio. Call it 'Quad.' Quad is a bundle of tropes. If there are determinable module tropes, then it would seem that there is a multiplication of shaped objects, all falling at different places along the hierarchy under the determinable 'shaped' and all located where Quad is located. Within Quad, for example, there would be a shaped-thing, a rectangular-thing, and a square-thing; these are non-identical objects. Thus, where Quad is, there would be a multitude of shaped objects – not exact duplicates, but, so to speak, duplicates of varying degrees of resolution. That would be superfluity of a rather bizarre stripe. Postulating determinable modifier tropes does not have this result. If there are such tropes, the only shaped object in Quad's region is the fully-determinately shaped Quad. There would be no multiplication of shaped objects.

My aim here is neither to provide a comprehensive response to Manley nor to argue that a trope theorist must posit determinable modifier tropes. Rather, the point is this. With respect to the project of constructing property classes, the Companionship and Imperfect Community Problems pose significantly greater challenges for module trope theory than for modifier trope theory. The choice between module tropes and modifier tropes is a significant one.

### 3. Conclusion

The distinction between modifier tropes and module tropes throws into relief two fundamentally different versions of trope theory and brings into focus unique challenges facing each. With respect to the project of thing-construction, a modifier trope theorist faces significant pressure to abandon the bundle theory of substance and adopt a poly-category ontology that includes both tropes and substrata. Conversely, the aspiration for a mono-category ontology, or bundle theory, is better realized by taking tropes to be primitively characterized, thereby adopting a module trope theory. With respect to the project of constructing property-classes, it is precisely the assumption that tropes are module tropes that gives rise to the imperfect community and companionship problems. A modifier trope theory is better



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equipped to meet these challenges. In this way, the distinction between modifier tropes and module tropes calls into question an alleged advantage of trope theory: that by occupying the middle ground between its rival mono-category constituent ontologies – austere nominalism and realist bundle theory – trope theory uniquely incorporates the strengths and avoids the weaknesses of those views. Upon closer inspection, the trope theory is a divided house.<sup>12</sup>

<sup>12</sup> An ancestor of this chapter was presented as ‘Tropes and Troppers’ at The Problem of Universals in Contemporary Philosophy: An International Conference on Ontology, Scuola Normale Superiore, Pisa, Italy, July 7, 2010. I have numerous friends to thank for their help with this paper. Most especially, I am grateful to Michael Loux – without his support, encouragement, and philosophical guidance, this paper would never have been born. I am also grateful to the other participants in the above conference, including Sophie Gibb, John Heil, E. J. Lowe, Fraser MacBride, Alex Oliver, Gonzalo Rodriguez-Pereyra, Peter van Inwagen, and Dean Zimmerman. For many hours of profitable discussion, I thank José Tomás Alvarado, Robert Koons, Chris Menzel, and Timothy Pickavance. Finally, I thank the two reviewers of the manuscript for their many helpful suggestions. Rodriguez-Pereyra, Peter van Inwagen, and Dean Zimmerman. For many hours of profitable discussion, I thank José Tomás Alvarado, Robert Koons, Chris Menzel, and Timothy Pickavance. Finally, I thank the two reviewers of the manuscript for their many helpful suggestions.

# *The Problem of Universals in Contemporary Philosophy*

## Corrections for Proofs

Robert Garcia

### ***Acknowledgements:***

- On page x, in the first paragraph, “Gonzala” should be “Gonzalo”.
- On page 6, line 14: I think this misrepresents what Heil says. In fact, I spoke on the phone with Heil about this and he confirmed that he takes Williams to have *module* tropes and not modifier tropes. Thus, on line 14, “modifier” should be replaced with “module”. That is, it should say that Heil understands Williams’ tropes as what Garcia calls *module* tropes.

### ***Chapter 6 “Is theory a divided house?”:***

- On page 134, footnote 1: “molnar” needs to be (capitalized as) “Molnar”.
- On page 136, footnote 5: “molnar” needs to be (capitalized as) “Molnar”.
- On page 140, in Box 1 of the figure: “Particular-objects” should be (put in the singular as) “Particular-object”.
- On page 140, in Box 3 of the figure: “Universal-objects” should be (put in the singular as) “Universal-object”.
- On page 142, line 2 (from top): “where that sphericity is not itself spherical.” should be “where that trope is not itself spherical.”
- On page 142, in the indented quotation: should the exact page number (page 31 in proofs) be provided for this quotation? I.e., should the quotation end with “(Chapter 1, page 31, this volume)”?
- On page 143, line 1 (from top): “MS a” should be “2014b”.
- On page 144, second to the last line in the main text: Currently it says “In the first two sections of section 2 I will argue”. But this phrase is erroneous, since there are *only* two sections in section 2. So, please replace the misleading phrase with “In this section my aim is to show”.
- On page 144, footnote 7: In line 5 of the footnote, the parenthetical comment “(more on this below)” is a false promise. Please replace it with “(see Garcia MS b)”.
- On page 144, footnote 7: In line 6 of the footnote, “Orbois” should be “Orbois”.
- On page 145, in the last sentence of the first paragraph under section 2.1: “that” should be deleted. That is, please replace “and that these challenges” with “and these challenges”.
- On page 147, footnotes 9 and 10: Somehow these footnotes got out of order. Thus, the (complete) text in these footnotes should be swapped as follows:

- Footnote 9, which appears in the main text after “in this way.” should say “Sellars argues...”.
- Footnote 10, which appears in the main text after “the coherence of bare particulars.” should say “For a defense, see Garcia...”.
- On page 148, line 17 (from top): the letter “a” should be inserted between “is” and “*non-shareable property*” to yield “is a *non-shareable property*”.
- On page 149, there is a **crucial mistake** in items “(TT1)” and “(TT2)”. There needs to be a comma after the second occurrence of “trope” in each. The corrected versions should read like this:
  - (TT1) Taking tropes to be module tropes, unaccompanied by bare particulars.
  - (TT2) Taking tropes to be modifier tropes, accompanied by bare particulars.
- On page 152, line 13-14 (from the bottom): “The existence of a coloredness modifier trope” should be “The existence of coloredness modifier tropes”.
- On page 153, in the second indented text, beginning with “Posit tropes...”: A closing quotation mark is needed in the last line between “ways.” and “(2002: 85)<sup>11</sup>” In other words, the last line of the indented text should be this: “tropes in many different ways.’ (2002: 85)<sup>11</sup>” (FYI, the quotation *begins* in the third line of the indented text: ‘a triangularity, an...).
- On page 155, last sentence of main text: please delete “the”. The last sentence should be “Upon closer inspection, trope theory is a divided house.<sup>12</sup>”
- On page 155, footnote 12: The last three complete lines of the footnote should be deleted (they are fragments and copies of earlier parts of the footnote).

## **References**

- On page 218, under “Garcia, R.”, there are two listings of “Tropes and Troopers”.
  - Please keep the first listing that reads “2010. ‘Tropes and Troopers,’ unpublished paper.”
  - Please delete the second listing that reads “‘Tropes and Troopers,’ unpublished paper.”