Instantiation in Trope Theory

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Abstract: The concept of instantiation is realized differently across a variety of metaphysical theories. A certain realization of the concept in a given theory depends on what roles are specified and associated with the concept and its corresponding term as well as what entities are suited to fill those roles. In this paper, the classic realization of the concept of instantiation in a one-category ontology of abstract particulars or tropes is articulated in a novel way and defended against unaddressed objections.

Instantiation is a technical notion with different uses across a variety of philosophical theories. It is vague, ambiguous, and indeterminate. Sometimes metaphysicians use other terms to pick out a certain realization of the concept such as 'exemplification', 'participation', 'inherence', to name a few. My preferred method for resolving this indeterminacy is to clarify a realization of the concept of instantiation through a specification of the role or roles it plays in a metaphysical theory, following David Lewis's doctrine of theoretical terms (Lewis 1970). We thereby arrive at different conceptions of instantiation depending on how we specify the relevant roles associated with the term and depending on what entities of our ontology fill those roles.

In this paper I am concerned with the conception of instantiation that is realized in Donald C. Williams's theory of tropes (1953a, 1953b). I call it *classical trope theory* in a bid to set it apart from modern developments of the concept of a trope that I believe depart radically from Williams's classic statement of trope theory in the mid-twentieth century.[1] My aim is to clarify, articulate, and develop what classical trope theorists say about instantiation and defend their view against unaddressed objections.

In classical trope theory, the concept of instantiation is associated with the role of a trope being of its kind and the role of analyzing predication of concrete particulars. For classical trope theorists, tropes fill both of these roles. As such, there is no instantiation-role of relating entities across distinct fundamental categories because, in classical trope theory, universals do not compose a fundamental category of being, nor are universals instantiated by concrete particulars. Since classical trope theory specifies unique roles with unique role-fillers, the concept of instantiation has a unique realization in classical trope theory. It is a different conception of instantiation from

the conception realized in mainstream variants of realism about universals and other metaphysical theories.

In what follows, I outline the conceptual foundations of classical trope theory, correcting misinterpretations where necessary and dealing with problems as they arise. I then present a trope-theoretic account of instantiation based on classical trope theory and defend it against an objection due to J.P. Moreland (2001). I conclude that this trope-theoretic account of instantiation is not subject to damaging criticism and has some advantages over rivals (although my treatment of it is not fully complete). Note well that I will not argue that it is the superior alternative. This latter consideration is beyond the scope of this paper.

1. Classical Trope Theory

Classical trope theorists posit tropes as members of one fundamental category of being. According to this one-category ontology, the categories of abstract universals and concrete particulars (substances) are derivative. Concrete particulars are mereological sums of concurring tropes, and abstract universals are identical with their manifestations in tropes. The concept of a trope, according to classical trope theory, is that of an entity that is a nature, is particular, and abstract. The notion of a nature is primitive; a trope just is a nature. If tropes are qualitative, they are qualitative natures. If tropes are quantitative, they are quantitative natures. It is a substantive question whether all tropes at the fundamental level are qualitative or quantitative or both. I will put this question to one side, however. Hereafter, I equate 'nature' with 'qualitative nature', knowing full well that all tropes at the fundamental level might be physical quantities (for a statement of this view, see Keinänen & Hakkarainen 2014, 72). There is also a broad sense of 'qualitative' that is contrasted with the non-qualitativeness or bareness of bare particulars. In this sense every nature is qualitative. The examples in this paper are of qualitative natures found in ordinary experience. For instance, consider this button. It is blue. For the sake of convenience, let us assume that colors are basic. A trope is basic iff it is not composed of further tropes. If a trope is basic, it is a simple qualitative nature. If a trope is non-basic, it is a complex qualitative nature and it inherits its qualitativeness from its constituents. Thus, the blueness of this button, or better, this blueness, is a simple qualitative nature – *unum simpliciter*.

A trope is particular just because it fails to obey the identity of indiscernibles, namely, necessarily, if x and y perfectly resemble each other intrinsically, then $x = y$ (Ehring 2011, 33-35; Williams [1960]1986, 3). If x and y are qualitative natures, the identity of indiscernibles says that necessarily, if x and y are duplicate qualitative natures, then $x = y$; therefore, the principle need not introduce talk of respects in which x and y resemble each other (note that duplication implies perfect resemblance). This blueness is particular because it is possible that there exists a duplicate of this blueness, that is, an entity that is perfectly similar to but distinct from this blueness. The fact that this blueness is particular is a central claim of every variant of trope theory. It is one of the key differences between trope theory and mainstream variants of realism about universals. The fact that tropes are particular is fundamental, given by primitive distinctness (see Campbell 1990, 56-57; Trettin 2000, 283-84). The identity and identity conditions of tropes are also primitive (see Keinänen & Hakkarainen 2014).

A trope is abstract just because it fails to exhaust its content or is merely part of its content (Campbell 1990, 2-3; Williams [1960]1986, 3). This blueness is abstract because it fails to exhaust its content. If this blueness fails to exhaust its content or is merely part of its content, other tropes can be collocated with it at the same content. The shape of this button, say, and this blueness occupy the same content. Assuming both color and shape are not complex, this blueness and this shape occupy the same content without having parts that occupy sub-contents of this content. In contrast, the button occupies the same content as this blueness and this shape, but it does so by having parts that occupy sub-contents of this content. You can think of these tropes as extended simples. But not all tropes are extended simples; there are even cases of tropes that count as unextended complexes (for discussion, see Pickup 2016). To be clear, the notion of 'content' is meant to be neutral as to whether the manifold under consideration is spatiotemporal, analogously spatiotemporal, immaterial, or some compound of these. What is required is nothing more than some topic-neutral description of modes of extent using logical concepts of parthood, identity, and distinctness. Therefore, this account of abstracta is not committed to a certain theory of space and time (it might be committed to a primitive occupation relation or predicate, but that would be a categorial matter and not an issue that concerns speculative cosmology).[2]

This account of abstracta has at least two advantages within in-house disputes over the best characterization of the concept of a trope. First, many trope theorists call tropes 'thin' natures (see for instance Hakkarainen & Keinänen 2017, 648; Simons 2000, 147). However, most of these trope theorists do not explain what 'thin' means. It is thus left as a mysterious aspect of tropes. But, as was Williams's original intention, the thinness of tropes, in contrast with the grossness of concrete objects, is explained in terms of abstractness. Tropes are thin in that tropes are abstract (in the sense specified above).[3] Second, the abstractness of tropes helps to account for how concrete particulars are composed of abstract particulars without creating gap challenges that have been recently posed by Robert K. Garcia (2014). The challenge is that there is a gap between properties and the objects that are constituted by properties. How do properties generate an entity, in this case an object, of a distinct ontic category? Using this account of abstracta, we can answer Garcia's challenge as follows. In ultimate terms, a concrete particular is composed of abstract components, despite the fact that our ordinary (concretive, partitive) mode of decomposition breaks concrete particulars down into their concrete parts. A concrete object in relation to its abstract components is maximally concrete, whereas its abstract components are abstract to a certain degree. This blueness is abstract, but it is more abstract than the concurrent sum of this blueness and this shape. At the same time, this concurrent sum is more concrete than this blueness. The perfectly abstract components of a concurrent sum are its simple components, if there is some fundamental level of perfectly abstract components.[4] So the abstract/concrete distinction admits of degree and is not an absolute divide between entities of two distinct ontic categories. In other words, there is no categorial gap between abstracta and concreta. The difference is one of mereological complexity. Since there is no categorial gap between abstracta and concreta, the gap challenge does not arise. Abstract particulars generate a concrete particular in virtue of abstract particulars composing a concurrent sum that exhausts its content. Concrete objects are really qualitative complexes mereologically composed of simpler qualitative elements. (How and when this sort of composition occurs is irrelevant to this resolution of the gap challenge. Perhaps concurrence is adequate. Perhaps some other mode of bundling is needed. For a well-cited discussion of this issue, see (Simons 1994).)[5]

The power of this concept of a trope lies in the fact that the object/property distinction is built up from the abstract/concrete distinction and the universal/particular distinction (cf. Forrest 1993, 47). As a result, while tropes are qualitative natures, this does not make them qualities or properties, fundamentally speaking, because the notion of a property is built up from the notions of abstract and particular (throughout, I use the word 'properties' to refer to both qualities and relations; thus, what I say about instantiation applies to both qualities and relations). Or at least tropes are not at bottom qualities in the ordinary sense of that word, that is, the sense that is associated with an entity that qualifies something.[6] Furthermore, tropes are not objects or substances. The notion of an object is built up from the notions of abstract and particular. Particularity is conceptually prior to objecthood. Tropes are particulars, and their particularity and abstractness often lead to concurrent sums that exhaust their content. These sums are concrete particulars or substances. It is a mistake, therefore, to think that tropes are objects or substances because they are particulars.[7]

There are many other issues concerning the nature of tropes such as the individuation and counting of tropes that should be addressed. There are also further obstacles pertaining to the concurrence and resemblance of tropes. These topics will be put to one side. Our primary concern is the roles that instantiation plays in classical trope theory.

2. A Trope-theoretic Account of Instantiation

In analytic ontology we aim to give an account of how abstract universals are related to concrete particulars. This is the perennial problem of how an object can have many properties and how a property can be had by many objects. Trope theorists account for apparent sameness in nature in terms of similarity among tropes. To illustrate, consider this button and that button. Both buttons are blue. They resemble each other with respect to color because each button has a blue-trope and each blue-trope perfectly resembles the other. Call this blueness 'b1' and that blueness 'b2'. The fact that *b1* and *b2* resemble each other supervenes on, is grounded in, or is made true by the natures of the terms of this resemblance relation-trope. It is therefore internal (Campbell 1990, 35-36; Williams 1953a, 8; 1966, 80).

What is doing the work here is the fact that tropes are qualitative natures. Trope *b1* and *b2* are of the same kind or universal because *b1* and *b2* resemble each other (in what follows, the terms 'kind' and 'universal' are used interchangeably; thus kinds are not necessarily natural kinds, nor are they necessarily determinables). This does not imply that the qualitativeness of each trope is determined by the fact that it resembles other tropes. Both tropes are of *a* kind. Trope *b1* is of the kind *Blue*. It would be of its kind irrespective of the existence of *b2*. Further, *b1* is not of its kind in virtue of having the kind *Blue* as a constituent. Trope *b1* is a simple entity that is primitively qualitative (more on this in the next section).

We are now in a position to understand how the concept of instantiation is realized in classical trope theory. Talk of tropes being of a kind is to be understood in terms of tropes manifesting kinds.[8] What it is for tropes to instantiate kinds is for tropes to manifest kinds. Trope *b1*, for instance, manifests the kind *Blue*. Instantiation is identified with manifestation and instantiation qua manifestation fills the role of a trope being of its kind. This is what 'instantiation' means in classical trope theory.

Instantiation qua manifestation also plays a role in constructing an analysis of predication. According to a substance-attribute ontology, a sentence such as 'a is F' usually takes the subject 'a' to refer to an object and the predicate '… is F' to refer to the extension of the predicate or the property of *being F*. Quantificational sentences receive a similar treatment. Classical trope theorists junk this analysis and give the following alternative (Williams 1963, 616; [1960]1986, 10):

(CTT-Pred) 'a is F' =df. 'a embraces an f-trope that manifests the kind F'.

Williams calls this is a double-jointed analysis of predication because it involves 'two distinct but intelligible phases' (Williams 1953a, 11; 1966, 82). The first phase concerns the abstractive compositionality of the concrete particular in terms of it embracing its tropes; the second phase is the manifesting of the relevant trope's kind. Embracement has to do with parthood, but with the parts that are of the same content as the relevant sum. This blueness and this shape concur in the button, while the button embraces this blueness and this shape. Indeed, this button embraces all of its abstract parts or components. Concurrent sums can do the same thing. The concurrent sum of this blueness and this shape embraces this blueness. A sum might have a part that is of a sub-content of its content, but that part is not embraced by the sum. For instance, take a car, to use Williams's example ([1960]1986, 5). It is a concrete sum. It

has concrete parts such as four tires, a steering column, five seats, and so on. Ultimately, this car is a sum of concurrent tropes. It can be abstractively analyzed in terms of its shape, its weight, its color, and so on. Take the front left tire. It occupies a sub-content of the content of the car. This tire is round. It has a round-trope that occupies the same sub-content as the tire. This round-trope (of the tire) is part of the car, but it is not embraced by the car because this round-trope is not of the same content as the car; it is of a sub-content of the content of the car. Thus not every abstract part of a concrete particular is a character of that concrete particular. The 'characters' of a concrete particular are the tropes that are embraced by that concrete particular.

(CTT-Pred) has two advantages over competing accounts. First, it does away with the problematic notion of instantiation that is realized in Platonic and Aristotelian theories of universals (Campbell 1990, 42). Platonic realism must account for a connection of instantiation between entities of ontically unique realms. As is well known, it suffers from vicious regress and the mysteriousness of a relation traversing two realms. Aristotelian realism must account for immanence using the concept of a state of affairs and a non-mereological mode of composition. As Lewis has argued, a non-mereological mode of composition seems too much to swallow (Lewis 1986). Classical trope theory is not burdened with such obstacles. This button is blue because it embraces this blueness and this blueness manifests the kind *Blue*, and not because the button instantiates the universal *Blueness* or because the state of affairs of *the button being blue* is non-mereologically composed of this button and *being blue*. Second, (CTT-Pred) provides us with a more accurate account of predication than the crude analysis offered by realists because (CTT-Pred) yields a distinction between abstract and concrete instances (Williams 1953a, 12; 1966, 83):

> Abstract instance: this blueness is an abstract instance of the kind *Blue*.
>
> Concrete instance: this button is a concrete instance of the kind *Blue*.[9]

A universal is thereby 'in' its concrete instances in virtue of the trope being an abstract instance of the universal; the notion of a concrete instance is the relative product of embracing and manifesting (Williams 1963, 617). By contrast, the standard account of predication, according to realism about universals, is that the concrete particular has the abstract universal or rather the object is a token of the type. But, as Williams argues, to identify a word, say, with a concrete ink splotch overlooks the

subtle fact that the word (in some sense) inheres in the splotch (Williams 1953b, 171; 1966, 89). Similarly, this button is not a token of the type Blue, but rather its blueness is an occurrence of the kind *Blue*. This has led others such as Nicholas Wolterstorff (1970) and E.J. Lowe (2006) to admit the abstract instance/concrete instance distinction. For Wolterstorff and Lowe, Socrates's wisdom instantiates Wisdom (abstract instance) and Socrates exemplifies Wisdom (concrete instance). Bracketing the subtleties of their views, Wolterstorff and Lowe have independently latched on to the idea that it is not enough to capture the instantiation of a universal at the level of the concrete object *tout court*.

(CTT-Pred) is an analysis of predication of concrete particulars. It is not an analysis of predication of any particular, abstract or concrete. It was introduced to explain how abstract universals can be said of concrete particulars. Also, (CTT-Pred) has as a background assumption the claim that the predicates of subject-predicate sentences and quantificational sentences somehow refer to qualities or relations and the claim that the subject or variables refer to concurrent sums of tropes. Classical trope theorists accept that it might be the case that a certain sentence is true but not because of the existence of the alleged referents of its constituent-terms.

Furthermore, as Campbell recognizes, there is a more fundamental case of predication that involves nothing other than a single trope (Campbell 1990, 41-42). The sentences 'this is (a case of) blue' and 'there is a case of blueness' are not subject to (CTT-Pred). Instead, each predicate applies directly to each respective trope. The predicate in these basic cases applies directly to the relevant trope because of the trope and nothing else. This can be put more clearly with an explicit use of the concept of truthmaking. All we need is a minimal commitment to some theory of truthmaking, leaving the debate concerning the best theory of truthmaking for another occasion. Let us say that if T makes that p true, necessarily if T exists, p is true (Armstrong 1997, 115). This is not to say that truthmaking *is* necessitation. Rather, necessitation is a condition of truthmaking. Truthmaking can be taken as a primitive term or identified with a relation of truthgrounding. If necessitation as a condition of truthmaking is too strong or troublesome for some reason, we can stipulate that truthmaking implies supervenience. Supervenience would then be the relevant condition of truthmaking.

Armed with the concept of truthmaking, consider the sentence 'this is a case of blue'. It is made true by this blueness because necessarily if this blueness exists, it is a

case of *Blue*. There is no world in which it is a case of some other kind. For other predicates that apply to this blueness, this blueness is a sufficient truthmaker. For example, it is true that this blueness is particular. The truthmaker for this truth is this blueness because necessarily if this blueness exists, it is true that it is particular. There is no world in which it is a universal. Consequently, the implementation of truthmaking guards against objections that attack the simplicity of (basic) tropes (for discussion of the simplicity of tropes, see Maurin 2005).

(CTT-Pred) is an analysis of how properties are predicated of objects. It builds up, as I mentioned in the previous section, the concept of property and object from the more fundamental notions of abstract, concrete, universal, and particular. (CTT-Pred) allows us to say that whatever fills the predicative-role is 'of' whatever fills the object-role. Tropes standing in certain relations (as per the relative product of embracing and manifesting) fill both roles. So we get to say that a property is 'of' an object and that a property characterizes an object. To draw a useful comparison, consider the analysis of change in terms of qualitative difference among temporal parts. On this view, qualitative difference among temporal parts plays the role of change. We get to say that this leaf changes from green to red because qualitative differences of the temporal parts of the leaf play the role of change and so deserve the label 'change'. Although this is not change in the sense of an enduring substance having different properties at different times, four-dimensionalists admit change. They are simply analyzing the analysandum differently. Similarly, classical trope theorists admit that tropes characterize, are 'of', or qualify concrete particulars, as per (CTT-Pred). It is not the case that abstract particulars do not characterize or qualify objects. It is just that the analysandum is analyzed differently, in the same way that change is analyzed differently according to the four-dimensionalist.

3. A Defense of Manifestation

Moreland has raised an objection against the concept of manifestation, which is yet to be addressed in the literature. His argument is embedded in a larger critique of Wolterstorff's account of universals but it applies to classical trope theory. (Part of the reason for this is that Williams and Wolterstorff have similar views: both admit cases of kinds and say that universals are kinds.) Moreland argues that the relation of 'being a case of' is mysterious (2001, 80-81). His reasons are not directed at the fact that the

relation is primitive, but at the *concept* of the relation. His objection is that he has no clear grasp of the concept. He points out correctly that it does not help us to say that the relation is analogous to set-membership or that it is a species of the type-token relation. He also argues that the relation does not play the role of relating the kind to its case. Therefore, it is not only mysterious but inadequate. Since the 'being a case of' relation is the manifestation relation for classical trope theorists, Moreland's objection is that the concept of manifestation is inadequate and mysterious.

To respond to Moreland's objection, we need to demonstrate that the concept of manifestation is not mysterious and explain how a kind is related to its trope. I will accomplish both tasks by first clarifying the concept of manifestation and then presenting the classical trope theorists' account of universals. To begin, let us distinguish the question 'Why does trope k manifest kind K?' from the question 'How does trope k manifest kind K?' Why-questions are after an explanation for why a certain proposition is true. How-questions concern what roles the entities of our theory play as specified by the concepts expressed in the theory.

Let us start with the why-question. Recall that the (basic) trope is simple. It has no constituents. Trope k does not have kind K as a constituent. So why is trope k of the kind K? It cannot be because trope k has kind K as a constituent. The only answer available is: given trope k, it is of the kind K. We might say given the nature of k it follows that k is of the kind K, but this is misleading because it implies that tropes *have* natures. If you think tropes have natures, then, like Moreland, you might wonder 'How does a case get its nature?' (Moreland 2001, 81). But this is an ill-formed question that arises from misunderstanding classical trope theory. A case *is* its nature. It does not come from somewhere else. There is no further proposition that explains the proposition that trope k is what it is. And this is as it should be because, according to classical trope theory, k and all other basic tropes are primitive natures. The only thing objectionable about this part of the theory is that facts about the nature and identity of basic tropes are brute. But explanation must stop somewhere, and this is where it stops for classical trope theory (cf. Campbell 1990, 30). Indeed, for most if not all other theories we should expect explanations to bottom out at the ontological primitives of the theory. So this is no knock-down criticism. It is nothing more than a cost to be noted in the tallying up of our cost-benefit analysis of candidate hypotheses in analytic ontology.

Let us move on to the how-question. Our task is to give a story about *how* tropes manifest kinds. Strictly speaking, there is no relation of manifestation that relates trope *k* and the kind *K*. Rather, there is a two-place '… manifests …' predicate taken as a piece of primitive ideology. This predicate does not ontologically commit us to a relation. Ontology consists of the values of the bound variables of our theory. Ideology is the set of terms of the theory. This common distinction between ideology and ontology is due to W.V. Quine (1951). Bits of ideology, like predicates and operators, express 'ideas' or concepts – hence, Quine's use of the label 'ideology'. Despite the allusion to concepts, the terms of the theory are of primary import, and although we are ideologically committing ourselves to a predicate, our account of manifestation is not semantic or linguistic. Following Theodore Sider (2011), ideology is just as important as ontology because they are both worldly. Ontology is worldly in that it is about entities out there in the world. Ideology is worldly in that it helps express fundamental and nonfundamental facts about the world. A fact, as I use the term, is a true proposition. A fundamental fact is a fact that is not explained in terms of further facts; a nonfundamental fact is explained in terms of further facts – this account of a fundamental fact is not essential to this conception of ideology. A sentence composed of primitive terms expresses a fundamental fact. A sentence composed of defined terms (even if one or more terms are primitive) expresses a nonfundamental fact. When '… manifests …' is saturated with a trope and a kind in the appropriate manner we get the sentence 'trope k manifests kind K'. This sentence expresses the fundamental fact that trope *k* manifests kind *K*.

The theoretical cost of this is two-fold. We bear the ideological cost of a primitive 'manifests' predicate and the conceptual cost of manifestation. The concept and its corresponding predicate are characterized as follows. First, the 'manifests' predicate is asymmetric. If trope *k* manifests kind *K*, kind *K* cannot manifest trope *k*. Kinds cannot manifest tropes, whereas tropes manifest kinds. Second, trope *k* is automatically of the kind *K*. In every world where trope *k* exists, it manifests kind *K*. So manifestation is necessary or essential. Third, manifestation is intrinsic (Williams 1963, 617). It is an intrinsic fact that tropes manifest their kinds. Trope *k* ontically entails kind *K*.[10] Fourth, manifestation is not transitive. This follows from the fact that for any sentence stating a manifestation fact, it must involve a trope manifesting a kind. If trope *k* manifests kind *K*, kind *K* cannot manifest some other entity in order to supply the

second premise needed to infer a conclusion about the transitivity of manifestation. Fifth, manifestation is internal. Although there is no relation such that it is internal, there are relational truths about the manifestation of kinds that require only tropes as truthmakers. Indeed, in the case of manifestation, the relation is what Karen Bennett calls 'superinternal' (Bennett 2011, 32) or what Campbell calls 'unilateral' (Campbell 1990, 104). A unilateral or superinternal relation is a relation that requires only one of the terms to be its full ground. Using talk of truthmaking, trope k is necessarily sufficient to make it true that k manifests kind K. We do not need a relation of manifestation, nor do we need kind K as a member of a primitive category of being. These features of manifestation facts and how these facts are accounted for in classical trope theory allow us to grasp the concept of manifestation.

Having now grasped the concept of manifestation, we can understand what kinds or universals really are, according to classical trope theory. This in turn will provide an explanation of how a kind is related to its trope. For classical trope theorists, universals are reductively identified with tropes.[11] One way that this has been expressed by Williams and Campbell is in terms of counting entities. Recall the identity of indiscernibles: necessarily, if x and y perfectly resemble each other, then $x = y$. If entity e obeys this principle, e is universal. If not, e is particular. Tropes can be counted in terms of the denial of the identity of indiscernibles or they can be counted in terms of the affirmation of the identity of indiscernibles. The difference between the kind *Blue* and a blue trope is 'not a difference of *category* but a difference in *rule for counting*' (Campbell 1990, 44, emphasis in original). Since it is not a difference of category, there is no ontological difference. We can count tropes one way or count them the other way. Either way we are counting tropes and not positing a primitive category of universals. The universal *is* the trope, counted according to the rule: perfect similarity entails numerical identity.[12]

There are problems with this formulation as it stands. As Moreland notes, talk of counting tropes is nothing more than an epistemological story about how *we* treat tropes and identify them as universals. As such, it is not a real theory of universals; it does not give us a metaphysics of universals (Moreland 2001, 73). However, this formulation can be improved upon in the following way such that it does give us a metaphysics of universals.

Contra Moreland, the appeal to different rules of counting arises because the underlying metaphysics lends itself accordingly. The underlying metaphysics concerns the roles that tropes play. The fact that tropes fill certain roles is a metaphysical matter. Talk of counting tropes comes into the picture because the issue of tropes filling certain roles is connected with the *meaning* of our terms. As Williams says:

> That tropes can enjoy this difference of case though of exactly the same kind, i.e., that they do not observe the principle of the identity of indiscernibles, is what we *mean* by saying that they are particulars instead of universals.
>
> …
>
> What we *mean* by a "universal", I suggest, is an entity or demi-entity which by thus pretending to shrink its dimensions to the identity of indiscernibles can be present undivided in two or more place-times (1963, 615, emphasis in original).

Since we are in the business of stating what 'particular' and 'universal' mean, we need to specify roles associated with the concept that each term expresses. Then our task is to discover the occupant(s) of these roles, suitable role-fillers from our ontology. Classical trope theorists posit abstract particulars. Abstract particulars can play the role of abstract universals by satisfying the identity of indiscernibles. If tropes play the role of universals, tropes are universals.

This is a case of reductive identification. To use an analogy, consider Lewis's formulation of the identity theory of mind (Lewis 1966). He proposed that, as a matter of analytic necessity, mental state M is defined in terms of certain roles concerning input and output clauses. Folk psychology embodies the role(s) and the meaning of such a mental term, but science discovers that the occupant of such a mental role is a neural state. Hence, the mental state *is* the neural state. Analogously, the meaning of the term 'universal' is associated with a certain role – call it R-role. This role is such that whatever has perfect similarity entails numerical identity. Tropes can fill this role. Thus, universals *are* tropes. More schematically, following Lewis (1972):

P1) Universal-entity U = occupant of R-role

P2) Trope-entity T = occupant of R-role

C) Thus, U = T.

Although we need to appeal to the relaxing or tightening of the identity conditions of our terms, this is due to the entities of our ontology and how they behave, and is not grounded in us or our epistemic predicament. Now, if tropes just are universals,

manifestation turns out to be a form of identity; hence, instantiation is a form of identity.[13] The manifestation of the kind in the trope is just the trope playing R-role. A kind is related to its trope in virtue of it being identical with its trope. We have thus answered Moreland's objection.

4. Conclusion

In this paper, I articulated the realization of the concept of instantiation in classical trope theory. Instantiation is the manifestation of kinds in tropes. The concept of manifestation plays the role of a trope being of its kind and plays a role in accounting for predication of concrete particulars. I argued that this account of predication has some advantages, but I stopped short of saying it is the superior analysis. I defended the concept of manifestation against Moreland by presenting a novel interpretation of the classical trope theorists' reduction of universals to tropes. Universals just are tropes, so manifestation is a form of identity and the 'manifests' predicate is a piece of primitive ideology that figures in the expression of fundamental facts about the manifestation of tropes. This in turn allowed us to characterize various features of manifestation facts and conclude that the concept of manifestation is not mysterious.[14]

Notes

[1] Keith Campbell comes closest to Williams's trope theory, but I am hesitant to attribute wholesale the view to be articulated in this paper to Campbell because there are subtle differences between Williams and Campbell that I do not have space to detail here. Having said that, I will draw freely from Campbell's work.

[2] Given this account of abstracta, we must deny coincident *concrete* particulars. Statue-lump cases and more complicated examples from physics of fields occupying the same region as concrete objects and fundamental particles or quanta occupying the same region will have to be addressed one at a time. Unfortunately, there is no space to discuss this issue adequately. It is left for another occasion.

[3] Anna-Sofia Maurin objects that Williams explains abstractness by reference to thinness; thus, his understanding of 'abstract' is empty and uninformative (Maurin 2002, 22). However, she fails to

identify the right passages in Williams's published work where he gives an account of abstracta in terms of an entity failing to exhaust its content. Such an account is not in terms of 'thinness'.

[4] If there is no fundamental level of perfectly abstract entities, we can tweak the theory to account for this possibility by taking the dyadic predicate '… is more abstract than …' as primitive and define up '… is perfectly abstract'. Anna Marmodoro calls this possibility 'qualitative gunk' (Marmodoro 2015).

[5] Garcia would say in reply that the notion of 'concurrence' presupposes the notion of an object and a specific theory of space and time (Garcia 2014, 124). However, concurrence, like the occupying of a particular at some content, is part of analytic ontology, not speculative cosmology; if we need to introduce a theory of space and time, the relational theory is adequate; it presupposes particulars, not objects, that ground spatiotemporal relation-tropes. A fuller defense of this is reserved for another occasion.

[6] As we will see, tropes in certain ways do play the role of an entity that qualifies something in a certain sense, but this is not a fundamental fact in our theory. It is something that is analyzed in terms of fundamental facts of our theory. The relevant fact here, which is fundamental, is that a trope is qualitative.

[7] D.M. Armstrong makes this mistake when he calls tropes 'junior substances' (Armstrong 1989, 115). Fredrik Stjernberg commits the same error when he says that tropes are objects because tropes are elements of sets, flank the identity sign, and are quantified over (Stjernberg 2003, 39). Garcia describes one concept of the trope as a 'particular-object' (Garcia 2015, 142-43). His fault lies in taking the object/property distinction as basic.

[8] Talk of manifestation of kinds, universals, characters, qualities, or determinables dates back to W.E. Johnson and C.D. Broad. Johnson says occurrents manifest characters, whereas the property of a continuant is a group of potential manifestations (Johnson 1924, 86). Broad takes occurrents to be manifestations of determinate qualities. A particular blueness, a turquoise, say, is the manifestation of Blueness at a certain spacetime region (Broad 1933, 133).

[9] In 'Necessary Facts' Williams calls the concrete instance 'supermanifestation' (Williams 1963, 616). For no good reason, I will not employ this term.

[10] Embracing and manifesting are both intrinsic, ontic entailments. (CTT-Pred) is intrinsic and an ontic entailment because it is a combination of embracing and manifesting (Williams 1963, 617). Hence, the

fact that Socrates is wise is necessary. Williams in one respect bites the bullet: it follows from Socrates being a concurrent sum of tropes that Socrates/this concurrent sum entails its components. It is a necessary fact, as Williams puts it, that Socrates is wise (Williams 1963, 621-22). However, it does not follow that Socrates could not have been unwise, nor does it follow that Socrates is a necessary existent. Williams plays down the counter-intuitiveness by pointing out that concrete objects are never given and are only inferred or idealized. Our contingent judgments of Socrates do not pick out the complete essence of Socrates or him qua that exact concurrent sum of tropes. Ultimately, this issue will turn on our theory of essence and whether there are genuine essences of objects or not. Also, our theories of de re modal judgments will come into play. These issues, however, are orthogonal to the main subject of this paper.

[11] Williams is often misinterpreted as holding the view that universals are sets or classes of similar tropes. While some trope theorists are explicit proponents of this view, it is not the view of Williams or Campbell. One upshot is that classical trope theorists avoid the problems and objections that come from identifying universals with sets or classes. A further upshot of this account is that the category of universality is accounted for and not explained away or eliminated. The eliminativist approach is not as explanatorily powerful, in the same way that eliminative materialism is less explanatorily powerful than the identity theory of mind.

[12] Williams further explains how we perceive and conceive abstract universals in concrete particulars by appealing to abstraction and generalization. To perceive or conceive an abstract universal in a concrete particular we need to first abstract the relevant trope from the concrete particular and then generalize it, that is, treat perfectly similar tropes as a repeatable. While this explanation is valuable for understanding how we grasp the concept of a universal in virtue of superimposing generalization on abstraction, I will not go into the details here because they are not directly relevant in this paper.

[13] For a similar theory of universals according to which instantiation is a form of identity, see (Baxter 2001).

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References

Armstrong, D.M. 1989. *Universals: An Opinionated Introduction*. Boulder, CO: Westview Press.

Armstrong, D.M. 1997. *A World of States of Affairs*. Cambridge: Cambridge University Press.

Baxter, Donald L. M. 2001. Instantiation as Partial Identity. *Australasian Journal of Philosophy* 79(4): 449-64.

Bennett, Karen. 2011. By Our Bootstraps. *Philosophical Perspectives* 25(1): 27-41.

Broad, C.D. 1933. *Examination of McTaggart's Philosophy*. Vol. 1. Cambridge: Cambridge University Press.

Campbell, Keith. 1990. *Abstract Particulars*. Oxford: Blackwell.

Ehring, Douglas. 2011. *Tropes: Properties, Objects, and Mental Causation*. Oxford: Oxford University Press.

Forrest, Peter. 1993. Just Like Quarks? The Status of Repeatables. In *Ontology, Causality and Mind*, ed. J. Bacon, K. Campbell and L. Reinhardt. Cambridge: Cambridge University Press.

Garcia, Robert K. 2014. Bundle Theory's Black Box: Gap Challenges for the Bundle Theory of Substance. *Philosophia* 42(1): 115-26.

Garcia, Robert K. 2015. Is Trope Theory a Divided House? In *The Problem of Universals in Contemporary Philosophy*, ed. G. Galluzzo and M. J. Loux. Cambridge: Cambridge University Press.

Hakkarainen, Jani, and Markku Keinänen. 2017. The Ontological Form of Tropes: Refuting Douglas Ehring's Main Argument against Standard Trope Nominalism. *Philosophia* 45(2): 647-58.

Johnson, W.E. 1924. *Logic, Part III*. Cambridge: Cambridge University Press.

Keinänen, Markku, and Jani Hakkarainen. 2014. The Problem of Trope Individuation: A Reply to Lowe. *Erkenntnis* 79(1): 65-79.

Lewis, David. 1966. An Argument for the Identity Theory. *Journal of Philosophy* 63(1): 17-25.

Lewis, David. 1970. How to Define Theoretical Terms. *Journal of Philosophy* 67(13): 427-46.

Lewis, David. 1972. Psychophysical and Theoretical Identifications. *Australasian Journal of Philosophy* 50(3): 249-58.

Lewis, David. 1986. Against Structural Universals. *Australasian Journal of Philosophy* 64(1): 25-46.

Lowe, E.J. 2006. *The Four-Category Ontology: A Metaphysical Foundation for Natural Science*. Oxford: Clarendon Press.

Marmodoro, Anna. 2015. Anaxagoras's Qualitative Gunk. *British Journal for the History of Philosophy* 23(3): 402-22.

Maurin, Anna-Sofia. 2002. *If Tropes*. Dordrecht: Kluwer.

Maurin, Anna-Sofia. 2005. Same but Different. *Metaphysica* 6(1): 129-46.

Moreland, J.P. 2001. *Universals*. Chesham, UK: Acumen.

Pickup, Martin. 2016. Unextended Complexes. *Thought: A Journal of Philosophy* doi: 10.1002/tht3.221.

Quine, W. V. 1951. Ontology and Ideology. *Philosophical Studies* 2(1): 11-15.

Sider, Theodore. 2011. *Writing the Book of the World*. Oxford: Clarendon Press.

Simons, Peter. 1994. Particulars in Particular Clothing: Three Trope Theories of Substance. *Philosophy and Phenomenological Research* 54(3): 553-75.

Simons, Peter. 2000. Identity Through Time and Trope Bundles. *Topoi* 19(1): 147-55.

Stjernberg, Fredrik. 2003. An Argument against the Trope Theory. *Erkenntnis* 59(1): 37-46.

Trettin, Kathe. 2000. Tropes and Things. In *Things, Facts and Events*, ed. J. Faye, U. Scheffler and M. Urchs. Amsterdam: Rodopi.

Williams, Donald C. 1953a. On the Elements of Being: I. *Review of Metaphysics* 7(1): 3-18. Reprinted in *The Elements and Patterns of Being: Essays in Metaphysics*, ed. A.R.J. Fisher. Oxford: Oxford University Press, 2018.

Williams, Donald C. 1953b. On the Elements of Being: II. *Review of Metaphysics* 7(2): 171-92. Reprinted in *The Elements and Patterns of Being: Essays in Metaphysics*, ed. A.R.J. Fisher. Oxford: Oxford University Press, 2018.

Williams, Donald C. 1963. Necessary Facts. *Review of Metaphysics* 16(4): 601-26. Reprinted in *The Elements and Patterns of Being: Essays in Metaphysics*, ed. A.R.J. Fisher. Oxford: Oxford University Press, 2018.

Williams, Donald C. 1966. *Principles of Empirical Realism: Philosophical Essays*. Springfield, IL: Charles C. Thomas.

Williams, Donald C. [1960]1986. Universals and Existents. *Australasian Journal of Philosophy* 64(1): 1-14. Reprinted in *The Elements and Patterns of Being: Essays in Metaphysics*, ed. A.R.J. Fisher. Oxford: Oxford University Press, 2018.

Wolterstorff, Nicholas. 1970. *On Universals: An Essay in Ontology*. Chicago: University of Chicago Press.