

There Are no Module or Modifier *Tropes*

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Abstract

According to Robert K. Garcia, trope theories divide into two distinct groups based on the type of tropes (module or modifier) assumed. Although left unnoticed by many trope theorists, Garcia claims that the module/modifier distinction has important consequences regarding the ontological merits of the different trope theories. In this article, I argue that Garcia's distinction between module and modifier tropes fails to provide any correct or informative classification of trope theories: Garcia's distinction is based on assumptions and primitive notions trope theorists explicitly reject. Trope theories attempt to eliminate the fundamental object-property dichotomy by means of the analysis of inherence (an object having a property). By contrast, Garcia's module and modifier tropes are different kinds of particular properties, which fundamentally inhere in a property bearer. Therefore, no trope is a module or modifier trope in Garcia's sense. Finally, there is an ambiguity in Garcia's use of his term "character making" that makes void his arguments for the module/modifier distinction based on the conception of non-module tropes as "character makers".

1. Introduction

Robert K. Garcia's (2015, 2016, 2024) distinction between *module* and *modifier* tropes has gained a great deal of attention in the recent discussion of tropes.¹ According to Garcia, trope theories divide into two distinct groups on grounds of the type of tropes (module or modifier) assumed. As I will argue in this article, the distinction is based on a mistaken conception of category features of tropes. In my argument, I will lean on formal ontological conception of ontological categories: an entity belongs to an ontological category and has the corresponding category features because it is in certain formal ontological relations in an order (Hakkarainen & Keinänen 2023). To put it briefly, Garcia's distinction incorrectly construes the category features of tropes in terms of fundamental formal ontological relations the trope theorist explicitly rejects. Yet, Garcia's distinction deserves closer examination for two main reasons: first, it has become popular and is a potential source of additional confusion; second, as a positive side-effect, dealing with Garcia's arguments helps us to make important but often neglected distinctions between tropes and other particular property-like entities.

¹ See, for instance, Alvarado (2020), Audi (2023) and Maurin (2023).

This article begins by a general characterization of tropes and their category features in section 2. In this connection, I distinguish between tropes, on the one hand, and three different kinds of *particular properties* introduced in three different alternative ontological category systems, on the other. Section 3 presents Garcia's distinction between *module* and *modifier tropes*. Moreover, I briefly compare it to Michael Loux's (2015) similar distinction between *tropes* and *tropers*. In section 4, I assess the relevance of Garcia's distinction to trope theories. My conclusions are negative: it fails to characterize the standard trope theories in any correct and/or informative way. The concluding section 5 draws some general morals from the results of this article.

2. Tropes, modes, individual accidents, and particularized universals

The term "trope" was coined by Donald C. Williams (2018 [1953]) for simple or thin particular natures ("occurrences of essences") of which the world is ultimately constituted. Prima facie examples of tropes are qualities like a determinate redness and roundness, and basic quantities like -e charge and a determinate mass in specific locations. The simplicity of tropes entails that tropes are categorially simple: they are either mereologically simple or all their parts are tropes. Like substances or objects, tropes are countable individuals, that is, they have determinate identity conditions and are countable unities – we can in principle tell how many tropes there are in some definite location. Moreover, like objects, tropes are particulars: tropes cannot have distinct instances or exemplifications. By means of this formal ontological characterization of particularity, tropes are contrasted (dialectically) with kind universals such as the kind electron, which can have distinct electrons as its instances, and property universals such as the property universal of -e charge, which can be exemplified by distinct particles.² Standardly, tropes are also taken to be concrete, that is, spatio-temporal particulars.

According to Williams' paradigmatic trope theory, tropes form the only fundamental category and substances are analysed as mereological sums of mutually co-located tropes.³ In addition to construing substances by means of tropes, Williams introduced tropes to eliminate the fundamental object-property dichotomy (Williams 2018 [1953], 30-31). It is Williams' ground-breaking insight that analysing substances and inherence (that is, substances having a

² In making particular-universal distinction, I follow here E.J. Lowe's (2006) formal ontological characterization: universals are entities that can have distinct instances (kind universals) or exemplifications (property universals). By contrast, particulars cannot have distinct instances or exemplifications. As nominalists, trope theorists deny the existence of all universals.

³ See Fisher (2018) and Keinänen & Hakkarainen (2024, sec. 21.2).

particular property) go hand in hand in trope theories. First, the category of substances is analysed reductively by means of co-located tropes. Second, inherence is analysed by means of parthood and co-location: trope *t* is a property of object *i* if and only if *t* is a part of *i* and exactly spatio-temporally co-located with *i*.⁴ Although bringing new primitive elements (e.g. the relation of compresence or existential dependencies) to the analysis of inherence, most trope bundle theorists (e.g., Campbell 1990, Ehring 2011, Keinänen 2011, Keinänen & Hakkarainen 2014) share this Williams' basic insight.⁵

Thus, the upshot is that, fundamentally, tropes are neither properties nor objects. They are members of a single category characterized in more fundamental terms. The category of substances is analysed reductively, and the primitive object-property distinction is eliminated in trope theories. Inherence, which is a fundamental formal ontological relation connecting particular properties (modes) and their bearers in Neo-Aristotelian and substance-mode ontologies, is analysed in terms of parthood and co-location in Williams' paradigmatic trope theory.⁶ Considered in formal ontologically fundamental terms (or in terms of their fundamental category features), tropes are countable concrete individuals and parts. In standard case, tropes are parts of more complex entities, that is, objects, which have several tropes as their mutually exactly co-located proper parts. Tropes are thin or simple natures, whereas objects have a complex nature constituted by tropes acting as their properties.

As stressed just above, tropes are properties only derivatively. Influentially and taking the particular/universal distinction as a basis of his classification, David Armstrong (1978, 1989, 1997) labelled *all particular property-like entities* "tropes". This has recently become a popular usage of the term (cf. Maurin 2023). Nevertheless, this has been an unfortunate terminological move. One of the main objectives of trope theories is to eliminate the "Aristotelian" object-property dichotomy by means of the analysis of inherence. Trope theories introduce a new fundamental category, tropes for that definite purpose. We need to carefully distinguish between tropes and particular properties introduced in category systems that leave the object-property-distinction primitive. The new distorted terminology, in which an original technical term is made disjunctive ("trope or any kind of particular property"), eliminates the original precise term and may lead to a misleading conception of the basic aims of trope theories.

⁴ Williams (2018 [1953]) presents his analysis of inherence as a part of his analysis of exemplification, that is, objects' having properties as general entities.

⁵ See Keinänen & Hakkarainen (2024, secs 21.2-21.4) for a more detailed discussion of Williams' views and some of these more recent trope bundle theories and their analyses of inherence.

⁶ See Lowe (2006) and Heil (2012) for two- or four-category systems taking inherence as primitive. Lowe's term for inherence is "characterization".

Furthermore, different ontological category systems have proposed different kinds of “*particular properties*” (i.e., properties taken as particulars), of which we already have precise classifications.⁷ For the present purposes, a general and very restricted overview of particular properties suffices. I already took up *modes* like the redness of some specific rose or the mass of some specific horse. Necessarily, if a mode exists, it inheres in a specific substance and it cannot exist without the substance existing. Modes have been popular among the advocates of particular properties: in addition to certain influential contemporary metaphysicians, several early modern metaphysicians have postulated modes.⁸ Similarly, individual accidents assumed by medieval metaphysicians might be interpreted as particular property-like entities inhering in some specific substance at a time.⁹ David Armstrong is a well-known advocate of Russellian property universals such as *being red* or *being 1 kg in mass*. They are universal properties directly exemplified by one or more objects. Their exemplification is direct because it is not mediated by any particular properties such as modes.¹⁰ Besides, Armstrong’s (1989, 1997) favourite candidates for particular properties (“tropes” as he calls them) are particularized Russellian properties like *being red* exemplified* by at most one object at a time. The existence of an “Armstrongian trope” is not sufficient for its being a property of some object. Therefore, Armstrong postulates facts (“states of affairs” as he calls them) to join his “tropes” to their bearers.

As this very brief discussion shows, *particular properties*, or better, fundamentally property-like entities considered particulars have been a common assumption in several distinct metaphysical views. They stand in different formal ontological relations varying from ontological category system to another, and we already have well-established terms like “mode” or “individual accident” for them. If it is impossible to fix the terminology anymore, one should keep in mind that the predicate “trope” applying to tropes (as understood above) and all other particular property-like entities (modes, individual accidents, etc.) is only a disjunctive predicate not doing any additional theoretical work.

⁷ Here, the term “property” is itself vague referring to all entities standing in some primitive characterization relation to characterized entities (objects).

⁸ For instance, Descartes and Locke postulated modes, although having different conceptions of their ontological status, cf. Pasnau (2011).

⁹ Medieval advocates of individual accidents include both realists like John Dun Scotus and nominalists like William Ockham and John Buridan (Adams 1987, Pasnau 2011). Unlike modes, individual accidents might be able to migrate from a substance to another. For instance, Ockham allowed for the migration of individual accidents from an object to another to explain the possibility of transubstantiation.

¹⁰ By contrast, the exemplification of property universals by objects is mediated by modes or kind universals in Lowe’s (2006) four-category ontology.

3. Garcia's module-modifier-distinction

Garcia (2016, 499-500) takes the catchphrase 'tropes are particularized properties' as his point of departure. Consider a Russellian property universal, say, *x's being spherical*, standardly signified by open formula "Sx".¹¹ According to Garcia, we obtain different kinds of tropes by particularizing property universals in a weak or in a strong way, respectively. If we particularize universals in a weak way, we render a shareable non-self-exemplifying Russellian property universal into a non-shareable and non-self-exemplifying property: "[h]ere, the Slogan fixes on the concept of a *modifier trope*: a non-shareable and non-self-exemplifying property."¹² In other words, *modifier tropes* in Garcia's sense are particularized Russellian property universals such as *being spherical*. Unlike the standard property universals, modifier tropes can be exemplified* only by a single object at a time.¹³ Thus, modifier tropes are alike "Armstrongian tropes" described in the previous section. According to Garcia, because of not itself being spherical, a sphericity modifier trope *s* does not confer or contribute its own character to its bearer (the object having that property). "Rather, *s* confers character that is somehow grounded in and produced by *s*'s own character" (Garcia 2016, 500).

Secondly, to particularize a Russellian property universal in a strong way is to "[c]onvert it into a *propertied-particular*" (Garcia 2016, 500). Here, we take one additional step and convert a shareable Russellian property universal "[i]nto a non-shareable and thinly propertied object: a *module trope*" (ibid, italics added). In other words, we first have a particularized property universal (a modifier trope), which is then, in the second step, converted into an object that self-exemplifies*, or using alternative terms, inheres in itself, a *module trope*. Thus, a sphericity module trope *s*' is itself a thinly characterized object – it is an object having exactly one natural property, namely, sphericity. Moreover, a module trope has the character it is meant to ground. The sphericity module trope *s*' is itself spherical (ibid.).

Michael Loux (2015, 31-32) draws a distinction between *tropes* and *tropers*, which analogous to Garcia's distinction between modifier and module tropes. Tropes in Loux's sense are mode-like "particular properties of objects" such as this redness or the redness of some

¹¹ Garcia (2016, 499-500) talks about "an Armstrongian, generally non-self-exemplifying, immanent universal". Since Armstrong (1978, 1989, 1997) postulates Russellian property universals directly exemplified by objects, I will use the term "Russellian property universal".

¹² Garcia (2016, 500); cf. also Garcia (2015, 138, 144, 158).

¹³ To annotate particularity of Garcia's modifier/module tropes, I use the term "exemplification*": as particular properties they can be exemplified* only by a single object (at a time).

specific object. By contrast, troopers are “qualitatively thin individuals” like this individual red thing or this individual round thing. Thus, one may take Loux’s troopers as substances with exactly one property. By contrast, Garcia’s module troopers are like facts because of being self-exemplified* properties. The main difference between module troopers and facts is that the former are mereologically simple entities. Unlike Armstrong’s (1989, 1997) states of affairs (facts), module troopers do not have proper parts (“constituents”). After discussing Garcia’s distinctions, I will briefly assess the relevance of Loux’s distinction to trope theory in the end of the next section.

Garcia (2016, 500-501) notes that the distinction between modifier and module troopers is seldom recognized. According to Garcia, it reveals two fundamentally different ways of considering troopers and has number of implications for their ability to do metaphysical work. In order to obtain these results, Garcia introduces new terminology like “character”, “character making”, “character grounding”, “thin-character” and “thick-character”. Since this terminology is not generally used, it must be explained in few words. The term “character” seems to refer to anything that can be predicated of a given entity. For the sake of argument, I will take it for granted that we have some general understanding of characters in this sense.¹⁴ More importantly, Garcia makes a distinction between “characters” and “natural characters”. The latter appear to be something that correspond to the similarities between objects with respect to their intrinsic features. In other words, “natural characters” are what many metaphysicians are used to call “natural properties”. Garcia (2016, 502) defines “thin-character” as follows: “[t]here is thin-character because there is at least one entity x that is (predicatively) F, where F is a non-formal and (non-conjunctive) natural property.” In other words, an entity possessing at least one natural property is a case of thin-character. Correspondingly, an entity possessing two or several natural properties is a case of the phenomenon of thick-character (*ibid*).

It is important to register the terminological moves Garcia makes here: while characters are *whatever predicated of entities*, thin- and thick-character concern *natural properties of entities*. Similarly, Garcia’s (2016) discussion of character grounding/character making concentrates on the phenomena of thin- and thick-character, on the grounding of natural properties of objects. As it will turn out, Garcia neglects the distinction between “characters”

¹⁴ It is a possible problem with this notion of character that it is relativized to language: what characters there are is ultimately dependent on the predicates we have at our disposal in a given language.

and “natural characters” (natural properties) in a way that has significant effects on the acceptability of his claims about character making.

Before going to these problematic features of Garcia’s arguments, I summarize the central claims Garcia makes about *character grounding*. He considers character grounding a species of grounding: a trope is supposed to ground a character of its bearer by determining its specific feature, a natural property possessed by the bearer.¹⁵ Garcia distinguishes between two different kinds of character grounding, and he considers the distinction to be exhaustive. First, there is character grounding in which a trope makes some entity characterized in the way it is itself characterized. For instance, module tropes are reflexive character grounders of their own – a sphericity module trope makes itself spherical. Second, in *character making*, a trope makes something characterized in a way different from the way it is itself characterized. To take the above example, according to Garcia, a modifier trope confers to its bearer a character it does not itself possess (Garcia 2016, 501-507).

It comes perhaps not as a surprise that, according to Garcia (2016, 503), in the case of modifier tropes, character-making “[s]eems to be precisely the kind of sui generis exemplification relation that substances and properties stand in on a poly-category substance-attribute ontology”. Nevertheless, Garcia does not directly draw this result from how he *defines* modifier tropes (cf. above). Instead, he starts from the claim that modifier tropes are character makers in his sense: a modifier “[t]rope characterizes a numerically distinct entity by producing character at the object-level that is absent at the trope-level. For example, if *s* is a sphericity modifier trope, then there is some *x* such that $x \neq s$ and *x* is spherical in virtue of *s*” (op. cit., 502, italics added). Garcia then argues that character-making is not reducible to parthood. According to him, the fact that modifier trope *s* (e.g., a sphericity trope) confers a character (sphericity) to object *x* is not a consequence of object *x*’s having the modifier trope *s* as its part. Therefore, character-making *seems* to be a sui generis exemplification relation between object and the trope (op. cit. 503).

According to Garcia (2016, 500), trope theorists D.C. Williams, Keith Campbell and Anna-Sofia Maurin are advocates of module tropes. Garcia (op. cit. 504-505) *assumes* that tropes as they are considered in Williams’ and Campbell’s paradigmatic trope theories (like sphericity and heaviness in some determinate location) *are* module tropes in his sense. In other words, Garcia assumes that tropes are also *objects having the corresponding (single) natural property*.

¹⁵ Although Garcia is not explicit about this, character grounding might be taken as a case of grounding considered a general sui generis relation, the so-called big-G grounding. As contrasted with this, I will use “grounding” (in hyphens) for any to-be-specified determination relation.

For instance, a sphericity trope is also an object having the property of being spherical.¹⁶ As reflexive character grounders, module tropes are able to secure the existence of the phenomenon of thin-character.

By contrast, Garcia argues that the advocates of module tropes run into difficulties in accounting for thick-character, that some object has two or several distinct natural properties. Here, Garcia's apparent aim is to argue against the trope bundle theory of objects. According to Garcia, objects' having several distinct properties is not reducible to the fact that it has the corresponding module tropes as its mutually co-located parts. Let there be three co-located module tropes *t*, *u* and *v*, which constitute object *i*. Garcia claims that the fact that object *i* has a thick-character grounded by *t*, *u* and *v* cannot be taken as a consequence of *i*'s having these module tropes as its mutually co-located proper parts. In addition, one needs to adopt an axiomatic principle that these module tropes constitute an object having the corresponding properties. Thus, in order to secure the existence of the phenomenon of thick-character, one needs to assume that, in addition to module tropes, there is a property bearer, an object constituted by the module tropes that has the corresponding properties (op. cit. 504-507). According to Garcia, module trope theory faces several additional difficulties. Since the study of Garcia's module tropes is not the main aim of this article, I will not consider the problems pertaining to module tropes any further.

4. The assessment of Garcia's distinctions

Nevertheless, Garcia's distinctions presented in the previous section do not correctly construe trope theories. No trope theorist aiming at categorial ontological economy and the elimination of the fundamental object-property distinction would accept his classifications. Fundamentally, tropes are neither *properties* nor *objects*. First, tropes are neither modes (particular properties such as the redness of a rose) nor particularized Russellian property universals (some object *x*'s being red). Therefore, the option of considering tropes "modifier tropes" in Garcia's sense is ruled out right in the beginning.

Second, recall that Garcia's "module tropes" are propertied objects, particularized properties inhering in themselves. Module tropes might be a coherent idea, but of no use in

¹⁶ Note that Garcia has *defined* module tropes as self-exemplified* particularized Russellian properties. Hence, a redness module trope is a property of *a*'s *being* red, where *a* seems to be the same property.

standard trope theories.¹⁷ Fundamentally, tropes are neither properties nor objects. Since inherence is analysed in trope theories, tropes cannot be fundamentally self-inhering entities – stand in the fundamental formal ontological relation of inherence to themselves. Consequently, no trope is a “module trope” in Garcia’s sense either. In Williams’ trope theory, one might take it a consequence of the analysis of inherence that the free-floating individual tropes are themselves objects with exactly one property. Nevertheless, unlike Garcia’s module trope, a free-floating trope inheres in itself only derivatively, by being a mereological sum of mutually co-located tropes and a part of its own. Like all other tropes, the possible free-floating tropes are, fundamentally, particular natures and individual simple parts. No recourse to properties, objects or inherence is required in the characterization of their ontological form.¹⁸

Thus, Garcia misrepresents trope theories by construing tropes like heaviness, sphericity and -e charge as “module tropes”, that is, particularized properties that inhere in themselves. Nevertheless, Garcia has continued to defend his approach. In his recent article, Garcia (2024, 229) argues for the module/modifier-distinction by using *the law of excluded middle*:

We can arrive at the distinction by considering a specific trope and using the law of excluded middle to ask a question about the character of the trope itself. Consider a range of putative tropes that one might find in either abundant or sparse trope ontologies. Applying the law of excluded middle, we can ask: Is a negative charge trope itself negatively charged? Is a mass trope itself massive? Is a salinity trope itself saline? Is a sphericity trope itself spherical? [...] And so on. In each case, the two ways of answering the question map onto two different conceptions of a trope: the affirmative answer yields what I call a module trope, the negative a modifier trope.

Thus, according to Garcia, we arrive at the modifier/module-distinction simply by asking whether a trope has itself the character it is supposed to ground. By the law of excluded middle, the answer is either affirmative or negative, and the trope is either a module or a modifier trope.

Seeing that Garcia’s new argument fails needs some elaboration. If we apply the laws of logic to our expressions, we must first specify the language in which they are applied and the

¹⁷ Giberman’s (2022) Ostrich tropes bear some similarities to Garcia’s module tropes. However, Ostrich tropes possess a set of spatio-temporal properties and an additional characterizing property. Like module tropes, Ostrich tropes are supposed to confer their character to more complex entities having Ostrich tropes as their proper parts.

¹⁸ See Hakkarainen (2018, 481-483) for an argument for the same conclusion and Hakkarainen & Keinänen (2023, sec. 5.2) for further discussion of the ontological form of tropes.

interpretation of non-logical constants. Like objects, tropes are countable individuals. In first-order predicate logic, we can construct an artificial language in which we refer to tropes by singular terms and have predicates applying to them. In this way, we can (truly or falsely) attribute various characters to tropes depending on the interpreted predicates the language happens to contain. Thus, predicates like “being simple”, “being a part”, “being a -e charge trope”, “being a 1 kg trope” might apply to some of the tropes in the domain of our language.¹⁹

Suppose now that we expand our artificial language to singular terms referring to objects and predicates applying to them like “being red”, “being spherical”, “having the mass of 1 kg” and “having -e charge”. These predicates usually get their interpretation on grounds of how we use similar expressions in colloquial language: “being spherical” applies to spherical objects, “having the mass of 1 kg” applies to 1 kg objects, and so on. These predicates are used to attribute natural properties/characters to objects and do not apply to any other kind of entity. Thus, for instance, “having the mass of 1 kg” means that some object has the mass of 1 kg. Indeed, we usually speak about objects in our language and attribute natural properties to them.

Trope theories analyse inherence (an object having a natural property) and fundamentally, tropes are neither properties nor objects. Thus, tropes do not belong to the plurality of 1 kg objects or -e charged objects. Thus, on the most natural interpretation of our artificial language, predicates “having -e charge” and “having the mass of 1 kg” do not apply to tropes (with the possible exception of free-floating tropes). Thus, according to standard semantics, the negations of the corresponding atomic propositions are true. Correspondingly, in standard cases, tropes do not have the natural characters “they are supposed to ground” because they are not property bearing objects. For instance, -e charge tropes are not themselves -e charged.

Nevertheless, the fact that tropes do not possess the natural properties they are supposed to “ground” does not entail that tropes are “modifier tropes” in Garcia’s sense, that is, particularized Russellian property universals. Since inherence is not considered primitive in trope theories, tropes are *neither* primitively non-self-inhering properties (modifier tropes) *nor* primitively self-inhering properties (module tropes). Tropes are particular natures by means of which inherence is analysed but they do not stand in the fundamental formal ontological

¹⁹ Barry Smith (2005, sec. 19) applies predicate logic to metaphysical reasoning by taking singular terms as the only expressions that refer to singular entities belonging to different categories. Here one can adopt a similar approach. One can refer to tropes, which are countable individuals, by singular terms and use predicates to express formal ontological relations in which tropes stand, their category features and standard features like being a -e charge trope.

relation of inherence to any entity.²⁰ Yet, tropes do have non-formal ontological characters. Certain predicates like “being a 1 kg trope”, “being a charge trope” and “being a -e charge trope” apply to tropes because they exist as particular natures (Keinänen, Hakkarainen & Keskinen 2018).

Thus, tropes do not (usually) possess the natural properties they “ground”. Yet, tropes *are* particular natures and constitutive to the nature of the corresponding object. Thereby, tropes are (derivatively) properties of objects. For instance, according to Williams’ trope theory, 1 kg trope *t* is property of object *i* if and only if *t* is a part of *i* and spatio-temporally co-located with *i* (cf. above). If object *i* has two or several tropes as its parts, *i* has a complex nature partly constituted by 1 kg trope *t*. Therefore, Garcia’s inference from the fact that a trope is not a bearer of the natural property the trope “grounds” (the lack of *natural character*) to the claim that the same trope does not have any non-formal character constituting that natural property (the lack of the relevant *character*) fails. Although not being an object having the corresponding property, 1 kg trope *t* surely has the relevant character (being a 1 kg trope) as a particular nature.

Garcia falls prey of ambiguous use of his own terminology in his talk about *character making*. Recall that in character making, a trope is supposed to make something characterized in a way different from the way it is itself characterized. Relative to a *natural character*, tropes are “character makers” in Garcia’s sense as they are not “naturally characterized”, that is, bearers of natural properties. However, Garcia means something stronger here. According to Garcia, in character making, “[t]rope characterizes a numerically distinct entity by producing character at the object-level that is absent at the trope-level”. Nevertheless, as we saw just above, the character of 1 kg trope *t* is both present at the trope-level and at the object-level (as a part of object’s nature). Only because of conflating *natural characters* and *characters* in a more general sense (i.e., anything that can be predicated of an entity), Garcia is able draw the conclusion that any *non-module trope* “produces” a character at the object level absent at the trope level. This comes into flat contradiction with how trope theorists characterize their views: according to trope theorists, every trope is present as a particular nature in a (usually) complex character of some object.

Thus, considering tropes as character makers in Garcia’s sense is not a credible alternative. Garcia’s view that paradigmatic trope theories are module trope theories is equally incorrect

²⁰ In other words, inherence is analysed in trope bundle theories and is not a fundamental formal ontological relation, cf. Keinänen & Hakkarainen (2024, sec. 5.2).

and seems to be based on his own false dichotomy that *all* tropes are either modifier or module tropes. Tropes put forth in standard trope theories are neither.

It is unclear whether Loux (2015) takes his distinction between tropes and troopers to be a classificatory distinction among tropes introduced in different trope theories. Loux is *prima facie* more cautious in this respect than Garcia, who claims that his module/modifier distinction divides trope theories into two exhaustive groups, module vs. modifier trope theories. Be this as it may, Loux's trope/troper distinction fails to characterize tropes for similar reasons as Garcia's module/modifier trope distinction. First, tropes are not particular properties of objects like modes. Thus, they are not "tropes" in Loux's sense. Second, recall that Loux's troopers are individual substances with exactly one natural property. Ordinary objects are supposed to be bundles of mutually co-located troopers (Loux 2015, 31-32). Whatever merits Loux's troper theory might have, it presupposes primitive inherence, which trope theorists explicitly reject. Thus, no trope is troper in Loux's sense.

Leaving all these confusions aside, I now provide a trope theoretical account of thin-character and thick-character, respectively. It indeed seems that thin-character and thick-character in Garcia's sense are wide-spread phenomena, for which an ontological category system needs to provide an account. In this, a trope theorist relies on their preferred analysis of inherence instead of primitive grounding or character grounding. Consider an object *i* having natural properties F and G (say, 1 kg and -e charge). An advocate of Williams' paradigmatic trope theory would maintain that object *i* has natural property F if and only if there is a F-trope *t* which is part of *i* and spatio-temporally co-located with *i*. Correspondingly, object *i* has natural properties F and G if and only if there is a F-trope *t* and a G trope *u* that are parts of *i* and spatio-temporally co-located with *i*.²¹

In order to allow for distinct spatio-temporally co-located objects and/or to provide an adequate account of objects belonging to natural kinds, trope theorists have developed new alternative accounts of objects in terms of tropes and new analyses of inherence (Keinänen & Hakkarainen 2024, secs. 21.3-21.4). The comparison of different trope theories is an additional issue, which I will not try to settle here.

²¹ This trope theoretical account of thin/thick character is compatible with different accounts of generality: of why trope *t* is a F trope and trope *u* is a G trope. For instance, according to Williams (2018 [1953]), *t* belongs to a set of exactly similar tropes, i.e., F tropes. Ultimately, distinct tropes belong to this set of tropes because being tropes (particular natures) they are. However, there are alternative trope theoretical accounts of generality, some of which dispense with general entities altogether. See Fisher (2018) for Williams' later views and Keinänen, Hakkarainen & Keskinen (2018, sec. 3.1) for an overview of different accounts.

5. Conclusion

Garcia's distinction between modifier and module tropes fails to provide any correct or informative classification of trope theories. Rather, because of operating by means of assumptions and primitive notions explicitly rejected by trope theorists, it is apt to bring additional confusion. To put it briefly, no trope is a module or modifier trope in Garcia's sense. Finally, if the ambiguity in the use of the term "character" is eliminated, Garcia's conception of non-module tropes as character makers is trivialized to a harmless claim that non-module tropes are not objects possessing the same natural properties that they "ground".

Instead of invoking primitive grounding relations between tropes and objects possessing properties, trope theorists advocate the analysis of inherence in terms of more transparent notions such as parthood, co-location and/or existential dependencies. By contrast, the ontological category systems introducing *particular properties* (such as modes) leave the object-property distinction primitive. The radically revisionary character of trope theories is left easily unnoticed unless one is aware of this fundamental distinction between different ontological category systems. It is a prerequisite of *any* fruitful discussion of trope theories that we correctly formulate them as revisionary category systems aiming at rejection of the fundamental distinction between properties and their bearers.

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