A tropist relational account of hallucinations

Abstract

I propose a tropist relational account of hallucinations in which the subject stands in relation to an instantiated trope complex. Philosophers typically maintain that hallucinations lack appropriate ordinary objects, thus rendering a relational account—which requires an actual relatum—impossible. While ordinary objects are indeed absent in hallucinations, I argue that an actually instantiated trope complex is available, and sufficient to account for the phenomenology of hallucinations. The main challenge for a tropist relational account lies in explaining how an actually instantiated trope complex can exist without being owned by any individual object. Drawing on Donald Williams's (1953) trope theory, I develop a tropist conception of instantiation that does not require a concrete particular or an individual as the property bearer. This conception of instantiation effectively explains the absence of apparently existing hallucinated objects.

Keywords: hallucination, tropes, instantiation, actuality

1. Introduction

The metaphysical status of hallucinated objects remains contentious. Are they sense-data (Robinson 1994)? Intentional objects (Crane 2001)? Uninstantiated universals (Johnston 2004)? Gerrymandered objects (Byrne and Manzotti 2022)?[1] Alternatively, as Michael Martin argues, can a hallucinatory experience only be characterized negatively in terms of its indiscriminability from a corresponding veridical perceptual experience (Martin 2004:72)?[2] These various accounts, whether metaphysically committed or not, aim to explain the phenomenology of hallucinations. Indeed, the central philosophical concern regarding hallucinations appears to be the source of their phenomenology. Yet, in the absence of appropriate environmental objects,[3] what determines this phenomenology? What is the nature of the apparent object (if any) that gives rise to the phenomenology? And is a hallucinatory experience representational?

I propose a tropist relational account of hallucinations (TRAH), according to which the subject stands in relation to an instantiated trope complex. Tropes—being actual, abstract particulars—can exist independently of objects (Campbell 1981; Williams 1953). The actuality of tropes explains the phenomenology of hallucinations, and the particularity of tropes makes a

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[1] Gerrymandered objects are "scattered objects, some with radically diverse parts, and some with large spatiotemporal gaps." (Byrne and Manzotti 2022:341). Note that Byrne and Manzotti also argue that some hallucinations involve ordinary objects. The key claim is that both gerrymandered objects and ordinary objects are physical.

[2] A more radical perspective on hallucination is to deny its possibility altogether. As Masrour (2020) contents, both empirical and a priori evidence supporting the possibility of hallucinations is inconclusive. Consequently, Masrour's approach to the argument from hallucination also challenges my tropist stance. I shall leave this challenge for another occasion.

[3] In many actual hallucinations, subjects are still aware of real scenes, and only parts of scenes and objects are unreal. In this paper, I am only concerned with complete hallucinations.

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relational account of hallucinations possible. Moreover, the independent existence of tropes resolves the difficulty posed by the absence of apparent hallucinatory objects.

The paper proceeds as follows. Section 2 explains the motivation for TRAH and identifies its challenge stemming from the universalist conception of instantiation. Section 3 introduces Donald Williams's trope theory and develops a tropist conception of instantiation, according to which, tropes can be instantiated without being possessed by any entity. Such a tropist instantiation is suited to explaining the phenomenology of hallucinations. Section 4 explores the implications of tropist instantiation for both the nature of hallucination and perception. Section 5 responds to several likely objections to TRAH.

2. The universalist conception of instantiation

As noted at the outset, philosophical accounts of hallucinations fundamentally aim to explain their phenomenology. The phenomenological problem, as Adam Pautz puts it, concerns "what determines the phenomenology of visual experience?" (2010, p. 255). Consider, for example, a hallucination of a pink elephant in a room. The associated phenomenology presents a pink elephant as being present in your experience. What determines this pink-cum-elephant-shaped phenomenology?

In veridical cases, both naïve realism and representationalism appeal to worldly objects and properties to explain phenomenology. Setting aside their respective difficulties, the explanatory legitimacy rests on the **actuality** of objects and properties—specifically, that actual object and properties explain the relevant phenomenology. Thus, if we can find something actual in hallucinations, we can analogously account for the phenomenology of hallucinations. A natural candidate is tropes given their presumed actuality. If hallucinations involve tropes,

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the phenomenological problem becomes readily addressable: the pinkness-cum-elephant-shapedness (as a trope complex) explains the phenomenology of the pink elephant hallucination. The crucial question becomes how an actual complex of sensible properties can exist without being owned by any object—in essence, how to explain the independent existence of sensible properties.

A major obstacle to accepting tropes as actual, independent existences stems from the dogmatic view of instantiation or exemplification. Traditionally, instantiation is understood as an exemplification relation between an object and a property: an object instantiates a property. For instance, the banana on my table instantiates yellowness and crescentness; the table-top instantiates whiteness and squareness, etc. These paradigmatic examples of instantiation, involving properties and objects, align with universal realism about properties. As universal realists hold, instantiation means that "thing's being an instance of a universal" (Armstrong 1989:52), where universals are conceived as mind-independent entities explaining identity and resemblance in multi-located or repeated properties (or relations). Consider how both the sky and my jeans are blue—here, the blue universal explains their resemblance.

The universalist instantiation has several classic objections, including the Third Men Argument[4] and the Bradley's Regression[5]. However, I do not contend that these objections to universal realism are decisive, as universal realists have offered various responses.[6] Rather, I suggest that instantiation is a theoretical notion that cuts across various metaphysical theories.

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[4] Originally see Plato's *Parmenides* 132a–b. For the contemporary discussion, see Vlastos (1954).
[5] See Bradley (1893), for the summary see Perovic (2017).
[6] For a comprehensive discussion of the Third Man Argument, see Gali Fine (1993), especially in Chapters 15 and 16).

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Beyond the universalist instantiation, there can be a tropist alternative. Since theories and theoretical concepts are typically devised to explain particular phenomena, a tropist instantiation appears more suitable for my purpose—explaining the phenomenology of hallucinations—given that a hallucination is a particular (a mental event) and hallucinatory properties are property-instances.

3. The tropist conception of instantiation

According to Donald Williams (1953), property-instances such as the color of the apple on a table, its shape, size, and taste are tropes. Tropes are abstract particulars that are nonetheless actual; they constitute "the very alphabet of being", and are "the primary constituents of this or any possible world" (1953:7). In other words, tropes are fundamental entities. Campbell (1981) further explicitly asserts that tropes are independent existences of concrete particulars. Traditionally, concrete particulars—such as those items on my table—have been considered 'primary substances', existing independently and thus deemed ontologically basic, while properties were viewed as dependent on them. Williams and Campbell challenge this orthodoxy by establishing tropes as ontologically basic.

The characterization of tropes by Williams and Campbell might appear contradictory to some, as it combines 'abstract' and 'particular'—terms typically associated with opposing categories, given the common assumption that universals are abstract and particulars are concrete. However, Williams demonstrates that the abstract/concrete and universal/particular distinctions operate independently. 'Abstract' in this context means that which is "partial, incomplete, or fragmentary", in contrast to the 'whole' (Williams 1953:15). Or as Campbell elaborates, 'abstract' means that the trope is the product of an act of abstraction, where

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attention selects only some aspects but not the whole (Campbell 1981:447–48). Their crucial

insight is that abstractness pertains to partial aspects, while concreteness characterizes the

whole. For example, an apple is concrete because it is a whole, while the redness of the apple is

abstract because it is a property of the apple. Note that abstract and concrete are relative: an

apple is concrete, while its color is abstract; similarly, a color-cum-shape complex is more

concrete than the color alone but less concrete than the apple itself. Under this interpretation,

we can acknowledge not only abstract universals and concrete particulars—as conventionally

recognized—but also abstract particulars (tropes) and concrete universals (e.g. animal as a

category).

	Universal	Particular
Abstract	The similar set (e.g. the universal Wisdom)	Tropes
Concrete	Kinds (e.g. dogs)	Individuals

Williams analyzes subject-predicate propositions thus: 'Socrates is wise,' or generically

'a is ϕ,' means that the concurrence sum (Socrates) includes a trope which is a member of the

similarity set (Wisdom)" (1953:11). This analysis comprises two distinct aspects: 'including' and

'being a member of'. A concrete particular (a concurrence sum) includes a trope, or tropes; and

a trope is a member of a similarity set. In short,

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'*a* is *F*' = df. '*a* includes an f-trope which is a member of the similarity set *F*'.[7]

'Including' designates a compositional relationship between abstract particular tropes (e.g., Socrates' wisdom) and the concrete particular or the concurrence sum (Socrates), while 'being a member of' relates an abstract trope to a kind or a similarity set. Unlike universal realist instantiation (i.e., a relation between a concrete particular and a universal), Williamsian tropist instantiation is a compositional relation between an abstract particular and a concrete particular, namely that f-trope is instantiated (by *a*) in virtue of *a* including an f-trope.

It is crucial to note that this analysis of subject-predicate propositions does not presuppose that the subject refers to a substance independent of the trope referenced by the predicate. Rather, the subject refers to a concurrence sum composed of tropes, where the trope referenced by the predicate is merely one component of this concurrence sum.

There exist cases where no concurrence sum is present, rendering the notion of "including" problematic. Consider a typical demonstrative assertion "this is F" where F refers to a property, but no object is picked out—for example, pointing at the blue sky and saying, "This is blue". Such cases are not subject to Williamsian subject-predicate analysis, since there is no object or concurrence sum that includes a trope. A natural tropist response is to extend Williams's analysis to encompass the mereological fusion of abstract particulars.[8] Thus, the blueness of the sky fuses with its dome-shape to form a fusion, while a single trope exists

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[7] A.R.J. Fisher (2018) also adopts Williams's analysis, but he uses the term 'embrace' instead of 'include'.
[8] L.A. Paul (2006) has developed a full-blown theory of mereological fusion, positing that objects are fusions of properties, with properties being primitive entities that can be multiply locatable, akin to immanent universals. I am grateful to a referee for bringing to my attention that L.A. Paul's theory of mereological fusion closely parallels the one I have developed here, with the key distinction being that Paul does not adopt a tropist stance.

independently. Such an extension aligns with Williams' initial metaphysical scheme: as the most fundamental alphabet of being, tropes cannot be constructed from substances or universals, though substances and universals can be constructed from tropes (Williams 1953). Because of this, tropes can be conceived as independent existences that fuse to form concrete particulars, enabling a conception of instantiation that does not necessarily require a concrete particular as its owner.

Indeed, many instantiated sensible properties are not owned by anything. Consider the sky—a color instance without a concrete particular—or the color bands in a rainbow—tropes without corresponding concrete particulars (See Campbell 1981). Besides Campbell's example, there are examples like shadows, penumbras, holograms, and so on, which exist merely as trope complexes. Shadows, for instance, can be understood as dark shapes projected onto surfaces, arising from light and obstacles. When my shadow falls on a corner, it becomes fractured, its shape determined partially by the wall's structure and partially by my form. However, we attribute the shadow's shape not to the walls but to the shadow itself—merely a shade of darkness. Thus, a shadow constitutes not a thing in the strict sense but rather a trope complex. This analysis suggests that attributing a shape or shade of darkness to a shadow amounts to recognizing these sensible properties as instantiated but unowned.

The trope theory—specifically, the tropist instantiation—proposed above has several theoretical merits. For instance, Williams finds tropes intuitively preferable in addressing the cardinal problem of similarity with difference among substances. Consider two lollipops, one with a red round head (Lolipop-1) and another with a brown round head (Lolipop-2). How do they resemble and differ from each other? Intuitively, their shared roundness determines their

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resemblance, while their distinct colors—redness and brownness—determine their difference. In Williams's framework, these properties are abstract particulars, or tropes.

The second reason for promoting trope theory stems from the analysis of causation. As Campbell argues, property-instances function as causes of effects. For example, the heat of an iron smooths out the wrinkles; the weight of a large truck causes the collapse of a bridge (Campbell, 1981, p. 480). This analysis necessitates tropes as a metaphysical category.

Pertaining to the current topic, tropes explain our sense perception better. As Williams observes, "What we primarily see of the moon, for example, is its shape and color and not at all its whole concrete bulk…" (1953, p. 16). Campbell also argues that tropes are "the immediate objects of perception": "not cats, but tropes of cats, are what is seen, touched, and so on"(1981:481). Thus, Williams and Campbell maintain that tropes constitute the primary features of our perceptual experience. [9]

More recently, Bence Nanay (2012) combines the trope theory with representationalism. He argues that if what is represented in perceptual experience are tropes, then traditional problems of representationalism—such as the particularity of perception and the problem of demonstrative thought—become readily resolvable, because tropes are particulars which the subject can demonstratively entertain.

Besides the above considerations, the tropist instantiation framework offers a potential theoretical foundation for understanding hallucinatory experiences.

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[9] While I agree that we perceive tropes, I disagree that there is a distinction between primary/direct and secondary/indirect seeing. As Gu(2021) argues, one does not indirectly smell a tulip by directly smelling the tulip's scent, as there is no direct way of smelling a tulip except through its scent. Hence, I prefer to say that tropes explain our perception of properties, without implying that we do not perceive concrete objects directly.

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4. Tropes as the objects of hallucinations

Having proposed the tropist instantiation in the previous section, I now demonstrate how it suggests an elegant, relationalist account of hallucinations, which can nicely explicate the phenomenology of hallucinations. Consider the hallucination of a pink elephant: the pinkness-cum-elephant-shapedness trope instantiates itself without an actual bearer. This trope complex determines the phenomenology precisely because the tropes are actual. As discussed in Section 2, both naïve realists and (Russellian) representationalists rely on the actuality of perceived worldly objects and properties to address the phenomenological problem in veridical cases. Now, by understanding unowned complexes of sensible properties through tropist instantiation, we identify an analogous actuality in hallucinations that explains their phenomenology. Moreover, the actuality of hallucinated trope complexes removes a key obstacle to developing a relational account. Traditionally, relational accounts of hallucinations have been stymied by the absence of an appropriate relatum, since hallucinatory objects are typically considered non-existent and thus non-actual. However, under tropist instantiation, a trope complex in hallucination can instantiate itself without requiring a concrete individual as bearer, thereby providing an actual and suitable relatum. This enables a relational account of hallucinatory experience with a trope or trope complex as its relatum (TRAH).

Given TRAH's plausibility, what are its implications for veridical perceptual experiences? After all, we are not only interested in hallucination but also in veridical perception. TRAH's primary appeal lies in its consistency with naïve realism or relationalism regarding veridical perceptual experiences. Both approaches are relational views, and under the metaphysical framework of trope theory, the objects of hallucinations and veridical perceptions share the

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same fundamental status as tropes. Following Williams's and Campbell's account, the objects of perceptual experiences are individuals or concrete particulars constructed from tropes—independent existences or mereological fusions of tropes. This results in a common-nature [10] theory of hallucination and perception in the sense that both of them are relational and their objects are fundamentally tropes. This contrasts with disjunctivist naïve realism, which denies any fundamental commonality between perception and hallucination. Here we have a unified tropist relational theory of perception and hallucination. Since both the status of objects and the structure of experiences are fundamental features of the theory, their common nature is not accidental. As a common-nature theory, it offers distinct advantages in addressing the long-standing challenge facing relationalism—the causal argument—which I shall discuss it in detail in the next section.

One may be curious about the spatiotemporal nature of hallucinated tropes given that they are instantiated or actual. Unlike shadows, rainbows, and other independently existing trope complexes in physical space, a hallucinated trope does not seem to exist in physical space and thus appears non-actual. Evidently, hallucinated tropes are not like ordinary tropes which are "out there". Rather, hallucinated tropes only appear to be "out there", and this appearance is deceptive—hence they are hallucinations. Nevertheless, hallucinated tropes are spatiotemporally located, as their instantiation is (causally) dependent on specific neural activity. Since neural activities occur in definite spatiotemporal regions, hallucinated tropes are

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[10] I'm grateful to the anonymous referee for suggesting to use the term "common-nature" instead of "common factor" to distance my view from Johnstonian or Sethi's (2021a, forthcoming) overdetermination view, as "common-factor" suggests an internalist core element common to both perception and hallucination.

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spatiotemporally located where those neurons are located and when those neurons are activated. However, unlike ordinary tropes which one can examine and re-encounter at their location, one cannot do the same with hallucinated tropes: examining the brain reveals only neural tissue.

The point is that not existing "out there" in physical space does not undermine the actuality of hallucinated tropes. Rather, it only demonstrates that sensible tropes can be produced differently in different locations. Some sensible tropes exist independently of perceivers in physical space (e.g., shadows and rainbows), while others do not (e.g., hallucination), and still others may depend on perceivers but nonetheless exist in physical space (e.g., afterimages).[11]

What matters for actuality is whether the trope enters into a causal chain and plays causal roles. As discussed in Section 3, Campbell demonstrates that trope theory applies effectively to the analysis of causation because particular property-instances play the real causal roles. For example, the heat of the iron removes the wrinkles. Consider a hallucination of a pink elephant approaching. In this scenario, the hallucinated trope complex likely causes a feeling of amazement and prompts flight. Beyond the causal efficacy that a hallucinated trope possesses, it is also itself causally produced. For example, a hallucinated trope can be caused by stimulating the same brain areas activated when genuinely seeing a pink elephant. Therefore, hallucinated tropes are causally competent. We might extend this line of thought with the revised Eleatic dictum, "to be *actual* is to have causal power".[12] This may be somewhat exaggerated since

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[11] Ian Phillips (2013) provides an objective view of negative afterimages.
[12] Eleatic dictum says, "to exist is to have causal powers". See Armstrong (1979:45–46) or Oddie (1982).

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some might argue that fictional entities have causal power yet are not actual. I acknowledge this objection. However, we would not seriously consider fictional objects and properties as actual precisely because they are fictional. Given that hallucinated tropes are not fictional and possess causal power, there are strong grounds for acknowledging their actuality.

The actuality of hallucinated tropes may lead some to erroneously believe that tropes instantiated in hallucination are indistinguishable from those ordinarily instantiated, and consequently, that the former are as real or genuine as the latter. For example, they might conclude that given the actuality of hallucinated fire, it is fundamentally equivalent to actual fire. However, it is crucial to emphasize that, for the purpose of explaining the phenomenology of hallucination, the actuality of appearance-related tropes is sufficient, and this actuality is necessitated by the causal role that these appearance-related tropes serve, which in turn depends on similar neural structures. Consider that a perceived red trope is similar to a hallucinated red trope because they have analogous proximate causes when interacting with human perceivers, though their distal causes may differ substantially. Similarly, while hallucinated fire is constituted by appearance-related instantiated tropes, it would not burn one because it does not instantiate heat as ordinary fire does. This phenomenon illustrates how two trope complexes can be similar at one level while differing at another level due to differences in causal powers related to different structures. To illustrate, butane and isobutane both have the molecular formula C_4H_{10}, but the arrangement of these atoms differs. This shared molecular formula results in similar chemical properties. Both compounds will undergo similar

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chemical reactions, such as combustion. However, the different arrangement of these atoms leads to distinct physical properties, such as their boiling point at room temperature. Thus, a general trope theory maintains that a trope complex contains tropes at different levels, each corresponding to its specific causal role. This framework readily explains why two appearance-similar tropes are not identical.

In the next section, I will address several likely objections to TRAH, aiming to make it more tenable.

5. Objections and Responses

Objection 1. A reviewer has noted that my tropist conception of instantiation is similar to Sethi's Berkeleyean conception of sensible qualities (Sethi 2021b, 2021a). Sethi begins her exploration by examining the metaphysical dependence relation between a property and its bearer. Traditionally, the universalist conception of instantiation posits that a property depends on a substance in which it inheres. Both Sethi and I find the traditional universalist conception of instantiation unsatisfactory. My tropist approach is more radical, completely inverting the dependence relation between properties and substances. As previously argued, tropes are the most fundamental elements, and objects are composed of trope fusions. In contrast, Sethi's view is more moderate and "ontologically flexible" (her term), and she explicitly distances herself from the trope theory. As she writes, "Only those trope theorists who invert the dependence thesis and build objects out of ontologically prior tropes reject it (I will not consider such a view in this paper)" (Sethi 2021b:417). In developing her hybrid view of instantiation, she maintains the universalist conception of instantiation while incorporating a Berkeleyean conception of instantiation that requires a mind to sustain sensible qualities.

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Specifically, a sensible quality can be instantiated in two ways: either by inhering in a substance **or** by being perceived by a subject. Thus, when one hallucinate**s** a pink elephant, a pinkness-cum-elephant-shapedness is instantiated through being perceived by the subject. Here, no substance exists in which the sensible quality can inhere; instead, the mind supports the qualities' existence. Importantly, a sensible quality involved in veridical perception is simultaneously instantiated both by inhering in ordinary objects and by being perceived by a subject.

The similarity between our views is evident: both yield a relational account of hallucination, and the actuality of sensible qualities explains the phenomenology of hallucinations. The difference resides in our ontological commitments. Sethi's ontology retains elements of the universal realist framework alongside aspects of Berkeley's framework—a flexibility she considers advantageous. However, while she distances herself from trope theory, my position differs. I would not claim that the instantiation of pinkness-cum-elephant-shapedness is sustained by mental perception. Instead, I maintain that the sensible quality is instantiated through specific causal processes, existing in a spatiotemporal region. While a subject is aware of this trope and the trope depends on this awareness, its existence or instantiation is fundamentally caused in a particular way. Though I do not claim my tropist view is superior to Sethi's, it offers a distinct alternative approach.

Objection 2. One might argue that my account resembles the sense-datum theory, which is traditionally accused of postulating mental entities. A parallel accusation might arise regarding hallucinated trope complexes. While it is true that the actuality of hallucinated trope complexes

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echoes H. H. Price's argument for the sense-datum theory, our theoretical commitments diverge significantly. Price writes,

> When I say 'This table appears brown to me' it is quite plain that I am acquainted with an *actual* instance of brownness…But I am not acquainted with an actual instance of tableness, though of course it may be that there is one. Thus the natural way of restating the original sentence 'This table appears brown to me' is 'I am acquainted with something which *actually* is brown (viz. a sense-datum) and I believe there is a table to which this something is intimately related (viz. belongs to)'. (Price, 1932, p. 63; italics added)

TRAH agrees with Price that sensible qualities like brownness are actual. However, it does not entail the sense-datum theory. The fundamental issue with Price's view is that from the actuality of brownness, he derives the existence of a mental entity – a sense-datum – which instantiates the actual brownness. This inference is both unnecessary and unjustified. It is unnecessary because a sensible complex adequately explains the phenomenology of sensory experience, making the postulation a sense-datum explanatorily redundant. Moreover, the inference is unjustified because it relies on the controversial 'phenomenal principle': if something appears F (e.g., red) to the subject, then there is something of which the subject is aware which has F (Robinson 1994:32). As previously established, even if something appears F to the subject, F can be instantiated without being possessed by any object. Shadows and rainbows serve as counterexamples to the phenomenal principle.

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Price appears to assume that 'instantiation' and 'instantiated by something' are necessarily equivalent: if a property is instantiated, it must be instantiated by something, and vice versa. In essence, the traditional sense-datum theory, as exemplified by H.H. Price, employs a universalist conception of instantiation. This framework leads to the formulation of the phenomenal principle and the subsequent inference of sense-data as mental entities. However, if sense-datum theorists adopted a less ontologically committed stance, treating 'sense-datum' as a 'dummy' name, the usage of "sense data" would be relatively unproblematic.

Given this analysis, we might consider a variant of the phenomenal principle that aligns with an ontologically neutral sense-datum theory. This variant would simply state that F appears to the subject only if the subject is aware of an F-trope, where F denotes a sensible quality. This formulation preserves the core insight of the phenomenal principle while avoiding the ontological commitments of traditional sense-datum theory.

All in all, asserting the actuality of a hallucinated trope should not be conflated with claiming that it is instantiated by a sense-datum. This distinction is fundamental to maintaining a coherent tropist account while avoiding problematic notions of mental entities or sense-data.

Objection 3. Among intentionalists, it is common to explain hallucinatory phenomenology through uninstantiated properties. Consider these representative examples:

> In hallucinating pink rats we are aware of something—the properties, pink and rat-shaped that something is represented as having—but we are not aware of any object that has these properties—a pink, rat-shaped, object. We are aware of pure universals, *uninstantiated properties*. (Dretske 2003:73, italics added)

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> When the visual system misfires, as in hallucination, it presents *uninstantiated* complexes of sensible qualities and relations. (Johnston, 2004, p. 135; italics added)

> Along with (most) other representationalists, I am happy to say that, in the hallucinatory case, the perceiver is conscious of an *un-instantiated property*. This seems to me to be part of naïve commonsense. (Tye forthcoming, italics added)

Let us call their view universal intentionalism. The moral of universal intentionalism is that represented properties account for the phenomenology of sensory experiences. In veridical cases, those properties are instantiated, while in hallucinatory cases, they remain uninstantiated yet phenomenologically efficacious. These intentionalists might challenge, "Why is TRAH preferable to universal intentionalism?"

Several compelling arguments support TRAH's superiority. First, let us suppose the Platonic view of universals is true. A specific problem concerns the explanatory competency of universals: because a Platonic universal exists outside the actual world where a hallucination occurs, it seems to be incapable of explaining the phenomenology of the hallucination.

Regarding the Aristotelian view of universals, these are located in objects by virtue of being instantiated by them. They appear explanatorily competent in veridical cases because such universals are actual. However, Aristotelian universals cannot be uninstantiated because they depend on their instantiating objects. Were they uninstantiated, no objects would exist within which they could be located. Hence, Aristotelian universals prove inadequate for explaining hallucinatory experiences.[13]

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[13] Kriegel (2011) provides other criticisms of universal intentionalism.

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Objection 4. Bence Nanay (2012) proposes a trope representationalism about perception, maintaining that perceptual experiences represent tropes. One might suggest extending this representationalist view to hallucinatory experiences, yielding a trope representationalism about hallucinations. The question arises why is such a view not preferable to TRAH? Notably, Nanay (2016) indeed contends that hallucinations are mental imagery. Mental imagery, despite its misleading name, is not concerned with phenomenology — it pertains purely to neural processing in the brain. As he explicitly states, "mental imagery is perceptual processing that is not triggered by corresponding sensory stimulation in the relevant sense modality" (2016:67). Thus, mental imagery is defined in terms of deviant causation. Although he subsequently claims that hallucinatory mental imagery is accompanied by the feeling of presence, he does not characterize hallucinatory imagery as inherently tropistic. Hence, attributing trope representationalism about hallucinations to Nanay would be inappropriate.

However, let us consider the possibility that another philosopher might develop such a view.[14] While I do not have specific objections to trope representationalism regarding hallucinations, I maintain broader objections to representationalism as a whole. Elaborating these objections would exceed the scope of this discussion. Instead, I offer this response: given that tropes are actual, why reject them as the relatum of hallucination? Isn't the common reason for rejecting a relational account of hallucinations the apparent absence of a proper relatum? Yet now we have one.

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[14] It appears that Johnston (2018) develops such a view in *Sensory Disclosure: Neither a Propositional, Nor a Factive, Attitude.*

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Objection 5. Universal intentionalists (and trope representationalists) might further contend that their views can withstand the causal argument, asserting that the awareness of a universal as content sufficiently explains all relevant phenomena while preserving ordinary objects and properties as the content in veridical cases. They maintain that an ordinary object's properties avoid being screened off in veridical perception. In contrast, they suggest, the trope relational theory remains vulnerable to the spreading step of the causal argument, specifically that tropes in veridical cases would get screened off from being experienced.

However, as previously explicated, when we examine TRAH in the broader context of perceptual theory, we discover a common-nature theory of sensory experience comparable to universal intentionalism. Where universal intentionalism identifies the common factor as universals (content) present in both perception and hallucination, the trope relational theory locates the common nature in tropes. Hence, prima facie, if the awareness of uninstantiated universals in hallucination does not screen off the awareness of instantiated universals in perception, then by parallel reasoning, the awareness of a sensible complex (a trope) in hallucination should not screen off its counterpart in perception. Therefore, as a common-nature theory, the trope relational theory proves no more vulnerable than universal intentionalism to the causal argument.

It must be acknowledged that this response to the causal argument remains necessarily brief. A comprehensive solution would require detailed examination of the screening-off relation, careful analysis of the metaphysical commitments of both theories, and extensive exploration of their respective explanatory virtues. Such an undertaking would demand systematic engagement with recent developments. However, given the scope and space

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constraints of the present work, this more extensive analysis must be reserved for future

research. The preceding discussion merely aims to suggest that TRAH is plausible to warrant

such detailed future investigation.

Conclusion

I have articulated TRAH, where hallucination is a relation between a hallucinator and a trope or

a trope complex. I have argued that tropes, when understood as actual particulars, are better

suited to explain the phenomenology of hallucinations. I have further argued that sensible

properties can exist independently by defending a tropist conception of instantiation. Finally, I

have addressed several likely objections, showing that TRAH is theoretically neater and less

mysterious than the competing theories, such as the sense-datum theory, universal

intentionalism, or trope representationalism.

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