

Pure Universals: Total and Partial

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ABSTRACT

The bundle theory under a *realist constituent ontology* takes material objects to be composed of repeatable qualitative parts. This theory must answer the problem of individuation, the problem of explaining how two or more qualitatively undistinguishable objects are numerically distinct. Any answer however is conditioned by the regulation that one should invoke only pure universals, i.e., constitutive qualitative parts like *being yellow*. An answer which appeals to impure universals, i.e., non-constitutive qualitative parts like *being Aristotle* or *being from Greece*, is a transgression. Here I attempt to show that positing *individual essences* like being Aristotle as individuators is no transgression. For one, they are constitutive qualitative parts, because they are constitutive qualitative *improper* parts, as opposed to constitutive qualitative *proper* parts like *being yellow*; for two, they are universals, because they are capable of a kind of multiple location I call multiple *fictional* location.

KEYWORDS

Bundle theory; Universals; Constituent ontology; Mereology; Individuation; Individual essences

1 Introduction

The *bundle theory* with which I'm concerned here is metaphysical, though the bundle theory itself is not necessarily metaphysical.¹ The metaphysical bundle theory is customarily associated with *material* objects (henceforth, objects). In this view, objects are bundles of constituents that fall under the ontological category of *properties*.² Thus a tomato is a bundle of color (redness); shape (roundness); texture (softness) ... where each of these constituents falls under the ontological category of properties. The bundle theory is therefore a *category constituent ontology*. More specifically, it's a *one-category* constituent ontology in that objects are composed of constituents all of which fall under *one* ontological category: properties. Other theories of objects are *two-categorical*. For example, in the *substratum theory* objects are composed of constituents some of which fall under one ontological category while some under another; thus a tomato doesn't comprise as ontological constituents only properties, but also an underlying propertyless substratum, a bare particular which, among other functions, bears those properties.³ Theories of objects which are one-categorical are preferred over the two-categorical. Thus the bundle theory is

1 Thus it can be a theory of the self/personal identity (Hume; Benovsky 2009); or of words (Miller 2021); or of material objects, from atoms, tomatoes, tables, and human beings, to planets, stars, and black holes (O'Leary-Hawthorne 1995; L. A. Paul 2006; Keinänen and Tahko 2019; Jago 2021).

2 I treat "properties" in its most general sense; I specify which kind I deal with in this paper shortly.

3 See for example Moreland (1998); Pickavance (2014); Perović (2017). Also, other functions of bare particulars include: being able to individuate objects, and being able to unify the properties of objects.

preferred over the substratum theory on the typical grounds that (i) the bundle theory is *parsimonious*, in that it simplifies metaphysical explanation, and that (ii) not only adding the bare particular as an additional ontological category overcomplicates metaphysical explanation, but the bare particular is a *mysterious* entity,⁴ let alone the concept itself being *incoherent*.⁵ The objective here isn't to critically compare these two category constituent ontologies or these two theories, but rather to assume that one-category ontology and the bundle theory are to be preferred so that I may focus entirely on the following question: how can bundle theorists solve the *problem of individuation*? I explain the latter in a minute; first let me characterize the particular bundle theory, and thereby the particular problem of individuation, which I have in mind.

The constitution relationship between properties and the bundle they constitute can be interpreted in at least two different ways, depending on *what* we mean by "constitution" in constituent ontology. There are at least two different ways to understand "constitution". Call that constituent ontology which reads constitution as *mereological* "Mereological Constituent Ontology" (MCO). In MCO, ontological constituents are primitive and they mereologically fuse together to generate thereafter a material object. In MCO, ontological constituents are referred to as *parts* and the material whole which they generate is referred to as *the mereological fusion* of those parts. Thus, a bundle theory that falls under MCO construes objects as mereological fusions of properties, where properties are understood as *qualitative parts*.⁶ Conversely, call that constituent ontology which reads constitution as *non-mereological* "Non-Mereological Constituent Ontology" (N-MCO). In N-MCO, ontological constituents aren't primitive and they come together to stand into a *primitive* relation, often referred to as expressions like *compresence*. Thus, a bundle theory that falls under N-MCO construes objects as complex compresence of properties.⁷ In N-MCO, talks of qualitative parts and mereological fusions tend to be inappropriate. And as to the question, which understanding of "constitution" one should endorse when discussing the bundle theory, "mereological fusion" stands attractive. For one, mereological fusion is a relation that's too familiar to be mysterious, as opposed to primitive relations like compresence. For two, it's for the bundle theorist's own sake to discuss properties, objects, and relations, in mereological terms because most contemporary metaphysics is couched in mereological lexicon. So here I adopt a bundle theory that falls under MCO. Next I specify which kind of qualitative parts I adopt.

MCO is ambiguous between a *realist* MCO (R-MCO) and a *nominalist* MCO (N-MCO). If the former, qualitative parts are *universals*.⁸ Thus these tennis balls, Alpha and Beta, are mereologically composed of *one and the same* qualitative parts. If the latter, qualitative parts are *particulars*.⁹ Thus Alpha and Beta are mereologically composed of *distinct* qualitative parts. Intuitively, N-MCO is more palatable, for one wants to say that each tennis ball is composed of distinct qualitative parts. What's more, N-MCO, unlike R-MCO, doesn't face *the problem of multiple spatial location*, the problem of explaining how is it possible for one and the same qualitative part be simultaneously part of this object and part of that object. Notwithstanding these reasons which motivate N-MCO, here I assume R-MCO because I want to contemplate the question: how can bundle theorists, who are *realist mereological constituent ontologists* (RCO, for short), solve *the problem of individuation*, the problem of explaining how two objects which are composed, through and through, of the same

4 See Hochberg (1966).

5 See Sellars (1952, p. 184); Mertz (2001, pp. 50–2).

6 For example, L.A. Paul (2002; 2006); Robb (2005, pp. 469–76).

7 For example, Russell (1948); Campbell (1990).

8 Thus L.A. Paul is a realist mereological bundle theorist.

9 Thus Robb is a nominalist mereological bundle theorist.

qualitative parts can nevertheless be numerically distinct?

The plan is as follows. In section 2, I introduce the problem of individuation which I have in mind, together with a particular regulation for solving it. This regulation is acknowledged among realist bundle theorists and most, if not all, abide by it; it imparts that in solving the problem of individuation one must invoke only *pure* universals, i.e., repeatable qualitative parts that *constitute* objects. Thus while Alpha's *being yellow* is a pure qualitative part because it constitutes Alpha, Alpha's *being to the right of Beta* is (im)pure because, though somehow related to it, it doesn't constitute Alpha: *while Alpha carries yellowness wherever it's transported, it doesn't carry being to the right of Beta wherever it's transported*. The main objective of this paper is to consider a particular kind of properties—i.e., *individual essences* such as being identical to Alpha (or being Alpha, for short)—which many consider to be neither pure nor universals, a consideration in virtue of which some bundle theorists,¹⁰ and non-bundle theorists alike,¹¹ conclude that introducing individual essences as individuating solutions violates the regulation. Here I attempt to show that individual essences can be pure universals and so introducing them as individuating solutions is no violation. Section 3 demonstrates that individual essences are pure, and section 4 that they are universals.

2 The Problem of Individuation and the Regulation

The problem of individuation is opaque. There is for example the *logical* problem and the *ontological*.¹² The logical in turn is either *intensional* or *extensional*. The intensional asks 'what is individuation in itself?' and based on the intensional the extensional asks 'if individuation is so-and-so, is there anything out there that corresponds to so-and-so?'. For example, if one intensionally defines *individuation* as *persistence*, the extensional question becomes 'is there anything out there that persists?'. These logical problems are typically tackled to meet another individuation problem that's relatively more important, namely the ontological, which asks 'what makes this thing that thing and not another thing?'. Thus if individuation is persistence, the thing that makes this thing that thing and not another must be something that persists in that thing alone. But it isn't compulsory for one to tackle first the logical problem to meet the ontological. Typically, things work differently in contemporary metaphysics. The ontological problem appears today as a hypothetical puzzling scenario which is devised in such a way to specifically target bundle theories under RCO. Bundle theorists under RCO must overcome these scenarios, otherwise others under other frameworks may gain a foothold.¹³ Take this scenario, TENNIS BALL:

Bundle theorists posit that objects are bundles of qualitative universal parts. Suppose then two tennis balls, Alpha and Beta, both of which are composed of the *same* qualitative parts: yellowness, roundness, fuzziness ... etc., to the last qualitative part. Holding this view commits one to the principle of the Identity of Indiscernibles (IND) (which I formulate in mereological terms): if two objects are composed of the same qualitative parts *through and through*, they are numerically identical. Given IND, Beta and Alpha are numerically identical. Yet one wants to say that they are

10 Thus O-Leary Hawthorne: "... putative [individual essences] as *being Aristotle* do not count as universals: I use 'universal' rather than 'property' here ... for the simple reason that 'universal' is the term of art that most safely excludes [individual essences] from its instances" (1995, p. 191, my brackets).

11 For example, Loux (1974); Van Cleve (1985, p. 96); Moreland (2002, pp. 44–9).

12 For a detailed account of the many kinds of problems of individuation, see Gracia (1984, pp. 21–31).

13 Thus bundle theories under *nominalist* constituent ontology avoid the ontological problem of individuation; but to conclusively say so, one needs to exhaust all possible answers to individuation propounded by realists.

numerically distinct!¹⁴

In general, there are two bundle theorist replies: (A) some reply that the bundle theory isn't committed to IND by showing, in this case, that Beta and Alpha are numerically distinct because there is at least one individuating qualitative part that Beta has but Alpha lacks and vice versa;¹⁵ (B) others reply that there is nothing wrong with the bundle theory being committed to IND. In this case, there is nothing wrong with Beta and Alpha being numerically identical, for, say they, such bundles aren't objects but themselves universals.¹⁶ Alpha and Beta are one and the same and merely distant from itself, much as yellowness in Beta and Alpha is one and the same and merely distant from itself. And since the problem of individuation regards objects, and since objects here are universals, there is no problem for starters. Defenders of (B) are called *eliminativists*, and those of (A) *identitarians*. Since I believe that there is a problem of individuation and that there are objects, I focus on the identitarian ways of solving the problem (though I will have to mix identitarianism and eliminativism in the sequel to make my case).

Critics of the bundle theory voice that the problem of individuation must be resolved by respecting a particular regulation:

REG. In solving the problem of individuation, one should invoke only *pure universals*.¹⁷

Before I state the vindication of REG, let me state the standard definitions of pure and impure universals. Whereas pure universals involve *no* objects or individuals, impure universals do.¹⁸ Thus *being yellow* and *being round* are pure, but *being to the right of Alpha* and *being from Greece* are impure. And since we are dealing with Mereological RCO, it would be rather meticulous to reformulate these definitions in mereological terms. Take *being yellow*, which is pure. It's also a qualitative part of both Alpha and Beta; more specifically, it's that kind of qualitative part which, among other parts, *constitutes*, Alpha and Beta, in that it's "in" both of them (e.g., wherever Alpha and Beta are transported, they remain yellow). I define pure universals in these terms:

PURE UNIVERSALS. Object *O*'s universal *P* is pure iff (i) *P* is a qualitative part of *O*, and (ii) *P* is constitutive of *O*.

Thus, while an object's pure universal is its qualitative part and constitutive of it, an object's impure universal is its qualitative part but *not* constitutive of it:

IMPURE UNIVERSALS. Object *O*'s universal *P* is impure iff (i) *P* is a qualitative part of *O*, and (ii) *P* isn't constitutive of *O*.

Thus Aristotle is constituted by suchlike qualitative parts: whiteness and tallness. These therefore are Aristotle's pure universals; conversely, Aristotle has suchlike qualitative parts but don't constitute him: being to the right of Alexander the great and being from Greece. These therefore are Aristotle's impure universals, related to him non-constitutively. Back to REG. Having defined pure universals, let's modify REG to:

REG.* In solving the problem of individuation, one should invoke only *constitutive qualitative*

14 Another scenario from Moreland: "What do I mean by the problem of individuation? Suppose we have two red, round spots that share all their pure properties in common. Let us call them Aristotle and Plato. The problem of individuation is the problem of offering an ontological assay of the situation so as to specify what it is that makes the two spots two particular, individual entities instead of one" (2000, p. 32); see also Perović (2017, p. 279).

15 For example, Losonsky (1987).

16 For example, O-Leary Hawthorne (1995).

17 Including Armstrong (1978); Chisholm (1981); Van Cleve (1985, pp. 96, 100).

18 Thus Loux: "... a universal is impure if it incorporates at least one determinate object and pure if it ... the materials for the construction [of material objects] must include only pure universals" (1974, pp. 774–75, my brackets). See also Rosenkrantz (1979, p. 515).

parts.

Identitarian bundle theorists who must demonstrate that Alpha and Beta are numerically distinct because there is at least one *individuative* qualitative part that Alpha has but Beta lacks and vice versa, must do so while considering REG*; i.e., whatever that individuative qualitative part is it must be *constitutive*. But why can't it be *non-constitutive*? Reasons differ depending on the individuative qualitative part in question. For example, suppose our bundle theorist says that Beta's *being to the right of Alpha* is what individuates Beta because Alpha lacks it, and Alpha's *being to the left of Beta* is what individuates Alpha because Beta lacks it. This unfortunately leads to infinite regress. Take "being to the right of Alpha" which is said to individuate Beta. This property includes an individual, Alpha, and Alpha is itself a bundle of properties that needs individuation; to individuate Alpha, one could say for example that it is being at the top of this fridge. But the latter property includes again an individual, this fridge, which is itself a bundle of properties that needs individuation; and so on ad infinitum till we realize that we've in fact never individuated the first subject matter, namely Beta. Our bundle theorist might reply that if we individuate Beta by "being to the right of Alpha" and then individuate Alpha by "being to the right of Beta", then regress stops because we have already individuated Beta. But this leads to a vicious circle. For now we need to individuate Beta and this takes us to individuating Alpha, and individuating Alpha takes us to individuating Beta, etc. To sidestep these consequences, it's better for our bundle theorist to respect REG*. She'd better introduce individuative candidates which are constitutive rather than non-constitutive.¹⁹

The paper's objective is to motivate a solution to the problem by positing *individual essences* (e. g., being Alpha) as individuative qualitative parts. Appealing to individual essences, TENNIS BALL is met by saying that Beta and Alpha don't share all of their properties, because while Beta is *being Beta*, Alpha isn't, and while Alpha is *being Alpha*, Beta isn't. This strategy is refuted on many grounds; such properties, which involve individuals, are (1) also subject to infinite regress and circles; (2) non-constitutive qualitative parts; (3) non-universals (e. g.. *only Alpha* which is being Alpha). Now (1) is obviously false. If Beta is individuated by being Beta, then I don't need to individuate Beta again (I have just individuated it!). The reason why individual essences avoid infinite regress and circles is because they are *constitutive* qualitative parts; however (2) says that this isn't the case; so next I focus on demonstrating that individual essences aren't only constitutive qualitative parts but also universals.

In section 3, I differentiate between two kinds of constitutive qualitative parts: *constitutive qualitative "proper" parts* and *constitutive qualitative "improper" parts*. Then I argue that whereas properties like yellowness are constitutive qualitative *proper* parts, individual essences are constitutive qualitative *improper* parts. In section 4, I differentiate between two kinds of multiple location: *multiple "spatial" location* and *multiple "fictional" location*. Then I argue that whereas properties like yellowness are capable of multiple *spatial* location, individual essences are capable of multiple *fictional* location. If successful, individual essences are plausible individuative candidates to which realist bundle theorists can appeal.

3 Two Kinds of Constitutive Qualitative Parts

It's typical in mereology to distinguish between two parthood compositions: *proper* and *improper*. Improper parthood allows that one part can compose an object, namely itself, in which

¹⁹ Thus Beta's being to the right of Alpha isn't constitutive of Beta, as opposed to Beta's yellowness: Beta's yellowness is in Beta wherever Beta is transported, but Beta's being to the right of Alpha isn't in Beta wherever Beta is transported.

case the object's part is *improper*. Conversely, proper parthood requires at least two parts for object composition, parts neither of which are identical to the object they compose, in which case the object's parts are *proper*. Says Aaron Cotnoir, "the salient difference between a proper part and an improper part is simply that a proper part *isn't identical to* the object it is part of, whereas an improper part *is identical to* the object it is part of" (2021, 4253). More formally then,

PROPER PARTS. x is a proper part of y , iff (i) x is part of y , and (ii) x isn't identical to y .

IMPROPER PARTS. x is an improper part of y , iff (i) x is part of y , and (ii) x is identical to y .

Let's assume that proper and improper parthood are plausible. Let's also assume that there is no problem with objects being composed of proper and improper parts. Thus if object O is composed each of these proper parts, p_1, p_2, p_3 , then p_1, p_2, p_3 (*taken together*) would be an improper part of, hence identical to, O ; that is, let's assume composition as identity.²⁰

Since here we are dealing with qualitative parts, it follows that there are qualitative *proper* parts and qualitative *improper* parts. Take Beta. Beta is an object that's composed of qualitative parts. Since each of yellowness and fuzziness is part of Beta, and since each isn't identical to Beta, then each is a qualitative *proper* part of Beta. But then what would be Beta's qualitative improper part? Whatever it is, it must be a quality that's identical to Beta. Let's say that Beta's qualitative proper parts *taken together* are identical to Beta, and let's call our qualitative proper parts *taken together* "being Beta". Being Beta, then, is identical to Beta, in which case being Beta is a qualitative improper part of Beta. At this point one might object,

"if our qualitative proper parts taken together are identical to Beta (the object), and if Beta is identical to being Beta (the property), then, by transitivity, the qualitative proper parts taken together are identical to being Beta (the property). However, this account is a mixture of the "identitarian" and the "eliminativist" bundle theory: identitarian, in that qualitative proper parts (properties) taken together generate Beta (object); eliminativist, in that qualitative proper parts (properties) taken together generate being Beta (property)."

In reply, there is nothing fishy about mixing these theories; in fact, one should mix them for three interrelated reasons: (R1) The identitarian bundle theory (IBT), unlike the eliminativist (EBT), violates a straightforward principle I call *Same-Type Generation*:

S-T-GENERATION. For each x and y , there is at least w , such that if (i) x and y are proper parts of w , and if (ii) x and y are of kind K , then it's impossible for w to be of a kind other than K ;

(R2) but since one still wants to retain the identitarian idea that bundles are objects, one must develop identitarianism that respects S-T-GENERATION. But in so doing one must mix identitarianism with eliminativism; what's more, (R3) this mixing, as we will see, allows one to explain what is for objects to have improper parts by using two different terms that designate the same idea.

(R1) S-T-GENERATION is familiar. Says D.C. Williams, "everybody agrees that a sum is of the same type with its terms, as a whole is of the same type of its parts, a man of the same type with his arms and legs" (1953, 10). Thus if you fuse two properties, you should acquire a property and not an object; and if you fuse two objects, you should acquire an object and not a property; etc. Given S-T-GENERATION, one shouldn't claim that qualitative proper parts like yellowness, roundness, fuzziness, etc., generate Beta the object. One should claim that they generate a qualitative whole, in this case being Beta. And since being Beta is a property that represents an individual essence, then, more generally, fusions of qualitative proper parts generate individual essences. Now, since IBT, unlike EBT, takes qualitative proper parts to generate objects, it violates S-T-GENERATION. Does this mean that we should endorse EBT? Suppose we do. We then should say that the bundles of universals are themselves universals. But since this view is counterintuitive despite its respect of S-T-GENERATION, I propose a way to be identitarian while respecting S-T-GENERATION.

20 Proponents of composition as identity include: Baxter (1988); Wallace (2011).

(R2) To see this, we might want to distinguish between two kinds of identitarianism. Since identitarianism, in general, holds that there are qualitative proper parts and objects such that the former bundle into the latter, this should mean either (a) qualitative proper parts, taken together, generate an object which is *something over and above* them, or (b) they, taken together, generate an object which is *nothing over and above* them. If (a), objects are independent of their qualitative parts (this is the standard IBT). If (b), objects *just are* their qualitative parts; (b) allows one to deem objects as qualitative parts taken together (namely as individual essences) and vice versa, because they are identical. The identitarian reading of (b) is different from eliminativism. While the latter motivates one to “eliminate” objects for good, the former motivates one to “retain” objects but only as identical to qualitative proper parts taken together; thus by “Beta” one means “being Beta” and vice versa. Therefore, by being identitarian in the sense of (b) one can identify bundles with objects *understood as identical to improper qualitative parts*. So no violation of S-T-GENERATION.

(R3) Finally, this mixing helps us explain what is for an object to have a part that’s identical to it (improper part) *by way of* using two different terms that refer to the same idea. Thus, instead of saying Beta has Beta as an improper part (or being Beta has being Beta as an improper part), we can now say that Beta has being Beta as an improper part.

To conclude, objects are composed of two different kinds of constitutive qualitative parts: proper and improper. Individual essences are kinds of constitutive qualitative improper parts of objects, in that objects just are individual essences. But thus far we’ve only shown that individual essences are kinds of constitutive qualitative parts. What remains to be shown is that individual essences are also universals, so that they may count as adequate individuator.

4 Two Kinds of Multiple Location

The main feature of universals is repeatability. Thus the constitutive qualitative part yellowness, which is repeatably in Alpha and Beta, is a universal. Other kinds of qualitative parts such as the *non-constitutive* are also repeatables. Thus “being good” is a non-constitutive qualitative part (indeed, one can’t physically detect goodness “in” something), yet many material objects are being good. The aim here is to show that, like constitutive qualitative proper parts and non-constitutive qualitative parts, constitutive qualitative *improper* parts are also repeatables. First, I consider what is for a universal to be property-repeatable. I begin with an obvious definition of property-repeatability vis-à-vis qualitative *proper* parts:

REPEATABILITY-1. A constitutive qualitative proper part is property-repeatable iff it’s capable of being *spatially* located in *multiple* material objects.

Thus since the constitutive qualitative proper part yellowness is capable of being spatially located in multiple material objects, e.g., in Alpha, in Beta, etc., it follows that yellowness is property-repeatable. But REPEATABILITY-1 doesn’t apply to other kinds of qualitative parts like (a) *non-constitutive* qualitative parts and (b) constitutive qualitative *improper* parts. Start with (a). Take being good, which is non-constitutive; it isn’t capable of being *spatially* located in material objects. This is because goodness isn’t a qualitative part that constitutes objects. Yet, more importantly, one wants to say that goodness is property-repeatable for obviously many things are good. The question becomes what is for non-constitutive qualitative parts to be repeatable? We know that for constitutive qualitative proper parts to be so they must be capable of multiple *spatial* location. So the question becomes: *what kind of multiple location non-constitutive qualitative parts are capable of?* I’m not interested in this question, but I give something in the right ballpark:

REPEATABILITY-2. A non-constitutive qualitative part is property-repeatable iff it’s capable of being *non-spatially* located in multiple material objects.

Now I'm interested in (b), the kind of multiple location pertaining to constitutive qualitative (im)proper parts. And these share something in common with non-constitutive qualitative parts; both are incapable of multiple *spatial* location. For example, the constitutive qualitative improper part *being G.E. Moore* is incapable of multiple spatial location because one can't find other G.E. Moore(s) in the world much as we find yellowness. But while it's certain that non-constitutive qualitative parts are repeatables, it isn't certain that constitutive improper parts are repeatables. Next I demonstrate that it's possible for constitutive improper parts to be repeatables considering a particular kind of *non-spatial* multiple location.

Take Alpha. Now Alpha could have been pink and squared rather than yellow and round. But one thing that Alpha couldn't have not been is being Alpha. We can't even suppose that Alpha could have been something other than Alpha, because we can't speak of a subject matter yet not speak of it. So while Alpha, the subject matter, *could* have had other constitutive qualitative proper parts, it *couldn't* have had another constitutive qualitative improper part, for the latter just is identical to Alpha. To recapitulate, Alpha of this actual world, Alpha-AW, has these constitutive qualitative proper parts, yellowness and roundness; it also has this constitutive qualitative improper part, being Alpha. Conversely, Alpha of another possible world, Alpha-PW1, has these constitutive qualitative proper parts, pinkness and squareness; it also has this constitutive qualitative improper part, being Alpha. Note then how being Alpha is shared by both Alpha-AW and Alpha-PW1, hence being repeatable. But before I specify the kind of multiple location that being Alpha is capable of, I must detail what I mean by "Alpha *could* have been so-and-so".

Modal ontology can be, in general, either a form of realism or anti-realism. Realists reduce possibility to actuality; roughly, to say that Alpha could have been pink and squared is to mean that there is an actual world other than this actual world in which Alpha is pink and squared. Reversely, anti-realists reduce possibility to non-actuality. Thus one anti-realist modal ontology, which I endorse here, is *modal fictionalism*, on which Gideon Rosen says, "the fictionalist hopes to earn honest title to the language of possible worlds—that is, title to talk as if there were such things—while retaining a sensible one-World ontology" (1990, 332). Thus if I say that Alpha could have been pink and squared, I mean it fictionally. I retain one-World ontology and merely fictionalize about another Alpha that's pink and squared. So there are fictional Alphas which, though may not share the same qualitative proper parts, must share *being Alpha*, i.e., share the same qualitative improper part. That said, considering modal fictionalism, I call the kind of multiple non-spatial location which individual essences are capable of *multiple fictional location*:

REPEATABILITY-3. A constitutive qualitative improper part is property-repeatable iff (i) it's capable of being *spatially* located in a *singular* material object, and (ii) it's capable of being *fictionally* located in multiple fictional objects.

Note then that constitutive qualitative *improper* parts are distinct from constitutive qualitative *proper* parts in that (1) the former aren't capable of being spatially located in "multiple" material object, and that (2) the latter aren't capable of being spatially located in a "singular" material object. But these parts share something. Both are capable of multiple fictional location. Yellowness, for example, like being Alpha, is capable of being located in multiple fictional objects. Moreover, constitutive qualitative *improper* parts are distinct from *non-constitutive* qualitative parts in that the former aren't capable of being non-spatially located in multiple material objects. Thus while *many* material objects can be good, only *one* material object can be Alpha. Moreover, both parts share something. Both are capable of multiple fictional location; goodness, for example, like being Alpha can be shared by many fictional objects.

Individual essences, therefore, are property-repeatables in the sense of REPEATABILITY-3. Also, they are kinds of constitutive qualitative parts. Individual essences, then, are legitimate individuator. Thus one bundle theorist way to answer TENNIS BALL without violating REG* is to

posit individual essences: even though Alpha and Beta share their pure proper universals, they don't share their pure improper universal. While Alpha is being Alpha (and could have never been Beta), Beta is being Beta (and could have never been Alpha).

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References

- [1] Armstrong D. (1978). *Nominalism and Realism*, Vol. 2. Cambridge: Cambridge University Press.
- [2] Baxter D. (1988). Many-one identity. *Philosophical Papers*, 17, 193–216.
- [3] Benovsky J. (2009). The self: human bundle and/or a cartesian substance? *European Journal of Analytic Philosophy*, 5, 7–19.
- [4] Campbell K. (1990). *Abstract Particulars*. Oxford: Blackwell.
- [5] Chisholm R. (1981). *The first person: an essay on reference and intentionality*. Minneapolis: The University of Minnesota Press.
- [6] Cotnoir A. (2021). Is weak supplementation analytic? *Synthese*, 198, 4229–4245.
- [7] Gracia J. (1984). *Introduction to the problem of individuation in the early Middle Ages*. München: Philosophia Verlag.
- [8] Hochberg H. (1966). Ontology and Acquaintance. *Philosophical Studies*, 17, 49–55.
- [9] Jago M. (2021). Essential bundle theory and modality. *Synthese*, 198, 1439–1454.
- [10] Keinänen M., Tahko T. (2009). Bundle theory with kinds. *The Philosophical Quarterly*, 69, 838–857.
- [11] Losonsky M. (1987). Individual essences. *American Philosophical Quarterly*, 24, 253–260.
- [12] Loux M. (1974). Kinds and the Dilemma of Individuation. *The Review of Metaphysics*, 27, 773–784.
- [13] Mertz D. W. (2001). Individuation and instance ontology. *Australasian Journal of Philosophy*, 79, 45–61.
- [14] Miller J.T.M. (2021). A bundle theory of words. *Synthese*, 198, 5731–5748.
- [15] Moreland J. P. (2000). Issues and options in individuation. *Grazer Philosophische Studien*, 60, 31–54.
- [16] Moreland J. P. (1998). Theories of individuation: A reconsideration of Bare Particulars. *Pacific Philosophical Quarterly*, 79, 251–263.
- [17] O'Leary-Hawthorne J. (1995). The bundle theory of substance and the identity of indiscernibles. *Analysis*, 55, 191–196.
- [18] Paul. L.A. (2006). Coincidence as overlap. *Noûs*, 40, 623–659.
- [19] Paul. L.A. (2002). Logical parts. *Noûs*, 36, 578–596.
- [20] Perović K. (2017). Bare particulars Laid Bare. *Acta Analytica*, 32, 277–295.
- [21] Pickavance T. (2014). Bare Particulars and Exemplification. *American Philosophical Quarterly*, 51, 95–108.
- [22] Robb D. (2005). Qualitative unity and the bundle theory. *The Monist*, 88, 466–492.
- [23] Rosen G. (1990). Modal fictionalism. *Mind*, 99, 327–354.
- [24] Rosenkrantz G. (1979). The pure and impure. *Logique Et Analyse*, 22, 515–523.
- [25] Russell B. (1948). *Human knowledge: its scope and limits*. New York: Simon and Schuster.
- [26] Sellars W. (1952). Particulars. *Philosophy and Phenomenological Research*, 13, 184–199.
- [27] Van Cleve J. (1985). Three Versions of the Bundle Theory. *Philosophical Studies*, 47, 95–107.
- [28] Wallace M. (2011). Composition as identity: part 1. *Philosophy Compass*, 6, 804–816.
- [29] Williams D. C. (1953). On the elements of being: I. *The Review of Metaphysics*, 7, 3–18.