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BARE PARTICULARS AND INDIVIDUATION

REPLY TO MERTZ

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Abstract

Not long ago, one of us has clarified and defended a bare particular theory of individuation. More recently, D. W. Mertz has raised a set of objections against this account and other accounts of bare particulars and proffered an alternative theory of individuation. He claims to have shown that 'the concept of bare particulars, and consequently substratum ontology that requires it, is untenable.' We disagree with this claim and believe there are adequate responses to the three arguments Mertz raises against bare particulars. To substantiate this assertion, we clarify the nature of bare particulars as individuators, state Mertz's objections, and respond to them. We conclude that Mertz has failed to show that bare particular theory is untenable.

The notion of a problem of individuation has come to be used for a wide variety of different and not altogether related matters in philosophy, ranging from linguistic, conceptual, and epistemological issues of singling something out at or through time to more distinctively metaphysical concerns. Even metaphysical issues of individuation exhibit a plethora of concerns and interpretations. In light of this diversity, we can clarify our own treatment of the problem of individuation in this article by considering a case of quality agreement. Suppose we have two red, round spots that have all their pure properties in common. Let us call them *a* and *b*. The problem of individuation is that of offering an ontological assay of the situation so as to specify what it is that makes each individual spot a particular and not a universal, and what is it that makes the two spots two particular, individual entities instead of one.[1] So understood, this problem of individuation requires an answer to two different but intimately related questions: (1) How are we to characterize individuality ontologically? To what ontological category or logical type does individuality belong? (2) What sort of distinction is there between the individuality and nature of an individual like *a* or *b*, e.g., a real distinction, a modal distinction, a distinction of reason, or some other distinction? One's answer to question two will depend on the solution given to query one.

In the last few years, one of us has defended a bare-particular theory of individuation by clarifying its major contours and responding to a set of objections often raised against it [Moreland 1998; 2000]. More recently, D. W. Mertz has raised a set of new objections against bare particulars and proffered an alternative account of individuation [Mertz

[1] For an analysis of various issues in the broader topic of exemplification, see J. P. Moreland [1996: 133–47].

2001]. He claims to have shown that 'the concept of bare particulars, and consequently substratum ontology that requires it, is untenable' [ibid.: 52]. We disagree with this claim and believe there are adequate responses to the objections Mertz raises against bare particulars. In what follows, we shall clarify the nature of bare particulars as individuators, particularly, those aspects of a bare-particular theory relevant to Mertz's critique, state his objections, and respond to them. Because the bare-particular theory has been defended elsewhere, we shall not attempt here to show that the theory is true in light of Mertz's critique. We only seek to show that his objections have not provided adequate reason to think that the bare particular theory is false.

I. The Central Contours of a Bare Particular Theory of Individuation

A good way to clarify the bare-particular theory is to examine briefly the problem to which it is a response and to set it alongside its main rivals. We begin by defining an impure property as one whose description makes essential reference to a particular, e.g., 'being identical to Socrates', 'being to the left of the table'. A pure property is one whose description makes no essential reference to a particular, e.g., 'being red'. Now consider the following four propositions:

(1) The only constituents of objects are their pure properties.
(2) Pure properties are numerically identical in their instances.
(3) (x)(y) [(z)(z is a constituent of x $\leftrightarrow$ z is a constituent of y)$\rightarrow$ (x = y)].
(4) Necessarily, (x)(y) [(z) (z is a pure property of x $\leftrightarrow$ z is a pure property of y) $\rightarrow$ (x = y)].

The difficulty expressed in these four propositions is that propositions (1)–(3) entail proposition (4) and (4) is the assertion that the identity of indiscernibles is a necessary truth when construed as a statement about pure properties. And most philosophers think that the identity of indiscernibles is false.

Proposition (3) has been called the principle of constituent identity and is fairly uncontroversial once we get clear on what a constituent is. So far as we know, virtually all philosophers accept it [Hochberg 1965]. The proposition employs a notion of 'constituent' that ranges over parts—separable and inseparable (e.g., Husserlian moments), properties, internal relations within some whole, and, indeed, all entities whatsoever that enter into the being of some whole. It is hard to see how two entities could share literally *all* their constituents in common and still be two. Those who reject proposition (3) reject the entire project of giving ontological assays of complex entities and would owe us another account of what it is for something to be a constituent of something else. Moreover, even if someone holds that the world consists entirely of simples, this would not be a solution to the problem of individuation as we are construing it; it would amount to a rejection of the problem itself. Note carefully, that (3) is a conditional, not a biconditional. (3) does not entail that all entities have constituents. It is consistent with (3) to hold that while two complex entities that share all their constituents in common are identical, there are uncomposed simples that are self-identical, individuated particulars simply as such. This point will be important when we consider Mertz's third objection below.

Different solutions to the problem of individuation focus variously on propositions (1), (2), and (4). Proposition (1) is meant to exclude bare particulars, and advocates of bare particulars like Gustav Bergmann, D. M. Armstrong, and E. B. Allaire reject it. Proposition (2) expresses a realist construal of properties as multiply-exemplifiable entities such that each is identical in all of its instances. Nominalists reject proposition (2) and try to solve the problem of individuation by embracing a view of qualities as abstract particulars. Currently, Keith Campbell is the best known advocate of this position [Campbell 1983; 1981; 1976; 1990]. A further solution to the dilemma of individuation is to accept propositions (1)–(3) and reject proposition (4) on the ground that impure properties or Leibnizian essences, e.g., the property of being identical to spot *a*, are among the constituents of spots *a* and *b* expressed in proposition (3). Thus, *a* and *b* each has its own impure property as an individuator. Alvin Plantinga is the chief advocate of this alternative [Plantiga 1974: chapters 4–6].

What exactly is a bare particular? According to Gustav Bergmann's classical definition,

> Bare particulars neither are nor have natures. Any two of them are not intrinsically but only numerically different. That is their bareness. It is impossible for a bare particular to be 'in' more than one ordinary thing. . . . A bare particular is a mere individuator. . . . It does nothing else.
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> [Bergmann 1967: 24, 25]

Bergmann's statement implies three things about a bare particular: (a) It is not a property or a relation, but rather, a primitive individual of logical type zero in Bertrand Russell's sense. (b) It does not 'have' a nature nor does it 'have' any properties at all. (c) Its only role is to be an individuator. Proposition one is fairly straightforward and clear. Spots *a* and *b* are two individual spots that differ from each other because each has its own bare particular that individuates it and that differs from the properties in *a* and *b* by more than a mere distinction of reason. Bare particulars constitute the 'this' and the 'that' of *a* and *b*, and are called 'bare' to distinguish them from other particulars, e.g., events, primary substances, quality-instances, or in this case, the spots themselves.

As it stands, proposition (b) is ambiguous because there is a sense in which bare particulars do have properties and a sense in which they do not. Advocates of bare particulars distinguish two different senses of being 'bare' along with two different ways something can have a property. In one sense, an entity is bare if and only if it has no properties in any sense. Bare particulars are not bare in this sense. They do not exist unless they possess properties. There is another sense of 'bare', however, that is true of bare particulars. To understand this, consider the way a classic Aristotelian substance has a property, say, some dog Fido's being brown. On this view, Fido is a substance constituted by an essence which contains a diversity of capacities internal to the being of Fido as a substance. These capacities are potentialities to exemplify properties or to have parts that exemplify properties. The capacities are grounds for the properties like brownness that Fido comes to have. When a substance has a property, that property is 'seated within' and, thus, an expression of the 'inner nature' of the substance itself. Thus, Richard Connell is correct to distinguish the way substances and bare substrata have

properties when he claims that properties are not simply tied to substances, but rather 'rooted in . . . and caused by the substance' [Connell 1988: 90].

By contrast, bare particulars are simple and properties are linked or tied to them. This tie is asymmetrical in that some bare particular x has a property F and F is had by x. A bare particular is called 'bare', not because it comes without properties, but in order to distinguish it from other particulars like substances and to distinguish the way it has a property (F is tied *to* x) from the way, say, a substance has a property (F is *rooted within* x). Because bare particulars are simples, there is no internal differentiation within one of them. When a property is exemplified by a bare particular, it is tied to that particular. Thus, bare particulars have properties. Moreover, we agree with every advocate of bare-particular theory with whom we are familiar that a bare particular can exist only if it has at least one property tied to it. Now, this fact about bare particulars neither makes them identical to their properties nor does it entail that properties are constituents within a bare particular. To illustrate this aspect of bare particulars by way of an analogy, just because a man never comes out of his house naked, it does not follow that he is his clothes or that they compose him as constituents.

One important qualification needs to be made about proposition (c). Bare particulars have been called upon to serve a number of metaphysical roles in addition to individuation: the unifier and possessor of all of a primary substance's properties (e.g., Locke's kind of substances), the ground for the concreteness of an ordinary thing if properties are taken as abstract entities, that which accounts for the endurance of a substance through intrinsic qualitative change. In this article, we follow Bergmann and discuss bare particulars only as individuators. Thus, arguments against the adequacy of bare particulars in the other roles are irrelevant to the question of individuation.

II. Mertz's Case Against Bare Particulars

Mertz raises three arguments against a bare particular theory of individuation. First, Mertz argues that of notion of a 'tied-to' relation between a bare particular and a universal is ad hoc and without adequate motivation besides that of saving bare particulars. Mertz supports this contention by calling attention to the radically different nature of the 'tied-to' relation of predication between a bare particular and an attribute. Advocates of bare particulars take the more conventional 'rooted-in' relation to characterize all other forms of predication in the hierarchy of individuals above the lowest level at which bare particulars are postulated. But when it comes to bare particulars, advocates adopt a *sui generis* 'tied-to' notion of predication and, says Mertz, 'There is no independent motivation provided for the tied-to form of predication, it is simply posited in an attempt to save bare particulars from self-contradiction' [Mertz 2001: 50].

Second, Mertz claims that when the 'tied-to' mode of predication obtains between a universal and a contentless bare particular, the latter has nothing in it to ground the relation. The relation is completely external to the bare particular, and this fact generates at least two problems. For one thing, when a universal is tied to a bare particular, this makes no difference to the intrinsic nature of that bare particular because it has no such nature. It would seem to follow, Mertz argues, that a bare particular can exist without being tied to any universal, because all properties tied to bare particulars are contingent

properties. This conclusion is absurd, however, because it implies that a property like simplicity is both a necessary and contingent property of bare particulars. It is contingent for the reason just cited, but it must also be a necessary property because a bare particular necessarily has the property of being simple (and of being particular) throughout all possible worlds in which it exists.

For another thing, the externality of the 'tied-to' predicational link implies that contrary properties, such as round and square, can be simultaneously tied to the same bare particular because there is no controlling content in a bare particular to serve as the metaphysical ground for what can and cannot be predicated of it. If an advocate of bare particulars argues that contrary properties are not predicable of the same subject—bare or otherwise—not because of the nature of the subject, but because of the nature of the contrary properties themselves, Mertz invites us to consider the following:

> Consider the shared 'subject' of Triangle in the facts corresponding to 'Round is contrary to Triangle' and 'Square is contrary to Triangle.' Here there is nothing in the natures of Round and Square as contraries that prevents them from being related by the relation Is-contrary-to to the shared relatum Triangle. Indeed, it is the very fact that they are contraries that allows them to enter into this particular relation with the intension Triangle. Hence, it is possible that contrary properties can be related to the same subject. More so in regard to the posited Tied-to relation, for in 'F is tied-to [bare particular] p_a' the Tied-to relation obtains independent of the nature of the relata, 'predicate' F or the 'subject' p_a. Hence, both Round and Square can be 'tied-to' a bare particular p_a, and if the Tied-to relation is to be a form of predication, then both contraries can be predicates, i.e., properties, of the same subject, which is absurd.
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> [Mertz 2001: 51]

Mertz uses a colon locution to designate facts, and concludes his second argument by claiming that in an atomic fact, say $:F_i(G_j)$, it is the content of the subject, G (subscripted locutions refer to instances of the intension expressed by their corresponding letters) that controls the predicability of F_i to one of G's instances, and for any content H contrary to that of F, the content of G also precludes any instances H_k from being predicable of G_j.

Third, Mertz claims 'there can be at most one bare particular and so only one extant individual' [ibid.: 52]. According to Mertz, this is the most devastating criticism of bare particulars. Because bare particulars are constituentless, they are all alike in having no constituents. But, then, because entities with the same constituents are identical, there can be only one bare particular and so only one thick, individual particular which is absurd. In support of this last claim, Mertz cites the principle of constituent identity mentioned above:

(3) $(x)(y)\ [(z)(z \text{ is a constituent of } x \leftrightarrow z \text{ is a constituent of } y) \rightarrow (x = y)]$.

Mertz argues that because proposition (3) 'asserts that entities having exactly the same constituents are identical, all bare particulars in having no constituents have exactly the same constituents and so are identical' [ibid.]. Mertz also points out that this argument has been made before, specifically by Leibniz, who argued against space conceived of as

dimensionless points on the grounds that, in themselves, there would be nothing to distinguish one point from another, and so they must be identical.

One may object by saying that bare particulars are individuated by their external relations, but Mertz points out, correctly in our view, that this would be inadequate because external relations logically presuppose their relata and so cannot serve to individuate them.

Mertz concludes that the general mistake is the assumption that individuation is a primitive requiring a distinct, unrepeatable entity. Instead, individuation is the result of the combinatorial nature of predication: '[B]are particulars are neither needed nor possible' and individuators cannot lack content [ibid.].

III. A Response to Mertz's Critique of Bare Particulars as Individuators

In order to respond to Mertz's first charge that the bare-particular model is problematically ad hoc, we must first provide a backdrop for the discussion that will serve to contextualize and motivate the problem of individuation in a realist ontology. This is necessary so that we do not lose perspective on this problem and how it relates to the development of that ontology. It is also important for calling attention to how the development of a bare-particular solution to individuation bears an important analogy to the way philosophical theories more generally are developed, especially when development of those theories reaches the point of identifying and characterizing the primitives in the theories in question.

In the development of a realist ontology, the problem of individuation surfaces toward the end of a specific dialectical process and is substantially motivated by antecedent considerations, e.g., a realist understanding of universals and the prima facie nature of predication. One first arrives at the central realist thesis that universals are real, multiply-exemplifiable entities by seeking to account for the various features of particulars that are the metaphysical data for which an analysis is sought. In cases of attribute agreement, e.g., the exactly resembling spots *a* and *b* mentioned above, we seem simply to be presented with attributes that are 'in' the particulars that generate the ontological analysis to follow. The natural realist conclusion is that repeatable universals are somehow contained in the entities that have them. In other words, we naturally move to a containment model of predication.

But then the question of individuation rears its head: if all of a particular's attributes are repeatable, what accounts for the particular's particularity? The natural instinct here is to attempt to account for particularity but to keep the ontology composed of only universals. We agree with Mertz that this is impossible; no arrangement of universals can account for particularity [Mertz 2001: 45; Moreland 2001: 144–7]. Failing on this analysis of individuation but still in search of plausible alternatives for a containment model or constituent ontology, the natural move is to go for a view along the lines of bare particulars. If this analysis fails and no tenable alternative for individuation in a containment model presents itself, one should look for alternatives to the containment model.

What we have been attempting to describe is the natural progression of analytic ontology in this area of reflection, assuming a realist analysis of attributes. The implication is that the containment model is more initially plausible and natural than a model that

abandons a constituent ontology such as the solution proffered by Mertz. As such, if bare particulars are salvageable, a non-constituent ontology is without motivation and, more importantly, unnecessary. One can be satisfied with a plausible containment model with bare particulars as individuators so long as no overriding problems arise.

With this background in view, for Mertz's first objection, viz. that the 'tied-to' mode of predication between a bare particular and a universal is ad hoc, two possible responses are available. First, one may respond that the 'tied-to' mode of prediction is a discovery made about bare particulars subsequent to recognizing the need to take bare particulars as ontological primitives relative to a realist theory of universals and predication. The status of the 'tied-to' mode of predication as a discovery precludes it from being an ad hoc stipulation. In this sense, the 'tied-to' model is not ad hoc but, rather, fits a familiar pattern in philosophy.

To see this, consider the development of agent causal theories of human freedom. An advocate of agent causation begins with certain concerns about human action and responsibility, formulates a set of arguments for regarding agent causation as the best view of action and responsibility, and confronts a problem with that view, *viz*., what does the agent do to bring about an action? Partly in response to this question and out of a desire to avoid a vicious infinite regress, the advocate of agent causation arrives at the view that an agent cause is a first-cause, a first-mover, an entity that may bring about a change without having to change or be changed to do so. In this sense, agent causes are sui generis compared with ordinary event causes in that the latter are caused causes characterized by passive liabilities; and agents, being characterized by sui generis active power, cannot be caused to act freely.

This kind of dialectic occurs frequently in philosophy. In epistemology, foundational beliefs are discovered to be such that they provide justification for non-foundational beliefs without having to receive their entire justification from their relationship with other beliefs. In ontology, discussions of relations and Bradley's famous regress lead to the notion that relations are discovered to be able to relate *relata* without having themselves to stand in a different relation to those *relata*. In philosophy of religion, different forms of the cosmological argument seek to justify a first being that is either an uncaused, necessary ground for finite, contingent beings, an intrinsically intelligible being which serves as the sufficient reason for beings that require such a reason to account for why they exist, a timeless first-cause of the beginning of the universe and the temporal sequence of events in the cosmos's history.

The point here is not that these various views (agent causation, foundationalism, the uniqueness of relations, the existence of a first being) are correct. Rather, the point is that in each case, the dialectic leads to the discovery of an ontologically primitive entity that has a sui generis feature not possessed by other entities relevant to the area of reflection. In each case, the advocate believes there to be at least some grounds for the view in question and holds that the dialectic that follows provides insights into real features of an ontological primitive that is part of the theory in question. Bare-particular theory is not different from these other areas of philosophical exploration. Advocates take it to be the case that there are at least some grounds for believing in bare particulars, e.g., the naturalness of a constituent ontology, the problems with other views, the ability to have knowledge by acquaintance with bare particulars themselves, and that the tied-to mode of predication is a discovery about reality obtained by probing the nature of bare

particulars more deeply. It may be that bare particular theory is inadequate on other grounds, but the charge of being ad hoc is not among them.[2]

Suppose someone is not persuaded by this first response to the charge that the tied-to mode of predication is ad hoc. In this case, the second response is just to accept this claim and say that, by itself, it has little impact on the epistemic status of bare particular theory. It may well be that counting the 'tied-to' model as primitive increases the price tag for bare particular theory. However, it is widely recognized that it is hard to assess the impact of an admission that some aspect of a theory is ad hoc. At most, this admission places a slight burden of proof on the theory's advocate and, more likely, the judgment that the theory involves an ad hoc feature should be reached only after one concludes that the theory in question enjoys weak epistemic support on other grounds. So even if there is a price tag involved here, assessing its cost involves weighing broader issues that are the really important ones (e.g., other virtues of the theory, weaknesses with rivals, assessing the role of primitives as part of philosophical methodology) and in light of which the charge of being ad hoc seems relatively unimportant.

We cannot undertake an exploration of that broader issue here. So we conclude our response to Mertz's first objection by saying that the tied-to mode of predication is a discovery not unlike similar discoveries throughout philosophy, not an ad hoc maneuver. And even if it is ad hoc, at most this places a slight burden of proof on advocates of bare particulars and, in any case, such a judgment should be reached only after assessing the overall strengths of bare particular theory vis-à-vis its rivals. Thus, that assessment is the real issue, not the charge of being ad hoc.

Mertz's second objection actually amounts to two different points to which we shall respond in order, namely, that the externality of the 'tied-to' predicational link has the absurd results that (1) properties such as simplicity are both necessary and contingent properties of bare particulars, and (2) contrary properties can be exemplified by the same bare particular.

Three responses may be given to the first claim. The first response is to claim that bare particulars actually have no necessary properties.[3] This reply distinguishes two different assertions that are sometimes confused: 'Necessarily, bare particulars have properties' and 'Bare particulars have necessary properties'. Letting x and P range over bare particulars and properties respectively, it is a simple fact of logic that '$(x)\exists P\ (Px)$' can be true and '$\exists P(x)\ (Px)$' be false. We believe that no bare particular can exist without having some property or other, but we do not believe that there are some properties that bare particulars have necessarily.

Second, it may seem that it would be easy to move from the fact that bare particulars have no necessary properties to the conclusion that they can exist apart from having

[2] We recognize that our argument here cuts both ways. It is open to someone to say that, given (1) the analogy between the other philosophical cases and bare particular theory and (2) the ad hoc nature that infects these other philosophical theories, the 'tied-to' model is similarly ad hoc in a problematic way. Among other things, what is at issue here is philosophical methodology itself which we cannot discuss here. We simply point out that throughout the philosophical landscape, it often happens that a philosophical theory includes a feature that is judged to be primitive and, as such, to have a feature importantly unlike other features in the theory.

[3] Thus, the admission that bare particulars have some properties necessarily is mistaken. See Moreland [1998: 261].

properties at all. Mertz makes this move; it is the means through which he arrives at the conclusion that some properties are both necessary and contingent for bare particulars. This is, however, a grave mistake, one that is brought out when two questions—'Is it necessarily the case that bare particulars have properties?' and 'Do bare particulars have necessary properties?'—are properly distinguished. The former question is a question about whether bare particulars necessitate *particular* properties in order to exist. We have already argued that its answer is no.

The latter question is a question about the conditions of existence generally; it asks whether bare particulars must have *a* property, *some* property, to exist. Elsewhere, one of us has argued that the answer to this question is yes because the correct analysis of existence is 'the *having of* a property or the *being had* by a property' [Moreland 2001: 134–9].[4] In other words, something exists if and only if it enters into the nexus of exemplification. From this characterization of existence, the following two definitions follow:

> E comes into being =Df. There is at least one property which is such that E has that property and there is no property which is such that E had that property.
>
> E perishes = Df. There was at least one property which was such that E had it and there is no longer any property which is such that E has it.

The point here is not to defend this theory of existence and, in any case, we have done so elsewhere [ibid.]. However, one thing should be said about this theory in the present context. It was formulated in light of broad metaphysical considerations that go quite beyond issues in individuation. We have simply applied to bare particulars a view of existence that we believe is justified broadly and independently of issues concerning bare particulars. The point is that, given this analysis of existence (or one relevantly similar to it), it explains the seemingly puzzling fact that bare particulars cannot exist without having any properties but nonetheless have no specific properties necessarily. To recapitulate, then, all properties of bare particulars are contingent in the sense that a bare particular need not have had those specific properties to exist; this does not, however, deny the fact that a bare particular must have some property or other in order to exist.

Third, what about properties such as simplicity? Don't bare particulars have these properties necessarily? Clearly, there are innumerable linguistic expressions assertible of bare particulars, e.g., 'is simple' and 'is coloured if green'. In our view, each of these linguistic predicates is analysable in such a way as not to require corresponding ontological properties.

[4] A theory of existence is a theory of what existence itself amounts to and what it is for something to exist. It is not a theory of efficient causality regarding what is responsible for bringing some particular entity into existence, or how it is that the entity can come-to-be or perish. Nor it is a theory of identity. It is widely recognized that, necessarily, for all entities e, e exists if and only if e is identical to e. While necessarily co-extensive, existence and identity are, arguably, different aspects of an entity. Applied to bare particulars, for some bare particular b, b is an uncomposed simple that is identical to b, but b exists just in case there is at least one property P such that b has P. What-something-is is different from that-it-is. No reference to a property is required to analyze a bare particular's identity, but such a reference is required to analyze what it is for that bare particular to exist.

Mertz claims that bare particulars, if they existed, would have many necessary properties, including 'the properties of unrepeatability and simplicity, the property of not having properties (in some sense), and the property of being the constituent of at most one object at a give time' [Mertz 2001: 50]. Michael Loux makes similar claims, and includes disjunctive and transcendental properties among those that bare particulars (his 'bare substrata') have necessarily [Loux 1978: 147–9].

We believe that the properties said to be necessary for bare particulars are not genuine properties; these include simplicity, particularity, unrepeatability, and those of the three categories of transcendental, disjunctive, and negative properties.

Negative predicates such as 'is not green' are rightly linguistically predicated because of a real lack of the property green, not because an entity possesses the property not-green. Disjunctive linguistic predicates, e.g., 'is either green or not green' should be understood in terms of logical exclusions that are the result of positive ontological property possession, not disjunctive property possession, e.g., something's being green simply excludes its failing to be green and conversely, and not because that something possesses the relevant disjunctive property.

Transcendental linguistic predicates, e.g. 'is coloured if green', are rightly understood in terms of metaphysically necessary internal relations that enter into certain states of affairs constituted by properties themselves, specifically, determinables and determinates, thereby making these transcendental expressions universally linguistically applicable. The determinate property being green necessarily exemplifies the determinate property being colourful, and the state of affairs of green's being a colour, is necessarily such that if something has being green, it obtains.

Ridding simplicity, particularity, and unrepeatability from one's ontology is somewhat more complicated. A quick, though nonetheless effective, dismissal of unrepeatability is to claim that it is actually a negative property in disguise. In other words, to be unrepeatable is simply to lack the property of repeatability. As we argued above, however, negative properties are not properties at all, so to be unrepeatable is just to lack the property of repeatability. Simplicity should be understood as the absence of any sort of complexity. Alternatively and, in our view, preferably, the linguistic predicate 'is simple' may simply capture the primitive fact that some entity such as a bare particular or an atomic simple as depicted in mereology theory is a single unit as a matter of brute fact incapable of further analysis. Particularity may be similarly treated.

It is important to say that our treatment of simplicity and particularity is not idiosyncratic or ad hoc. To cite one example of a similar view formulated without specific regard to bare-particular theory: Edmund Husserl argued that the categories of formal ontology, e.g., being an essence, being a property, being a particular, are not in the objects to which these categories truly apply as properties are [1982: 18–32]. For Husserl, subordinating a property such as being red to its appropriate category of formal ontology (property) is quite different from subordinating it to a higher genus (being colourful). Husserl claims that higher genera are in the species under them, but the categories of formal ontology are not. Rather, as a primitive fact the latter are merely ways of representing entities, e.g., 'any property whatever' or 'any individual whatever'.

What about the claim that bare-particular theory implies that contrary properties can be exemplified by the same bare particular? The proper response is to assert what

Mertz mentions only to dismiss too quickly, namely, that the impossibility of the co-exemplification of contrary properties is a function of the nature of the properties themselves; it is not a function of the nature of the object that may or may not have those properties. To see this, we mention another insight noted by Husserl in his discussion of the notion of foundation.[5] According to Husserl, colour and extension stand in a relation of foundation. That is, one cannot have an instance of some colour without there also being an instance of some extension. Instances of colour are necessarily associated with and require supplementation by, that is, are founded on, instances of extension. Consider the red, round spot *a*. For Husserl, spot *a* is a whole with two dependent parts or property-instances, red_1 and $round_1$. These moments stand to each other in a relation of foundation. This relation is an a priori law (e.g., necessarily, for all x, if x is red, then x is extended) grounded in the essences or species of these moments, redness and extension. Husserl states the following: 'Our discussions so far have shown that there is always an a priori law governing what is non-independent, having its conceptual roots *in what is universal* in the whole and part in question' [Husserl 1970: 2, 453 (our italics)].

So the relationship between red_1 and $extension_1$ (which are dependent parts of the whole, spot *a*) is determined by an a priori law of essence which is grounded in the universals in those moments. Thus, the necessary requirement that an instance of colour like red_1 can obtain only in conjunction with an instance of extension ($extension_1$) is true of these instances, not because of the objects that may or may not have these instances, but because there are laws governing the obtaining of property-instances grounded in the universal essences that are constituents in those instances. The possibility, necessity or impossibility of co-exemplification is a feature of the properties themselves and not of the particulars in question.

What about Mertz's argument that there is nothing in the natures of Round and Square as contraries that prevents them from being related by the relation Is-contrary-to to the shared relatum Triangle, and concluding that because it is possible that contrary properties can be related to the same subject, it is the nature of the subject, and not the properties themselves that is the decisive factor?

We offer two responses to this claim. First, just because two entities can (or cannot) stand in one relation to each other, nothing whatever follows about whether or not those entities can stand in another relation to each other. And whether or not two entities can stand in a relation to each other is a function of the entities themselves, not the relation per se. Red is darker than yellow, but not larger than yellow. Why? Red and yellow are the sorts of things that can stand in darker-than or lighter-than relations to other colours but that cannot stand in larger-than relations to other things. Again, red is necessarily such that it can be exemplified only if extension is exemplified, but red does not require the exemplification of sweetness to be exemplified, and these claims seem obviously grounded in the nature of the properties themselves. Further, from the fact that red and yellow cannot stand in the larger-than relation to each other, it does not follow that they cannot stand in any relation to each other. Similarly, from the fact that round and square cannot stand in the co-exemplification relation, it does not follow that there is no relation

[5] The entire third investigation of the *Logical Investigations* discusses Husserl's views on parts and wholes, including his notion of foundation [1970].

that they cannot stand in relative to each other (e.g., Is-contrary-to). What can or cannot happen to properties relative to other properties and relations is a function of the nature of the properties themselves.

Second, Mertz himself seems inadvertently to admit as much, though he is not consistent in seeing this. He says that it is the content of the subject, i.e., the nature of a property it possesses, that controls what can and cannot be predicated of that subject. This would seem to imply that it is not the subject *qua* particular, but the subject *qua* having some property that is the decisive factor for what can subsequently be predicated of that subject already in possession of some property. What can or cannot be predicated of a subject, then, is a function of the properties relative to each other, not relative to the object per se.

However, in his discussion of atomic facts, he seems to miss this point and to draw the wrong conclusion. He says that in an atomic fact, say :$F_i(G_j)$, it is the content of the subject, G (subscripted locutions refer to instances of the intension expressed by their corresponding letters) that controls the predicability of F_i to one of G's instances, and for any content H contrary to that of F, the content of G also precludes any instances H_k from being predicable of G_j. Let F be red, G be round and H be green. According to Mertz, it is the content of the subject (e.g., a round ball), roundness, that controls (permits?) the predicability of redness to an instance of round (the round ball) and that precludes the exemplification of a property H (green) contrary to F. But this just seems wrong. It is not roundness that precludes the ball's exemplifying green—after all, it could easily be green if it were not already red—it is the presence of redness itself, together with the fact that two determinates under the same determinable cannot be co-exemplified by the same object. It is the content of F, not G, that precludes the exemplification of H. F and G by their very natures cannot be co-exemplified, irrespective of whether the object is round (G), square (I), or some other shape.

This leaves what Mertz claims to be his strongest objection, namely, because bare particulars are constituentless, they are all alike in having no constituents. But, then, because entities with the same constituents are identical, there can only be one bare particular and so only one thick, individual particular. But that, surely, is absurd. Mertz appeals to the principle of constituent identity to make his argument:

(3) $(x)(y)\ [(z)(z \text{ is a constituent of } x \leftrightarrow z \text{ is a constituent of } y) \rightarrow (x = y)]$.

In response, it is important to note that proposition (3) is a conditional, not a biconditional. Specifically, it does not say that if x and y are identical, they share all their constituents in common, because that claim could be taken to require that all entities must have constituents. Apart from the fact that such a claim would seem to generate a vicious infinite regress of constituents standing in a constituent-whole relation, advocates of bare particulars and atomic simples, e.g., mereological essentialists, who employ proposition (3) take it to range over only those entities that have constituents. We suppose that if one allows something to be a constituent of itself, then Mertz's claim could be countered by the simple observation that all bare particulars do, indeed, have one constituent not possessed by other bare particulars, namely, themselves. But in keeping with the spirit of those who employ proposition (3), 'constituent' means 'proper constituent' and its range of application is only over composed entities, not simples, and this is captured by the

proposition's being a conditional and not a biconditional. There may be no such things as simples, but it will hardly do to establish this view to cite proposition (3), along with the claim that because simples do not have different constituents (because they have no constituents at all), they violate proposition (3) and, thus, all collapse into the same entity. And in keeping with our discussion of Mertz's second objection, we believe that 'property' of having no constituents is not itself a constituent of anything.

In sum, we do not believe that Mertz has successfully shown that 'the concept of bare particulars, and consequently substratum ontology that requires it, is untenable', and we have tried to say why we think this. It may well be that a bare-particular theory of individuation suffers from other problems that render it unacceptable, and it may be that there are accounts of individuation that are superior to a bare-particular account. But assessing these possibilities must be left for another occasion.

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