

**PROPERTY POSSESSION AND IDENTITY: AN ESSAY IN
METAPHYSICS**

by

Patrick Xerxes Monaghan
B.A. University of Nebraska-Omaha

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APPROVAL

Name: Patrick Monaghan
Degree: Masters of Arts

Title of Thesis: **Property Possession and Identity: an essay in metaphysics**

Examining Committee:

Chair: **Dr. Raymond Jennings**
Professor, Department of Philosophy Simon Fraser University

Dr. Philip Hanson
Senior Supervisor
Associate Professor, Department of Philosophy Simon Fraser University

Dr. Evan Tiffany
Supervisor
Assistant Professor, Department of Philosophy Simon Fraser University

Dr. David Zimmerman
Supervisor
Professor, Department of Philosophy Simon Fraser University

Dr. Andrew Newman (in absentia)
External Examiner
Professor, Department of Philosophy, University of Nebraska-Omaha

Date Defended/Approved:

July 29, 2005

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ABSTRACT

The thesis of this paper is that no real distinction obtains between property possession and identity. To justify this thesis, I argue against two views I call Exteriorism and Interiorism, I argue for an account of property possession and identity according to which they are one and the same relation, and I respond to a wide variety of objections to that account.

DEDICATION

I dedicate this thesis to Phil Hanson, for encouraging my work, and to Jackie Wilwerding, for putting up with it.

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I have many debts. First of all, I would like to thank Phil Hanson for making time for me in his busy schedule, for pressing me not to shy away from areas I would rather shy away from, and for also pressing me to make my ideas plain for those who are not steeped in analytic metaphysics.

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Chapter 1: Introduction.

Property possession and identity are thought by some to be among the most fundamental notions of philosophy.¹ After all, property possession has been referred to as "the fundamental tie,"² and identity has been said to "play an absolutely fundamental role in our thought."³ But despite their being fundamental, I claim that property possession and identity are *also* misunderstood. They are among the most fundamentally misunderstood of all fundamental philosophical notions.

To be sure, if property possession and identity are misunderstood, this should be of concern to *all* philosophers, not just to those odd few who toil alone in remote corners of analytic metaphysics. For if one does not understand property possession and identity, this undermines one's ability to engage in an intellectually honest manner with such issues as whether physical substances can possess irreducibly non-physical properties, whether agents or their actions can possess objective moral properties, whether the mind is identical to the brain, whether one's psychology is what makes one identical over time, and so forth. In other words, if the whole of philosophy is shot through with talk of property possession and identity, which it seems to be, then no philosopher would be entitled to a complacent attitude towards his or her lack of understanding of them.

¹ In this paper I will use the term 'entity' technically in such a way that an entity can be drawn from any ontological category whatsoever, and I will use 'x' and 'y' to quantify over all entities.

² See Armstrong (1989, pp. 108-110). Property possession is also sometimes referred to as instantiation, exemplification and inherence.

³ See McGinn (2000, p. 1).

So why do I think that property possession and identity are misunderstood? To be sure, it is *not* because I think there is some widespread but mistaken belief about them as they are, intrinsically, or as they are in and of themselves. After all, we understand them as they are, intrinsically, well enough to know that property possession is the relation any x bears to any y just in case x possesses y as a property,⁴ and that identity is the relation any x bears to any y just in case x is identical to y .⁵ Rather, I think that property possession and identity are misunderstood because I think there is a widespread but mistaken belief about the *relation* that obtains between them. For whereas it is apparently widely believed that a *real distinction* obtains between them, that belief is false.⁶ Property possession and identity are not two distinct relations. They are one and the same relation, instead. Now I will have much more to say below about why I think that property possession and identity the same relation. But before that, I

⁴ To be sure, nothing in this characterization of property possession requires that x and y be numerically distinct from each other. For there are some two-place relations that relate one entity just to itself, as in the case of identity. Of course, some will object that property possession is not a relation in the first place. But in section III, I will argue that it is. Then again, others might object that there is no such thing as the relation of property possession. I will respond to this objection in the conclusion, and, as a related matter, I will argue in section IV that there are such entities as properties.

⁵ For a brief exposition of the classical or absolute conception of identity as the transitive, symmetrical and reflexive relation any x bears just to x , which I presuppose as true throughout, see Williamson (1998). This conception has also sometimes been referred to as the conception of strict, numerical identity, as opposed to mere indiscernibility.

⁶ A real distinction is one that obtains between any x and any y just in case x and y are not numerically identical to each other. For one who thinks that such a distinction obtains between property possession and identity, see Armstrong (2004, p. 139).

want to look briefly at some reasons why one might think that a real distinction obtains between them in the first place.

There are a variety of reasons why one might believe that a real distinction obtains between property possession and identity, some of which are better than others. For example, from an epistemological point of view one might suggest that a real distinction obtains between property possession and identity because such a distinction obtains between the *concepts* of property possession and identity. Of course, if a real distinction obtains between these concepts, this at least partially explains why it should come as a surprise to learn that property possession and identity are one and the same relation. But beyond that, there have been lots of previous cases in which a real distinction between concepts failed to determine a real distinction between what those concepts are concepts of. The case of the Morning Star and the Evening Star is a case in point. And so is the case of property possession and identity, or so I will argue.

One might also suggest from a linguistic point of view that a real distinction obtains between property possession and identity because such a distinction obtains between the 'is' of predication and the 'is' of identity. But to claim that a real distinction in language necessarily determines a real distinction in reality is to commit what William of Ockham called the worst fallacy in philosophy.⁷ So far as I can tell, we can consistently deny that a real distinction obtains between property possession and identity, while maintaining that such a distinction obtains between the 'is' of predication and the 'is' of identity. In short,

⁷ For more on Ockham's view, see Adams (1987, pp. 143-156).

we can identify property possession and identity without violating the various conventions that govern predication.⁸

One might even suggest from a logical point of view that a real distinction obtains between property possession and identity because they differ from each other with respect to their logical features. But this suggestion is undermined by the fact that whereas there is widespread agreement over the logical features of identity, there is widespread disagreement over such features of property possession. After all, whereas identity is widely agreed to be transitive, symmetrical and reflexive,⁹ there are some who think that property possession is asymmetrical,¹⁰ but others who think that it is sometimes symmetrical, instead.¹¹

To my mind, the best reason to believe that a real distinction obtains between property possession and identity is neither an epistemological, linguistic, nor logical one. Rather, it's the metaphysical reason that a real distinction will obtain between property possession if either Exteriorism or Interiorism is true. Thus, this will be the reason I concentrate on below. (Though I will also have much more to say about these views below, I'll say now that Exteriorism is the view according to which an entity *x* possesses a property just in case there exists some entity *y* (to be specified) that is exterior to *x* in some way (also to be specified). An instance of Exteriorism is Platonic Transcendental Realism, according to which *x* possesses a property just in case *x* instantiates a

⁸ In section IV, I will say more about how predication fits into my overall position.

⁹ See Williamson (1998).

¹⁰ To his credit, Newman is one who makes this view explicit. See his (2002, p. 24, n. 40).

¹¹ In the *Parmenides* Plato seems to say that the forms possess themselves.

transcendental form. On the other hand, Interiorism is the view according to which an entity *x* possesses a property just in case that property is interior to that entity in such a way that there is more to that entity than that property. An instance of Interiorism is Aristotelian Immanent Realism, according to which and entity possesses a property just in case that property inheres in that entity.)

Though this metaphysical reason is the best reason to believe that a real distinction obtains between property possession and identity, it's not good enough, since Exteriorism and Interiorism are both false. Against Exteriorism, I argue that it fails to provide a true *necessary* condition for property possession. That is to say, I argue it is not the case that *x* possesses a property just in case some specific entity is exterior to *x* in some specific way, since *x* could still possess a property, even if none of the exterior entities specified existed at all. Against Interiorism, I argue that it fails to give a true *sufficient* condition for property possession. That is to say, I argue it is not the case that *x* possesses a property just in case that property is interior to that entity, since a rather large number of entities fail to possess a rather large number of properties that are interior to them.

Since Exteriorism and Interiorism fail to provide true sufficient or necessary conditions for property possession, I conclude that they are both false. But my critique of Exteriorism and Interiorism is merely my critical aim in this paper. My positive aim is to argue for and defend an account of property possession and identity according to which no real distinction whatsoever obtains between them. To be picturesque, it might also be said that according to my

account, there is no more distinction to be drawn between the relation of property possession and the relation of identity than there is to be drawn between the Morning Star and the Evening Star.¹² To be fully explicit, it might even be said that according to my account, no real distinction obtains between the relation any x bears to any y just in case x possesses y as a property and the (transitive, symmetrical, and reflexive) relation any x bears to any y just in case x is identical to y. But for the sake of brevity from now on I'll simply say that according to my account, property possession and identity are one and the same relation.

Why do I think that property possession and identity are one and the same relation? Very briefly I will say the following by way of introduction to the line of reasoning I will pursue below. Plato set the stage when he assumed that property possession is a relation that can obtain between two distinct entities (i.e. a transcendental form and an immanent particular). So far as I can tell, this assumption has gone unquestioned down to the present day. But insofar as the whole or a large portion of philosophy is based upon this assumption, it is based upon a mistake. For when one begins to question this assumption, one comes to see that it is a problematic one. I refer to the problem with this assumption as the problem of contribution, and while I will have much more to say about it below, I will say now that it lies at the heart of my argument that property possession and identity are one and the same relation.

¹² Thus, my view is that a *distinctio rationis ratiocinatae* (i.e. a distinction of reasoned reason) obtains between property possession and identity. Such a distinction obtains between any x and y just in case they are numerically identical to each other even though our concepts of them don't inform us of this.

The plan of the paper is as follows. In section II, I argue that Exteriorism and Interiorism are both false by arguing that the former fails to provide a true necessary condition for property possession, whereas the latter fails to provide a true sufficient condition for it. To be sure, the purpose of section II is not to argue via disjunctive syllogism that since Exteriorism and Interiorism are both false, property possession and identity must be one and the same relation. Still, once I have refuted Exteriorism and Interiorism, I will have refuted the vast majority of competitors to my account of property possession and identity.

In section III, I defend an argument for an account of property possession and identity according to which they are one and the same relation.

In section IV, I show that by utilizing the view according to which there is nothing more to any given entity than what is sometimes referred to in ontology as the nature of that entity, I can rebut a wide variety of what one might take to be the obvious objections to my account.

Chapter 2: Against Exteriorism and Interiorism.

In this section I argue that Exteriorism and Interiorism are both false by arguing that the former fails to provide a true necessary condition for property possession, whereas the latter fails to provide a true necessary condition for it. To be sure, the purpose of this section is not to argue via disjunctive syllogism that since Exteriorism and Interiorism are both false, property possession and identity must be one and the same relation. Still, once I have refuted Exteriorism and Interiorism, I will have refuted the vast majority of competitors to my account of property possession and identity. Moreover, it will be worthwhile to examine Exteriorism and Interiorism in some detail, if one is not familiar with the tradition of thought about property possession to which I'm responding.

2.1. Against Exteriorism. In this section I will argue against Exteriorism, or the view according to which x possesses a property just in case¹³ there exists some entity y (to be specified) that is exterior to x in some way (also to be specified).

One famous instance of Exteriorism is Platonic Transcendental Realism, or the view according to which x possesses a property just in case x instantiates an (exterior) transcendental form. By way of illustration, Platonic Transcendental Realism has it that x possesses the property of being red just in case x instantiates the transcendental form Redness.¹⁴

¹³ I will interpret this as the relatively weak material bi-conditional.

¹⁴ Plato's metaphysics underwent some sort of transformation. That much is clear. But practically everything else about this transformation is debatable. In this matter, I have found Teloh (1981) helpful.

So far as I can tell, Platonic Transcendental Realism is the only instance of Exteriorism that is also an instance of Realism about universals. All other instances of Exteriorism of which I'm aware are also instances of Nominalism, or the purely negative doctrine that there are no such entities as universals. One such instance of Exteriorism is Class Nominalism, which is the view Rodriguez-Pereyra attributes to David Lewis according to which x possesses a property just in case x is an element of a class (e.g. the class of all and only red entities).¹⁵ Still another such instance is Concept Nominalism, or Frege's view according to which x possesses a property just in case x is subsumed under a concept (e.g. the concept of a red entity).¹⁶ Yet another instance is Predicate Nominalism, which is the view David Armstrong attributes to John Searle according to which x possesses a property just in case x satisfies a predicate (e.g. the predicate 'is red'). Then there is Resemblance Nominalism itself, which is Rodriguez-Pereyra's view according to which x possesses a property just in case x resembles certain other entities (e.g. the red entities).¹⁷

Now I do not presume that the foregoing run-down exhausts all possible instances of Exteriorism. (In the very least, it leaves out such hybrid positions as the one held by William of Ockham according to which x possesses a universal just in case either x is subsumed under a concept or else x satisfies a predicate.) Still, we have seen enough instances of Exteriorism already to feel the force of the following argument that Exteriorism in general is false. If Exteriorism is true,

¹⁵ See Rodriguez-Pereyra (2002, p. 25, n. 4).

¹⁶ He writes: "I call the concepts under which an object falls its properties." See his (1892) in Beaney (1997, p. 189).

¹⁷ See Rodriguez-Pereyra (2002).

then x possesses a property just in case there exists some specific entity or other that is exterior to x in some specific way or other. But x could still possess a property, it seems, even if none of the exterior entities specified existed at all. (For example, it seems that x could possess the property of being red even if the predicate 'is red' didn't exist at all.) In other words, Exteriorism fails to provide a true necessary condition for property possession, and so is false.

To be sure, I don't claim this argument as a novel contribution of my own.

In the course of his critique of Predicate Nominalism, David Armstrong writes:

According to Predicate Nominalism, an object's possession of (say) the property, being white, is completely determined by the fact that the predicate 'white' applies to this object. But now let us make a thought-experiment. Let us imagine that the predicate 'white' does not exist. Is it not obvious that the object might still be white? If so, its whiteness is not constituted by the object's relation to the predicate 'white.'¹⁸

This same complaint can be extended to Exteriorism in general, or so it seems to me.

Of course, one might object that x's possession of a property depends for some reason or other upon the existence of some exterior entity. But this seems to get things backwards. That is to say, it seems backwards to claim that x possesses a property because x is an element of some class, because x is subsumed under some concept, because x satisfies some predicate, or because x resembles some other entity. Instead, it seems that if x is an element of a class, if x is subsumed under some concept, if x satisfies some predicate, or if x resembles some other entity, it will be because x possesses some property first.

¹⁸ See his (1978a, p. 17).

To be sure, Armstrong also makes this point in connection with Predicate Nominalism. He writes: "the applicability of 'white' depends upon the whiteness in the object, not the whiteness of the object upon the applicability of 'white'."¹⁹

On the other hand, one might object that x's possession of a property trivially depends upon the existence of a transcendental form simply because transcendental forms have existence necessarily.²⁰ But as Aristotle objected to Plato, even if transcendental forms exist necessarily, it is very difficult to see how immanent entities could possess them, given that the immanent and transcendental realms are separated by such a wide divide. This is a point about the *relevance* of transcendental forms to the possession of properties by immanent entities. Even if we grant that forms have necessary existence, unless it can be shown that x needs a transcendental form to possess a property, it must be concluded that Platonic Transcendental Realism fails to provide a true necessary condition for property possession, and so is false.

In the same vain, unless it can be shown in general that x needs some exterior entity or other to possess a property, which seems doubtful, it must be concluded that Exteriorism as a whole fails to provide a true necessary condition for property possession, and so is false. Thus, I throw down the gauntlet to the Exteriorist, and turn now to my critique of Interiorism.

¹⁹ See his (1978, p. 17).

²⁰ I owe this point to Andrew Newman.

2.2. Against Interiorism. In the remainder of this section I will argue against Interiorism, or the view that an entity possesses a property just in case²¹ that property is interior to that entity in such that way that there is more to that entity than that property. I will begin by critically evaluating three particular instances of Interiorism. And then I will argue that Interiorism in general is false. The first instance to be examined is the theory L.A. develops in her recent "Logical Parts."

2.2.1. Against Paul's Interiorism. According to Paul's theory, an object is defined as the fusion of properties it possesses -- its logical parts, as she calls them. To familiarize her reader with the theory she develops, she considers a red cup as an example. She writes: "The cup's property of being red is a logical part of the object, the red cup, and this particular is the fusion of all its parts. The red cup has many logical parts, including the properties of being red, being ceramic, and being in my office."²² Insofar as these properties are logical parts of the cup, they are interior to it. But what does it mean to say that they are its logical parts?

According to Paul, logical parts are to be distinguished from spatial parts, for whereas the former are properties, the latter are objects. Still, logical and spatial parts all have it in common with each other that they are parts in the purview of mereology. And since even Paul herself admits that her theory

²¹ As was the case with respect to Exteriorism, I will interpret this as a material biconditional.

²² See her (2002, p. 581).

"amounts to subsuming the bundle theory under the aegis of mereology"²³ I presume that the following introductory remarks about mereology are in order.

Mereology is the topic neutral logic of parts and the fusions they compose. The topic neutrality of mereology culminates in the doctrine of unrestricted composition, or the doctrine according to which any given entities are parts of some fusion. To be sure, it is a doctrine Paul accepts, as she writes: "I shall formulate the theory of logical parts in terms of unrestricted composition."²⁴ Of course, this doctrine has received some critical attention. But for the sake of the argument I will ignore them and grant to Paul that composition is unrestricted.

Among the fundamental relations of mereology is the relation of parthood. Parthood is transitive, as there is the strong intuition that a part of a part of a fusion is itself a part of that fusion. But parthood is also reflexive, even if it is less intuitive in the limiting case that any given entity is a part of itself. In any event, parthood is sometimes but not always symmetrical. In those cases in which x is a part of y and y is a part of x , x and y are said to be non-proper parts of each other. The non-proper part of an entity is *the* part to which that entity is identical. On the other hand, in those cases in which x is a part of y and y is not a part of x , x is said to be a proper part of y . The proper parts of an entity are the parts to which it is not identical. Like parthood, the relation of proper parthood is transitive. But unlike parthood, proper parthood is never reflexive and never symmetrical (i.e. anti-reflexive and anti-symmetrical).

²³ See her (2002, p. 579).

²⁴ See her (2002, p. 580).

So much for the introductory remarks about mereology. On the basis of her mereological bundle theory, Paul offers a definition of property possession -- or instantiation, as she refers to it -- according to which property possession is the fusion of a property to a location. She writes: "We might even redefine instantiation as the fusion of [properties] with locations."²⁵

Paul's definition of property possession is problematic, since it seems to imply that any given entity will possess any given property which is fused to any given location which that entity spatially encompasses. But that implication is false: not every entity possesses every property at every location that entity spatially encompasses. For example, consider any arbitrary helium atom. Insofar as that atom spatially encompasses its proton, it spatially encompasses the property of being positively charged; and insofar as that atom spatially encompasses its electron, it spatially encompasses the property of being negatively charged. But it is absurd to say something is both positively and negatively charged, for this amounts to saying that the entity in question both is and is not positively charged (as well as being both negatively and not negatively charged).

Much the same problem crops up when we consider medium sized entities, like my pencil. Presumably my pencil will fail to possess a rather large number of properties that are fused to locations that are spatially interior to it. (For example, insofar as my pencil spatially encompasses some electron and some proton, it spatially encompasses the property of being negatively charged

²⁵ See her (2002, p. 584).

and the property of being positively charged. But my pencil is not both negatively and positively charged.) To see the problem on a large scale, consider the physical universe as a whole. To say that the universe possesses all of the properties that are spatially interior to it would be absurd, for this would be to say that the universe possesses any property with some spatial location. (For example, it would be to say that the universe possesses the property of being a cat and the property of being a dog, given that the universe spatially includes both cats and dogs.) To say such a thing would vastly overburden the world with properties. Moreover, this problem only gets worse, once we consider all the "scattered" entities let in the door by unrestricted composition.

Of course, one might object that I'm misconstruing Paul's definition of property possession. And I admit that I am. But my intention was to be charitable. Strictly speaking, the claim 'property possession is the fusion of a property to a location' prohibits entities other than locations from possessing properties. But this is also absurd, for lots of entities other than locations possess properties. My pencil is one of them. And so are you and I.

There is some truth in the claim that if an entity possesses a property, then that property will not be exterior to that entity. But it's false, as Paul seems to claim, that if a property is spatially interior to an entity, then that entity will possess that property, since a rather large number of entities fail to possess a rather large number of properties that are spatially interior to them. In other words, Paul's theory fails to give a true sufficient condition for property possession, and so is false. Thus, I will turn to the second instance of Interiorism

to be examined, which is the theory Arda Denkel develops in his recent *Object and Property*.

2.2.2. Against Denkel's Interiorism. Like Paul's theory, Arda Denkel's theory is an instance of the bundle theory. As he conceives of it, his task is "to construct and legitimize a notion of object, the sole ingredients of which are properties."²⁶

According to Denkel, objects are bundles in which properties inhere.

As an aside, though Denkel thinks that any property inheres in some bundle, he distinguishes his bundle theory from others that, he thinks, make bundles of properties out to be objects that are in some sense non-qualitative.

He writes:

To many it seemed that from the endorsement of this doctrine [of inherence] it follows that in an object there must exist something non-qualitative that performs the function of support. Presumably because of such an assumption, philosophers belonging to the other tradition have rejected the principle of inherence. I think it is the entailment that should be rejected, and not inherence itself. Although I believe that there must be, about an object, something that bears its properties, I do not believe that such a thing has to be non-qualitative.²⁷

As he puts it later on:

My own conviction is that such a [non-qualitative] aspect should never be tolerated in ontology. As the empiricists have often complained, something non-qualitative is totally inaccessible to us and remains recalcitrantly mysterious. I denounce the idea of a mysterious entity, unknowable throughout and supposed to exist in objects. There, realism must be curbed in favor of empiricism.²⁸

²⁶ See his (1996, p. 11).

²⁷ See his (1996, p. 11).

²⁸ See his (1996, p. 20). Now while I am sympathetic to Denkel's denouncement of non-qualitative entities, I must admit that his denouncement has not gone far enough. For in the end, Denkel seems to accept entities that are extrinsically

Denkel identifies property possession -- or inherence, as he refers to it -- as the existence of a property within the extension of an object. In other words, he identifies property possession as extensional inclusion. For example, he writes:

My view is that to inhere in a substance is to be the element of a compresence of qualitative properties. In the *Categories*, Aristotle makes the object itself (the primary substance) as that to which the attributes belong. Accordingly, a property inheres in an object simply in the sense of 'being present in' that object. If we can interpret this as existing within the object's extension, on the assumption that an object is a compresence of qualities, inherence will amount to being an element of a compresence of qualities.²⁹

But I will argue that his identification of property possession as extensional inclusion is problematic.

On some occasions, Denkel seems to equate extensional inclusion as spatial inclusion. For example, he writes: "For an object to have a property is for that object to bear it throughout (part of) its extension, where that property permeates with other properties (of that object) which extend across the same spatial position."³⁰ But on other occasions, he indicates that spatial inclusion is not necessary for extensional inclusion. For example, he writes: "any existing

qualitative. After all, he seems to accept that objects are qualitative merely in virtue of the relations they bear to the properties that inhere in them. But I feel that a denouncement of non-qualitative entities will not have gone far enough until one has denounced all entities that are not intrinsically qualitative. Though this issue will not concern us any more in this section, I will have much more to say about it in section IV

²⁹ See his (1996, p. 41).

³⁰ See his (1996, p. 37).

quality must be extended. However small, it must spread as the property it is. Being extended does not, however, entail spatiotemporality; even abstract qualities extend."³¹

Possible mysteries of non-spatial extension aside, Denkel leaves us unable to understand exactly how extensional inclusion is to be understood. To be sure, he argues at length that it is not to be understood as mereological parthood or proper parthood. One might suggest that it is to be understood as the relation of set membership, given the prevalence of terminology in Denkel's writings reminiscent of set theory. But it's uncharitable to interpret Denkel as suggesting that only sets can possess properties. For lots of entities other than sets possess properties. Perhaps, then, the most charitable interpretation to make is the one according to which Denkel's thinks of extensional inclusion as a primitive notion.³² Even so, Denkel's identification of property possession is problematic in those cases in which extensional inclusion amounts just to spatial inclusion. And it is problematic for the very same reason Paul's was. Consider any arbitrary helium atom, or my pencil or any other medium-sized entity, or the universe as a whole. No matter what entity is decided upon as an example, presumably it will fail to possess a rather large number of properties that it spatially includes.

Like Paul's theory before it, Denkel's theory fails to provide a true sufficient condition for property possession, and so is false. Thus, I will turn to the final

³¹ See his (1996, p. 189).

³² In section III (p. 32), I will return to discuss in more detail the view according to which property possession is a primitive.

instance of Interiorism to be examined, which the view David Armstrong develops in his *Universals and Scientific Realism* (volumes I and II) and in his more recent *A World of States of Affairs*.

2.2.3. Against Armstrong's Interiorism. David Armstrong follows in a philosophical tradition, stemming from the writings of Duns Scotus, in which a distinction is made between the particular of an entity and that entity's nature. The nature of an entity is the property that entity possesses which is complete in the sense that it comprises all of the properties that can be truly predicated of that entity. As Armstrong puts it, the nature of an entity is the property that is the conjunction of all of the properties that can be truly predicated of that entity.³³ Since Armstrong takes natures to be universals that can be possessed by two or more entities, he needs something to individuate such entities from each other. According to Armstrong, the particularity of a particular is what individuates it from others. Though the particularity of a particular is sometimes referred to in this Scotian tradition as the haecceity, Armstrong refers to it as the thin particular. It is the particular considered in abstraction from all of its non-relational properties,³⁴ though on other occasions he seems to refer to it as the particular considered in abstraction from all of its properties whatsoever.³⁵ In any case, he likens this process of abstraction to Lockian partial consideration.³⁶ So in the end

³³ See his (1997, pp. 124-125).

³⁴ See his (1978a, p. 114).

³⁵ See his (1978a, p. 114).

³⁶ See his (1997, p. 123).

he thinks that the thin particular is the particular considered only with respect to its particularity.³⁷

On some occasions, Armstrong characterizes his view on property possession as a non-relational one, since he seeks to replace the relation of property possession with states of affairs.³⁸ According to him, a thin particular possesses a property only if there exists such an entity as the state of affairs of that particular's possessing that property. He writes: "A state of affairs exists if and only if a particular (at a later point to be dubbed a thin particular) has a property or, instead, a relation holds between two or more particulars."³⁹

Elsewhere, he writes: "We are asking what in the world will ensure, make true, underlie, serve as the ontological ground for, the truth that *a* is *F*. The obvious candidate seems to be the state of affairs of *a*'s being *F*. In this state of affairs (fact, circumstance) *a* and *F* are brought together."⁴⁰

As an aside, given that thin particulars possess properties by being brought together with those properties in states of affairs, one should wonder whether Armstrong has succeeded in providing a non-relational account of property possession. Though this issue does not matter for the purpose of the argument of this section, I will argue in section III that since states of affairs *function* as relations, they *are* relations, in which case Armstrong has not succeeded in providing a non-relational account of property possession.

³⁷ See his (1997, p. 123).

³⁸ See his (1978a, pp. 108-111).

³⁹ See his (1997, p. 1).

⁴⁰ See his (1997, p. 116).

In addition to thin particulars, Armstrong believes in what he calls thick particulars. Whereas all thick particulars are states of affairs, not all states of affairs are thick particulars.⁴¹ Thick particulars are in some sense complete states of affairs. The thick particular is the state of affairs of a thin particular's possessing a nature. Armstrong writes:

So the thick particular is to be taken along with all and only the particular's non-relational properties. What will this come to in terms of our scheme? The answer seems clear. The 'taken along with' should be cashed out in terms of states of affairs... So let us conjoin all the non-relational properties of a certain particular, *a*, or perhaps in order to allow for temporal parts, *a* at a certain time. Call the resultant property *N* (for nature). The thick particular *a* is now seen to be identical with the state of affairs of *a*'s being *N*.⁴²

Though Armstrong says on this occasion that the thick particular is the thin particular conjoined to all of its non-relational properties, he seems to say on other occasions that the thick particular is the thin particular conjoined to all of the properties that can be truly predicated of it. For example, he writes:

A state of affairs is defined as a thin particular's possessing a property or two or more particulars' being related. But we must now ask 'Which of the two concepts of a particular are we working with in this definition?' It seems that we cannot be working with the first conception. For a particular conceived in the "thick" way is conceived as already possessing its properties. It is, we might say, already a state of affairs. In our notion of a state of affairs, then, we are using the conception of a particular in abstraction from all its properties.⁴³

So much for the exegesis of Armstrong's position. I now turn to a critical evaluation of it.

⁴¹ I owe this point to Phil Hanson.

⁴² See his (1978a, p. 114).

⁴³ See his (1978a, p. 114).

Whereas Armstrong's view on property possession for thick particulars (and states of affairs in general, though I will concentrate on the former in particular) seems to be an instance of Interiorism, his view on property possession for thin particulars seems to be an instance of Exteriorism, instead. His view on property possession for thick particulars seems to be an instance of Interiorism, for he says that the thick particular is already conceived of as possessing its properties, and it is hard to see how they could possess them other than by having them as constituents. On the other hand, his view on property possession for thin particulars seems to be an instance of Exteriorism, for he says that a thin particular possesses a property by being a constituent along with that property in a state of affairs, and it seems that a thin particular could be a constituent along with a property in a state of affairs only if that property and that state of affairs were exterior to that thin particular.

Since Armstrong's view on property possession for thin particulars is an instance of Exteriorism, it falls prey to the very argument we saw Armstrong deploy against Predicate Nominalism above. Of course, one might object that his view on property possession for thin particulars is an instance of Interiorism, instead. But this objection is undermined by the fact that according to Armstrong, thin particulars are particulars considered in abstraction from all of their non-relational properties, in the very least, if not from them all.

One might also object that Armstrong's view on property possession for thin particulars simply cannot diverge from his view on property possession for thick particulars, given that he thinks the thin particular and the thick particular

are two different ways of considering one and the same entity. Now I grant that Armstrong seems to think that the thin particular and the thick particular are two different ways of considering one and the same entity. But if in fact they are one and the same entity, then a contradiction is easily reached. After all, Armstrong also thinks that the thin particular is a constituent of the thick particular in a way in which the thick particular is not a constituent of itself. If the thin particular and the thick particular are one and the same entity, and if the thin particular is a constituent of the thick particular in a way in which the thick particular is not a constituent of itself, then the thick particular both is and is not a constituent of itself in that way.

Of course, one might object that the thick particular can be a constituent of itself in the very same way that it has the thin particular as a constituent. Now I grant that the thick particular can be a constituent of itself in a way analogous to the way in which any given entity is a non-proper part of itself in mereology. But whereas Armstrong thinks that thin particulars are proper constituents of thick particulars (i.e. whereas he thinks that there is more to a thick particular than a thin particular, for there is also that thin particular's nature), I deny that he can allow thick particulars to be constituents of themselves in this same way. Nothing can be a proper constituent of itself, since the proper constituents of an entity are its constituents to which it is not identical.

Since Armstrong's view on property possession for thin particulars seems clearly to be an instance of Exteriorism, it falls prey to the argument we saw him deploy against Predicate Nominalism above. Let us now turn to his view on

property possession for thick particulars. This seems to be an instance of Interiorism, instead. But Interiorism in general is false. It is not necessarily the case that an entity possesses a property just in case that property is interior to that entity, since a rather large number of entities fail to possess a rather large number of properties that are interior to them. (For example, recall the case of the universe as a whole. Insofar as dogs and cats are interior to the universe, so are the properties of being a dog and being a cat. But the universe itself does not possess these properties. The universe is not both a dog and a cat. It is neither a dog nor a cat, or so it seems to me.) In other words, Interiorism fails to provide a true sufficient condition for property possession, and so is false.

Of course, one might reject the truth of the claim 'if a property is interior to an entity, then that entity possesses that property' but still maintain the truth of 'if an entity possesses a property, then that property is interior to that entity.' But I reject that latter claim as false, too. If a property is interior to an entity in the sense that there is more to that entity than that property, then that entity and that property will be numerically distinct from each other. I reject the claim 'if an entity possesses a property, then that property is interior to that entity' because I find the assumption 'there is at least one pair of numerically distinct entities that the relation of property possession obtains between' to be problematic. I refer to the problem with this assumption as the problem of contribution, and I will have more to say about it in the following section, where it is at the heart of my argument that property possession and identity are one and the same relation. Thus, I will put off further discussion of this matter until then.

* * *

In this section, I argued against two views I call Exteriorism and Interiorism. Against Exteriorism, I argued that it fails to provide a true necessary condition for property possession. Against Interiorism, I argued that it fails to provide a true sufficient condition for property possession. Since Exteriorism and Interiorism fail to provide true necessary or sufficient conditions for property possession, they are both false. In the following section I will argue that property possession and identity are one and the same relation.

Chapter 3: The Argument for the Account.

In this section, I defend the following argument. Since property possession is a relation, either it is the relation of identity, or else it is some relation other than identity. If property possession is some relation other than identity, however, then there is at least one pair of entities that the relation of property possession obtains between. But since there are no such pairs of entities, property possession and identity are one and the same relation.

3.1 Premise one: Property possession is a relation. So far as I can tell, the only philosophers who have resisted this premise have been motivated to do so on the basis of their anxiety about Bradley's relational regress. According to that regress, if x bears the relation R to y , then relation R' (which may or may not be the same as R) is required to relate x to R , in which case relation R'' (which may or may not be the same as R') is required to relate x to R' , and so forth.⁴⁴

Overcome by their anxiety about the regress, a variety of philosophers have sought to identify property possession as something other than a relation. Most of them have looked for inspiration to Frege, who claimed that objects join with concepts without an intermediary relation obtaining between them.⁴⁵ But even Frege seems to identify property possession as a relation, namely, the relation of subsumption under a concept.⁴⁶ Putting this historical issue to the side, if an object can join with a concept without an intermediary relation

⁴⁴ For a discussion of this regress in its historical context, see Mander (1994).

⁴⁵ For commentary on such a view, see Newman (2002, pp. 25-26)

⁴⁶ See his (1891) in Beaney (1997, p. 173).

obtaining between them, it is only because that concept is unsaturated. And the notion of something that is unsaturated is obscure. After all, Frege was undecided over whether to analyze the notion in terms of full-blown metaphysics or mere grammar.

In the final analysis, I strongly suspect that the notion of non-relational property possession is simply a contradiction in terms. Of course, not all would agree, and certainly not all of them look to Frege for inspiration in this matter. We have seen in section II that according to Armstrong's view on property possession for thin particulars, a thin particular possesses a property by being brought together with that property in a state of affairs. But I argue that since states of affairs bring together thin particulars and their properties, states of affairs function as relations; and since they function as relations, they are relations. Moreover, there are occasions on which even Armstrong himself seems to agree with my line of reasoning. For example, he writes:

Suppose, for instance, that we have non-symmetrical R , particulars a and b , and that there obtain two wholly independent states of affairs: a 's having R to b and b 's having R to a . The difference between the two states of affairs, it is suggested, cannot be expressed better than by stating what are the two states of affairs. The "relation" or 'tie' between the constituents, the two different 'relations' or ties' that in this case are associated with the two states of affairs, are not anything additional to the two states of affairs. It is often convenient to talk about instantiation, but states of affairs come first. If this is a 'fundamental tie,' required by relations as much as properties, then so be it. But it is very different from anything that is ordinarily spoken of as a relation.⁴⁷

⁴⁷ See his (1997, p. 118).

The issue crucial to adjudicating my claim, of course, is whether property possession is so unlike any ordinary relation, according to Armstrong, that it is not a relation at all. But this is an issue on which he is unfortunately unclear.

Should we be so anxious about Bradley's regress as to deny that property possession is a relation? I think not. After all, the regress isn't a vicious one, as some seem to have thought.⁴⁸ That is to say, it does not prevent x from being related by R to y in the end. In fact, the regress gets going only if x is related by R to y in the first place. Once the threat of a vicious regress is suppressed, there seems much less reason to be anxious about Bradley's regress. Moreover, no contradiction is ever reached by the regress, even if it extends to infinity. Of course, most will look on in absolute horror as x becomes related to R and then to R' and then to R'' and so on. But this seems to me to be nothing more than a particular instance of the plausible general principle according to which any x bears some relation to any entity y , even if that relation is just identity or difference. Thus, I conclude that property possession is a relation. So now we must ask: Which relation is it?

3.2. Premise two: Either property possession and identity are one and the same relation, or else property possession is some relation other than identity. Given that property possession is a relation, I take this premise to be trivial.

⁴⁸ For commentary on such a view, see Newman (2002, p. 26).

3.3. Premise three: If property possession is some relation other than identity, then presumably there is at least one pair of entities that the relation of property possession obtains between. Of course, it is not a truth of logic that if property possession is some relation other than identity, then there is at least one pair of entities that the relation of property possession obtains between. Property possession could still be some relation other than identity either by being the relation with the null extension or by being a relation that some but not all entities bear to themselves. But these possibilities seem remote.⁴⁹ And since presumably everyone already assumed that property possession obtains between two distinct entities, that is the option against which I'll argue in what follows.

3.4. Premise four: There is no pair of numerically distinct entities that the relation of property possession obtains between.

Assume that there is at least one entity *x* that bears the relation to an entity *y* to which *x* is numerically distinct, and to make the ensuing argument somewhat vivid, let *y* be the property of being red. Now if *x* bears the relation of property possession to *y*, then *y* bears the converse of that relation to *x*, in virtue of which it is said that *y* makes *x* red.⁵⁰ But even if *x* and *y* are not separable from each other in the sense that one could exist without the other, so long as *x*

⁴⁹ To be sure, one might think that the relation of property possession is the relation with the null extension precisely in the sense that there is no such thing as the relation of property possession in the first place. I will respond to this objection in the conclusion of the paper.

⁵⁰ For a representative context in which this locution is used, see Leftow (2003).

and y are numerically distinct from each other, it seems problematic to say that y could make x red. Though I will have much more to say about this problem in a moment, since the gap that exists between x and y seems to be so insurmountable as to prevent y from making x red, there will not be at least one entity that bears the relation of property possession to a second entity, in which case there will not be at least one pair of numerically distinct entities that the relation of property possession obtains between.⁵¹

To see more clearly the problem I am pointing towards, consider the redness of x. The redness of x is that in virtue of which it is true to say of x that it is red. (For the purpose of the argument, it does not matter whether or not the redness of x is assumed to be identical to y, though I will have more to say about the identity of the redness of x below.) Now it is problematic to claim that y makes x red because to claim that y makes x red is *not only* to claim that the redness of x depends at least partially for its existence upon the existence of y.⁵² It is *also* to claim that y somehow contributes the redness of x to x itself. But

⁵¹ It's worth pausing briefly to consider seriously the sarcastic suggestion that y makes x red with a paint brush. But even if y slathers a non-red x in a coat of red paint, one must still admit that it is the coat of red paint that is red, not x as a whole. After all, there is more to x than that coat of pain. (Moreover, one still has to explain what makes that red paint red in the first place.) Of course, one might suggest that x counts as being red, since it is completely encapsulated by something red. But by that reasoning, I would possess all properties previously thought to be possessed solely by the rest of the physical universe that surrounds me. These same points will be made again below in a context that is less tongue in cheek.

⁵² Quine is sometimes associated with a view disparagingly referred to as Ostrich Nominalism, according to which the true predication of 'is red' of x, for example, depends upon nothing in addition to x and that predicate. At this point, one might think that I'm simply arguing for the truth of Ostrich Nominalism. But I'm not. In section IV, I will clearly distinguish my view from Ostrich Nominalism.

even if y were somehow to gain what one imagines must be the requisite control over the redness of x to do with it what it will, this still doesn't leave one in a position to explain exactly *how* y contributes the redness of x to x itself. Given that x and y are numerically distinct from each other, it is difficult to see how one could explain this without making recourse to something akin to action at a distance.

Of course, one might object that the matter is not as problematic as I make it out to be. One suggestion is that y makes x red simply by causing x to be red.⁵³ But even if we grant that y causes an instance of redness to exist, which by itself is an opaque suggestion, this still doesn't suffice to make x red. After all, what's there to prevent y from producing an instance of redness that exists at the opposite end of the universe from x? But there it will be an exterior entity vis-à-vis x.

Perhaps the most natural suggestion is that the relation between y and x is not productive but constitutive.⁵⁴ That is to say, the most natural suggestion seems to be that for y to make x red is for y to be the red constituent of x. But the claim 'for y to make x red is for y to be the red constituent of x' seems to me to be nothing more nor less than the admission that it is y that is red in the end, not x. After all, if one claims that y makes x red by being the red constituent of x, one thereby admits that the only instance of redness at play is confined solely to y. Another suggestion along the lines of the previous one is that if x has an

⁵³ Armstrong considers but ultimately rejects such a suggestion. See his (1978a, p. 68).

⁵⁴ Armstrong himself makes this suggestion. See his (1978a, pp. 68-69)

instance of redness as a constituent, then this suffices to make x red. But it does not follow that if x has an instance of redness as a constituent, then x is red in and of itself. To see this, one only has to recall the case of the universe at large and all of the properties it has as constituents that it fails to possess. Still another suggestion along these lines is that if x has an instance of redness as a constituent, then x counts as being red somehow. But this strikes me as a cop out. To be sure, the suggestion helps to explain why we are inclined to predicate 'is red' of *some* entities that have instances of redness as constituents.⁵⁵ But it is absurd to claim that all entities count as possessing all of the properties that they have as constituents.

One might even suggest that the relation of property possession is a primitive that can somehow obtain between two distinct entities. But this suggestion just begs the question. Even if we grant that x bears the relation of property possession to y and even if we also grant that the redness of x therefore exists, we must still ask: What is the relation that obtains between the redness of x and x itself? Is it identity, or is the redness of x not identical to x itself? If x is identical to the redness of x, then unless the redness of x was assumed all along to be identical to y, the need for y drops away, leaving us with an x that is identical to the redness of x. In other words, we are left with an x that is red not extrinsically, or in virtue of a relation it bears to something other than x, but intrinsically, or in virtue of the relation of property possession and identity it bears

⁵⁵ I will have more in section IV to say about this issue pertaining to predication.

to itself.⁵⁶ But since this is my view, let us assume that x is not identical to the redness of x. But then we must ask: How does the redness of x make x itself red?

We have come around again to the same problem, and the regress it engenders is a vicious one, to be sure. No vast and ever increasing horde of rednesses swarming around x will ever successfully conspire amongst themselves to make x red, if x is distinct from them all. Since we will keep coming around to this problem over and over again so long as a real distinction is assumed to obtain between property possession and identity, that assumption should be given up.

I call this problem the problem of contribution. In the case at hand it is the problem of how y makes x red, and it was what drove me to my account of property possession and identity in the first place.⁵⁷ Of course, some will object that this so-called problem is not really that much of a problem at all. One suggestion is that I demand too much of y when I demand that it make x red. But I disagree. Logically speaking, there are only the following four options. Either x and y are not red, x is not red but y is, both x and y are red, or x is red and y is not. Now the first two options do not give us what we want in the first place, which is a red x. To be sure, the third option gives us that, but it also makes y seem superfluous. And though the fourth option also gives us a red x, it makes y seem irrelevant.

⁵⁶ I will have much more to say in section IV to elaborate this point about intrinsically qualitative entities.

⁵⁷ Actually, I first became aware of the problem when, having become dissatisfied with Kant's argument that existence is not a property, I realized that existence could not be a property anyway, since y could not contribute the existence of x to x itself.

So unless it can be shown that x needs something other than x to be red -- which will be a tall order, since that additional entity would appear to be either superfluous or irrelevant -- it must be concluded that x just is the redness of x.

One might grant that the problem is a legitimate problem, but claim that it gets off the ground only if it is granted that 'y contributes the redness of x to x itself' can be somehow derived from 'y makes x red.' But the problem can also be formulated, omitting 'contributes' or 'contribution,' as the problem of how y makes x red. A related suggestion is that the problem gets off the ground only if it is granted that x possesses y only if y makes x red. But the problem can be reformulated as the problem of how x comes to be related to y in such a way that x becomes red. And to say that x does so by instantiating y just begs the question: What exactly is property possession, if not the relation of identity? The Platonic assumption that it is a relation that can obtain between two distinct entities has gone unchallenged down to the present day. But this assumption is problematic, and it is time to give it up.

One might even object that the problem cannot be generalized. But it can. It is the general problem of how one entity comes to be related to a second entity in such a way that the second entity comes to possess a certain size, shape, mass, density, texture or color (or some other property). Unless this general problem can be solved, it must be concluded that property possession and identity are one and the same relation.

* * *

In this section, I defended an argument for an account of property possession and identity according to which they are one and the same relation. In the following sections, I shift tactics to defend that account against a variety of objections one might raise against it.

Chapter 4: Objections and Responses.

In this section I will show that by utilizing the view according to which there is nothing more to any given entity than the nature of that entity (which, for the sake of brevity, I will refer to in what follows as **N**), I can rebut a wide variety of what one might take to be the obvious objections to my account. (More will be said to elaborate **N** as the various objections are gone through.)

4.1. The first objection, the response and the worry about it. One might raise the following objection to my account of property possession and identity. There is at least one entity that bears the relation of property possession to two or more properties. If there is an entity that bears the relation of property possession to two or more properties, then if property possession and identity were one and the same relation, that one entity would be identical to those two or more properties. But since that would be absurd, property possession and identity are not one and the same relation.

My response to this objection is to reject as false the assumption that there exist some entities that bear the relation of property possession to two or more properties, either simultaneously or not. After all, there could be such an entity only if property possession were a one-many relation that at least one entity is capable of bearing to two or more properties. But property possession is not a one-many relation. It's the one-one relation of identity.

There is a worry about this response to the objection, however. An entity is qualitative just in case a certain shape, size, mass, density, texture *or* color (*or*

some other property) can be truly predicated of it; and an entity is qualitatively complex just in case a certain shape, size, mass, density, texture *and* color (*and* some other property or properties) can be truly predication of it. The worry is that if I deny the existence of entities that bear the relation of property possession to two or more properties, then I will be unable to account for the fact that some entities are qualitatively complex. For example, some might worry that I am unable to account for the fact that we can truly predicate of my pencil a certain size, shape, mass density, texture, color, and so forth.

This worry can be made more precise. It is the worry that if I deny the existence of some entities that possess two or more properties, then I will be unable to account for the fact that some entities possess qualitatively complex natures. Recall from section II that the nature of an entity is the property that entity possesses which is complete in the sense that it comprises all of the properties that can be truly predicated of that entity.

Now I will grant that it's easy to see how to account for qualitative complexity on the basis of an account of property possession as a one-many relation that at least one entity is capable of bearing to two or more properties. The natural suggestion is that for an entity to be qualitatively complex is for that entity to bear the relation of property possession to two or more properties. I will also grant that perhaps it's not so easy at first to see how to account for qualitative complexity on the basis of an account of property possession as the one-one relation of identity. But if property possession and identity are one and the same relation, then I can account for qualitative complexity on the basis of N:

the view according to which any given entity bears the relation of property possession and identity to the nature of that entity, or, in other words, the view according to which there is nothing more to any given entity than the nature of that entity.

Strictly speaking, **N** is the view according to which for any given entity there is exactly one nature, such that this entity bears the relation of property possession and identity just to that nature. On the basis of **N**, for an entity to be qualitative is for that entity to bear the relation of property possession and identity to a nature that comprises at least one property. On the basis of **N**, for an entity to be qualitatively complex is for that entity to bear the relation of property possession and identity to a nature that comprises two or more properties. This account can be made more precise if we recall the distinction made in mereology between non-proper parts and proper parts. The non-proper part of an entity is the part to which it is identical, whereas the proper parts of an entity are the parts to which it is not identical. Now for an entity to be qualitative is for that entity to bear the relation of property possession and identity to the (non-proper part of the) nature of that entity, and for an entity to be qualitatively complex is for the nature of that entity to comprise two or more properties as proper parts.

It seems that some entities are more qualitatively complex than others. This phenomenon is accounted for by **N** in the following way. For one entity to be more qualitatively complex than another entity *y* is for the number of properties that are proper parts of the nature of *x* to be greater than the number of properties that are proper parts of the nature of *y*. The more properties that

are proper parts of the nature of an entity, the more qualitatively complex that entity will be.

Is there such a thing as the most qualitatively complex entity of them all? Though it matters not at all to my purposes in this paper, I think that it is natural to identify the world itself as the qualitative entity whose nature comprises all entities as parts. Of course, some will object that if the nature of the world comprises all entities, then any given entity must be truly predicable of the world itself. But this I deny. The nature of an entity is defined as the property that entity possesses which is complete in the sense that it comprises all of the properties that can be truly predicated of that entity. But this definition does not imply that the nature of an entity is the property that entity possesses that is complete in the sense that it is composed *solely* out of the properties that can be truly predicated of that entity. The nature of an entity may comprise more than just the properties that can be truly predicated of that entity. Thus, you and I may still be parts of the nature of the world, even though we are not truly predicable of the world itself.

One might also wonder whether there are entities that are not at all qualitatively complex. To address this issue, it is useful to compare and contrast **N** with Thomas Aquinas' doctrine of divine simplicity. On the one hand, just as Aquinas thinks that God possesses and is identical to the nature of God, I think that any given entity possesses and is identical to the nature of that entity.⁵⁸ But, on the other hand, whereas Aquinas thinks that the nature of God is utterly

⁵⁸ For more on the view of Aquinas, see his *Summa Theologiae* Ia3.

simple, I assume that there are at least some entities that have natures that comprise two or more properties as proper parts.⁵⁹

Of course, there may be non-theological reasons for believing that some entities are qualitatively non-complex. If there are such entities -- I make no presupposition either way -- then any such entity will fall into the limiting case in which an entity trivially bears the relation of property possession to all of the parts of the nature of that entity. In general, whereas any given entity will always bear the relation of property possession and identity to the nature of that entity, no entity will ever bear that relation to any one of the proper parts of that entity's nature. Of course, some will object that any given entity must always bear the relation of property possession to all of the properties that can be truly predicated of that entity. But I am skeptical that anyone has any strong intuitions about the relation that obtains between property possession and predication.

Still, I want to make clear that I am not claiming that property possession and identity can completely go their own separate ways. On the one hand, property possession is not the converse of predication, as is sometimes thought.⁶⁰ Not all entities possess all of the properties that can be truly predicated of them. Nor is predication even the converse of the relation an entity bears to the parts of the nature of that entity. For some entities may bear the relation of property possession and identity to natures that comprise more than just the properties that can be truly predicated of those entities. Still, the nature

⁵⁹ The view that the nature of God is simple amounts to the view that God's omnipotence, omniscience and omnibenevolence are all identical to each other and to God. For a critique of this view, see Hughes (1989, pp. 60-87).

⁶⁰ I owe this point to Cian Dorr.

of an entity must comprise a property, if that property can be truly predicated of that entity. So to that extent the properties that can be truly predicated of an entity determine the composition of the nature to which that entity bears the relation of property possession.

We have seen that I am able to account for qualitative complexity on the basis of **N**, or the view according to which any given entity bears the relation of property possession and identity to the nature of that entity. Now I will argue that **N** is to be preferred to the view according to which there is something more to some entities than the natures of those entities.

There are a variety of philosophers who believe there to be something more to some entities than the natures of those entities. For example, we saw that according to Armstrong, the thick particular has the thin particular as an ontological ingredient in addition to the nature of that particular. For Duns Scotus, this extra ontological ingredient is the haecceity.⁶¹ For Aquinas, it is prime matter.⁶² For Locke, it is the substratum.⁶³ And for other philosophers, it is the bare particular.⁶⁴ It seems to be a very widespread view that there is something more to some entities than the natures of those entities.

If there is something more to some entities than the nature of those entities, then **N** is clearly false. After all, if **N** is true, then there is nothing more to

⁶¹ See Spade (1994, ch. 4).

⁶² See his *Summa Theologiae*.

⁶³ See his *Essay Concerning Human Understanding*.

⁶⁴ See Gustav Bergmann's *Realism*.

any given entity than the nature of that entity.⁶⁵ So is it true that there is something more to some entities than the natures of those entities?

In my opinion it is problematic to claim that there is something more to some entities than the natures of those entities. If there is something more to an entity than the nature of that entity, then the extra ontological ingredient in that entity would seem to be qualitative, if at all, merely extrinsically. After all, it is hard to see how that extra ingredient could be qualitative at all, other than by bearing some relation or other to the nature of that entity. But there is a long-standing suspicion within the tradition of Empiricism towards entities that are merely extrinsically qualitative. No doubt this is because the sheer inductive weight of the empirical evidence we have that all entities are intrinsically qualitative is simply overwhelming. But one also wonders how we even could have any epistemic access to any entity that is not intrinsically qualitative. Of course, one might object that we have access to entities that are not intrinsically qualitative by accessing the natures of such entities. But this seems to me to be nothing more than the admission that we have empirical access only to natures in the end. In any case, it's not just a matter of curbing our ontology to empiricism, as we saw Denkel put it in section II. For the very notion of an entity that is not intrinsically qualitative seems simply incoherent. After all, it seems to imply a formal contradiction to claim of an entity that it is not intrinsically

⁶⁵ To say that an entity bears the relation of property possession and identity to the nature of that entity is to say that there is nothing more to that entity than that nature.

qualitative.⁶⁶ For to say 'an entity is extrinsically qualitative but not intrinsically qualitative' is to say 'the entity in question both is and is not qualitative,' or so it seems to me. Of course, one might seek to resolve this contradiction in some way. But even if this apparent contradiction can be resolved somehow, one still faces the problem of contribution, which will crop up whenever one attempts to claim that some entities are qualitative merely extrinsically. How could one entity become qualitative by bearing a relation to a second entity? It is a problem we should be quite familiar with from section III.

N avoids the problems that beset the view according to which there is something more to some entities than the natures of those entities. First of all, **N** avoids the problem of contribution. If any given entity bears the relation of property possession and identity to the nature of that entity, then there simply is no question of how one entity contributes the nature of a second entity to that second entity. No two entities ever bear the relation of property possession and identity to each other, if **N** is true. Secondly, **N** avoids a commitment to the existence of entities that are qualitative merely extrinsically. If **N** is true, then any given entity is qualitative not extrinsically, or in virtue of some relation it bears to some second entity, but intrinsically, or in virtue of the relation of property possession and identity it bears to itself. Lastly, since **N** avoids a commitment to the existence of entities that are qualitative merely extrinsically, it avoids a commitment to the existence of entities that the Empiricist would find spooky.

⁶⁶ Wilfred Sellars made a similar point. See his (1963, pp. 282-283).

Since **N** avoids the problems that beset the view according to which there is something more to some entities than the natures of those entities, **N** is to be preferred to that view.

I have argued that **N** is to be preferred to the view according to which there is something more to some entities than the natures of those entities. Even so, no doubt there are a variety of objections one would raise against **N**. So in the remainder of this section I will respond to six objections to **N** of which I'm aware.

The *first* objection to **N** is as follows. There is at least one property that can be possessed by two or more entities. If so, then it is at least in principle possible for two distinct entities to possess one and the same nature, in which case there must be something more to those entities than their natures -- something which individuates those entities from each other. But if there is something more to some entities than the natures of those entities, **N** is false.

My response to this objection is to reject as false the assumption according to which there are some properties that are possessed by two or more entities, either simultaneously or not. After all, there could be such a property only if property possession were a many-one relation that two or more entities are capable of bearing to one and the same property. But property possession is not a many-one relation. It is the one-one relation of identity.

Of course, one might object at this point that my account of property possession and identity commits me to the truth of Nominalism, or the view according to which there are no such entities as universals. Now I will grant that

my account of property possession does commit me to the truth of Nominalism, if universals are defined as properties that are capable of being possessed by two or more entities. But I deny that my account commits me to the truth of Nominalism, if universals are defined as properties that are capable of simultaneous multiple-location. Still, I would like to put off further discussion of this matter until section V, where it can have the space it merits.

There still remains the outstanding issue of what individuates one entity from another, given that there is nothing more to an entity than the nature of that entity. Lots of ink has been spilled by philosophers on the issue of what individuates various entities from each other. One popular view is that material entities (e.g. The Ships of Theseus) are individuated from each other in virtue of their spatial-temporal locations. But others have argued it is at least in principle possible for two distinct entities to occupy one and the same spatial-temporal location. This problem of co-location has also beset the view according to which the matter of an entity is what individuates it from others. A similar problem besets the view according to which any x and y are identical to each other just in case they share all of the same properties. It was this problem that led Duns Scotus to postulate the existence of the haecceity. If x and y share the same nature, then the haecceity of x is what individuates it from y in the end.

More relevant to our purposes is the view according to which x and y are identical to just in case the natures of x and y share all of the same proper parts. But this view, like each of the others already mentioned, engenders a vicious regress. For example, if one claims that x and y are identical just in case they

share all of the same proper parts, then we must ask: What individuates the proper parts of x and y from each other, and what individuates the proper parts of the proper parts of x and y from each other, and so forth? If this regress ever terminates in the inexplicable, the individuation of x from y is directly threatened. But it seems strange to think that it could go on forever. So what is it that individuates one entity from another?

In my opinion, we should give up the assumption that if x is any given entity whatsoever, if y is any entity other than x , and if z is that in virtue of which x is numerically distinct from y , then z is numerically distinct from x . That is to say, we should adopt a view on individuation according to which if x is any given entity, if y is any entity other than x , and if z is that in virtue of which x is numerically distinct from y , then x and z are identical to each other. To be sure, this view seems to have some historical precedent in the writings of William of Ockham. As one commentator of Ockham puts it, if some objects are distinct from each other, then according to Ockham, "their distinction from each other is not explained by anything other than their own self-identity."⁶⁷ As another commentator puts it, Ockham thinks that entities "are individuals all by themselves; they so to speak 'just come that way'."⁶⁸

Consider the following argument for Ockham's view. Let x be any given entity, let y be any entity other than x , and let z be that in virtue of which x is numerically distinct from y . Logically speaking, there are only the following four options. Either z is identical to both x and y , z is identical to y alone, z is not

⁶⁷ See Cross (2003, section 6).

⁶⁸ See Spade (1994, p. xii).

identical to x or y, or z is identical to x alone. First, assume that z is identical to x and y. But in that case, x and y would turn out to be identical to each other, which contradicts the original assumption that they are not. Second, assume that z is identical to y alone. But since y is any entity other than x, if any entity other than x ceased to exist, x would cease to be numerically distinct from all remaining entities other than x. But that would be absurd, for it would imply that my pencil would cease to be numerically distinct from all of the entities in the world if the Eiffel Tower suddenly ceased to exist. Thirdly, assume that z is not identical to x or y. But since x is any given entity and since y is any given entity other than x, if z is not identical to either x or y, then z would not be identical to x or to any entity not identical to x, which is incoherent. Thus, if x is any given entity, if y is any entity other than x, and if z is that in virtue of which x is numerically distinct from y, x and z are identical to each other.

The upshot of my adoption of William of Ockham's view on individuation is that I reject as false the principle of mereological extensionalism, according to which x and y are identical to each other just in case they share all of the same proper parts. Thus, I reserve the right to a mereology for natures that helps itself to the (transitive, reflexive and sometimes symmetrical) relation of parthood and the (transitive, anti-reflexive and anti-symmetrical) relation of proper parthood, but that takes a pass on mereological extensionalism.⁶⁹ This fact should be kept in mind vis-à-vis my responses to the following objections.

⁶⁹ To be sure, I'm not the first to do so. See Simons (1987).

The *second* objection to **N** is that if there is nothing more to an entity than the nature of that entity, then there will be nothing in an entity capable of persisting through change. But given that I reject mereological extensionalism, so far as I can tell **N** is compatible with the prominent accounts of persistence and change on the market today. These include Presentism, Endurantism and Perdurantism. A Presentist's slant on **N** would have it that only present natures exist. An Endurantist's slant on **N** would have it that entities persist by gaining and losing proper parts of their natures. And a Perdurantist's slant on **N** would have it that an entity persists by having a four-dimensional nature.⁷⁰

The *third* objection to **N** is that since identity is necessary, so is property possession, in which case all properties are essential ones. Now I will grant that if an entity bears the relation of identity to itself necessarily, then that entity will bear the relation of property possession to itself necessarily, since property possession and identity are one and the same relation. But if others can claim that an entity could have instantiated a set of properties that is different from the set of properties it actually instantiates, I see no reason why I can't claim that the nature of an entity could have comprised a set of properties that is different than the one that it actually comprises, given that I reject mereological extensionalism.

The *fourth* objection to **N** is the most pressing of them all. It is the objection to the implication that if **N** is true, then the world is a world of properties alone. Now I grant that if **N** is true, then the world is a world of properties alone. After all, if any given entity bears the relation of property possession and identity

⁷⁰ For more on Presentism, Endurantism and Perdurantism, see Sider (2001).

to the nature of that entity, which is a property, then any given entity just is a property, in which case the world is a world of properties alone. But I also maintain that the world really is a world of properties alone.

There are two reasons why one might deny that the world is a world of properties alone. The first is that there are no such entities as properties at all. And the second is that there are entities in the world in addition to properties. I will take them in turn.

The view that there are no such entities as properties is most closely associated with Quine.⁷¹ He writes:

There is no denying the access of power that accrues to our conceptual scheme through the positing of abstract entities. Most of what is gained by positing attributes, however, is gained equally by positing classes. Classes are on par with attributes on the score of abstractness or universality, and they share the same purposes of attributes so far as mathematics and certainly much of the sciences are concerned; and they enjoy, unlike attributes, a crystal-clear identity concept.⁷²

But Quine is wrong three times over. Properties are not necessarily abstract.⁷³

They are not necessarily universals. And he is wrong about individuation.

Nothing has concept of identity that is more crystal-clear than that of anything else. For as we have seen, if x is any entity whatsoever, if y is any entity other than x , and if z is that in virtue of which x is numerically distinct from y , then x and z are identical to each other.

⁷¹ It is a common mistake to think that William of Ockham rejected the existence of properties. He did not. He rejected the existence of universals, but maintained the existence of particular properties. For more on his view, see Adams (1987, pp. 277-285).

⁷² See his (1969, p. 21).

⁷³ For one who thinks they are concrete, instead of abstract, see Armstrong (1978a) and (1978b).

Quine thinks that sets have a crystal-clear concept of identity because he thinks that the set-theoretic axiom of extensionality is a crystal-clear principle, but it's not. According to that principle, any sets x and y are identical to each other just in case they share all of the same elements or members. But this principle just sets off a vicious regress. For x can only be individuated from y by the elements or members of x only if the elements of x are clearly distinct from the elements of y , in which case the individuators of the elements of x must be clearly distinct from the individuators of the elements of y , and so forth. If this regress ever terminates in the inexplicable, the individuation of x from y is directly threatened. But it cannot run on forever, or so it seems. Better to conclude that for any entity whatsoever x (be it a set or class or something else), if y is any entity other than x , and if z is that in virtue of which x is numerically distinct from y , then x and z are identical to each other.

In his quest to make metaphysics safe for logic, Quine sought to account for predication on the basis of a view that dispenses with everything other than predicates and the subjects of predication. He writes:

One might admit that there are houses, roses, and sunsets, but deny, except as a popular and misleading manner of speaking, that they have anything in common. The words 'houses', 'roses' and 'sunsets', and the word 'red' or 'red object' is true of each of sundry individual entities which are red houses, red roses, red sunsets; but there is not, in addition, any entity whatsoever, individual or otherwise, which is named by the word 'redness,' nor, for that matter, by the words 'househood', 'rosehood', 'sunsethood.' That the houses and roses and sunsets are all of them red may be taken as ultimate and irreducible.⁷⁴

⁷⁴ See his (1964, p. 10).

But as it happens all too often if one attempts to make metaphysics safe for logic or some other disciple such as the philosophy of language, one loses what Russell called a robust sense of reality in one's outlook about certain unassailable truths about our world that might, for the lack of a better word, be classified as metaphysical. Quine's view, which has been disparagingly referred to as Ostrich Nominalism by Armstrong (who thinks that Quine would prefer to stick his head in the sand than admit properties), is unable to account for the unassailable fact about our world that there are qualitatively complex entities. If nothing in addition to x is needed to account for the true predication of 'is red' of x, then by that line of reasoning, nothing in addition to x would be needed to account for the true predication of 'is a house' of x, in which case the true predication of the one would amount to the true predication of the other. But surely they don't amount to the very same thing, for presumably x could have been a blue house, instead of a red one.

Quine's view has inspired more sophisticated views, such as the one developed by David Spade. He writes:

In modern epistemology, there is an "adverbial" theory of perception according to which the experience of sensing something red, for example, is not to be analyzed into a mental act of awareness plus a sense-datum or mental object that is red. Rather, the experience is to be thought of as a mental act of seeing "redly." So, too, I suggest, why should being red be analyzed in terms of a substance plus a quality of redness distinct from but inhering in it? Why should being red not be thought of simply as a substance that "exists in a certain way" -- redly?⁷⁵

To be sure, Spade's view is unable to account for qualitative complexity. But beyond that, perhaps what Spade has really put his finger on here is the problem

⁷⁵ See his (1999, p. 106).

of contribution. Of course, one might think this problem suggests that there are no properties in addition to the subjects of predication. But I would suggest the lesson to be drawn from the problem is not that there are no such entities as properties. I would suggest that the lesson to be learned is quite the opposite one. What I would suggest the lesson should be is that the world is a world of properties alone. Allow me to explain.

Our world is manifestly a world of qualitatively complex entities. But it is not a world of entities that are qualitative merely extrinsically, for the suggestion that there are extrinsically qualitative entities is undermined by the problem of contribution. Rather, the world is a world of entities that are qualitative intrinsically. It is a world of intrinsically qualitative entities alone. Now properties have traditionally been thought to be entities that are intrinsically qualitative,⁷⁶ and all other types of entities have traditionally been thought to be qualitative, if at all, merely extrinsically, or in virtue of the relations they bear to properties. Since properties are intrinsically qualitative entities, that is why I claim that the world is a world of properties alone. Of course, one might choose not to refer to those intrinsically qualitative entities as properties. But then the debate will have become a merely terminological one. So unless one can account for the fact that the world is a world of intrinsically qualitative entities, without identifying those entities as properties, one must conclude that the world is a world of properties alone.

⁷⁶ One gets a sense of this from the passage from Denkel above, where he writes: "My view is that to inhere in a substance is to be the element of a compresence of qualitative properties." See his (1996, p. 41).

The second reason why one might not believe that the world is a world of properties alone is that there are entities in the world other than properties. In other words, one might object that if the world were a world of properties alone, then there would be no such entities as substances, events, processes, and so forth. But it is one thing to eliminate the ontological categories of substance, event, process, etc. And it is quite another to reduce them. What I am suggesting is that all ontological categories are to be reduced to sub-categories within the category of property. What I am suggesting, in other words, is that the category of property is the one all-inclusive ontological category.

Of course, some might object that if all categories are so reduced, then nothing would remain to play the various roles traditionally thought to be played by substances, events, processes, and so forth. (Such roles include being capable of independent existence, being subjects of predication, being causally efficacious, and so forth.) But the view that the world is a world of properties alone is not the view that the world is a world of qualitatively non-complex properties alone. In the world of properties alone, some of those properties can be complex enough to be natures that *adequately* play all of the roles traditionally thought to be played by substances, events, processes, and other such entities.

The *fifth* objection is that **N** contradicts Aristotle's principle according to which any given property must be possessed by something. But **N** does not contradict this principle, since this principle does not entail that any given property must be possessed by something other than that property itself. All properties are possessed in the world of properties alone, given that **N** is true.

The *sixth* objection is that **N** contradicts Aristotle's principle according to which no substance is possessed by anything else. But **N** does not contradict this principle, either. For according to **N**, no entity is possessed by anything other than itself.

* * *

In this section, I raised an objection to my account of property possession and identity. Out of the response to that objection emerged **N**: the view according to which any given entity bears the relation of property possession and identity to the nature of that entity. On the basis of **N**, I offered an account of qualitative complexity. After that, I argued that **N** is to be preferred to the view according to which there is something more to some entities than the natures of those entities. And then I defended **N** against a variety of objections one might raise against it.

4.2. Second objection and response. In this section, I raise a second objection to my account of property possession. After I respond to that objection, I discuss whether that account of mine commits me to the truth of Nominalism, or the view according to which there are no such entities as universals. On the one hand, I show that my account does commit me to the truth of Nominalism, if universals are defined as properties that are capable of being possessed by two

or more entities. But, on the other hand, I also show that my account does not commit me to the truth of Nominalism, if universals are defined as properties that are capable of simultaneous multiple-location.

One might raise the following objection to my account of property possession and identity. There is at least one property that is possessed by two or more entities simultaneously. If there is at least one such property, however, then if property possession and identity were one and the same relation, then that *one* property would be identical to the *two* or more entities that possess it. But since that is absurd, property possession and identity are not one and the same relation.

My response to this objection is to reject its first premise as false. There is not at least one property that is possessed by two or more entities, either simultaneously or not. For if there were, then property possession would need to be a many-one relation that two or more entities are capable of bearing to one and the same property. But property possession isn't a many-one relation at all, just as it isn't a one-many relation. As I've argued, it is the one-one relation of identity.

Of course, one might object at this point that I have become committed to the truth of Nominalism, or the view that there are no universals and that all properties are particulars, or tropes. Indeed, my account of property possession and identity does commit me to the truth of Nominalism, or the view that there

are no universals, if we define them as Boethius did as properties that are capable of being possessed by more than one entity.⁷⁷

On the other hand, my account of property possession and identity does not commit me to the truth of Nominalism, or the view that there are no universals, if we define them as properties that are capable of simultaneous multiple-location.⁷⁸ Thus, in the end my account of property possession and identity is merely consistent with the non-existence of universals, but only if they are defined as properties that are capable of simultaneous multiple-location.⁷⁹

Even though my account of property possession and identity doesn't allow me to derive the truth of Nominalism, there is a good reason to deny that there could be universals in the first place. In a recent paper, Douglas Ehring assumes for *reductio* that U and V are properties that are simultaneously multiply-located at both the North and North Poles.⁸⁰ Now if U and V are located at both poles, then U is north of V and U is south of V, in which case U is north and not north of V, which is absurd. Since this is as good a reason as any to reject deny that there could be properties that are capable of simultaneous multiple-location, it's as good a reason as any to reject the existence of universals. After all, it seems that there could be Boethius' universals only if there could be properties capable of simultaneous multiple-location.

⁷⁷ See his commentary on Porphyry's *Isogoge* in Spade (1994).

⁷⁸ Newman suggests such a definition. See his (2002, p. 24, n. 40).

⁷⁹ This should not be taken to suggest I advocate Realism about universals, for I am sympathetic to Nominalism. For an argument against universals, see Ehring (2002). To be sure, the truth of Nominalism doesn't entail that there are no properties, for even Ockham believed in properties. For more on his view, see Adams (1987, pp. 277-285).

⁸⁰ See Ehring (2002).

Of course, defenders of universals will object to Ehring's argument. In a recent paper, Cody Gilmore has sought to utilize what he calls a relativizing technique dubbed the 2n principle to replace the absurd conclusion Ehring urges with the conclusion: "U, the North Pole, V, and the South Pole (in that order) stand in the relation 'x at Lx is north of y at Ly' whereas U, the South Pole, V, and the North Pole (in that order) do not stand in the given relation."⁸¹

But the only way Gilmore can succeed in replacing the one conclusion with the other is by making tropes out of what were assumed to be the universals U and V. For if U really is a property that is capable of simultaneous multiple-location, then U at its location at the North Pole just is U at its location at the South Pole, in which case they will stand in the very same relations as each other.

Of course, others might respond to Ehring's argument by biting the bullet, and admitting that U is both north and not north of V. But to embrace a true contradiction is to embrace the truth of Dialetheism. And that is not something I'm willing to do just for the sake of universals, though perhaps others would be. After all, various arguments have been proposed that universals exist. For example, L.A. Paul has recently written:

Consider two particulars, our cups in the example above, that have the property of being red. Suppose that each shade of red exactly resembles the other: some might say that we have two exactly resembling tropes and some might say each cup instantiates the same universal. I say that both claims are true. When we have resembling tropes we have two different objects which overlap with respect to (at least one of) their logical parts. The objects that we have called the red cups with all their properties have all their logical parts, including their spatial locations, and so the objects

⁸¹ See Gilmore (2003, p. 423).

that are the cups are spatially distinct. But when we subtract away the proper logical parts which are the particular spatial properties (and perhaps other relevant parts, such as the part of being a cup) we are left with the part of redness; in other words, we are left with just one object. This lone object grounds the claim that the redness of each cup is the same. Here, there is just one object *that has no location properties as parts*. This object -- call it *R* -- partly overlaps objects that include location properties as parts, but *R* does not include the location properties themselves. So *R* does not have particular locations as parts, even if it overlaps or exists in association with objects that do. In this way, two spatially distinct cups have the same logical part, redness, in virtue of the fact that *R* logically overlaps each cup.⁸²

But even if we put to the side the obscure notion of a non-spatial instance of redness, Paul's argument begs the question. Instead of forcing us to admit that the redness of the one cup collapses into that of the other, as she would have it, her argument just leaves us with the sense that something individuates those two instances of redness from each other in the end, and prevents the collapse of the wavelength she envisions.

* * * *

In this section I have argued that my account of property possession and identity commits me to the truth of Nominalism, or the view that there are no universals and that all properties are particulars, but only if universals are defined as properties that are capable of being possessed by two or more entities. If universals are defined as properties that are capable of multiple-location, then

⁸² See Paul (2002, p. 584).

my account of property possession is merely consistent with the truth of Nominalism.

4.3. Third objection and response. In this section I will draw a distinction between the classical or absolute conception of identity as the transitive, symmetrical and reflexive relation any entity bears to itself and nothing else, and the relation of indiscernibility. I will respond to several traditional objections to the classical or absolute conception of identity. And I will respond to a variety of objections to the claim that even if the classical or absolute conception of identity is granted, the relation of identity is not the relation of property possession.

There is a distinction to be drawn between the relation of identity and the relation of indiscernibility. (On some occasions the former relation is referred to as strict, numerical identity, and the latter relation is referred to as qualitative identity.) Whereas both relations are transitive, symmetrical and reflexive, only the relation of identity is the transitive, symmetrical relation that any given entity bears to itself and nothing else. The relation of indiscernibility is a relation that *two* entities can bear to each other.

The conception of identity as the transitive, symmetrical and reflexive relation any x bears just to x is known as the classical or absolute conception of identity.⁸³ Traditionally the most pressing objection to this conception of identity is the one according to which identity is not a relation at all. As Williamson has written: "That identity is a relation has been denied, both on metaphysical

⁸³ See Williamson (1998).

grounds (it cannot relate two things) and on grammatical grounds (some assimilate 'is' in 'Constantinople is Istanbul' to the 'is' of predication as in 'Constantinople is crowded')."⁸⁴ But, in response to this objection, he points out: "However, the logic of '=' does single out a unique class of ordered pairs of objects to which it applies, which suffices to make identity a relation in some minimal sense."⁸⁵ Moreover, before one chooses not to identify identity as a relation, one should be advised that one doesn't have many choices left, given that the problem of contribution would seem to prevent one entity from contributing the identity of another entity to that other entity.

A second objection to the classical or absolute conception of identity is the one according to which identity is relative. The claim that identity is relative amounts to the claim that x can be the same F as y but not the same G.⁸⁶ The claim that identity is relative was employed by some philosophers of the Medieval tradition to solve the problem of the trinity. According to that solution, the Father, the Son, and the Holy Spirit can be the same deity, even though the Father is neither the Son nor the Spirit. But to claim that identity is relative is to deny the truth of Leibnitz's law, or the principle that if x and y are identical to each other, then they will possess all of the same properties. But this is too high a price to pay for relative identity. For if Leibnitz's law is given up, then we have no way to

⁸⁴ See his (1998).

⁸⁵ See his (1998).

⁸⁶ I take this formulation of the thesis that identity is relative from McGinn. See his (2000, p. 4). To be sure, McGinn holds the classical or absolute conception, and does not think that identity is relative.

prove the real distinction of entities that are really distinct from each other, as Ockham pointed out a long time ago.⁸⁷

As an aside, the truth of Leibnitz's law can be derived from the truth of my account of property possession and identity. Assume that property possession and identity are one and the same relation. Assume x and y be any entities that are identical to each other. And assume that x possesses some property y does not. Then x bears the relation of property possession to some property to which y does not. But then x is identical to some entity that y is not. Since this contradicts the assumption that x and y are identical to each other, x and y possess all of the same properties.

Of course, even if one grants the classical or absolute conception of identity, one might still reject my claim that the relation of identity is none other than the relation of property possession. There seem to me to be two reasons why one might do so. The *first* is that if property possession and identity were one and the same relation, then identity would not be able to be used as widely or in as wide a variety of fields (e.g. logic) in which it is used now. But I can't see that this should be the case. For the usefulness of identity derives from its logical features. Even if property possession and identity are one and the same relation, identity remains the transitive, symmetrical and reflexive relation any entity x bears just to itself and nothing else. The *second* reason is that identity is a relation of logic, which carries with it no ontological baggage, whereas my account of property possession and identity commits us to a substantive

⁸⁷ See Adams (1982, pp. 417-419).

metaphysics according to which the world is a world of properties alone. But my account of property possession and identity doesn't commit us to the actual existence of any entities. Rather, it commits us to the view that all entities will be inherently qualitative ones, which seems to me to be a good thing.

* * *

In this section, I drew a distinction between the classical or absolute conception of identity as the transitive, symmetrical and reflexive relation any entity bears just to itself, and the relation of mere indiscernibility. I responded to several objections that have been raised against the classical or absolute conception of identity. And I responded to a variety of objections to my claim that this relation of identity is to be identified as the relation of property possession.

4.4. Fourth objection and response. In this section, I will argue against the view that property possession is merely partial identity by critically evaluating Donald Baxter's recent account of property possession as partial identity.

Baxter's account of property possession as partial identity is based on his theory of aspects. What is his theory of aspects? As he puts it,

the underlying idea is that an entity can differ from itself without contradiction. Something can be true of one aspect of an entity that is false of another aspect of it, even though its aspects are numerically identical to it.⁸⁸

⁸⁸ See his (2001, p. 449).

Since this latter feature of his aspect-theory, according to which an entity will be numerically identical to any one of its aspects, will figure importantly in my critique, it won't hurt to point out that Baxter is even more explicit about the point in the following passage:

You shouldn't think of aspects as parts, unless you hold a theory of composition as identity. On standard conceptions, the parts are all numerically distinct from each other, and each is numerically distinct from the whole they compose. Aspects aren't like this. They are numerically identical with each other and the whole.⁸⁹

So if x has aspects y and z, then x, y and z are identical to each other, according to Baxter.

With his theory of aspects in place, Baxter offers his account of property possession as partial identity. He writes:

Here is the proposal in brief: the non-relational tie [property possession] is the identity of an aspect of a universal with an aspect of a particular. If you think of aspects as parts, then the non-relational tie is the 'partial identity' of the particular and the universal.⁹⁰

He gives as an example, the following:

Suppose Hume is a particular, Benevolence is a universal, and Hume is benevolent. Then Hume has an aspect, Hume insofar as he is benevolent. Also, Benevolence has an aspect, Benevolence insofar as Hume has it. They are the same aspect -- Hume's benevolence.⁹¹

That Baxter doesn't explain why the overlap of a particular and a universal amounts to the partial identity of that particular and that universal need not concern us in the critique of Baxter's account that follows.

⁸⁹ See his (2001, p. 453).

⁹⁰ See his (2001, p. 453).

⁹¹ See his (2001, p. 454).

Baxter's account of property possession as partial identity suffers from various problems. The first is conditional upon his acceptance of particulars that possess two or more properties. (When I say that the problem is conditional on this acceptance, I am not claiming that Baxter explicitly signals this acceptance. Rather, I am claiming that if he does, and we have no reason to think he doesn't, then he faces the problem.) For example, if all of Hume's aspects are identical to each other, then if Hume is benevolent and a skilled billiards player, then the property of being benevolent and the property of being a skilled billiards player are identical to each other, which surely they aren't, for there are some skilled billiards players are pool sharks.

The second problem with Baxter's account is conditional upon his acceptance of properties that are possessed by two or more particulars. For example, if all of Hume's and Kant's aspects are identical to each other and to Hume and Kant, then if Hume and Kant are both benevolent, Hume and Kant will turn out to be identical to each other. Even if Kant would go in for this, I doubt Hume would.

Of course, Baxter could avoid these problems if he rejected the existence of particulars that possesses two or more properties and the existence of properties that are possessed by two or more particulars. But still another problem remains for his account. If the aspects of a particular are identical with each other and that particular, then Hume is identical to his benevolence. But it seems that Hume is not identical to his benevolence, for it seems that there's more to Hume than his benevolence. Of course, Baxter could object that there is

more to Hume than his benevolence; there is his skill at pool, his charity, his humanity, etc. But if the aspects of Hume are identical to each other and to Hume, then it seems that it is Baxter who has offered the universal generalization of Thomas Aquinas' doctrine of the divine simplicity of God. But it is implausible enough to say that God's nature is simple, let alone ordinary entities, like Hume.

Chapter 5: Conclusion.

The thesis of this paper is that no real distinction obtains between the relation of property possession and the relation of identity. To defend this thesis, I began by arguing against two views I call Exteriorism and Interiorism. Against Exteriorism, I argued that it fails to provide a true necessary condition for property possession. And against Interiorism, I argued that it fails to provide a true sufficient condition for property possession. After I argued that Exteriorism and Interiorism are both false, I defended a positive argument that property possession and identity are one and the same relation. At the heart of this argument was a problem I call the problem of contribution. It is a problem that arises whenever one assumes that there is a pair of numerically distinct entities that the relation of property possession obtains between. After I defended that argument, I shifted gear to defend my account of property possession and identity against a variety of objections one might potentially raise against it. The first objection is that if I claim that property possession and identity are one and the same relation, then I am unable to account for qualitative complexity. But I showed that I am able to account for qualitative complexity on the basis of **N**, or the view according to which any given entity bears the relation of property possession and identity to the nature of that entity. I also argued that **N** is to be preferred to the widespread view according to which there is something more to some entities than the natures of those entities. Then I defended **N** against six potential objections one might raise against it. The second objection to my account of property possession and identity is that if I claim property possession

and identity are one and the same relation, then I become committed to the truth of Nominalism, or the view according to which there are no such entities as universals. I showed that my account of property possession and identity does in fact commit me to the truth of Nominalism, if universals are defined as properties that are capable of being possessed by two or more entities. But I also showed that my account of property possession does not commit me to the truth of Nominalism, if universals are defined as properties that are capable of multiple location. The third objection to my account of property possession and identity concentrates on the character of identity I presuppose. Specifically, I sought to justify my account of identity as the transitive, symmetrical and reflexive relation that any given entity bears to itself and nothing else; and I sought to rebut the objection that identity, so construed, is not the relation of property possession. Lastly, I critically evaluated Donald Baxter's account of property possession as partial identity. Presumably there is much more to be done to make my account of property possession and identity even more plausible. But I hope that it is agreed that this paper is a good start towards that ultimate end.

There is one remaining matter to be discussed by way of a final assessment of my overall project. My fundamental judgment in the paper has been that property possession and identity are one and the same relation. But is my fundamental judgment fundamentally flawed? One might think so for the following reason. Duns Scotus spoke of the nature of an entity being *contracted* by that entity. The very notion of property possession seems latent with this dynamic element. In fact, it is this dynamic element that gives rise to the problem

of contribution. How can one entity contribute to a second in the relevant manner in such a dynamic way? On the other hand, there is no dynamic element inherent in the idea of identity. The very notion of identity is a notion of stasis. Everything just is identical to itself -- and there is nothing dynamic about that. Thus, one might think that property possession and identity cannot be one and the same relation, for whereas the former comprises a dynamic element, the latter does not. But it is my contention that the very notion of property possession is problematic, if it is understood as comprising this dynamic element. It is my contention that property possession should be understood as being the static notion of identity. Of course, one might object that to strip away the dynamic element from property possession is to strip away what is essential to it. But I disagree. I am more worried about the objection that since dynamic conception of identity is problematic, there is no such thing as property possession -- there is only identity. But I submit that more preferable to this option is the one according to which property possession and identity are identified with each other and thus all entities turn out to be intrinsically qualitative ones, an option which is not necessarily guaranteed by the former option.

Reference List

Adams, Marilyn:

(1987) *William of Ockham*, Notre Dame University Press.

(1982) "Universals in the Early Fourteenth Century" in Kretzmann et al (eds.) (1982).

Aquinas, Thomas:

Summa Theologiae.

Armstrong, David:

(2004) "How Do Particulars Stand to Universals?" in Zimmerman (ed.) (2004).

(1997) *A World of States of Affairs*, Cambridge University Press.

(1989) *Universals: An Opinionated Introduction*, Westview Press.

(1978a) *Nominalism and Realism*, Cambridge University Press.

(1978b) *A Theory of Universals*, Cambridge University Press.

Baxter, Donald:

(2001) "Instantiation as Partial Identity," in the *Australian Journal of Philosophy* 79.

Beaney, Michael:

(1997) *The Frege Reader*, Blackwell Press.

Bergmann, Gustav:

(1967) *Realism*, University of Wisconsin Press.

Cooper, John (ed.):

(1997) *The Complete Works of Plato*, Hackett Press.

Cross, Richard:

(2003) "Medieval Theories of the Haecceity" in the *Stanford On-line Encyclopedia of Philosophy*.

Denkel, Arda:

(1996) *Object and Property*, Cambridge University Press.

Ehring, Douglas:

(2002) "Spatial Relations Between Universals," *The Australasian Journal of Philosophy*, 80, pp. 17-23.

Gilmore, Cody:

- (2003) "In Defense of Spatially Related Universals," *Australasian Journal of Philosophy* 81: 420-428.
- Hughes, Christopher:
(1989) *On a Complex Theory of A Simple God: an investigation in Aquinas' philosophical theology*, Cornell University Press.
- Leftow, Brian:
(2004) "Aquinas on Attributes" in *Medieval Philosophy and Theology* 11, Cambridge University Press.
(1998) "Simplicity, divine" in E. Craig (Ed.), *Routledge Encyclopedia of Philosophy*. London: Routledge. Retrieved April 01, 2005, from <http://www.rep.routledge.com/article/K094>.
- Locke, John:
(1988) *An Essay Concerning Human Understanding*, Oxford University Press.
- Malcolm, John:
(1990) *Plato on the Self-Predication of Forms: early and middle dialogues*, Oxford University Press.
- Mander, W.J.
(1994) *An Introduction to Bradley's Metaphysics*, Oxford University Press.
- McGinn, Colin:
(2000) *Logical Properties*, Oxford University Press.
- Newman, Andrew:
(2002) *A Correspondence Theory of Truth*, Cambridge University Press.
- Paul, L.A.
(2002) "Logical Parts" in *Nous*, 36(4): 578-596.
- Plantinga, Alvin:
(1980) *Does God Have a Nature?* Marquette University Press.
- Plato:
Parmenides in Cooper (ed.) (1997).
- Quine, W.V.O.:
(1969) *Ontological Relativity and Other Essays*, Columbia University Press.
(1964) *From A Logical Point of View*, Harvard University Press.
- Rodriguez-Pereyra, Gonzalo:

- (2000) *Resemblance Nominalism*, Oxford University Press.
- Sellars, Wilfred:
(1963) *Science, Perception and Reality*, Humanities Press.
- Sider, Theodore:
(2001) *Four-Dimensionalism*, Oxford University Press.
- Simons, Peter:
(1987) *Parts*, Oxford University Press.
- Spade, Paul Vincent (ed.):
(1999) *The Cambridge Companion to Ockham*, Cambridge University Press.
(1994) *Five Texts on the Medieval Problem of Universals*, Hackett Press.
- Strawson, Peter:
(1959) *Individuals*, Methuen Press.
- Teloh, Henry:
(1981) *The Development of Plato's Metaphysics*, Pennsylvania State University Press.
- Williamson, Timothy:
(1998) "Identity" in E. Craig (ed.) *Routledge Encyclopedia of Philosophy*,
Routledge: <http://www.rep.routledge.com/article/X015>.
- Zimmerman, Dean (ed.):
(2004) *Oxford Studies in Metaphysics*, Oxford University Press.