

MATERIAL CONSTITUTION AND THE TRINITY[†]

JEFFREY E. BROWER AND MICHAEL C. REA

Abstract. The Christian doctrine of the Trinity poses a serious philosophical problem. On the one hand, it seems to imply that there is exactly one divine being; on the other hand, it seems to imply that there are three. There is another well-known philosophical problem that presents us with a similar sort of tension: the problem of material constitution. We argue in this paper that a relatively neglected solution to the problem of material constitution can be developed into a novel solution to the problem of the Trinity.

As is well known, the Christian doctrine of the Trinity poses a serious philosophical problem. On the one hand, it affirms that there are three distinct Persons—Father, Son, and Holy Spirit—each of whom is God. On the other hand, it says that there is one and only one God. The doctrine therefore pulls us in two directions at once—in the direction of saying that there is exactly one divine being and in the direction of saying that there is more than one.

There is another well-known philosophical problem that presents us with the same sort of tension: the problem of material constitution. This problem arises whenever it appears that an object *a* and an object *b* share all of the same parts and yet have different modal properties.¹ To take just one of the many well-worn examples in the literature: Consider a bronze statue of the Greek goddess, Athena, and the lump of bronze that constitutes it. On the one hand, it would appear that we must recognize at least *two* material objects in the region occupied by the statue. For presumably the statue cannot survive the process of being melted down and recast whereas

the lump of bronze can. On the other hand, our ordinary counting practices lead us to recognize only *one* material object in the region. As Harold Noonan aptly puts it, counting two material objects in such a region seems to “manifest a bad case of double vision”.² Here, then, as with the doctrine of the Trinity, we are pulled in two directions at once.

Admittedly, the analogy between the two problems is far from perfect. But we mention it because, as we shall argue below, it turns out that a relatively neglected response to the problem of material constitution can be developed into a novel solution to the problem of the Trinity. In our view, this new solution is more promising than the other solutions available in the contemporary literature. It is independently plausible, it is motivated by considerations independent of the problem of the Trinity, and it is immune to objections that afflict the other solutions. The guiding intuition is the Aristotelian idea that it is possible for an object *a* and an object *b* to be “one in number”—that is, numerically the same—without being strictly identical.

We will begin in Section 1 by offering a precise statement of the problem of the Trinity. In Section 2, we will flesh out the Aristotelian notion of “numerical sameness without identity”, explain how it solves the problem of material constitution, and defend it against what we take to be the most obvious and important objections to it. Also in that section we will distinguish numerical sameness without identity from two superficially similar relations. Finally, in Sections 3 and 4, we will show how the Aristotelian solution to the problem of material constitution can be developed into a solution to the problem of the Trinity, and we will highlight some of the more interesting consequences of the solution we describe.³

1. THE PROBLEM OF THE TRINITY

The central claim of the doctrine of the Trinity is that God exists in three Persons—Father, Son, and Holy Spirit. This claim is not problematic because of any superficial incoherence or inconsistency with well-entrenched intuitions. Rather, it is problematic because of a tension that results from ~~certain~~ constraints imposed on its interpretation by other aspects of orthodox Christian theology. These constraints are neatly summarized in the following passage from the so-called Athanasian Creed:

We worship one God in Trinity and Trinity in unity, neither confusing the Persons, nor dividing the substance. For there is one person for the Father, another for the Son, and yet another for the Holy Spirit. But the divinity of the Father, Son, and Holy Spirit is one ... The Father is eternal, the Son is eternal, and the Holy Spirit is eternal; and yet they are not three eternals, but there is one eternal. Likewise, the Father is almighty, the Son is almighty, and the Holy Spirit is almighty; and yet there are not three almighties, but there is one almighty. Thus, the Father is God, the Son is God, and the Holy Spirit is God; and yet there are not three Gods, but there is one God.⁴

The passage quoted here is widely—and rightly—taken to offer a paradigm statement of the orthodox understanding of the doctrine of the Trinity. Moreover, it tells us that the doctrine of the Trinity must be understood in such a way as to be compatible with each of the following theses:

- (T1) Each Person of the Trinity is distinct from each of the others.
- (T2) Each Person of the Trinity is God.
- (T3) There is exactly one God.

Each of these theses is affirmed by the Creed in order to rule out a specific heresy. T1 is intended to rule out *modalism*, the view that Father, Son, and Holy Spirit are not really distinct from one another. According to modalism, each Person is just God in a different guise, or playing a different role—much like Superman and Clark Kent are just the Kryptonian Kal-El in different guises, or playing different roles. T2 is intended to rule out *subordinationism*, the view that not all of the Persons are divine, or that the divinity of one or more of the Persons is somehow unequal with, or subordinate to, that of the others. T3 is intended to rule out *polytheism*, the view that there is more than one God. The problem, however, is that the conjunction of T1 – T3 is apparently incoherent. For on their most natural interpretation, they imply that three distinct beings are each identical with one being (since each of the Persons is God, and yet there is only one God).

In the contemporary literature, there are two main strategies for solving the problem: the Relative-Identity strategy, and the Social-Trinitarian strategy. Both of these strategies solve the problem at least in part by denying that the words ‘is God’ in Trinitarian formulations mean ‘is absolutely identical with God’. Thus both are well-poised to avoid the heresy of modalism.⁵ Furthermore, both affirm T2 (or some suitable variant thereof); thus, subordinationism is not a worry either. The real question is whether either manages to avoid polytheism without incurring other problems in the process. In our view, the answer is *no*—at least not as these solutions have been developed in the literature so far. Social Trinitarianism we reject outright. The Relative-Identity solution we reject as a *stand-alone* solution to the problem of the Trinity. (That is, we think that it is successful only if it is supplemented by a story about the metaphysics of relative-identity relations. More on this at the end of Section 2 below). Since we have already explained elsewhere why we find these solutions unsatisfying, we will not repeat the details of our

objections here.⁶ Instead, we'll simply summarize by saying that we reject both the Social Trinitarian solution and existing versions of the Relative Identity solution because they fail to provide an account of the Trinity that satisfies the following five desiderata:

- (D1) It is clearly consistent with the view that Father, Son, and Holy Spirit are divine individuals, and that there is exactly one divine individual.
- (D2) It does not conflict with a natural reading of either the Bible or the ecumenical creeds.
- (D3) It is consistent with the view that God is an individual rather than a society, and that the Persons are not parts of God.⁷
- (D4) It is consistent with the view that classical identity exists and is not to be analyzed in terms of more fundamental sorta-relativized sameness relations like *being the same person as*.
- (D5) It carries no anti-realist commitments in metaphysics.

The Social Trinitarian solution violates D1 – D3. Extant versions of the Relative Identity solution violate D1, D4, or D5. As will emerge shortly, our solution, which may fruitfully be thought of as an appropriately supplemented version of the Relative Identity solution, succeeds precisely where these others fail—namely, in satisfying all five desiderata.

2. SAMENESS WITHOUT IDENTITY AND THE PROBLEM OF MATERIAL CONSTITUTION

The point of departure for our solution is Aristotle's notion of "accidental sameness". Elsewhere, we have proposed (for the sake of argument, at any rate) that the phenomenon of material constitution be understood in terms of accidental sameness.⁸ What we here propose is that the unity of the divine Persons also be understood in terms of this relation (or more accurately, in

terms of the genus of which it a species—namely, numerical sameness without identity⁹). In this section, therefore, we review the way in which appeal to accidental sameness provides a solution to the problem of material constitution and address what we take to be the most natural objections to it.

2.1 Accidental Sameness Characterized. According to Aristotle, familiar particulars (trees, cats, human beings, etc.) are hylomorphic compounds—things that exist because and just so long as some matter instantiates a certain kind of form. Forms, for Aristotle, are complex organizational properties, and properties are immanent universals (or, as some have it, tropes). The matter of a thing is not itself an individual thing; rather, it is that which combines with a form to *make* an individual thing.¹⁰ Thus, for example, a human being exists just in case some matter instantiates the complex organizational property *humanity*. Each human being depends for its continued existence on the continued instantiation of *humanity* by some matter; and each human being is appropriately viewed as a composite whose parts (at one level of decomposition) are just its matter and (its) humanity.¹¹

On Aristotle's view, living organisms are the paradigmatic examples of material objects. But Aristotle also acknowledges the existence of other hylomorphic compounds. Thus, books, caskets, beds, thresholds, hands, hearts, and various other non-organisms populate his ontology, and (like an organism) each one exists because and only so long as some matter instantiates a particular complex organizational property.¹² Indeed, Aristotle even countenances what Gareth Matthews calls “kooky” objects—objects like ‘seated-Socrates’, a thing that comes into existence when Socrates sits down and which passes away when Socrates ceases to be seated.¹³ Seated-Socrates is an ‘accidental unity’—a unified thing that exists only by virtue of the

instantiation of an accidental (non-essential) property (like seatedness) by a substance (like Socrates). The substance plays the role of matter in this sort of hylomorphic compound (though, of course, unlike matter properly conceived, the substance is a pre-existing individual thing), and the accidental property plays the role of form. Accidental sameness, according to Aristotle, is just the relation that obtains between an accidental unity and its parent substance.¹⁴

One might balk at this point on the grounds that Aristotle's accidental unities are just a bit *too* kooky for serious ontology. We see that Socrates has seated himself; but why believe that in doing so he has brought into existence a new object—seated-Socrates? Indeed, one might think it's clear that we *shouldn't* believe this. For there is nothing special about seatedness, and so, if we acknowledge the existence of seated-Socrates, we must also acknowledge the existence of a myriad other kooky objects: pale-Socrates, bald-Socrates, barefoot-Socrates, and so on. But surely there are not millions of objects completely overlapping Socrates.

Fair enough; and nothing here depends on our believing in seated-Socrates or his cohorts. But note that, regardless of what we think of seated-Socrates, we (fans of common sense) believe in many things relevantly *like* seated-Socrates. That is, we believe in things that are very plausibly characterized as hylomorphic compounds whose matter is *a familiar material object* and whose form is an accidental property. For example, we believe in fists and hands, bronze statues and lumps of bronze, cats and heaps of cat tissue, and so on. Why we should believe all *this* but not that sitting down is a way of replacing one kind of object (a standing-man) with another (a seated-man) is an interesting and surprisingly difficult question. But never mind that for now. The important point here is that, whether we go along with Aristotle in believing in what *he* calls accidental unities, the fact is that many of us will be inclined to believe in things

relevantly like accidental unities along with other things that are relevantly like the parent substances of accidental unities.

This last point is important because the things we have listed as being relevantly like accidental unities and their parent substances are precisely the sorts of things belief in which gives rise to the problem of material constitution. Hence the relevance of Aristotle's doctrine of accidental sameness. Aristotle agrees with common sense in thinking that there is only one material object that fills the region occupied by Socrates when he is seated. Thus, he says that the relation between accidental unities and their parent substances is a variety of *numerical sameness*. Socrates and seated-Socrates are, as he would put it, *one in number but not one in being*.¹⁵ They are distinct, but they are to be counted as one material object.¹⁶ But once one is committed to believing in such a relation, one has a solution to the problem of material constitution ready to hand. Recall that the problem arises whenever it appears that an object *a* and an object *b* share all of the same parts and yet have different modal properties. In such cases we are pushed in the direction of denying that the relevant *a* and *b* are identical and yet we also want to avoid saying that they are *two* material objects occupying the same place at the same time. Belief in the relation of accidental sameness solves this problem because it allows us to deny that the relevant *a* and *b* are identical without thereby committing us to the claim that *a* and *b* are *two material objects*. Thus, one can continue to believe that (e.g.) there are bronze statues and lumps of bronze, that every region occupied by a bronze statue is occupied by a lump of bronze, that no bronze statue is identical to a lump of bronze (after all, statues and lumps have different persistence conditions), but also that there are never two material objects occupying precisely the same place at the same time. One can believe all this because one can say that

bronze statues and their constitutive lumps stand in the relation of accidental sameness: they are one in number but not one in being.

2.2 Accidental Sameness Defended. But should we believe in accidental sameness? The fact of the matter is that this sort of solution to the problem of material constitution is probably the single most neglected solution to that problem in the contemporary literature; and it is not hard to see why. Initially it is hard to swallow the idea that there is a variety of *numerical* sameness that falls short of identity. But, in our view, the most obvious and serious objections are failures, and the bare fact that the doctrine of accidental sameness is counterintuitive is mitigated by the fact that *every* solution to the problem of material constitution is counterintuitive (a fact which largely explains the problem's lasting philosophical interest). In the remainder of this section, we will address what we take to be the four most serious objections against the doctrine of accidental sameness. We will also explain how the relation of accidental sameness differs from two other relations to which it bears some superficial resemblance. In doing all this, we hope to shed further light on the metaphysics of material objects that attends belief in accidental sameness.

First objection: Most contemporary philosophers think that, for any material objects *a* and *b*, *a* and *b* are to be counted as *one* if and only if *a* and *b* are identical. Indeed, it is fairly standard to define number in terms of identity, as follows:

(1F) there is exactly one F =_{df} $\exists x(Fx \ \& \ \forall y(Fy \equiv y = x))$

(2F) there are exactly two Fs =_{df} $\exists x\exists y(Fx \ \& \ Fy \ \& \ x \neq y \ \& \ \forall z(Fz \equiv y = z \vee x = z))$

etc.

But if that is right, then it is hard to see how there could be a relation that does not obey Leibniz's Law but is nevertheless such that objects standing in that relation are to be counted as one.

Obviously enough, a believer in accidental sameness must reject standard definitions like 1F and 2F. But this does not seem to us to be an especially radical move. As is often pointed out, common sense does not always count by identity.¹⁷ If you sell a piano, you won't charge for the piano *and* for the lump of wood, ivory, and metal that constitutes it. As a fan of common sense, you will probably believe that there are pianos and lumps, and that the persistence conditions of pianos differ from the persistence conditions of lumps. Still, for sales purposes, and so for common sense counting purposes, pianos and their constitutive lumps are counted as *one material object*. One might say that common sense is wrong to count this way. But why go along with that? Even if we grant that 1F and its relatives are strongly intuitive, we must still reckon with the fact that we have strong intuitions that support the following:

(MC) In the region occupied by a bronze statue, there is a statue and there is a lump of bronze; the lump is not identical with the statue (the statue but not the lump would be destroyed if the lump were melted down and recast in the shape of a disc); but only one material object fills that region.

If we did not have intuitions that support MC, there would be no problem of material constitution. But if MC is true, then 1F and its relatives are false, and there seems to be no compelling reason to prefer the latter over the former.

Of course, if rejecting 1F and its relatives were to leave us without any way of defining number, then our move *would* be radical, and there would be compelling reason to give up MC. But the fact is, rejecting 1F and its relatives does *not* leave us in any such situation. Indeed,

belief in accidental sameness doesn't even preclude us altogether from counting by identity. At worst, it simply requires us to acknowledge a distinction between sortals that permit counting by identity and sortals that do not. For example, according to the believer in accidental sameness, we do not count *material objects* by identity. Rather, we count them by numerical sameness (the more general relation of which both accidental sameness and identity are species). Thus:

(1M) there is exactly one material object $\equiv_{df} \exists x(x \text{ is a material object} \ \& \ \forall y(y \text{ is a material object} \equiv y \text{ is numerically the same as } x))$

(2M) there are exactly two material objects $\equiv_{df} \exists x(x \text{ is a material object} \ \& \ y \text{ is a material object and } x \text{ is not numerically the same as } y \text{ and } \forall z(z \text{ is a material object} \equiv z \text{ is numerically the same as } x \text{ or } z \text{ is numerically the same as } y)$

etc.

Perhaps the same is true for other familiar sortals. For example: Suppose a lump of bronze that constitutes a bronze statue is nominally, but not essentially, a statue.¹⁸ Then the lump and the statue are distinct, and both are statues. But, intuitively, the region occupied by the lump/statue is occupied by only one statue. Thus, given the initial supposition, we should not count statues by identity either. Nevertheless, we can still grant that there are some sortals that do allow us to count by identity. Likely candidates are technical philosophical sortals like 'hylomorphic compound', or maximally general sortals, like 'thing' or 'being'. For such sortals, number terms can be defined in the style of 1F and its relatives. Admittedly, the business of defining number is a bit more complicated for those who believe in accidental sameness (we must recognize at least two different styles of defining number corresponding to two different kinds of sortal terms). The important point, however, is that it is not impossible.

In saying what we have about the categories of *hylomorphic compound*, *thing*, and *being*, we grant that proponents of our Aristotelian solution to the problem of material constitution are committed to a kind of co-locationism. Although cases of material constitution will never, on the view we are proposing, present us with two material objects in the same place at the same time, they will present us with (at least) two *hylomorphic compounds* or *things* in the same place at the same time. But we deny that this commitment is problematic. By our lights, it is a conceptual truth that material objects cannot be co-located; but it is not a conceptual truth that hylomorphic compounds (e.g., a statue and a lump, a fist and a hand, etc.) or things (e.g., a material object and an event) cannot be co-located. We take it as an advantage of the Aristotelian solution that it respects these *prima facie* truths.

Second objection: To say that hylomorphic compounds, or mere things, can be co-located but material objects cannot smacks of pretense. For while it preserves the letter, it does not preserve the spirit of the intuition that material objects cannot be co-located. If counting two material objects in the same place at the same time “reeks of double counting”,¹⁹ then the same reek must attend the counting of two hylomorphic compounds or two things in the same place at the same time. At best, therefore, the Aristotelian solution is only verbally distinct from the co-locationist solution. For co-locationists and fans of accidental sameness will still have the same *metaphysical* story to tell about statues and their constitutive lumps—namely, that they are distinct, despite occupying precisely the same region of spacetime—and that metaphysical story is all that matters.

But this objection is sound only on the assumption that the properties *being a material object*, *being a hylomorphic compound*, and *being a thing* are on a par with one another. From x is a hylomorphic compound & y is a hylomorphic compound & $x \neq y$, we rightly infer that x and

y are two hylomorphic compounds. And if, somehow, we come to believe that x and y are co-located, we'd have no choice but to conclude that x and y are *two* distinct hylomorphic compounds sharing the same place at the same time. The reason is that the following seems to be a necessary truth about the property of being a hylomorphic compound:

- (H1) x is a hylomorphic compound iff x is a matter-form composite; exactly one hylomorphic compound fills a region R iff some matter instantiates exactly one form; and x is (numerically) the same hylomorphic compound as y iff x is a hylomorphic compound and $x = y$.

According to the second objection, a parallel principle expresses a necessary truth about the property of being a material object:

- (M1) x is a material object iff x is a hylomorphic compound; exactly one material object fills a region R iff exactly one hylomorphic compound fills R ; and x is (numerically) the same material object as y iff x is a material object and $x = y$

Note that M1 is not a mere *linguistic* principle; it is a substantive claim about the necessary and sufficient conditions for having *a* material object in a region, having *exactly one* material object in a region, and having (numerically) *the same* material object in a region. But M1 is a claim that will be denied by proponents of the Aristotelian solution we have been describing here. As should by now be clear, proponents of that solution will reject M1 in favor of something like M2:

- (M2) x is a material object iff x is a hylomorphic compound; exactly one material object fills a region R iff *at least one* hylomorphic compound fills R ; and x is (numerically) the same material object as y iff x and y are hylomorphic compounds sharing the same matter in common.

M2 is equivalent to M1 on the assumption that no two hylomorphic compounds can share the same matter in common; but, short of treating the technical philosophical category *hylomorphic compound* as co-extensive with the common-sense category *material object*, it is hard to see what would motivate that assumption. Thus, there is room for disagreement on the question whether M2 is true or whether M2 is equivalent to M1; and, importantly, accidental-sameness theorists and co-locationists will come down on different sides of those questions. Thus, there is a *substantive* (as opposed to a merely verbal) disagreement to be had here after all.

Two further points should be made before we move on to the third objection. First, though M2 is specifically a thesis about the property *being a material object*, the doctrine of accidental sameness makes it plausible to think that similar theses about various other properties will be true. In particular, if one thinks that sortals like ‘cat’, ‘house’, ‘lump’, ‘statue’, and so on can apply nominally to things that constitute cats, houses, lumps, or statues, then something like M2 is true of *most* familiar composite object kinds. Second, though it may be tempting to think that the relation of accidental sameness (or of numerical sameness without identity) is nothing other than the relation of sharing exactly the same *matter*, as we see it, this isn’t quite correct. On our view (though probably not on Aristotle’s), the relation of numerical sameness without identity can hold between *immaterial* objects, so long as the relevant immaterial objects are plausibly thought of on analogy with hylomorphic compounds. Thus, it is inappropriate to say (as might so far seem natural to say) that the relation of numerical sameness without identity is nothing other than the relation of material constitution. Rather, what is appropriate to say is that material constitution is a species of numerical sameness without identity.

Third objection: The principles for counting that we have just described (i.e., H1 and M2) are apparently *inconsistent* with the doctrine of accidental sameness. To see why, consider

the following argument. Let Athena be a particular bronze statue; let Lump be the lump of bronze that constitutes it. Let R be the region filled by Athena and Lump. Then:

- (1) Athena is identical with the material object in R whose matter is arranged statuewise.
- (2) Lump is identical with the material object in R whose matter is arranged lumpwise.
- (3) The material object whose matter is arranged statuewise is identical with the material object whose matter is arranged lumpwise.
- (4) Therefore, Athena is identical with Lump (contrary to the doctrine of accidental sameness).

The crucial premise, of course, is premise (3); and premise (3) seems to follow directly from a proposition that is entailed by the facts of the example in conjunction with our remarks about counting—namely, that there is exactly one object in R whose matter is arranged both statuewise and lumpwise.

On reflection, however, it is easy to see that this objection is a nonstarter. For (3) follows *only* if the doctrine of accidental sameness is false. Numerical sameness, according to Aristotle, does not entail identity. Thus, if his view is correct, it does *not* follow from the fact that there is exactly one material object in R whose matter is arranged both statuewise and lumpwise that the object whose matter is arranged lumpwise is identical with the object whose matter is arranged statuewise. Simply to assume otherwise, then, is to beg the question. One might insist that the assumption is nevertheless highly intuitive, and therefore legitimate. But, again, the right response here is that *every* solution to the problem of material constitution is such that its denial is highly intuitive. That is why we have a problem. Successfully rejecting a solution requires

showing that the intuitive cost is higher with the objectionable solution than with some other solution; but, with respect to the doctrine of accidental sameness, this has not yet been done.

Fourth objection: We say that there is one (and only one) material object that fills a region just in case the region is filled by matter unified in any object-constituting way. So consider a region R that is filled by matter arranged both lumpwise and statuewise. What *is* the object in R? What are its essential properties? If there is exactly one object in R, these two questions should have straightforward answers. But they do not (at least not so long as we continue to say that there is a statue *and* a lump in R). Thus, there is reason to doubt that there could really be exactly one object in R.

This is probably the most serious objection of the lot. But there is a perfectly sensible reply: To the first question, the correct answer is that the object is both a statue and a lump; to the second question there is no correct answer.²⁰ If the doctrine of accidental sameness is true, a statue and its constitutive lump are numerically the same object. This fact seems sufficient to entitle believers in accidental sameness to say that the object in R ‘is’ both a statue and a lump, so long as they don’t take this to imply either that the statue is identical to the lump or that some statue or lump exemplifies contradictory essential properties. But if this view is right, how *could* there be any correct answer to the question “What are its essential properties?” absent further information about whether the word ‘it’ is supposed to refer to the statue or the lump? The pronoun is ambiguous, as is the noun (‘the object in R’) to which it refers.²¹ Thus, we would need to disambiguate before answering the question. Does this imply that there are two material objects in R? It might appear to because we are accustomed to finding ambiguity only in cases where a noun or pronoun refers to *two* objects rather than one. But if the doctrine of accidental sameness is true, we should also expect to find such ambiguity in cases of accidental sameness.

Thus, to infer from the fact of pronoun ambiguity the conclusion that there must be two objects in R is simply to beg the question against the doctrine of accidental sameness.

So much for objections. Now, in closing this section, we would like to make it clear how accidental sameness differs from two apparently similar relations.

Those who have followed the recent literature on material constitution will know that, like us, Lynne Baker has spoken of a relation that stands “between identity and separate existence” (2000: 29) and that this relation is (on her view) to be identified with the relation of material constitution. On hearing this characterization, one might naturally think that what Baker has in mind is something very much like accidental sameness. In fact, however, the similarity between accidental sameness and Baker-style constitution ends with the characterization just quoted. Baker’s definition of constitution is somewhat complicated; but for present purposes we needn’t go into the details. Suffice it to say that, according to Baker, the relation of material constitution is neither symmetric nor transitive whereas accidental sameness is both symmetric and transitive. (At least, it is synchronically transitive. Whether it is transitive over time depends in part on whether the doctrine of temporal parts is true.) Lacking the same formal properties, the two relations could not possibly be the same.²²

One might also naturally wonder whether what we call ‘numerical sameness without identity’ isn’t just good old-fashioned *relative identity* under a different name. Different views have been advertised in the literature under the label ‘relative identity’. But one doctrine that virtually all of these views (and certainly all that *deserve* the label) share in common is the following:

- (R1) States of affairs of the following sort are possible: x is an F, y is an F, x is a G, y is a G, x is the same F as y , but x is not the same G as y .

This is a claim that we will endorse too; and, like those who endorse the Relative-Identity solution to the problem of the Trinity, it is a truth we rely on in order to show that T1 – T3 are consistent with one another. It is for this reason, and this reason alone, that we say that our solution may fruitfully be thought of as a version of the Relative Identity strategy. Despite our commitment to R1, it would be a mistake to suppose that we endorse a doctrine of relative identity. Our solution to the problem of the Trinity is therefore importantly different from the Relative-Identity solution in its purest form.²³

How is it possible to accept R1 while at the same time rejecting relative identity? The answer, as we see it, is that identity is truly *relative* only if one of the following claims is true:

- (R2) Statements of the form ‘ $x = y$ ’ are incomplete and therefore ill-formed. A proper identity statement has the form ‘ x is the same F as y ’.
- (R3) Sortal-relative identity statements are more fundamental than absolute identity statements.²⁴

R2 is famously associated with P. T. Geach (1967, 1968, 1969, and 1973), whereas R3 is defended by, among others, Nicholas Griffin (1977).²⁵ Views according to which classical identity exists and is no less fundamental than other sameness relations are simply not views according to which *identity* is relative. Perhaps, on those views, there are multiple sameness relations; and perhaps some of those relations are both sortal-relative and such that R1 is true of them. But so long as classical identity exists and is in no way derivative upon or less fundamental than they are, there seems to be no reason whatsoever to think of other “sameness” relations as identity relations. Thus, on views that reject both R2 and R3, there seems to be no reason for thinking that identity is relative.

The difference between accidental sameness and relative identity is important, especially in the present context, because it highlights the fact that there is more than one way to make sense of sameness without identity. It is for this reason that endorsing R1 *apart* from R2 or R3 won't suffice all by itself to solve the problem of the Trinity. As we have argued elsewhere (Rea 2003), absent an appropriate supplemental story about the metaphysics underlying relative-identity relations, endorsing R1 apart from R2 or R3 leaves one, at best, with an incomplete solution to the problem of the Trinity and, at worst, with an heretical solution.²⁶ We think that the doctrine of accidental sameness provides the right sort of supplemental story, and that the solution it yields (in conjunction with R1) is both complete and orthodox.

We suspect, moreover, that failure to distinguish different ways of making sense of sameness without identity is partly responsible for the attraction that the Relative-Identity solution holds for many. As is well known, respected Christian philosophers and theologians—such as Augustine, Anselm, and Aquinas—habitually speak of the Trinity in ways that require the introduction of a form of sameness that fails Leibniz Law. But this way of speaking, it is often assumed, can only be explained in terms of relative identity.²⁷ In light of what's just been said, however, we can see that this assumption is false. Sameness without identity does not imply relative identity, and hence any appeal to such sameness either to determine the views of actual historical figures or to provide authoritative support for a (pure) Relative-Identity solution is wholly misguided. Relative identity does provide one way of explaining (numerical) sameness without identity, but it does not provide the only way of explaining it.

3. SAMENESS WITHOUT IDENTITY AND THE PROBLEM OF THE TRINITY

If we accept the Aristotelian solution to the problem of material constitution, then, as we have seen, the familiar particulars of experience must be conceived of as hylomorphic compounds—that is, as matter-form structures related to other things sharing their matter by the relation of accidental sameness. The relevance of this Aristotelian solution to the problem of the Trinity is perhaps already clear. For like the familiar particulars of experience, the Persons of the Trinity can also be conceived of in terms of hylomorphic compounds. Thus, we can think of the divine essence as playing the role of matter; and we can regard the properties *being a Father*, *being a Son*, and *being a Spirit* as distinct forms instantiated by the divine essence, each giving rise to a distinct Person. As in the case of matter, moreover, we can regard the divine essence not as an individual thing in its own right but rather as that which, together with the requisite “form”, constitutes a Person. Each Person will then be a compound structure whose matter is the divine essence and whose form is one of the three distinctive Trinitarian properties. On this way of thinking, the Persons of the Trinity are directly analogous to particulars that stand in the familiar relation of material constitution.

Of course, there are also some obvious disanalogies. For example, in contrast to ordinary material objects, the role of matter in the case of the Trinity is played by immaterial stuff, and so the structures or compounds constituted from the divine essence (namely, the divine persons) will be ‘hylomorphic’ only in an extended sense. Also, in the case of material objects, the form of a particular hylomorphic compound will typically only be contingently instantiated by the matter. Not so, however, in the case of the Trinity. For Christian orthodoxy requires us to say that properties like *being a Father* and *being a Son* are essentially such as to be instantiated by the divine essence. As we have seen, moreover, the relation of *accidental sameness* on which our solution is modeled is, in Aristotle anyway, paradigmatically a relation between a *substance*

(e.g., a man) and a hylomorphic structure built out of the substance and an accidental property. The Persons, however, are not like this. Thus, it is at best misleading to say that the relation between them is one of *accidental sameness*. Better instead to go with the more general label we have used throughout this paper: the Persons stand in the relation of *numerical sameness without identity*.

As far as we can tell, none of these disanalogies are of deep import. It seems not at all inappropriate to think of the divine Persons on analogy with hylomorphic compounds; and once we do think of them this way, the problem of the Trinity disappears. Return to the analogy with material objects: According to the Aristotelian solution to the problem of material constitution, a statue and its constitutive lump are *two* distinct hylomorphic compounds; yet they are numerically one material object. Likewise, then, the Persons of the Trinity are *three* distinct Persons but numerically one God. The key to understanding this is just to see that the right way to count Gods resembles the right way to count material objects. Thus:

(G1) x is a God iff x is a hylomorphic compound whose “matter” is some divine essence; x is the same God as y iff x and y are each hylomorphic compounds whose “matter” is some divine essence and x ’s “matter” is the same “matter” as y ’s; and there is exactly one God iff there is an x such that x is a God and every God is the same God as x .

And, in light of G1, the following principle also seems reasonable:

(G2) x is God iff x is a God and there is exactly one God.

If these principles are correct, and if (as Christians assume) there are three (and only three) Persons that share the same divine essence, then we arrive directly at the central Trinitarian claims T1 – T3 without contradiction. For in that case, there will be three distinct Persons; each

Person will be God (and will be the same God as each of the other Persons); and there will be exactly one God. Admittedly, if G1 is taken all by itself and without explanation, it might appear just as mysterious as the conjunction of T1 – T3 initially appeared. But that is to be expected. What is important is that once the parallel with M2 is appreciated, and the doctrine of numerical sameness without identity is understood and embraced, much of the mystery goes away.

We are now in a position to see how our Aristotelian account of the Trinity meets the desiderata we set out earlier for an adequate solution to the problem of the Trinity (namely, D1-D5). As should already be clear, our solution resolves the apparent inconsistency of T1 – T3 in the same basic way that Relative-Identity and Social-Trinitarian solutions do: namely, by rejecting the idea that the words ‘is God’ in Trinitarian statements like “Each of the Persons is God” mean ‘is absolutely identical with God’. According to our solution, these words should be interpreted to mean ‘is numerically the same as the one and only God’. But once this interpretation of T2 is adopted—together with a proper understanding of the relation of numerical sameness without identity—the apparent inconsistency of T1 – T3 is resolved, and in a way that satisfies D1 and D2. For inasmuch as the Persons of the Trinity are distinct hylomorphic compounds, they are distinct from one another (hence T1 is true); and inasmuch as they are each numerically the same as the one and only God, each of them is God and there is only one God (hence T2 and T3 are true). Moreover, since our solution implies that each of the Persons is a divine individual who is *one in number* with each of the other two Persons, it is consistent with the claim that there are three Persons but exactly one divine individual (thus satisfying D1),²⁸ and it also seems to preserve the intention of traditional formulations of the doctrine of the Trinity (thereby satisfying D2).

It should also be clear how our solution meets the other desiderata. Unlike (pure) Relative-Identity solutions, ours is compatible with the claim that classical identity exists and is as fundamental as any other sameness relation (and hence satisfies D4). Moreover, it supplies an explanation for why ' $x = y$ ' does not follow from ' x is the same God as y '. Unlike Social-Trinitarian strategies, on the other hand, ours is clearly compatible with the view that God is an individual rather than a society, and that the Persons are not parts of God (and hence satisfies D3). Furthermore, our story about the unity of the Persons exploits what we take to be a plausible story about the unity of distinct hylomorphic compounds, whereas no similarly plausible analogy seems to be available to the social Trinitarian. Finally, though we deny that it makes sense to say, unequivocally, that each of the Persons is absolutely identical with God, our view—unlike either of the other two strategies—allows us to say that the Father is identical with God, the Son is identical with God, the Holy Spirit is identical with God, and yet the Father, Son and Holy Spirit are distinct from one another. And it can do all of this without introducing any anti-realist commitments in metaphysics (thus satisfying D5). Consider a parallel drawn from one of our earlier examples: Athena is identical to the material object in R; Lump is identical to the material object in R; but Athena is distinct from Lump. Since 'the material object in R' is ambiguous, there is no threat of contradiction; and the doctrine of numerical sameness without identity blocks an inference to the claim that Lump and Athena are co-located material objects. Likewise in the case of the Trinity.

For all these reasons, therefore, our Aristotelian solution to the problem of the Trinity seems to us to be the most philosophically promising and theologically satisfying solution currently on offer.

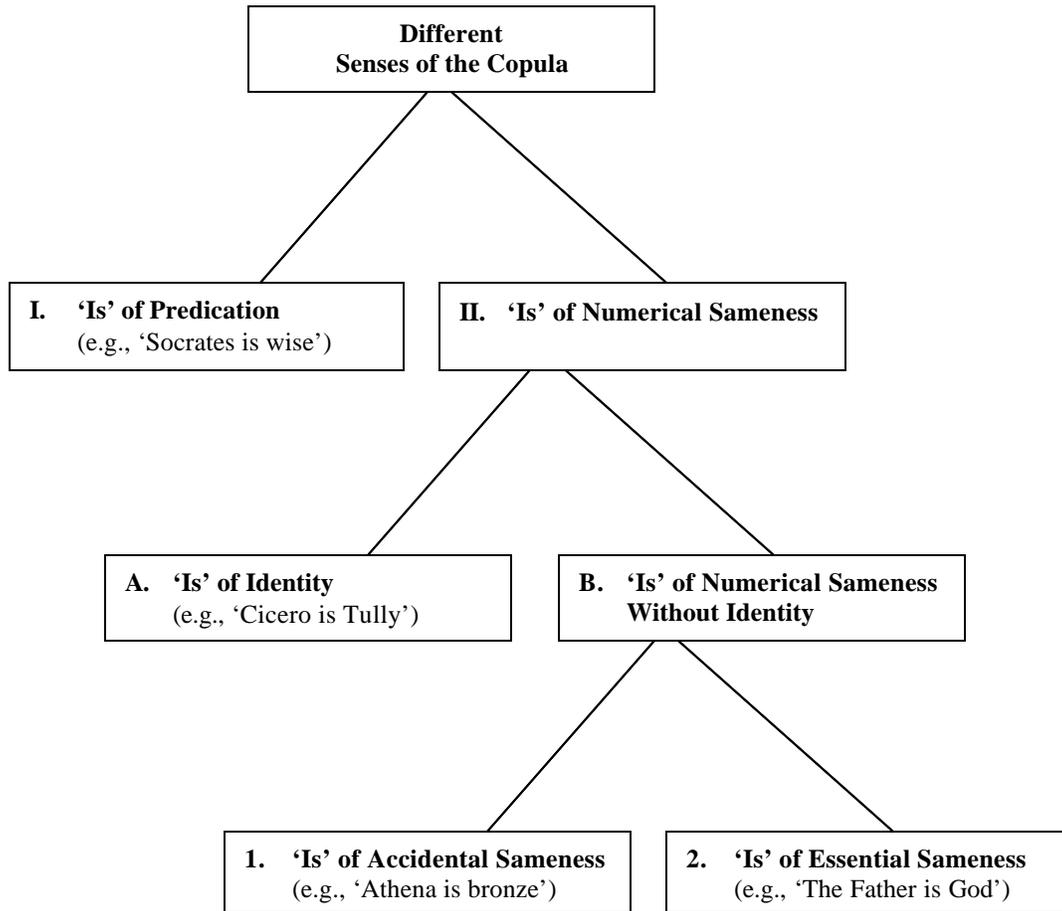
4. IMPORTANT CONSEQUENCES

This completes our defense of the Aristotelian account of the Christian doctrine of the Trinity. As we see it, however, this account is not only interesting in its own right, but also has several important consequences. We close by calling attention to two of these.

First, our solution suggests a revision in our understanding of the nature of the copula. Philosophers traditionally distinguish what is called the ‘is’ of predication from the ‘is’ of identity. It is sometimes added, moreover, that any solution to the problem of material constitution that denies that constitution is identity must introduce a third sense of ‘is’. As Lynne Baker says:

If the constitution view [i.e., the view that constitution is not identity] is correct, then there is a third sense of ‘is’, distinct from the other two. The third sense of ‘is’ is the ‘is’ of constitution (as in ‘is (constituted by) a piece of marble’).²⁹

Baker seems to think that if constitution is not identity, there will have to be three main senses of the copula, each co-ordinate with the other two. But we can now see that this is a mistake. If our account of the Trinity is correct, constitution can be explained in terms of something other than identity (namely, accidental sameness). Even so, there will be only two main senses of the copula, namely, the traditional ‘is’ of predication and a heretofore unrecognized sense of the copula, the ‘is’ of numerical sameness. There will still be an ‘is’ of identity and an ‘is’ of constitution, as Baker suggests, but these will both be subsumed under the second of the two main senses just mentioned. Indeed, if we take into account all of the changes suggested by our account of the Trinity, we will get a fairly complex set of relations holding between the various senses of the copula, as the following diagram makes clear:



Second, our solution helps to make clear that both the problem of material constitution and the problem of the Trinity are generated in part by the fact that we have incompatible intuitions about how to *count* things. Thus, both problems might plausibly be seen as special instances of a broader *counting problem*—a problem that arises whenever we appear to have, on the one hand, a single object of one sort (e.g., *God* or *material object*) and, on the other hand, multiple coinciding objects of a different sort (e.g., *Person*, or *hylomorphic compound*). One significant advantage of the Aristotelian solution to the problem of material constitution is that it alone seems to provide a unified strategy for resolving the broader problem of which it is an instance.

Purdue University

University of Notre Dame

NOTES

[†] This paper has benefited greatly from the advice and criticism of Michael Bergmann, Jan Cover, Tom Crisp, William Hasker, John Hawthorne, Michael Jcovices, Brian Leftow, Trenton Merricks, Laurie Paul, William Rowe, and two anonymous referees for *Faith and Philosophy*.

¹ For purposes here, an object x and an object y stand in the relation of material constitution just in case x and y share all of the same *material* parts. Thus, on our view, material constitution is both symmetric and transitive. Contrary to some philosophers (e.g., Lynne Baker, discussed below) who treat material constitution as asymmetric, we think that there are good theoretical reasons for regarding it as a symmetric relation; but we will not attempt to defend that view here.

² Noonan 1988, 222.

³ Note, however, that we stop short of actually endorsing the solution that we describe. There are three reasons for this. First, our solution, like most others, attempts to provide a metaphysical account of the ultimate nature of God. But surely here, if anywhere, a great deal of circumspection is warranted. Second, the contemporary Trinitarian debate, as we see it, is still in its infancy; hence a definitive stand on any particular solution, including our own, strikes us as a bit premature. Third, the solution we develop strongly supports a specific understanding of material constitution (as will become clear in Section 4)—one that is at odds with some of our previously considered views on the matter. (See, e.g., Rea 2000.) But, given the current state of the Trinitarian debate, we are uncertain whether this fact should motivate us to change our views about material constitution or to continue exploring yet other alternatives to the currently available accounts of the Trinity. Thus, it is important to understand that we are not here aiming to resolve the contemporary Trinitarian debate once and for all, but rather to advance it by

introducing what seems to us to be the most promising solution to the problem of the Trinity developed so far.

⁴ *Quicumque vult* (our translation).

⁵ Denying that ‘is God’ means ‘is absolutely identical with God’ doesn’t guarantee that modalism is false; but making the denial removes any pressure toward modalism that might arise out of T1 – T3.

⁶ See Rea 2003 and Brower Forthcoming. Proponents of the Relative-Identity strategy include Cain (1989), Anscombe & Geach (1961, pp. 118-20), Martinich (1978, 1979), and van Inwagen (1988). Proponents of the more typical versions of the Social-Trinitarian strategy include Bartel (1993, 1994), Brown (1985, 1989), Davis (1999), Layman (1988), C. Plantinga (1986, 1988, 1989), and Swinburne (1994). The position is commonly attributed to the Cappadocian Fathers. (See, esp., Brown 1985, Plantinga 1986, and Wolfson 1964). It is against these relatively typical versions of ST that our previously published objections most straightforwardly apply. Among the less typical versions of ST are, for example, Peter Forrest’s (1998), according to which the Persons are three “quasi-individuals” that result from an event of divine fission, and C.J.F. Williams’s (1994), according to which “God is the love of three Persons for each other.” We reject Forrest’s view because it implies (among other things) that there is no fact about whether there are one or many Gods, and there is no fact about whether there are three or many more than three Persons. On his view, ‘one’ is the lowest correct answer to the question ‘How many Gods are there?’ and ‘three’ is the lowest correct answer to the question ‘How many persons are there?’; but it is sheer convention that allows us to say that ‘one’ and ‘three’—rather than, say ‘twenty’ and ‘two hundred and forty one’—are *the* correct answers to those questions. As for Williams’s view, we take it that his, along with other less common versions of ST, will fall prey

to objections similar to those we raise against the more typical versions. For further critical discussion of both the Relative-Identity strategy and the Social-Trinitarian strategy, see Bartel 1988, Cartwright 1987, Clark 1996, Feser 1997, Leftow 1999, and Merricks 2004.

⁷ Note that the point of D3 isn't to deny that the Persons compose a society. Of course they do, if there are genuinely *three* Persons. Rather, the point of D3 is to deny both that the name 'God' refers to the society composed of these Persons and that the Persons are *proper parts* of God. But if the society of Persons is the Trinity, and the Trinity is God, doesn't it follow that 'God' refers to the society of Persons after all? No. Each member of the Trinity is God, and God "is a Trinity" (that is, He exists in three Persons). But nothing in orthodoxy seems to require that the Trinity is itself a whole composed of three Persons and referred to by the name 'God'. Moreover, in light of objections to Social Trinitarianism raised here and elsewhere, it seems that orthodoxy actually precludes us from saying such a thing (which is part of why we reject Social Trinitarianism).

⁸ See Rea 1998 and Brower 2004.

⁹ For reasons that we shall explain below, the label 'accidental sameness' is not appropriate in the context of the Trinity

¹⁰ This claim is negotiable; and, in fact, there are independent (non-Aristotelian) reasons for thinking that "masses of matter" *must* be treated as individuals. (See, e.g., Zimmerman 1995). But the view of matter articulated here seems to comport best with Aristotle's metaphysics and with the solution to the problem of the Trinity that we will propose, and so we will go ahead and endorse it here. Those who think of masses of matter as individuals may be inclined (in Section 3 below) also to think of what we will call "the divine essence" as an individual. Were we to endorse this view, we would deny that the divine essence is a fourth Person or a second God (just

as we would deny that Socrates's matter is a second man co-located with Socrates). Rather, we would say that the divine essence is one in number with God, a *sui generis* individual distinct from the Persons and, indeed, nothing other than a substrate for the Persons. We would also deny that there is any sense in which the divine essence is prior to or independent of God.

¹¹ We place 'its' in parentheses to signal our neutrality on the question whether, say, the humanity of Plato is a special kind of trope or a multiply instantiated universal.

¹² See, e.g., *Metaphysics* H2, 1042b15-25.

¹³ Matthews 1982, 1992.

¹⁴ *Topics* A7, 103a23-31; *Physics* A3, 190a17-21, 190b18-22; *Metaphysics* D6, 1015b16-22, 1016b32-1017a6; *Metaphysics* D9, 1024b30-1.

¹⁵ *Topics* A7, 103a23-31; *Metaphysics* D6, 1015b16-22, 1016b32-1017a6.

¹⁶ And, we might add, the same would hold true for Socrates and his matter, if indeed the matter of a thing were to be understood as an *individual* distinct from that thing.

¹⁷ See, e.g., Lewis 1993: 175, and Robinson 1985.

¹⁸ An object belongs to a kind in the *nominal* way just in case it displays the superficial features distinctive of members of that kind.

¹⁹ Lewis 1986: 252.

²⁰ We assume that 'object' in the context here means 'material object'.

²¹ Here is why 'the object in R' is ambiguous. There aren't *two* material objects in R; and the material object in R isn't a third thing in addition to Athena and Lump. Thus, 'Athena = the material object in R' and 'Lump = the material object in R' must both express truths. But they can't both express truths unless either Lump = Athena (which the doctrine of accidental sameness denies) or 'the material object in R' is ambiguous.

²² Baker's definition appears in both Baker 1999 and Baker 2000. For critical discussion, see Pereboom 2002, Rea 2002, Sider 2002, and Zimmerman 2002.

²³ Elsewhere we distinguish between *pure* and *impure* versions of the Relative Identity strategy (see Rea 2003). Impure versions endorse R1 without endorsing a doctrine of relative identity; pure versions endorse R1 in conjunction with either R2 or R3 below. Our solution is thus an impure version of the Relative Identity solution.

²⁴ To say that sortal-relative identity statements are more fundamental than absolute identity statements is, at least in part, to say that absolute identity statements are to be *analyzed* or *defined* in terms of more primitive sortal-relative identity statements, rather than the other way around. See Rea 2003 for further discussion of views that endorse R3.

²⁵ See also Routley & Griffin 1979.

²⁶ This is, roughly, the problem that we think Peter van Inwagen's solution to the problem of the Trinity faces. (Cf. Rea 2003.)

²⁷ For example, Cartwright (1987: 193) claims to detect an appeal to relative identity in a letter of Anselm, as well as the Eleventh Council of Toledo, on just these grounds. The same sort of reasoning may also help to explain Anscombe & Geach's (1961: 118) attribution of the Relative-Identity solution to Aquinas.

²⁸ Assuming, anyway, that counting *divine individuals* is more like counting *Gods* than counting *Persons*. But this assumption seems clearly legitimate in the context of D1.

²⁹ Baker 1999, p. 51.

REFERENCES

- Anscombe, G. E. M. and P. T. Geach. 1961. *Three Philosophers* (Ithaca, NY: Cornell University Press).
- Baker, Lynne Rudder. 1999. "Unity Without Identity: A New Look at Material Constitution", in *Midwest Studies in Philosophy* 23: 144-165.
- . 2000. *Persons and Bodies*. (Cambridge: Cambridge University Press).
- Bartel, Timothy. 1988. "The Plight of the Relative Trinitarian." *Religious Studies* 24: 129-155.
- . 1993. "Could There Be More Than One Almighty?" *Religious Studies* 29: 465-495.
- . 1994. "Could There Be More Than One Lord?" *Faith and Philosophy* 11: 357-378.
- Brower, Jeffrey E. 2004. "Abelard on the Trinity." *The Cambridge Companion to Abelard*, Jeffrey E. Brower and Kevin Guilfooy (eds.), (Cambridge: Cambridge University Press).
- . Forthcoming. "The Problem with Social Trinitarianism: A Reply to Edward Wierenga." *Faith and Philosophy*.
- Brown, David. 1985. *The Divine Trinity*. (La Salle, IL: Open Court)
- . 1989. "Trinitarian Personhood and Individuality," in Feenstra & Plantinga 1989, pp. 48-78.
- Cain, James. 1989. "The Doctrine of the Trinity and the Logic of Relative Identity". *Religious Studies* 25: 141-152.

- Cartwright, Richard. 1987. "On the Logical Problem of the Trinity," in *Philosophical Essays*, Richard Cartwright (Cambridge, Mass.: MIT Press, 1987), 187-200.
- Clark, Kelly. 1996. "Trinity or Tritheism?" *Religious Studies* 32: 463-76.
- Davis, Stephen. 1999. "A Somewhat Playful Proof of the Social Trinity in Five Easy Steps." *Philosophia Christi* 1: 103-105.
- Feenstra, Ronald and Cornelius Plantinga, Jr. (eds.) 1989. *Trinity, Incarnation, and Atonement: Philosophical and Theological Essays*. (Notre Dame, IN: University of Notre Dame Press).
- Feser, Edward. 1997. "Swinburne's Tritheism." *International Journal for Philosophy of Religion* 42: 175-84.
- Forrest, Peter. 1998. "Divine Fission: A New Way of Moderating Social Trinitarianism." *Religious Studies* 34: 281-97.
- Geach, Peter. 1967. "Identity." *Review of Metaphysics* 21: 3 – 12. Reprinted in Geach 1972, pp. 238-46.
- . 1969. "Identity—A Reply." *Review of Metaphysics* 22: 556-59. Reprinted in Geach 1972, pp. 247-249.
- . 1972. *Logic Matters*. (Berkeley, CA: University of California Press)
- . 1973. "Ontological Relativity and Relative Identity," in *Logic and Ontology*, Milton K. Munitz (ed.) (New York: New York University Press), pp. 287-302.
- Griffin, Nicholas. 1977. *Relative Identity*. (Oxford: Clarendon Press.)
- Layman, C. Stephen. 1988. "Tritheism and the Trinity." *Faith and Philosophy* 5: 291-98.
- Leftow, Brian. 1999. "Anti Social Trinitarianism". In Davis et al. 1999, pp.203-249.
- Lewis, David. 1986. *On the Plurality of Worlds* (Oxford: Basil Blackwell).

- . 1993. “Many but Almost One,” in K. Campbell, J. Bacon, and L. Reinhardt (eds.), *Ontology, Causality, and Mind: Essays on the Philosophy of D.M. Armstrong* (Cambridge: Cambridge University Press). Reprinted in Lewis, *Papers in Metaphysics and Epistemology* (Cambridge: Cambridge University Press, 1999), pp. 163-182.
- Martinich, A. P. 1978. “Identity and Trinity”. *Journal of Religion* 58: 169-181.
- . 1979. “God, Emperor and Relative Identity.” *Franciscan Studies* 39: 180-191.
- Matthews, Gareth. 1982. “Accidental Unities.” In *Language and Logos*, ed. M. Schofield and M. Nussbaum (Cambridge: Cambridge University Press).
- . 1992. “On Knowing How to Take Aristotle’s Kooky Objects Seriously.” Presented at the Pacific Division Meeting of the APA, Portland.
- Merricks, Trenton. 2004. “Split Brains and the Godhead.” in *Knowledge and Reality: Essays in Honor of Alvin Plantinga*, ed. Thomas Crisp, Matthew Davidson, and David vanderLaan.
- Noonan, Harold. 1988. “Reply to Lowe on Ships and Structures.” *Analysis* 48: 221-23.
- Pereboom, Derk. 2002. “On Baker’s *Persons and Bodies*.” *Philosophy and Phenomenological Research* 64: 615-22.
- Plantinga, Cornelius Jr. 1986. “Gregory of Nyssa and the Social Analogy of the Trinity.” *Thomist* 50: 25-352.
- . 1988. “The Threeness/Oneness Problem of the Trinity.” *Calvin Theological Journal* 23: 37-53.
- . 1989. “Social Trinity and Tritheism,” in Feenstra & Plantinga 1989, pp. 21-47.

- Rea, Michael. 1998. "Sameness Without Identity: An Aristotelian Solution to the Problem of Material Constitution." *Ratio* 11 (1998): 316-328. Reprinted in *Form & Matter: Contemporary Themes in Metaphysics*, edited by D. S. Oderberg, Oxford: Basil Blackwell, 1999, pp. 103-116.
- . 2000. "Constitution and Kind-Membership." *Philosophical Studies* 97: 169 – 93.
- . 2002. "Lynne Baker on Material Constitution." *Philosophy and Phenomenological Research*: 607 – 14.
- . 2003. "Relative Identity and the Doctrine of the Trinity." *Philosophia Christi*.
- Robinson, Denis. 1985. "Can Amoebae Divide Without Multiplying?" *Australasian Journal of Philosophy* 63: 299-319.
- Routley, Richard and Nicholas Griffin. 1979. "Towards a Logic of Relative Identity." *Logique et Analyse* 22: 65-83.
- Sider, Theodore. 2002. "Review of Lynne Rudder Baker's *Persons and Bodies*." *Journal of Philosophy* 99: 45-48.
- Swinburne, Richard. 1994. *The Christian God*. Oxford: Clarendon Press.
- van Inwagen, Peter. 1988. "And Yet They Are Not Three Gods But One God." In *Philosophy and the Christian Faith*, ed. Thomas Morris (Notre Dame, IN: University of Notre Dame Press), 241-78.
- Williams, C. J. F. 1994. "Neither Confounding the Persons nor Dividing the Substance," pp. 227-243 in *Reason and the Christian Religion: Essays in Honor of Richard Swinburne*, ed. by Alan Padgett (Oxford: Clarendon Press).
- Wolfson, H. A. 1964. *The Philosophy of the Church Fathers*, vol. 1: *Faith, Trinity, Incarnation*. (Cambridge, MA: Harvard University Press)

Zimmerman, Dean. 1995. "Theories of Masses and Problems of Constitution."

Philosophical Review 104: 53-110.

———. 2002. "Persons and Bodies: Constitution without Mereology?" *Philosophy and*

Phenomenological Research 64: 599-606.