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## THE TRINITY AND EXTENDED SIMPLES

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In this paper, I will offer an analogy between the Trinity and extended simples that supports a Latin approach to the Trinity. The theoretical tools developed to discuss and debate extended simples in the literature of contemporary analytic metaphysics, I argue, can help us make useful conceptual distinctions in attempts to understand what it could be for God to be Triune. Furthermore, the analogy between extended simples and the Trinity might surprise some who find one of these at least plausibly possible and the other incoherent.

In this paper, I will offer an analogy between the Trinity and extended simples. In doing so, I hope to shed some light on the philosophical problems of Trinitarian doctrine and suggest a tentative way to address the core of them. The theoretical tools developed to discuss and debate extended simples in the literature of contemporary analytic metaphysics, I argue, can help us make useful conceptual distinctions in attempts to understand what it could be for God to be Triune. Furthermore, the analogy between extended simples and the Trinity might surprise some who find one of these at least plausibly possible and the other incoherent.

In order to show connections between these seemingly disparate topics, I shall first briefly introduce the notion of extended simples before, in the next section, outlining the core contemporary philosophical problem of the Trinity. In the later parts of the paper, I'll then apply the conceptual resources provided by extended simples to the specified Trinitarian problem.

Extended simples, as might be expected, are entities that are both extended and simple. They are *extended* in the sense of occupying regions of space and they are *simple* in the sense of having no parts. So, to speak more colloquially, extended simples are objects which are spread out in space but which do not have any bits to them.<sup>1</sup>

Extended simples would be strange, and there is a discussion in the metaphysics literature about whether or not they are possible. For how can something that is extended not be made up of parts? Even proponents of the possibility of extended simples will admit that this *is* strange. The strangeness comes from the fact that the parthood relations are different for the entity and its location: the simple entity has no parts but the region the extended object occupies *does* have parts.<sup>2</sup> Thus, the mereological structure of extended simples comes apart from the mereological structure of the spatial regions they occupy. I submit that this is the source of (at least some of) the strangeness of extended simples; a dissonance introduced by the structural difference between entities and their locations.

Defenders of the possibility of extended simples point out that just because this is strange doesn't make it impossible, and that there is no obvious contradiction in the notion of something occupying complex spatial regions but having no parts. In other words, these metaphysicians claim that for at least some possible objects, their mereological structure and the structure of their location are not aligned.<sup>3</sup> The possibility of extended simples

would therefore demonstrate that the mereological structures of these two are at least logically independent. It is this distinction, between the structures of entities and of their locations, that I want to exploit in presenting an analogy between extended simples and the doctrine of the Trinity. But before discussing the analogy, we should set out clearly the problem to address.

(i) *The Problem of the Trinity*

The doctrine of the Trinity is a claim about what God is. It is a claim that God is, in some sense, three, and, in some sense, one. It is a doctrine with a long and intricate history. The scriptural evidence, the early church discussions, and later debates have all contributed to the doctrine. It is contentious how, precisely, we should understand it. Nevertheless, in contemporary philosophical discussion of the doctrine, we can identify a core question: *how* can God be both three and one?

Any account of the Trinity faces this difficulty. To give an example of a text that gives rise to these worries, consider part of the Athanasian Creed:

[W]e worship one God in Trinity, and Trinity in Unity; Neither confounding the Persons: nor dividing the Substance. For there is one Person of the Father, another of the Son: and another of the Holy Ghost ... So the Father is God, the Son is God: and the Holy Ghost is God.<sup>4</sup>

A *prima facie* reading of Athanasian text would propose that each of the Father, Son and Spirit are God, but that they are distinct. It is this contention that is the typical starting point for the contemporary philosophical discussion.<sup>5</sup> Of course, there is a good doctrinal

question about whether this is the right way to understand the various creedal claims, but this is not one I'll consider here. Rather, I want to see whether extended simples can help with what we might call the 'philosophers'' problem of the Trinity.

So, what is this problem? Well, a straightforward way of understanding that the Father, Son and Spirit are God but that they are distinct is that:

- (1) The Father is God
- (2) The Son is God
- (3) The Holy Spirit is God

And also that:

- (4) The Father is not the Son
- (5) The Father is not the Holy Spirit
- (6) The Son is not the Holy Spirit

The problem is that, if we read the 'is' in each case as an 'is' of identity, we have the resulting claims (where F, S, H and G abbreviate their obvious candidates):

- (7)  $F = G$
- (8)  $S = G$
- (9)  $H = G$
- (10)  $F \neq S$
- (11)  $F \neq H$
- (12)  $S \neq H$

But by the transitivity and symmetry of identity,

- (13)  $F = S$

$$(14) \quad F = H$$

$$(15) \quad S = H$$

Any of these three provides a contradiction with one of (10) – (12). This is the core contemporary philosophical problem.<sup>6</sup>

One solution to this problem is to toy with identity so that a contradiction cannot be derived from (7) – (12). An obvious way of doing so is to deny either the transitivity or the symmetry of identity. But this is massively controversial: any relation that is not both transitive and symmetric doesn't seem to be identity. Another suggestion along these lines is the *relative identity* view, according to which we should understand identity as (in at least some cases) being with respect to a particular sortal.<sup>7</sup> According to such a view, (7) – (12) are incomplete because they do not specify the sortal under which the terms fall. A relative identity theorist might therefore hope that holding the sortal terms fixed avoids a contradiction. I don't favour a relative identity view: any sort of adjustments to or complications of identity are liable to serious objection. But I will not here try to substantiate such objections. Instead, for reasons of space, I'll simply set this alternative aside.

If we accept the canonical account of identity, then, (7) – (12) does indeed lead to contradiction. We must therefore find a reason to deny that all of (7) – (12) are the appropriate translations of (1) – (6). But then the task is to say which are inappropriate and why, whilst maintaining a view that can faithfully be called Trinitarian.

There are two broad approaches to this. The first takes (7) – (9) to be inappropriate translations of (1) – (3) and the second takes (10) – (12) to be inappropriate translations of (4) – (6). The first approach emphasises the distinctness of the Persons, the second

approach emphasises the unity of God. These two different ways of proceeding are sometimes called the Greek and Latin approaches to the Trinity, respectively (though the historical aptness of these designations is not certain<sup>8</sup>). This paper will take the second way, that of trying to account for the distinctness of the Father, Son and Holy Spirit without translating this into the definitive denial of numerical identity. The reason I do so is simply that I find the criticisms of the Greek approach convincing.<sup>9</sup> But I do not have space to argue this here. Thus, I will be exploring a Latin Trinitarian view, as advocated in this journal and elsewhere by Brian Leftow.<sup>10</sup> The paper can therefore be seen as a way of spelling out the Latin approach, and suggesting reasons to think it plausible. The comparative task of assessing the costs and benefits of the Latin approach versus the alternatives will have to wait for another day.

As I am taking a Latin view, I will be examining the translatability of (4) – (6) into (10) – (12). I will deny that the Father, Son and Holy Spirit are numerically distinct entities. But this seems to spell trouble: the Father, Son and Holy Spirit are supposed to be persons, and *different* persons. How can this be compatible with them not being numerically distinct entities? We need to find a way to model the fact that they are numerically identical as God, but still hold onto some version of the assertion that they are distinct persons. It is here that I believe the analogy with extended simples can help us.

(ii) *The Analogy between Extended Simples and the Trinity*

Recall that in the case of extended simples, the structure of space and the structure of the entity come apart. With this in mind, my core claim can now be stated rather briefly: in the divine the ‘substance-structure’ described by the statements of identity above, (1) – (3),

comes apart from the ‘person-structure’ of the statements of the distinctions between the Persons of the Trinity, (4) – (6). These scare quotes indicate that there is further explaining to do. But we can immediately note that the relationships between the Father, Son and Spirit are to be analogous to the relationships between the spatial regions that an extended simple occupies, while the relationships between each of Father, Son and Spirit and God are to be analogous to the relationships between the entities located at the regions an extended simple occupies, viz. identity. The ‘person-structure’ and the ‘substance-structure’ of the divine are not isomorphic, in much the same way that the location structure and mereological structure of extended simples are not isomorphic.<sup>11</sup>

Of course, this claim needs to be spelt out in much more detail. The ‘substance-structure’ I am appealing to should be easily comprehensible: it is standard identity. There are numerous questions about identity but these are not peculiar to the Trinity: the identity of the Father, Son and Spirit with God should be understandable. The real work to do in explaining this analogy is to make clear what is meant by the ‘person-structure’ of the Father, Son and Spirit. In the analogy, this corresponds to the complex location of the extended simple or, in other words, the spatial regions occupied by the simple entity.

What we need, then, is a notion of ‘person-space’ and of the occupancy of this space by entities. I will be thinking of the Persons of the Trinity on a model of actual and possible persons: though arguably theologically naïve, if we can make sense of the Trinity using these naïve tools then there is at least one way to make sense of the doctrine. Furthermore, there is no obvious reason why any sophisticated theological use of ‘Person’ would make issues for what is to come.

Although our primitive notion of a 'space' is derived from the space that material objects occupy, we can formalise a number of other spaces for other purposes. For instance, in physics the configuration space of a system describes all the possible states in which the system can be. In other words, it is the range of all the possible configurations of the system. A point in the space corresponds to a particular configuration of the entire system. Configuration space is a space with more dimensions than the three of physical space, and can have certain mathematical and geometrical properties (including distance relations). A more philosophical example is the space of possibility *per se*.<sup>12</sup> Using Lewisian modal realism as an explanatory short cut, we can generate a space of possibility by taking each point of the space to correspond to a way for the world to be (i.e. a possible world). The space of possibility describes how actuality might be. For Lewis, distance relations can be defined on this space according to relative similarity between worlds.

Importantly, we can choose to introduce spaces as we find them useful. As an example, I propose a new notion: taste-space. I can stipulate that this is the space that describes all possible tastes. A point in taste-space corresponds to a way for something to taste. Tastes that are more similar will be closer to each other in this space. It is reasonable to think that overall tastes involve the relative amount and balance of more primitive tastes like saltiness, sweetness, acidity, spiciness etc. These more primitive tastes can therefore provide the axes of this space, allowing distance relations to be defined on the space. The example of taste-space shows that we can describe certain features of the world or of our experiences using spatial analogues, with associated benefits of formalisation.

The notion of space, then, seems sufficiently flexible to permit us to introduce spaces if they will be useful. I want to introduce a particular space I'll call person-space: the



space of possible persons. This space is made up of points, and occupying a certain point in person-space is being a certain possible person. Distances between points in person-space report how alike persons are: these distance relations can be brute or depend on certain more primitive axes of similarity. Thus, two entities that are similar people will occupy nearer points of person-space than two entities that are very different people.

But what *is* person-space? To begin to answer this, I will first give some examples to get a grip on how the concept is supposed to work. So, consider some entities and their occupation of person-space: I occupy exactly one point in person-space; Hillary Clinton occupies exactly one point in person-space; I do not have a sister, but if I did my sister *would* occupy exactly one point in person-space (cashing out this ‘would’ will connect to questions about the existential status of merely possible entities); the milk in the fridge occupies no location in person-space as it is not a person.

These are the easy examples, where the points of person-space have at most one occupant and the entities occupy at most one point of person-space. But there are also interesting examples where this seems not to be the case. I’ll spend a little while discussing these.

First, imagine a football team on a pitch. Grant that we can consider the team as a whole, i.e. as a single thing.<sup>13</sup> There is a natural metaphysical carving of this whole into 11 parts, namely into the 11 players. The team has the mereological structure of having 11 parts. Each of these parts occupies a single point in person-space, as each of the players is a person. These points are different, of course. I suggest we think of the whole team, which is composed of these 11 players, as having a location in person-space too. In particular, I propose it is extended in person-space by occupying the 11 points of person-space that are

the locations its parts.<sup>14</sup> The team is spread out in person-space across all and only the points that its parts occupy. The football team is therefore an example of something occupying multiple points of person-space. In such a case, the mereology and person-structure of the team are aligned: there is a one-to-one correspondence between the points of person-space the team occupies and its parts.

The concept of person-space allows us to describe some more contentious examples too. In the story of Dr Jekyll and Mr Hyde, it seems that there are two people in one body. This can be captured using person-space: in the story there is one entity occupying two distinct points of person-space (using the term 'entity' here deliberately avoids the difficult issue of what exactly *is* the thing that is two persons). I also want to note, tentatively, that this *might* be an accurate description of some individuals diagnosed with Dissociative Identity Disorders (previously called Multiple Personality Disorders). Perhaps in such circumstances there is a single entity occupying distinct points of person-space. I do not wish to take a stand on these real life cases, though they are suggestive.

The last couple of paragraphs have pointed to cases where it seems that things occupy more than one point of person-space. Another interesting issue is whether two entities can occupy exactly the same point in person-space. This is the question of whether two distinct things could both be a certain person. Esoteric cases involving clones or time-travellers might be examples of this. Suppose, for instance, that Alice time-travels to a point in her past. Perhaps the right way to understand this is that at that time there are two distinct *things* (young Alice and old Alice) which are the same *person*. Of course, what to say in such situations is controversial and depends on one's views of the persistence of objects

and persons through time. But points of person-space being multiply occupied is one alternative.

A different case where we might want multiple occupation of points of person-space is qualitative identity. Suppose two entities are qualitatively indistinguishable regarding all properties that relate to personhood. Does this entail that they occupy the same point of person-space? This is the question whether two entities that are exactly similar in this respect are in fact the same person.<sup>15</sup> No particular answer to the question is needed for the notion of person-space I will use. But discussing these questions through the lens of person-space highlights them and helps us to see how person-space works.

Finally, let me flag another interesting question. Can entities move through person-space? We can imagine such a possibility in the following way: suppose that an entity changes which person it is across time (for simplicity, in a smooth and continuous way across a fixed axis in person-space). In such a case, it seems that the entity would trace a line in person-space. Of course, this requires that it is not essential to an entity that it is a particular person. Note, though, that if we add a temporal axis into person-space so that the points correspond to being a certain person *at a certain time*, every entity that is a person for more than an instant will occupy multiple points of person-space.

The discussion of the above strange cases is helpful to get a sense of the flexibility of the notion of person-space. There are decisions to make about it. Some of these decisions will depend on what we think is possible for persons and for entities. I've deliberately avoided taking a view on this. The use of person-space, however, allows us to tease apart the relevant questions.

Another decision, though, is one about which I will specify a preference. This concerns the ontological status of person-space. The central issue is whether person-space is anything over and above the occupants thereof and their properties and relations. In other words, should we be substantivalist or anti-substantivalist about person-space? Compare this with substantivalist and anti-substantivalist views of space itself: the former hold that space and its points are in the fundamental ontology of reality while the latter suggest that their existence is merely derivative. There are similar issues concerning the ontological status of configuration space and modal space. In each of these three cases, there is ongoing and well-documented disagreement.<sup>16</sup> Above, I introduced the notion of taste-space. It seems much less contentious what the ontological status of taste-space is: it is naturally thought of as no more than the possible tastes and their relationships. We should be anti-substantivalist about taste-space.

I also prefer an anti-substantivalist view of person-space. I take it that person-space is nothing over and above the entities occupying it and their properties and relations. I prefer this view because do not wish my use of person-space to add to my fundamental ontology. I will therefore be using an anti-substantivalist account of person-space in what follows. It is open to others, however, to develop my account of the Trinity in line with a substantivalist account of person-space.

Given an anti-substantivalist approach to person-space, some more metaphysics can be given for person-space. I take person-space to be an abstraction of the facts about possible personhood. It is thus a formalisation of certain group of modal facts.<sup>17</sup> I therefore take it to be merely a way of presenting some pre-existing claims: it does not add anything metaphysically speaking.<sup>18</sup> Though it may serve as a clarification and rigidification of

personhood facts, it does not add to the ontological ingredients of the world. Person-space as a whole, which considers all possible persons, covers all of the range of possibilities for personhood and is thus exhaustive. Points of this space are thus to be thought of as specific possibilities for personhood. In particular, a point of person-space is a representation of a group of properties that are jointly necessary and sufficient for being a certain possible person. So a particular point corresponds to a particular possible person and distinct points of the space represent distinct possible persons. I wish to be deflationary, too, about points of person-space. They are not additions to the ontology but structures to describe and formalise certain pre-existing *specific* claims about personhood. Both for person-space in general and for points of person-space in particular, therefore, I do not wish to be committed to anything beyond a formalisation of our independently motivated theories what it is to be a person and to be a specific person.<sup>19</sup>

The final issue to address in this section is how persons and person-space are related. I have said above that the occupation of a point of person-space by something is that thing being the corresponding person. It is things that are people: the points of person-space correspond to the ways that things can be people. Person-space is thus a description of the range of possibilities for things in the domain of personhood. We might say that person-space is the personal possibilities for things quite generally.<sup>20</sup> A person, therefore, is something occupying a point of person-space. When something occupies a point of person-space, it is the relevant person. Person-space is the abstract representation of what it is to be all actual and possible persons.

This concludes the introduction to person-space. It is a space produced from the facts about possible personhood and describes the ways things could be persons. Points in

person-space are occupied by things, and this occupation amounts to that thing being that person. Typically, we consider things that occupy just one point of person-space, but we have also considered putative cases where the occupation of points of person-space by entities is more complicated. For instance, the football team and Jekyll/Hyde cases might suggest that things can occupy multiple points of person-space, while the time-travel case might suggest that points of person-space can be occupied by multiple entities. In what follows, I will use the notion of person-space and, specifically, its multiple occupation to draw the analogy between extended simples and the Trinity. In doing so I attempt to solve the problems the latter faces.

(iii) *The Solution to the Problem*

I claim that the divine occupies multiple locations of person-space. More precisely, I claim that the single and simple entity that is God is located at three distinct points of person-space. Unlike the case of the football team above, God does not occupy three distinct points of person-space by having as parts three distinct entities occupying those points. Rather, one and the same God has a location in person-space three times over. God is a simple extended in person-space. Some notation will be helpful here. I'll translate 'entity  $a$  is person  $P$ ' as ' $a$  occupies point  $p$  of personal space'. For every  $P$ , there is a corresponding  $p$ . Thus, I claim that God occupies three points of person-space, which we can call  $f$ ,  $s$ , and  $h$ . By being at  $f$ , God is the Father. By being at  $s$ , God is the Son. By being at  $h$ , God is the Holy Spirit. The same entity occupies these three points of person-space, so there is only one divine entity. But the distinct points of person-space correspond to distinct persons, so

there are three divine persons. This allows us to say that there is only one God, but three persons.

This is the central idea. But we now need to show exactly how it solves the problem outlined above when introducing the doctrine of the Trinity. What would this mean for the statements (1) – (12)? Let us consider them in turn.

(1) The Father is God

(2) The Son is God

(3) The Holy Spirit is God

(1) – (3) refer to the Father, Son and Holy Spirit and say of them that they are God. Using the notion of personal space introduced above, I gloss these as follows:

(1') The occupant of  $f$  is God

(2') The occupant of  $s$  is God

(3') The occupant of  $h$  is God

In other words, the terms 'the Father', 'the Son' and 'the Holy Spirit' in (1) – (3) I take to refer to the entity occupying the relevant points of personal space. Thus, following the extended simple analogy, we can say that they refer to one and the same entity, namely God. This means that their translation into the identity statements below is appropriate:

(7)  $F = G$

(8)  $S = G$

(9)  $H = G$

F, S, H and G here all denote entities (in fact, they all denote one and the same entity). So we can retain (7) – (9) on the interpretation I am offering.

What about the second set of statements derived from the doctrine? These are below:

- (4) The Father is not the Son
- (5) The Father is not the Holy Spirit
- (6) The Son is not the Holy Spirit

Now, we know that the entities involved in these statements are all the single divine entity. Hence we should *not* interpret these as the denial of the identity claims about entities. In other words, we do not want to accept the translation of (4) – (6) into the following claims of numerical distinctness:

- (10)  $F \neq S$
- (11)  $F \neq H$
- (12)  $S \neq H$

But we *do* want to maintain that the persons of the Trinity are distinct as persons. What this means is that there are three points of person-space, not one, occupied by the divine entity. Thus, (4) – (6) should be interpreted as claims about the structure of the person-space occupied by God, not as claims about the structure of the identity relations that hold within the Godhead. (4) – (6) should be glossed as:

- (4')  $f$  is not  $s$
- (5')  $f$  is not  $h$
- (6')  $s$  is not  $h$

Of course, all of these are true: these are indeed distinct points in person-space. But (4') – (6'), which refer to points of person-space, clearly do not entail (10) – (12), which refer to



entities. We are not therefore required to hold (10) – (12), which generate a contradiction via the transitivity and reflexivity of identity. Rather, we can say of the points of person-space:

$$(10') f \neq s$$

$$(11') f \neq h$$

$$(12') s \neq h$$

But, of course, these do *not* create a contradiction with (7) – (9). This is how the analogy between extended simples and the Trinity is supposed to shed light on the latter: by distinguishing between the structures of person-space and entities we can give grounds for the claim that (10) – (12) are not the appropriate translations of (4) – (6) and offer alternatives.

The contention of the analogy, therefore, is this: being a certain entity and being a certain person are not the same thing, even if that entity *is* that person. These are conceptually distinct, and so being a certain entity and being a certain person are distinguishable. Even if typically entities and persons are matched one-to-one, it is conceptually possible that they are not. This conceptual possibility is actual in the case of the divine: the Persons of the Trinity are the very same entity but there really are three Persons. The analogy with extended simples shows how such structures can be distinguished, and the mechanisms by which to express the conceptual possibilities involved. God occupies three distinct points of person-space but is a single entity. I thus argue that the Latin Trinitarian approach can maintain the appropriate sense of the distinctness of the Persons.

*(iv) Responses to Worries*

There are a number of worries that might arise from the preceding argument. Here I want to anticipate some of them.

Modalism

The first concern is the ever-present one for Trinitarian thought that emphasises the unity of the Godhead: modalism. Modalism is a view that is explicitly ruled out by the doctrinal constraints, so my picture cannot be a form of modalism on pain of radical revisionism. I will take modalism to be the claim that God's three-ness is not fundamental. Or, to put it differently, a modalist view is one that claims that God is Father, Son and Spirit only in some derivative sense. In particular, views according to which the Persons are not eternal, necessary, or internal to God are modalist. A standard modalist view is that the Persons are simply different *roles* God can play in relation to us, but any account that takes the Persons to be in any way derivative should be counted as modalist.<sup>21</sup> Modalism denigrates the Persons of the Trinity: it maintains that at the deepest metaphysical and theological level, God is not triune.

The view I present is not a version of modalism. This is because God's being the Father, Son and Holy Spirit is fundamental, not derivative. God's being Father, Son and Holy Spirit is modelled by a single entity occupying multiple locations in person-space. The model expresses a fundamental fact about the personhood-structure of God. God's occupancy of distinct regions of person-space is a fact at the most primitive metaphysical and theological level. God is fundamentally, not derivatively, three persons.

This is so even on the anti-substantialist account of person-space that I advocate (see also note 19). My deflationary approach to person-space states that it is nothing over and above the entities that are persons and their properties and relations. As I described it above, it is a systematisation of the facts about possible personhood. Because I am anti-substantialist about person-space, this space is not fundamental. But the *facts* that it systematises are. The fact that God is the person of the Father is fundamental whatever view we have of the ontological status of person-space. Whether or not an entity is a particular person is a different question to whether or not person-space is anything more than entities and their properties and relations. The facts about God's personhood are fundamental regardless of the fundamentality of person-space as an independent item of our ontology.

Worries about the fundamentality of God's three-fold personhood can also be assuaged when we notice that the Father is (at least) as much a person as I am. The relationship between the entity God and the person of the Father is the same as the relationship between the entity that is the person I am and the person that I am. The occupancy of the relevant point in person-space is not different in any important way between the case of the Father (or the Son, or the Holy Spirit) and the case of other persons. God the Father is a full person, and fully. The view I am advocating takes nothing away from the Father's personhood. To make this clear, compare it with the extended simple case: the simple entity really is located at certain points of space. Its location at the points it occupies is not derivative, nor is it less complete than the location of any other object at the point or points it occupies. The extended simple is not in space in a less profound sense than anything else is. Likewise, God the Father is not a person in a less profound sense than a non-divine person is.

### Unpalatable theological consequences

Even if the threat of modalism is countered, there are other theological issues that can be raised. An important one is that there still seem to be worrying statements that come out true on my account and appear to conflict with the doctrine. My solution holds that the Father, Son and Spirit are, strictly speaking, numerically identical (understanding these terms as referring to the entity that occupies the relevant portions of person-space). But doesn't the doctrine require that the Persons are simply numerically distinct? My response is that the Persons *are* distinct, when 'the Persons' has a certain reference (to points of person-space). But the Persons are also *not* distinct, when this refers to the divine entity. It isn't clear to me that the doctrine and tradition require that the entity that is each Person be numerically distinct. If it did, wouldn't that simply equate to tritheism?

I take the project of philosophical reflection on the Trinity to be to find ways to uphold the core of the doctrine without leading to contradiction. This might require some accommodation or interpretation of the doctrinal claims. I do not wish to dwell on the question of whether the Latin-style version of Trinitarianism is theologically acceptable: there is enough to read on this question already. But, to put it simply, I don't accept that having numerically distinct *entities* corresponding to the Persons is a theological requirement that can be drawn from the core claims outlined in Sect. i. God being Father, Son and Spirit doesn't entail that there are three divine entities. Those who disagree are unfortunately not going to accept the model I here offer of the Trinity, but it is their task to show how the core claims lead to numerically distinct entities referred to by the Persons.

However, there may be further statements that my position is committed to that might be worrying:

- (i) 'The Father is numerically identical to the Son' is a literal truth when 'The Father' and 'The Son' have the very same referents they have in the truths 'The Father is God' and 'The Son is God'.
- (ii) 'The Spirit is three persons' is a literal truth when 'The Spirit' has the very same reference it has in the truth 'The Spirit is God.'

I am committed to these statements, and I do think they *prima facie* sound bad. But reflection makes this *prima facie* impression much weaker. The Latin Trinitarian view as I construe it is required to assent to such claims. But given the ambiguity involved in the Person-terms and the fact that the terms are being deliberately disambiguated in unfamiliar ways in the contexts of (i) and (ii), I don't believe it is unacceptable for these statements to be true. If we substitute 'the entity which occupies the point of person-space *x*' for the relevant terms, the resulting claims seem more palatable, even though they are equivalent. This indicates that the unusual use of the terms in the context might be generating a reasonable amount of the discomfort.

In sum, then, I do recognise that some unfamiliar claims will come out true on the interpretation I am proposing of the doctrine of the Trinity. But these unfamiliar claims are not unacceptable, and do not therefore rule out the interpretation.<sup>22</sup>

### Indiscernibility and Identity

If we accept the identities asserted in (7) – (9), then the Father, the Son and the Holy Spirit are numerically identical, where these terms refer to the entity located at the relevant portions of person-space. But this seems to suggest that the Father, Son and Holy Spirit must be indiscernible, for a well-established law governing identity is the indiscernibility of identicals: when  $a = b$  then  $a$  and  $b$  share all and only the same properties (and relations). This is a problem for the doctrine of the Trinity because the Father, Son and Holy Spirit are supposed to share only *almost* all the same properties. In particular, they are supposed to vary in at least the relations of origin.<sup>23</sup> The Son is begotten by the Father. The Holy Spirit proceeds from the Father (Eastern tradition) or the Father and the Son (Western tradition). Thus, it seems that the Father has a property of begetting the Son, which neither the Son nor the Holy Spirit do. This appears a violation of the indiscernibility of identicals, and hence to prove that the Father, Son and Holy Spirit cannot be numerically identical entities after all. To sum up the problem: the identity of the occupants of the distinct points of person-space seems to imply that there can be no variation in qualities across this space. But, in fact, the doctrine requires that there is such variation.

Luckily, the analogy with the extended simple case provides help here once more. When they were introduced above, I said nothing about the properties of extended simples. We might naturally think that extended simples have to be qualitatively identical at any location at which they exist, i.e. they must be the same across the space they occupy. Interestingly, this is not a constraint that has been readily adopted in the literature. In fact, it is a common view that extended simples can be heterogeneous: that they can have different properties at the different locations at which they exist.<sup>24</sup> This causes a problem for the defenders of heterogeneous extended simples that is parallel to the problem just outlined for the Latin Trinitarian: the numerical identity of the occupants of the distinct

points of physical space seems to imply that there can be no variation in qualities across this space.

This problem has been noted and discussed in the case of extended simples. A number of different solutions to the problem are available. I believe these solutions can be used to give analogous solutions to the problem in the case of the Trinity. To argue this, I'll first focus on one solution, which I prefer for both problems. But I'll then briefly indicate how we might translate the alternatives from the extended simples literature to the context of the Trinity.

My favoured approach in both cases is to appeal to certain sorts of properties: fundamental distributional properties. A distributional property is a property that grants to its bearer a qualitative variation across a particular dimension.<sup>25</sup> Typical examples given involve colour: being speckled and being polka-dotted, for instance, are colour properties that grant variation in colour across space upon their bearers. A speckled hen exhibits colour variation across her body by being speckled. A non-colour example might be turbulence: by being turbulent, a fluid varies in its flow across space. There are many further examples of such properties, and their existence is not controversial. What is contentious, however, is the further claim that some distributional properties are fundamental. That is, the claim that some distributional properties are such that they cannot be decomposed into any collection of other non-distributional properties. If this is so, then there are some properties that simply confer on their bearers some qualitative variation in a quality across a dimension, and any group of non-distributional properties cannot capture this variation.

Why should we believe that there are fundamentally distributional properties? I can't conclusively prove their existence here. But some thoughts are suggestive. The best

reason to accept fundamental distributional properties seems to be the difficulty in finding appropriate non-distributional properties to capture the distributional ones. For instance, consider the speckled hen. If being speckled is not fundamental, there are some non-distributional properties that jointly capture the speckledness of the hen. One might think that these non-distributional properties will be the uniform colours of the hen's body: the patches of brown and white. But these patches themselves seem, on closer inspection, to be relevantly similar to distributional properties: they are uniform colours spread over a region of space. Why is a property that grants uniform colour over a region of space less problematic than one that grants a non-uniform colour over a region of space? The former seems a special case of the latter: each provides a distribution of a quality over a dimension, but in the former case this distribution is less interesting. What we really need for our reduction is properties that assign properties to things at points, not regions, of space. But then it becomes more difficult to see how things at points of space could be, for instance, coloured, or have flow. Fundamentally distributional properties therefore become more plausible as the only satisfying account of spread of a quality across a region.<sup>26</sup>

Accepting that there are irreducibly distributional properties gives us a solution to the problem of the indiscernibility of identicals for heterogeneous extended simples.<sup>27</sup> To summarise, the solution is that extended simples can have irreducibly distributional properties that imply qualitative variation across space in certain ways. The extended simple is different in different places by having a single property of a special kind, and this single property cannot be decomposed into non-distributional ones. The extended simple has this single property at all locations at which it exists, so satisfies the indiscernibility of identicals, but the property implies variation so the extended simple is heterogeneous. Thus, the extended simple can exhibit variation across space without violating the indiscernibility of



identicals.<sup>28</sup> To give an example: suppose an extended simple is brown in one region it occupies and white in another. It might seem this qualitative variation implies that the thing in the first region is distinct from the thing in the second, due to the indiscernibility of identicals. But if the extended simple is in fact simply *speckled* (and irreducibly so), the thing in the first region and the second region in fact have one and the same property. Therefore, they needn't be distinct.

We can translate this, via the analogy between extended simples and the Trinity, into a solution for the heterogeneity of God across person-space. I'll focus on the relations of origin. The Father is begetter and the Son is begotten. In our terms, the occupant of the point of person-space corresponding to the Father is begetter, and the occupant of the point of person-space corresponding to the Son is begotten. This might seem to imply that these occupants are distinct entities, through the indiscernibility of identicals. But if God in fact simply has an irreducible distributional generation property, the occupants of the points of person-space in fact have one and the same property. So they needn't be distinct after all. Thus, I claim that there is a single distributional property of generation that the single entity that is God has. This property gives God qualitative variation. The dimension of variation is person-space (just as the dimension of variation for an extended simple is space). To repeat: God varies across person-space in the property of origination that God displays. But this is not a matter of God being *different* at different parts of person-space: there is no property that the entity that the Father is has that the entities that the Son or Holy Spirit are do not. For these are all the same entity. Rather, this entity, which is the Father, Son and Holy Spirit, has a fundamentally distributive property that cannot be reduced to non-distributional ones. The seeming qualitative variation of the Father, Son and Holy Spirit is derived from their joint possession (as a numerically identical entity) of a

distributive property. The apparent qualitative variation corresponds to the qualitative variation encoded by the distributive property across person-space. More generally, when the Persons seem to differ the seeming difference is a result of qualitative variation across person-space in virtue of some irreducibly distributional property. This means that the indiscernibility of identicals is not violated.

A concern can be raised here about the analogy.<sup>29</sup> The relations of origin seem to encode some sort of priority claim: the Father begets the Son and the Spirit proceeds from them jointly (in the Western tradition). It might seem that a distributional property cannot capture this priority, for such a priority seems to require that the relata of the relation are distinct. There are options here. One is to take the relations of origin to be relations between the *points* of person-space, rather than belonging to the entity itself. As these points are distinct, the relata would be distinct. A second option is to say that although God necessarily and eternally occupies the three points of person-space, God's occupation of *s* is nevertheless in some sense dependent upon God's occupation of *f* and God's occupation of *h* is in some sense dependent upon God's occupation of *f* and *s*. This dependence between the occupations of the points of person-space is what the relations of origin are encoding. As all distributional properties grant a certain sort of variation across a space on their bearer, the sort of variation in this case is simply that of dependence of occupation. The distributional property in question makes it the case that one and the same thing occupies the different points of person-space with different levels of priority. On this second approach, therefore, the relations of origin therefore do not require distinct relata.

So, we have discussed how the distributional properties approach can solve the indiscernibility of identicals issue for both the heterogeneous extended simples and the

Trinity. As mentioned, there are alternative explanations available that ground the claim that extended simples can be heterogeneous. Three that are especially worth mentioning are the following: (a) relativizing properties to regions of space, (b) taking extended simples and their stuff to be distinct and (c) using localised trope theory. I believe that each of these can be translated into appropriate solutions in the analogue case of the Trinity, but I cannot fully explore this here. Let me, though, at least indicate how I think this would work for these three alternatives in turn.

Recall that the problem is how to make sense of extended simples exhibiting variation in their qualities over the space they occupy. The relativisation approach is roughly the following: the heterogeneous extended simple bears one property with respect to one region of space and another property with respect to another. For instance, an extended simple *O* is hot with respect to one region of space and cold with respect to another. The relativiser can maintain this by taking properties themselves to be relations to regions of space, or by taking the instantiation of properties to be relative to regions of space. This, in turn, can be motivated by reference to similar *temporal* relativisation in some endurantist solutions to the problem of change.<sup>30</sup> How does this translate to the parallel worry about variation of the qualities of God across person-space? Well, the Latin Trinitarian can take the properties of origin to include relativisation to parts of person-space. God is thus ‘begetter-relative-to-*f*’, ‘begotten-relative-to-*s*’ and ‘proceeding-relative-to-*h*’. This would be the starting point for an explanation of apparent differences in properties between the Father, Son and Holy Spirit. It is worth noting, though, that such relativizing might be dependent on a substantialist understanding of person-space, rather than the deflationary view I adopted above.<sup>31</sup>

The second approach, advocated by Markosian, involves making a distinction between things and stuff and, in particular, between an object and the stuff of which it is made.<sup>32</sup> An extended simple, on this view, is a simple object but is constituted by certain matter. This matter is not simple, but rather has parts. The bearer of the properties which vary across space, for Markosian, are the portions of stuff, rather than the extended simple. Because these portions are distinct from one another, the indiscernibility of identicals worry can't get off the ground. The central move, then, in Markosian's solution is to identify the bearers of the properties as stuff, not things.

Translating this into the Trinitarian case is more complicated than in the other solutions, and I am more tentative about its success. But the central move, again, is to identify the bearers of the properties of origin as distinct from the entity that is God. One candidate is the points of person-space themselves, a possibility mentioned above.<sup>33</sup> Because the points of person-space are distinct, if they are the bearers of the varying properties then no problem from the indiscernibility of identicals arises. Again, as in the previous solution, an approach along these lines might be more conducive to a Latin Trinitarian who took a more ontologically robust view of the points of person-space that I have done in this paper.<sup>34</sup> This is because Markosian explicitly relies on an ontology that doesn't reduce things to stuff or *vice versa* (called the 'Mixed Ontology'). The parallel here would be the irreducibility of points of person-space to entities (and *vice versa*).

However, there's still more work to do before a Markosian-style solution to the Trinitarian case is established. In the extended simple case, there is a relation of constitution between the stuff and the things. What is the parallel relation for the Trinity? Not constitution, as the divine is not constituted by points of person-space. Perhaps it is simply

the occupation relation. But it's not at all obvious how the occupation relation would do the required job. So more work would need to be done to develop such a Markosian-style account. I will therefore only tentatively propose that a solution along these lines is worth investigating further.

The third alternative is to take the properties that are ascribed to the extended simple as tropes of a specific sort. Tropes are particulars, rather than universals, and give certain qualities to their bearers. The claim of this solution is that an extended simple has localised tropes: *O* has both the 'hot at *s*' trope and the 'cold at *s*\*' trope.<sup>35</sup> These tropes do not resemble, but they are not contradictory either. So the extended simple displays the variation by having non-resembling localised tropes that are local to the different parts of space that it occupies. (One might wonder about a connection to the first, relativizing approach here.) Similarly, the Trinitarian can make use of tropes with circumscribed locations in person-space. For instance, the relations of origin can be taken to be tropes that are local within this space: God has *both* the local-to-point-of-person-space-*f* begetter trope *and* the non-resembling local-to-point-of-person-space-*s* begotten trope. As tropes which are local to those points of person-space, these can be jointly held by a single thing, so the indiscernibility of identicals is not violated.

I have explicitly not investigated these candidate solutions in detail, either as applied to heterogeneous extended simples or to the Trinity. But I hope to have indicated how work in the literature in the former case carry over to the latter. Thus, the defence of the Latin Trinity against the indiscernibility of identicals worry is heavily indebted to discussion of how to accommodate variation in the extended simples literature. Although I prefer the distributional properties view, if *any* such explanation is coherent then there may be a

translation into the Trinitarian case.<sup>36</sup> I conclude that we have the resources to avoid the charge that the numerical identity account proposed fails to capture the relations of origin that obtain within the Godhead.

### The Metaphysical Status of the Persons

There is a fourth worry that might follow from the above discussion. The appeal to distributional properties might make us concerned about the status of the Persons of the Trinity. I'll show this worry via extended simples.

Imagine an extended simple rod, R.<sup>37</sup> Imagine, further, that R is red in one continuous half of the spatial region it occupies and blue in the other continuous half of the spatial region it occupies. The concern in the last section was that it seems as though what is located at one half of the spatial region and what is located at the other half have different properties. But if R is an extended simple then there is just one entity located at these regions, which cannot have different properties from itself. To resolve this initial issue, we say that R has a single, irreducibly distributional property of being red-and-blue-in-the-appropriate-ways. Contrast this description of the extended simple case with what is happening in a normal case. Normally, we would say that R has a red half and a blue half. But we are not allowed to say this in the extended simple case as R is a simple. Speaking with metaphysical rigour, therefore, there is no such thing as a half of R. What there is, instead, is a region of space at which R is located which is where R is red.

Now we turn to the Trinity. The Son is begotten. What does this mean, in metaphysical rigour? It does *not* mean that there is an entity that is the Son, and that this

entity is begotten *simpliciter*. For the entity occupying the relevant person-space is God, who is not begotten *simpliciter*. Rather, it means that there is a region of person-space such that it is occupied by God and God is begotten there. God has the irreducible distributional property of divine origin, and the way God has this heterogeneous property in the region of person-space corresponding to the second Person is what it is for the second Person to be begotten. But, much as we cannot in metaphysical rigour talk of the red half of R, we cannot speak of the Son part of God. In metaphysical rigour, we can talk of the occupant of a point of person-space (= God), and also of a point of person-space. We have the entity, God, and the three points of person-space God occupies, *f*, *s* and *h*. A single entity is each of the Persons of the Trinity. But in talking of the distinctness of the Persons, we are not speaking of their numerical distinctness. Rather, we are referring to the points of person-space so occupied by God. The lesson from this is that the terms 'Father', 'Son' and 'Spirit' (and their cognates) refer to God when speaking of an entity, but can also be used to refer to different categories of thing, namely points of person-space. God belongs to the category of entities. Points in person-space, by contrast, are not entities. This may be unpalatable to some: they may be disconcerted that we can, using the term 'Father', refer not to an entity but to a way of being a person. This, I take it, is a cost of the theory.

#### Necessary Co-extension of Persons and Entities

A fifth worry is connected to this, and denies that there is such a distinction between persons and entities. A disputant might argue as follows:

It is clear that persons and entity are numerically identical. When I talk about Hillary Clinton, I am talking about the entity that is Hillary Clinton and the

person Hillary Clinton: they are one and the same thing. One way to characterise this is to assert that persons are a sub-category of entities (as are, e.g., animals, artefacts, sub-atomic particles and planets). But I don't even need this assertion; I merely need it to be the case that persons and entities cannot be separated. So the notion of person-space is otiose: it is exactly isomorphic to a sub-region of the space generated by assigning each entity a point.

The disputant is right that I need this distinction between persons and entities, for I claim that in the Trinity there is only one entity, but three persons. Hence I take it that counting by entities and counting by persons are different, and, more importantly, that what it is to be a particular entity is not the same as what it is to be a particular person.<sup>38</sup> But I don't think that the disputant's position is as obvious as it is presented. Though I have made my task deliberately difficult by using a notion of personhood that is generic, it worth remembering that the doctrinal texts do not force us to hold that the 'Persons' need satisfy philosophical analyses of the contemporary notion of personhood. Thus even if 'persons' in the contemporary usage implies identity of entity, it may not in the theological usage.

But more ambitiously, I think the putative possible cases like that of Jekyll and Hyde might make us doubt the identity claim even in the case of human persons. Given that what I am seeking to do is make a *conceptual* distinction between person-structure and entity-structure, to rule this out the disputant needs to not only show that persons and entities are related one-to-one in actuality, but that they *must* be. In other words, not only that person-space and a region of entity-space are isomorphic when considering actual persons and entities, but also when considering all possible persons and entities. The onus, I feel, is on



the disputant to establish this. Presumably establishing this would be done by giving an account of personhood (and, indeed, of entities), the satisfactory completion of which would be no mean feat.

### Lack of Novelty

Finally, even a sympathetic reader may worry that what I am presenting here is no real advance in our understanding, as it adds nothing to the Latin Trinitarian approach spelt out in detail by Brian Leftow in various places. In response, I'd like to point to a few things I think this analogy *does* add, but first it is worth a brief sketch of Leftow's view in order to make the relevant contrasts clear.

Leftow presents an account of the Trinity that belongs in the same category as that defended in this paper: a Latin approach. That is, his view is one that maintains the strict identity of the Persons with God and therefore has the task of explaining what the distinctions between the Persons consists in. For Leftow, God is just one thing but has three distinguishable 'life streams': these are what correspond to the Persons. So there is a life of the Father, a life of the Son and a life of the Spirit: these are distinct lives and contain distinct conscious events but all belong to a single entity. A parallel Leftow draws is with an imagined case of time-travel: the time-traveller might be simultaneously living different parts of the life of a single thing. Similarly, the Father, Son and Spirit are all numerically identical to God, but God's life has the curious form that it is composed of three simultaneous strands. Unlike in the time-travel case, God's life strands are not sequential.

Thus, Leftow's account has significant connections to the one I present here.

However, as mentioned, I believe there to be some key differences. In order of increasing importance, they are:

- a) At the very least, the analogy with extended simples offers a different way to approach the Latin Trinitarian theory. The analogy with extended simples is a helpful one, in that it clarifies the distinction between the entity that is located at points of person-space and the points of person-space themselves. The parallel with the separation of the mereological and spacetime location structure of extended simples helps to warrant such a distinction.
- b) Leftow's account of the Trinity takes the Persons' identities to be event-based: it is the events of their lives that individuate and distinguish the Persons.<sup>39</sup> My approach is more flexible: it is neutral on what the Persons of the Trinity are and how they are to be characterised. These will depend on the precise character of personhood (and hence of person-space). By occupying a point of person-space, entities are particular persons. Thus, entities are the things that are people, but counting by entities and counting by persons can give different results. But this leaves open both the metaphysical category to which persons belong and the means of characterising persons. It therefore doesn't *require* that the Persons of the Trinity are understood as event-based (though they can be understood in this way). My account is thus more general than Leftow's, and allows the Trinitarian more resources for answering the

difficult question of what the Persons are. Leftow's original account may be easily adaptable to accommodate wider possibilities, but here it is explicit that a Latin Trinitarian approach doesn't entail an event-based view of the identity of the Persons.

- c) Thirdly, the approach doesn't require the metaphysical (or conceptual) possibility of time-travel. (Perhaps Leftow's doesn't either.<sup>40</sup>) So if you're uncomfortable with time-travel, you might still accept the analogy offered here. On the other hand, of course, extended simples are controversial, so perhaps some are more inclined to accept the possibility of time-travel than of extended simples. At any rate, a second, logically independent analogy bolsters the case. Furthermore, the central work done by Leftow's time-travel analogy is to give us a case of multilocation: multilocation provides the conceptual grip on the Latin Trinity he advocates. While extended simple cases can be thought of as instances of multilocation (where the object is fully located at each of the points of space it can be found), they do not have to be. For instance, extended simples could be only partially located at each of the points of space where they can be found, and fully located only at the combination of these.<sup>41</sup> Similarly, although the above has been tacitly framed in terms of multilocation, God could be located at the relevant three points of person-space only partially, and fully located only at their sum. I myself do not favour this view, but it shows the independence of the Latin Trinitarian approach from the possibility of multilocation. What matters, rather, is the

different structures of entities and person-space. The account here presented therefore does not, unlike Leftow's, rely on multilocation.

- d) Finally, the extended simples literature gives us a series of neat options for solving the problem of the indiscernibility of identicals and the different relations of origin within the Godhead for a view that asserts the numerical identity of God with Father, Son and Holy Spirit. These options correspond to the solutions to the parallel problem of heterogeneous extended simples. I've outlined the position I find most appealing, namely irreducible distributive properties, but it is a major benefit to the Latin approach that there are these further metaphysical resources already developed that can be explored.

(v) *Conclusion*

I have here presented an analogy between extended simples and the Trinity, more specifically between the way that extended simples occupy space and the way that God is distinct persons. The analogy relies on a notion of 'person-space'. I believe this analogy strengthens the Latin Trinitarian approach by showing the distinction between entity- and person-structure, and hence the possibility of these coming apart in the divine. The analogy helps to show how a Latin Trinity can maintain both the numerical identity of God with the Persons (understood as occupants of person-space) and the numerical distinctness of the Persons (understood as locations in person-space). It might also give pause to those who are willing to take extended simples metaphysically seriously but are not willing to do the same in the case of the Trinity.<sup>42</sup>

## REFERENCES

Cross, Richard. 2009. "Latin Trinitarianism: Some Conceptual and Historical Considerations". In *Philosophical and Theological Essays on the Trinity*, edited by Thomas McCall and Michael Rea (Oxford University Press), 201–213.

Ehring, Doug. 1997. "Lewis, Temporary Intrinsic, and Momentary Tropes". *Analysis* 57: 254–258.

doi: 10.1111/1467-8284.00084

Hasker, William. 2013. *Metaphysics and the Tri-Personal God* (Oxford University Press).

Haslanger, Sally. 1989. "Endurance and Temporary Intrinsic". *Analysis* 49: 119–125.

doi: 10.1093/analys/49.3.119

Howard-Snyder, Daniel. 2015. "Trinity" in *Routledge Encyclopedia of Philosophy* (Routledge).

doi: 10.4324/9780415249126-K105-2

Kleinschmidt, Shieva. 2012. "Many-One Identity and the Trinity". *Oxford Studies in the Philosophy of Religion* 4: 84–96.

doi: <http://dx.doi.org/10.1093/acprof:oso/9780199656417.003.0005>

Leftow, Brian. 2004. "A Latin Trinity". *Faith and Philosophy* 21: 304–333.

doi: 10.5840/faithphil200421328

Lewis, David. 1986. *On the Plurality of Worlds* (Blackwell).

Markosian, Ned. 2004. "Simples, Stuff, and Simple People". *The Monist* 87: 405–428.

doi: <http://dx.doi.org/10.5840/monist200487318>

---- 1998. "Simples". *Australasian Journal of Philosophy* 76: 213–226.

doi: 10.1080/00048409812348361

McCall, Thomas and Michael Rea, ed. 2009. *Philosophical and Theological Essays on the Trinity* (Oxford University Press).

McDaniel, Kris. 2009. "Extended Simples and Qualitative Heterogeneity". *The Philosophical Quarterly* 59: 325–331.

doi: 10.1111/j.1467-9213.2008.589.x

---- 2007 "Extended Simples". *Philosophical Studies* 133: 131–141.

doi: 0.1007/s11098-006-9010-y

Mellor, Hugh. 1981. *Real Time* (Cambridge University Press).

Ney, Alyssa. 2015. "Fundamental Physical Ontologies and the Constraint of Empirical Coherence: a Defense of Wave Function Realism". *Synthese* 192: 3105–3124.

doi: 10.1007/s11229-014-0633-9

Parsons, Josh. 2004. "Distributional Properties". In *Lewisian Themes: The Philosophy of David K Lewis*, edited by Frank Jackson and Graham Priest (Oxford University Press), 173–180.

---- 2000. "Must a Four-Dimensionalist Believe in Temporal Parts?". *The Monist* 83: 399–418.

doi: <http://dx.doi.org/10.5840/monist200083319>

Pickup, Martin. Forthcoming. "A Situationalist Solution to the Ship of Theseus Puzzle." *Erkenntnis*

doi: 10.1007/s10670-015-9777-3

Rea, Michael. 2009. "The Trinity". In *The Handbook of Philosophical Theology*, edited by Thomas Flint and Michael Rea (Oxford University Press), 403–29.

---- 2003. "Relative Identity and the Doctrine of the Trinity". *Philosophia Christi* 5: 431-45.

Saucedo, R. 2011. "Parthood and Location". In *Oxford Studies in Metaphysics* 6: 225–286.

Schaffer, Jonathan. 2007. "From Nihilism to Monism". *Australasian Journal of Philosophy* 85: 175 – 191.

doi: 10.1080/00048400701343150

Sider, Ted. 2001. *Four-Dimensionalism* (Oxford University Press).

Spencer, Joshua. 2010. "A Tale of Two Simples". *Philosophical Studies* 148: 167–181.

doi: 10.1007/s11098-008-9291-4

Wittgenstein, Ludwig. 1974 (revised edition). *Tractatus Logico-Philosophicus*. Translated by D. F. Pears and B. F. McGuinness (Routledge and Kegan Paul).

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## NOTES

<sup>1</sup> I will speak of space rather than spacetime in what follows, though everything I will say is translatable into spacetime terminology. I do so simply to avoid complications (especially regarding the relationship between the temporal axis of spacetime (in a given reference frame) and time itself).

<sup>2</sup> This characterisation might be resisted if we can make sense of a region of space that does not contain parts. If so, an entity could be extended in virtue of occupying a region without thereby having a mereologically complex location. But it is natural to characterise regions in mereological terms, whereby a region is mereologically complex and contains points of space as parts. So an alternative, non-mereological account of what it is to be a region would need to be provided before we can develop this thought further. Thanks to Mark Murphy for noticing this.

<sup>3</sup> Some objects may inherit their structure from their location, and *vice versa*. Such objects necessarily have the same structure as their locations. The claim here is that not *all* objects and their locations are like this. (See Saucedo, "Parthood and Location" for a discussion of various ways that objects and their locations can fail to align).

<sup>4</sup> This is the Book of Common Prayer's translation. Note that Eastern Church Christians don't typically accept the Athanasian Creed, but the core problem I identify is shared nevertheless.

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<sup>5</sup> Michael Rea, in his chapter “The Trinity,” 403-404 states that this is called the ‘the logical problem of the Trinity’ by philosophers and ‘the threeness-oneness problem’ by theologians. As a couple of examples, the problem is set out this way by Kleinschmidt, “Many-One Identity and the Trinity”, and by Howard-Snyder, in his introductory entry “Trinity”.

<sup>6</sup> By this, I do not mean to suggest that it is the most important or difficult problem associated with the Trinity, but rather that it is in some sense the most primitive: if we can’t fix this problem there’s just a contradiction being expressed.

<sup>7</sup> For discussion, see Rea, “Relative Identity and the Doctrine of the Trinity”. A sortal is a kind term for some countable kind. ‘Chicken’, ‘statue’ and ‘molecule’ are examples of sortals.

<sup>8</sup> See Cross, “Latin Trinitarianism: Some Conceptual and Historical Considerations” for a discussion of this.

<sup>9</sup> There is much written both in favour of and against the Greek or ‘social’ account of the Trinity. The McCall and Rea collection, *Philosophical and Theological Essays on the Trinity*, especially Part 1, is a good place to begin, and William Hasker’s recent book length treatment in his *Metaphysics and the Tri-Personal God* is a prominent defence.

<sup>10</sup> Leftow, “A Latin Trinity”.

<sup>11</sup> I will discuss in more detail below how the ‘person-structure’ and ‘substance-structure’ of the divine come apart. It’s worth flagging here, though, that although extended simples are easily understood on a substantialist view of space, where space is something over and above its occupants, substantialism is not necessary for extended simples. For an anti-substantialist view of space might still hold that space can be constructed on the basis of the best systematisation of distance relations between entities, and on this basis some simple entity might be multiply located in space. Such an entity would have distance relations to other objects that are inconsistent with its occupying a single point of space. So space being relational doesn’t entail that the location and mereological structure of entities must align. Thanks to David Glick for discussion on this, which was an issue raised by a reviewer.

<sup>12</sup> Wittgenstein’s discussion in the *Tractatus*, 1.13 of logical space is an important precursor to philosophical use of spatial concepts, and my thanks to Brian Leftow for noting this.

<sup>13</sup> Perhaps it is too asking too much to grant that a football team can be considered as a single thing. I suspect if one will not grant this, other examples I would appeal to (such as families, committees, or bands) will be no more persuasive. Though it will be helpful for my later discussion if we already have cases where things are



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extended in person-space, if these cases are not accepted it doesn't rule out the divine as a *sui generis* entity with extension in such a space.

<sup>14</sup> This might follow straightforwardly given certain principles governing how and when wholes inherit properties of their parts. But I won't explore this here, as the example is simply indicative.

<sup>15</sup> Another way to frame this issue, suggested by a reviewer, is whether the modal facts from which the points of person-space are abstracted include 'thisness' facts. For what it's worth, I am inclined to view person-space as purely qualitative, and hence permit multiple occupation of points of it by entities exactly similar in ways relevant to personhood.

<sup>16</sup> For discussion of the ontological priority of configuration space and connected issues, see Ney, "Fundamental Physical Ontologies and the Constraint of Empirical Coherence: a Defense of Wave Function Realism" and for discussion of the ontological status of possible worlds the classic text is Lewis, *On the Plurality of Worlds*.

<sup>17</sup> If the reader is uncomfortable with modal facts, or indeed facts in general, we can be deflationary here: simply insert for 'modal facts' whatever it is that does this role in your metaphysics.

<sup>18</sup> The editor, Mark Murphy, has raised the following problem: if person-space is not substantive, isn't my argument that follows simply a reformulation of pre-existing claims in the doctrine? In other words, if I don't make any distinctive claims about what it is to be a person (i.e. occupy a point of person-space) or posit person-space to be an additional ontological ingredient, what more am I saying than that God is Father, Son and Spirit?

I think this is a good challenge. I have two replies. Firstly, I'm certainly not trying to say something that is different to the doctrine, and perhaps not much beyond the doctrine. So I'm reasonably happy if the position is a reformulation of that doctrine, albeit hopefully more precise in certain ways. Secondly, the reformulation of the doctrine in these terms allows us to see the conceptual space between being a certain person and being a certain entity that, I think, the doctrine tacitly relies upon. That is, my discussion can show the *coherence* of the pre-existing claims, a coherence that becomes apparent by the reformulation. The reformulation permits distinctions between different structures that were previously obscured. These distinctions show how the Trinitarian position is not contradictory in the way outlined in Sect. i.

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Further, the analogy with extended simples suggests that philosophers in other areas are willing to countenance very similar moves. So the use of person-space may still be dialectically helpful even if, on my deflationary understanding, it doesn't add *content* to the Trinitarian claims.

<sup>19</sup> I wish to flag something here that will be important for later discussion. I take person-space to be a mechanism for formalising claims about personhood, without adding anything ontologically or metaphysically serious. But being deflationary about person-space and its points is *not* being deflationary about the personhood facts. Although person-space is not fundamental in the sense that it describes pre-existing claims, this does not mean that those claims themselves are not fundamental. By reducing person-space to facts about possible persons, I do not mean to reduce the facts about possible persons to anything else. This is important for my response to the threat of modalism, and will be mentioned again later in the paper.

<sup>20</sup> This is not to say that any particular thing can occupy any particular point of person-space: it would seem extremely natural to assert that there are constraints on the range of points that particular things might occupy. But person-space gives us the range of possible ways that *any* thing can be a person.

<sup>21</sup> This typical view is probably akin to the views of Sabellius, who was the figure against whom responses to modalism were first formulated.

<sup>22</sup> My thanks to one of the reviewers for raising the issue tackled in this section, which also required revising the scope of the paper, and to Brian Leftow for discussion.

<sup>23</sup> There are also be other properties that seem true of one of the Persons and not another. For instance, it could be argued that (while incarnate) the Son doesn't know everything that the Father does. I can't enter into this debate here. But what I say about the relations of origin will generalise, if necessary: I therefore focus on this particular example from here on.

<sup>24</sup> Those who allow for heterogeneous extended simples include Parsons, "Distributional Properties", Markosian, "Simples, Stuff, and Simple People", and McDaniel, "Extended Simples and Qualitative Heterogeneity". Certain existence monists, who believe that there is only one thing and that it is simple, would presumably also subscribe to variation across that thing (as does Schaffer in, "From Nihilism to Monism"). Of course, heterogeneous extended simples are not without their detractors, e.g. Spencer, "A Tale of Two Simples".

A *prima facie* reason to think such variation over space can be argued for is the analogy to the problem of temporary intrinsics, where a parallel indiscernibility of identicals challenge is raised for objects

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enduring (i.e. being numerically identical) despite variation over time. But I cannot make this argument here and will simply assume the possibility of heterogeneous extended simples.

<sup>25</sup> Parsons, “Must a Four-Dimensionalist Believe in Temporal Parts?” and his “Distributional Properties” introduce these properties.

<sup>26</sup> As an aside, we can find some further support for the possibility of fundamentally distributional properties from a couple of sources. Firstly, if spacetime is gunky (i.e. if spacetime is infinitely divisible and has no points), all properties of objects located in this spacetime will be fundamentally distributional. Secondly, if any properties are emergent in a certain way (i.e. don’t supervene on the properties of point-sized objects), these properties will also be fundamentally distributional.

<sup>27</sup> See, again, Parsons “Must a Four-Dimensionalist Believe in Temporal Parts?”.

<sup>28</sup> There are, of course, criticisms of the distributional properties solution to the problem involving heterogeneous extended simples. McDaniel, “Extended Simples and Qualitative Heterogeneity” is a prominent critic. A central worry is that the distributional properties are underinformative. The speckled hen, for example, remains speckled regardless of where the speckles are on her body. But, McDaniel argues, the different ways for her to be speckled cannot be captured if being speckled is a fundamentally distributional property. This issue, while important, is not relevant for us. This is because the points of physical space that an extended simple occupies are qualitatively identical, and so distributional properties cannot distinguish between points of this space. Points of person-space, by contrast, are not qualitatively identical and hence a fundamental distributional property across this space can be orientated (see the next paragraph). Thanks to a reviewer for encouraging me to think about this.

<sup>29</sup> My thanks to Mark Murphy for raising this concern, and offering the first of the solutions I mention.

<sup>30</sup> See, for instance, Mellor, *Real Time*, 111-114 and Haslanger, “Endurance and Temporary Intrinsic”. The idea is that properties (or the having of properties) are relative to a time, thus avoiding the charge that when an object changes one and the same thing has incompatible properties.

<sup>31</sup> Thanks to a reviewer for pointing this out. The issue is that substantivalism about time and space makes much more plausible the relativisation to them posited by certain endurantist and extended simple solutions respectively (argument to this effect in the endurance case can be found in Ted Sider, *Four-Dimensionalism*, 113ff. I don’t find this totally convincing, but here is not the place to say why (though see also note 11). My own views on endurance and change, at least, do not require this (see Pickup, “A Situationist Solution to the

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Ship of Theseus Puzzle” for some indicative material). At any rate, the pairing of a substantialist view of person-space with relativisation to that space is not something I am ruling out. As I have said, though, I prefer the pairing of anti-substantialism about person-space and fundamental distributional properties (which do not require relativisation).

<sup>32</sup> See Markosian, “Simples, Stuff, and Simple People”, which spells out further some thoughts from his “Simples”.

<sup>33</sup> Another option is to take God to be in some sense composed of divine ‘matter’, distinct from the divine thing. This matter would be complex, with exactly three parts (corresponding to the Persons). This is suggestive but not something I’ll investigate here.

<sup>34</sup> See Sect. ii above.

<sup>35</sup> This is how McDaniel, “Extended Simples and Qualitative Heterogeneity” develops the solution. It draws on a similar solution to the problem of temporary intrinsics outlined by Ehring, “Lewis, Temporary Intrinsics, and Momentary Tropes”.

<sup>36</sup> As noted above, it would take further work to establish this for Markosian’s solution.

<sup>37</sup> I am grateful to Dani Kodaj for this example, and the point it makes.

<sup>38</sup> If counting by persons and counting by entities gives different results, this might seem to suggest my solution is a variant of a relative identity view. But this isn’t actually so. If I see three of the same brand of car, counting by cars and counting by brands of car will give different results. This doesn’t require relative identity, but just that cars and brands of car are not in a one-to-one correspondence. Thanks to Mark Murphy for highlighting this possible concern.

<sup>39</sup> Leftow, “A Latin Trinity”: 315

<sup>40</sup> See *ibid.* p309-311 for discussion.

<sup>41</sup> For this ‘spanner’ approach see, e.g., McDaniel, “Extended Simples”.

<sup>42</sup> This paper has greatly benefitted from the input of a number of people, including Mark Murphy, two referees for this journal, Brian Leftow, Gonzalo Rodriguez-Pereyra and my colleagues on The Metaphysics of Entanglement project based in the Faculty of Philosophy, Oxford University. I am grateful to them all, and to the funder of our project, the Templeton World Charity Foundation.