

## More Problems for MaxCon: Contingent Particularity and Stuff-Thing Coincidence

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**Abstract** Ned Markosian argues (Australasian Journal of Philosophy 76:213–228, 1998a; Australasian Journal of Philosophy 82:332–340, 2004a, The Monist 87:405–428, 2004b) that simples are ‘maximally continuous’ entities. This leads him to conclude that there could be non-particular ‘stuff’ in addition to things. I first show how an ensuing debate on this issue McDaniel (Australasian Journal of Philosophy 81 (2):265–275, 2003); Markosian (Australasian Journal of Philosophy 82:332–340, 2004a) ended in deadlock. I attempt to break the deadlock. Markosian’s view entails stuff-thing coincidence, which I show is just as problematic as the more oft-discussed thing-thing coincidence. Also, the view entails that every particular is only contingently so. If there is a world  $W$  like our own, but with ether, then there would be only one object in  $W$ . But, since merely adding ether to a world does not destroy the entities in it, then  $W$  contains counterparts of all the entities in the actual world—they just are not things. Hence, if simples are maximally continuous, then every actual particular is only contingently so. This in turn entails the following disjunction: (i) identity is contingent or intransitive, or (ii) there are no things at all in the actual world, or (iii) the distinction between stuff and things is one without a difference. I recommend that we reject this stuff-thing dualism.

**Keywords** Stuff ontology · Substance · Simples · Ordinary objects · Coincidence · Material constitution · Mereology

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## 1 Introduction

Are all the concrete inhabitants of the world things? Or are there, distinct from things, also portions of stuff? Ned Markosian holds that a stuff/thing dualism is entailed by the correct answer to the 'Simple Question':

What are the necessary and jointly sufficient conditions for an object's being a simple?<sup>1</sup>

Simples are entities which have no proper parts. It is often illegitimately taken for granted that something has no proper parts just in case it is point-sized.

Markosian, after criticizing the standard 'pointy' view of simples, and some others, proposes instead that simples are 'maximally continuous objects,' the intuitive idea being that 'simples are objects that occupy the largest matter-filled, continuous regions of space around.' (1998a: 222) More formally, we have the following definition:

*x* is a *maximally continuous object* = df *x* is a spatially continuous object and there is no continuous region of space, *R*, such that (i) the region occupied by *x* is a proper subset of *R*, and (ii) every point in *R* falls within some object or other.<sup>2</sup>

The view is then stated as:

*The Maximally Continuous View of Simples* (MaxCon): Necessarily, *x* is a simple iff *x* is a maximally continuous object. (1998a: 222)

It is consistent with MaxCon that there are point-sized or 'pointy' simples, and all manner of extended simples, in any shape or size you can imagine, just so long as they occupy a continuous region of space which is not continuous with any completely matter-filled larger region. There can be a donut-shaped simple, because, even though there is a gap in it, it is possible to trace a line-sized path from any point in the simple to any other without ever leaving some occupied space.

Consider, however, a maximally continuous sphere. Call it, following Markosian, 'Spero.' One would think that such a sphere has parts, such as a left and a right half, which are distinct from each other and from Spero. *No*, says the MaxConner. The sphere has no proper parts at all. The sphere is made up of some stuff, some of which occupies the left half of the region occupied by the sphere, some of which occupies the right half of the region occupied by the sphere. The putative 'halves' are in fact two portions of stuff which are not parts of the sphere, because parts are things, and portions are not (Markosian 1998a: 222-3).

<sup>1</sup> Markosian 1998a: 214. Markosian also states that answers to the Simple Question will typically be instances of this schema: (S) Necessarily, *x* is a simple iff \_\_\_\_\_; where the blank ought to be filled in by a substantive criterion.

<sup>2</sup> Markosian 1998a: 222. Note that Markosian's definitions in 1998a and 2004b are based on those in Richard Cartwright's classic 'Scattered Objects' (in Lehrer 1975: 153-171). But, where Markosian speaks of an object's spatial continuity or not Cartwright speaks of its connectedness or not. Note, a spatially continuous object is one that occupies a continuous region of space, regardless of the shape. There must be no gaps.

At this point I must make a necessary stipulative terminological aside. Necessary, because ‘thing,’ ‘object,’ or ‘substance’ talk in philosophy is a non-standardized mess.<sup>3</sup> In the following paper, I shall use ‘object,’ ‘thing,’ and ‘particular’ interchangeably, and by these terms mean (non-property and non-abstract) entities which can exist (as things) while being a proper part of something, can exist independently from each other, and are not correctly referred to by a plural expression. However, I shall use the terms ‘individual,’ ‘portion,’ and ‘entity’ and their grammatical cognates to refer neutrally to things/stuff, leaving it open whether the referents are particular. I will frequently be distinguishing between particulars and non-particulars. The distinction here, as you will see, is not between, on the one

<sup>3</sup> All of the following terms have been used to indicate particular entities: *thing, object, entity, being, individual, item, unity, particular, term, existent, substance*, and so on. However, the term ‘substance’ (at least in its classical use) connotes independent existence, whereas ‘particular’ does not. (Tropes, if there are any, are particular, but do not have independent existence). ‘Term,’ which Russell used to refer in the widest possible sense, would seem also to refer to stuff such as the gold on my finger, since the gold exists. But ‘term,’ is often equated with ‘individual,’ which usually connotes particularity, thus seemingly begging the question against the stuff ontologist in regards to whether all of being might contain the non-particulate. We can see by the following how the question is begged against the stuff ontologist: “Whatever may be an object of thought, or may occur in any true or false proposition, or can be counted as one, I call a term. This, then, is the widest word in the philosophical vocabulary. I shall use as synonymous with it the words unit, individual, and entity. The first two emphasize the fact that every term is one, while the third is derived from the fact that every term has being, i.e. is in some sense. A man, a moment, a number, a class, a relation, a chimera, or anything else that can be mentioned, is sure to be a term.” (Russell 1937, p. 43). However, some stuff or process theorists use ‘individual’ to refer in the widest possible sense, so as to be neutral on the question of whether all existents or items are objects: “Dynamic masses are non-countable, non-particular individuals...” (Seibt 2000, p. 241). There is the additional problem of differentiating between what we could call the formal or logical notion of ‘thing,’ and the meaty notion of thing, such as ‘physical object’ or a particular which falls under a (count) substance sortal. (Note that nothing in the following paper will depend on distinguishing between thin and thick particulars, namely, distinguishing between bare substrata alone and substrata plus their properties). There is also the problem that every seemingly grammatical way to talk about stuff or stuffs, where we pick them out with singular reference, seemingly implies that the referents of stuff-talk are particulars. This quote by Mill I think shows the difficulty with this (although with an analogue, *attributes*, rather than stuff):

When we shall have occasion for a name which shall be capable of denoting whatever exists ... there is hardly a word applicable to the purpose which is not also ... taken in a sense in which it denotes only substances. But substances are not all that exists; attributes, if such things are to be spoken of, must be said to exist ... . Yet when we speak of an object, or of a thing, we are almost always supposed to mean a substance ... . If, rejecting the word Thing, we endeavor to find another of more general import, a word denoting all that exists.... no word might be presumed fitter ... than being ... . But this word ... is still more completely spoiled for the purpose ... . Being is, by custom, exactly synonymous with substance ... Attributes are never called Beings ... . In consequence of this perversion of the word Being, philosophers ... laid their hands upon the word Entity ... . Yet if you call virtue an entity, you are ... suspected of believing it to be a substance ... . Every word which was originally intended to connote mere existence, seems, after a time, to enlarge its connotation to separate existence ...” . (Mill 1874, 30-31. Quote and paraphrase from Laycock 2002, fn 3).

With this stew of usage, we can do two things—despair, or stipulate. I choose the latter. More ideally, I think, the stuff/thing distinction should be in large part constrained by the mass-noun/count-noun distinction. But, in Markosian’s work on stuff, he does not really track this distinction. ‘Portions’ can be pluralized, counted, and in many ways act exactly the same as the referents of count-nouns, namely, *things*. For some of the best work on the mass-noun/count-noun distinction, see Pelletier and Schubert (1989). For the implicit commitment by most metaphysicians to the ‘object-thesis’, or the notion that all of being is ultimately particular, see Laycock (2002).

hand, the particular and concrete, versus, on the other hand, the universal and abstract. No, the distinction here is between particular entities, such as tables and chairs, versus entities which the opposition holds are concrete, but not particular or ‘objectual,’ such as portions of matter, like the water in my glass, or the stuff that constitutes my body.

Now we can understand Markosian to mean that the two portions of Spero are concrete, non-particular entities.<sup>4</sup> As Markosian says:

Let us distinguish between two kinds of ‘part’. On the one hand, there are what we might call ‘metaphysical parts’, which are the things that actually compose composite objects, and each of which is a genuine object in its own right. And on the other hand, there are what we might call ‘conceptual parts,’ which may or may not be genuine objects, but which correspond to the sub-regions of the region of space occupied by an object, along with the matter, or stuff, that fills those sub-regions. The idea, then is that in at least some cases, when we talk about the ‘parts’ of an object, we are really talking about its conceptual parts. Moreover, it seems to me that talk about the conceptual parts of an object, whenever it makes sense, can be translated into talk about the sub-regions of the region occupied by that object, along with the matter that fills those sub-regions (1998a: 224).

So, Markosian believes in the possibility of what are called ‘extended simples’. Markosian is joined in this belief by contemporaries such as Scala 2002 and Simons 2004, who agree in many ways with those who have been classically called ‘potential-parts theorists.’ Potential-parts theorists can claim such august company as Aristotle and Hobbes.<sup>5</sup> The potential-parts theorist, like the believer in extended simples, holds that maximally continuous extended objects are unitary substances, and are not made up of distinct objects (i.e., parts), even if they are divisible. Such non-parts are called ‘potential parts’, or, ‘conceptual parts,’<sup>6</sup> or just ‘portions of stuff,’ where, ‘it must be claimed that portions are not things.’<sup>7</sup> (Markosian 2004b: 409). Contrast potential parts theory with ‘actual parts’ theory. Actual parts theorists maintain that every possible division of an extended continuous body corresponds to an actually existing entity, whose existence predates the possible division.<sup>8</sup>

<sup>4</sup> I believe Laycock first uses the term ‘concrete non-particulars’ in Laycock (1975).

<sup>5</sup> See, for instance, the *Metaphysics* 1019a3–14. Aristotle, however, is far more ambivalent about potential parts in *On Generation and Corruption* 315b24–317a18. In regards to Hobbes, see *De Corpore* i.95–7, 108 in Molesworth (1992), and Thomas White’s ‘*De Mundo*’ Examined, in Whitmore Jones (1976), p. 29. My source for Hobbes on this topic is Holden (2004), where one will find an excellent treatment of the debate between actual and potential parts theorists in the Early Modern period.

<sup>6</sup> Markosian 1998a: 224. Note some similarities of conceptual parts with what Hume in the *Treatise* calls mere ‘distinctions of reason.’ (1.1.7)

<sup>7</sup> Note that this use of ‘portion’ is intended to be semi-stipulative, not part of an analysis of ‘portion’.

<sup>8</sup> Actual parts theorists, in the Early Modern period, include Reid, Descartes, Charleton, Galileo, Clarke, and many more. (see Holden 2004: chapter 2). For a direct statement, here is Thomas Reid: ‘There seems to be nothing more evident than that all bodies must consist of parts, and that every part of a body is a body, and a distinct being, which may exist without the other parts. ... when (matter) is divided into parts, every part is a being or substance distinct from all the other parts, and was so even before the division.’ (Reid 1863 edn: i323). Most current analytic metaphysicians either explicitly avow actual parts doctrine, or at least implicitly support it. This seems to be the default position. For a current statement of the view, see Zimmerman 1996: 8.

In what follows, I attack MaxCon and its stuff-ontological corollaries. The paper has three main sections. In section 2, I briefly summarize some recent arguments between Markosian and Kris McDaniel, and note that this exchange has resulted mostly in deadlock or ‘intuition bashing.’ While Markosian has not adequately elucidated the notion of concrete non-particulars, and has not shown us how we can speak of such things without being committed to their being particular, neither has McDaniel shown that it cannot be done. Furthermore, while McDaniel has given us a principle (called ‘SoC’) which, when conjoined with a principle I’ll call ‘QD’, contradicts MaxCon, we have not been given the tools to decide between the *modus ponens* and *modus tollens* response to this conditional:

(C) If MaxCon is true, then the conjunction of SoC and QD is false.

In the rest of the paper, I will break the impasse by showing further awkward consequences of accepting MaxCon.

In section 3, I point out how stuff-thing coincidence, or what I dub ‘stoincidence’, which some think is free from the problems of regular thing-thing coincidence, in fact is not.<sup>9</sup> It is just as problematic as the more oft-discussed thing-thing coincidence. If one thinks that thing-thing coincidence is a problem, then one should believe stuff-thing coincidence is a problem as well.

In section 4, I show how MaxCon entails the strange and problematic principle that every particular is only contingently a particular. This doctrine of contingent particularity itself entails that either (1) we should not believe in *things* at all, or (2) identity is either contingent or intransitive, or (3) the distinction between stuff and things is a distinction without a difference. Since all of these entailments are unpalatable, then, MaxCon, the principle which entails their disjunction, ought to be rejected. Lastly, as another way of getting at the problems of contingent particularity, we will look at the possibility of a ‘Plenum World’. This world is just like ours except that, where there is (I assume) empty space in our world, in Plenum World this space is packed completely full of inert ether. In this world, if MaxCon is true, then there would be only one object, and talk in that world would not track particulars at all but rather non-particular portions. But, this would be wrong. Since our counterpart’s talk in Plenum World *would* track particulars, MaxCon is false. While this critique is, strictly speaking, question-begging, it helps draw out what the proponent of MaxCon must be committed to, and what intuitions would need to be dropped, e.g., that in a densely packed world, there could be more than one object.

## 2 Problems With Non-Particular Portions: Clarifying the McDaniel-Markosian Debate

Markosian calls the entities such as the matter that fills the arm-shaped region of a maximally continuous statue, or the left half of Spero, not only conceptual parts, but ‘portions’ (2004b: 409). But what are these portions? Aren’t portions *things*? ‘No’,

<sup>9</sup> See Burke 1997:12; 1994, section VI; Laycock 2006; Rudder Baker 2000: 181, and Markosian 2004b: 408–9, and section 4, for examples where some assert that there is no, or not much, problem with thing-stuff coincidence.

says Markosian. Markosian replies to the sneaking suspicion that his portions are really just things in the following way:

Talk of portions of matter might sound suspiciously like talk of things, namely, *portions*. But...it must be claimed that portions are not things. If someone should insist that in talking about stuff I avoid even the appearance of thing talk and thing quantifiers, I would be happy to do so, although the result might involve some strange-sounding locutions. For example, thesis (2) above<sup>10</sup> would have to be phrased this way: For every object, and for every time at which that object is present, there is some matter such that that matter constitutes that object at that time and for any other matter it is not the case that that other matter constitutes the object at that time (2004b: 409).

Indeed, despite what Markosian says, one does have the suspicion that all this ‘portion-not-thing’ and ‘stuff-not-thing’ talk is just veiled thing talk. Markosian gives the following reasons for denying that stuff-talk is reducible to thing-talk. (1) Allegedly, he can translate all quantification over portions into talk which does not quantify over them as particulars (1998a: 223–4; 2004b: 409; 2004a: 334). (2) Stuff has different modal properties than things do. I will address (2) later, since this commits Markosian to problematic stuff-thing coincidence, the subject of the next section. The problem with (1), however, is that although Markosian assures us that he can, he never delivers the translation template or paraphrase scheme, so we’ve been given no compelling reason to believe that all reference to portions as particulars can be eliminated (we will talk about this further below when I point out how, in a Plenum World, where all our counterparts are stuff-portions, the only way that he can seemingly eliminate reference to things and succeed in respecting our intuitions about what is true, is by asserting that portions of stuff are exactly like things. But, if he does this, the whole motivation for a stuff-thing dualism collapses).

When Markosian is challenged to defend the notion that there *are* portions that *are not* things, his replies are somewhat weak. Kris McDaniel, in ‘Against MaxCon Simples’ argues against Markosian:

Matter as Markosian conceives it seems to be very thing-like; it can fall under different kinds, instantiate properties, change position in space, persist through time, and undergo change; moreover, matter always comes in *thing-like* portions. In order for talk about matter to do the work that Markosian wants it to do, we need the resources of quantification over portions of matter. Why don’t they count as *things*? (2003: 270)

Markosian’s replies to the above are as follows:

- (A) ‘First, I would say that matter does *not* always come in thing-like portions, since many portions of matter are altogether unlike any thing at all.’
- (B) ‘Second, I would say that although matter may be *similar* to things in certain ways, insofar as matter has properties, etc., nevertheless, that doesn’t make it true that each portion of matter is *identical* to some thing or other.’

<sup>10</sup> Namely, ‘(2) *For every object, and for every time at which that object is present, there is exactly one portion of matter that constitutes that object at that time.*’ Markosian 2004b: 409, italics his.

- (C) ‘I admit that I am committed to there being special quantifiers that range over portions of stuff...I will insist (as anyone who holds the irreducibility of stuff thesis must) that the relevant stuff quantifiers are not in any way equivalent to or even reducible to thing quantifiers.’ (2004a: 334).

With (A), Markosian seems to be talking past McDaniel. ‘Thing’ has, in this context, two salient readings. One is that by ‘thing’ we mean a commonsense object, a medium sized dry good. The second sense of ‘thing’ is formal—a thing is an item of quantification, where items of quantification include ‘things’ such as an army, a heat wave, or a trade surplus. Anything we can quantify over is a *thing*, in this sense, even if not a commonsense object. It seems that McDaniel was asking why it is that portions do not get treated as standard items of quantification, and Markosian replies that this is because portions are not commonsense objects. But, since many entities which are not commonsense objects get quantified over in the standard way, Markosian hasn’t replied to McDaniel’s complaint. (B) and (C), while not exactly question-begging replies, come close to being so. McDaniel asks what reasons we have for treating stuff any differently than things, implying that in ‘Simples’ Markosian has not given us good enough reasons to suppose that we should. Markosian’s reply with (B) is to repeat a gloss on a conclusion he argued for in ‘Simples,’ and, in (C), to insist that he has already been employing, or that we already employ, ‘stuff quantifiers.’ But this reply is made in the context of McDaniel’s puzzlement as to what these quantifiers would be, whether the idea is coherent, and why we would even need them.

Skipping over a wealth of interesting detail, I now want to focus on what seemed to be the strongest reasons McDaniel gives for holding that there cannot be portions which are not things. Now, a few caveats. The dialectic gets a little confusing since some mistakes were made by McDaniel and Markosian in their exchange. To make everything clear, first I will lay out how the dialectic was, and then lay out how it should have been.

McDaniel’s main argument against MaxCon is based first on defending the following three principles:

*The Supervenience of Constitution (SoC)* Necessarily, for any portion of matter that constitutes some object,  $z$ , any qualitative duplicate of that portion of matter constitutes a qualitative duplicate of  $z$  (2003: 271).

*The Portion-Parts Principle (PPP)* Necessarily, for any material objects  $x$  and  $y$ ,  $x$  is a part of  $y$  if and only if the matter that constitutes  $x$  is a portion of the matter that constitutes  $y$  (2003: 270).

*The Doctrine of Arbitrary Undetached Portions (DAUPO)* For every material object,  $M$ , if  $R$  is the region of space occupied by  $M$ , and if sub- $R$  is any occupiable sub-region of  $R$  whatever, there is a portion of matter that exactly fills the region sub- $R$  (2003: 272).<sup>11</sup>

<sup>11</sup> Actually, Markosian himself embraces a principle even stronger than DAUPO in 2004a. He accepts the “Doctrine of Wholly Arbitrary Portions” (DWAP), which states ‘For every region of space,  $R$ , such that every point in  $R$  is filled with matter, there is a portion of matter that exactly fills  $R$ ’ (2004a: 337).



SoC, McDaniel notes, is ‘extremely plausible.’ It just says that any qualitative duplicate of some matter which constitutes an object would be qualitatively identical to the object it is a duplicate of:

Surely whatever factors determine that these objects compose something have nothing to do with what occurs outside of the region occupied by the objects in question; instead, whether composition obtains is entirely a local matter determined...by the intrinsic properties and relations instantiated by those objects (2003: 271).

As we will see, SoC, despite the initial impression, is not directly in conflict with MaxCon, and contradicts MaxCon only if it is also supposed that qualitative duplicates of objects are always objects as well.

PPP, McDaniel notes, is also ‘extremely plausible’ (2003: 270). And it does seem obvious that if there are two *objects*, and all of the matter that constitutes one also constitutes a part of the matter that constitutes the other, then the one is a part of the other. Lastly, DAUPO is pretty intuitively obvious. However, it is not obvious, and it is indeed in question, whether sub-portions of matter are objects or things.

Now, with these principles in hand, McDaniel’s argument against MaxCon is as follows:

Imagine two disjoint continuous regions exactly filled with homogenous stuff of the same kind. The first region is spherical with a radius of one meter; call this region ‘Sphere’. The second region is a semi-sphere one-half the size of Sphere; let’s call this region ‘Semi’. We have at least two objects in this story: one that exactly occupies Sphere—let it be named ‘Ball’—and one that exactly occupies Semi—let it be named ‘Drum’. According to SoC and the claim that there is matter occupying the bottom half of Sphere, there is a third object which occupies the bottom half of Sphere—let it be named ‘Bottom’—that is a qualitative duplicate of Drum. Given our allegiance to PPP, it follows that Bottom is a proper part of Sphere. But if MaxCon is correct, Sphere has no proper parts. So from the claim that the bottom half of Sphere is filled with matter (DAUPO) and SoC we can infer the falsity of MaxCon (2003: 271-2).

The problem with this argument is that PPP, SoC, and the claim that the bottom half of Sphere is filled with matter (an entailment of DAUPO) *do not* entail that in the situation described there would be an *object*, Bottom, which occupies the lower half of Sphere. All that PPP, SoC, and DAUPO together entail is that there is a qualitative duplicate of Drum, which occupies the lower half of Sphere. The aforementioned premises strictly speaking leave it open whether Bottom is an *object* or merely a *portion of matter*. Let’s see why.

SoC and DAUPO, in the situation McDaniel describes, would entail that there is a qualitative duplicate of Drum, which occupies the lower half of Sphere, i.e., Bottom. PPP would imply that, *if Bottom were an object*, it would be a part of Ball. The claim that ‘the bottom half of Sphere is filled with matter’ is a red herring—certainly Markosian could grant that. Still, the conjunction of that claim with SoC and PPP, does not entail either that Bottom is an object or that it is a proper part of Ball. In fact, PPP is irrelevant as well. It doesn’t have the strength (either by itself, or in conjunction with SoC), to let one infer from the fact that some matter composes a



proper portion of something that that matter is in fact identical with some *thing*, namely, a part. What McDaniel really wants is the SoC principle, not alone, but in addition to the principle I will call ‘QD’:

*The Supervenience of Constitution (SoC)* Necessarily, for any portion of matter that constitutes some object *z*, any qualitative duplicate of that portion of matter constitutes a qualitative duplicate of *z*.

*The Qualitative Duplicate Principle (QD)* Any qualitative duplicate of an object is an object.

If these two principles are true, then MaxCon would indeed be false.<sup>12</sup> This is because, given McDaniel’s example, SoC entails that Bottom is a qualitative duplicate of Drum, and QD entails that Bottom is an object.

However, the ease with which SoC and the added QD defeats MaxCon also shows why these principles cannot be jointly employed without begging the question against Markosian. Markosian can just admit that Bottom is a qualitative duplicate of Drum. He would surely reject QD, though. What is it to hold MaxCon other than to deny that qualitative duplicates of objects are necessarily objects, especially when continuous with larger matter-filled regions?

That said, however, Markosian’s own defense of MaxCon against McDaniel’s argument is strange. Markosian states that while MaxCon, SoC and DAUPO are an inconsistent triad, this is only because SoC is inconsistent with MaxCon (2004a: 336). This is strange, since McDaniel’s claim is that MaxCon is inconsistent with DAUPO, SoC, and PPP, and Markosian’s summary of McDaniel’s argument against MaxCon based on SoC does not mention PPP.<sup>13</sup> Instead, he says that the “MaxConner must reject SoC in any case,” not noticing that SoC is actually consistent with MaxCon (2004a: 336).

Markosian seems to read QD into SoC, since he notes (incorrectly) that, it entails that a part of a maximally continuous statue (say, the arm) is also an object. It is for this mistaken reason that he rejects SoC. I take this as evidence that Markosian would reject QD.

This is how the dialectic has gone. I recommend that the dispute between Markosian and McDaniel could have been stated much more simply. It has to do with the reaction to this conditional:

(C) If MaxCon is true, then the conjunction of SoC and QD is false.

Markosian recommends the *modus ponens*; McDaniel—the *modus tollens*. But, I think here we have a plain case of intuition-bashing, i.e., a case where two independently compelling but mutually inconsistent sets of intuitions are in a seeming deadlock. Markosian has on his side the notion that whether something is a simple depends on what it is connected to, and that a maximally continuous object has a kind of unity and simplicity that cannot be found in extended objects

<sup>12</sup> Alternatively, we could assume, incorrectly, I think, that *being an object* is a qualitative property. Thanks go to Kris McDaniel for some help and suggestions on this section.

<sup>13</sup> I think this is partly because McDaniel does not make it crystal clear that DAUPO is an essential part of his argument.

with scattered parts. McDaniel has on his side the notion that whether a portion of matter is an object does not depend on what goes on outside it and the intuition that qualitative duplicates of objects are themselves objects. As I see it, although my intuitions support McDaniel's more than Markosian's, looking at things from a detached perspective, McDaniel has done nothing to win over the undecided voter.

I believe we can break the deadlock. In the rest of the paper, I will seek to undermine MaxCon due to its counterintuitive consequences.

### 3 'Stoincidence', or, Stuff-Thing Coincidence

On Markosian's account, there is a thoroughgoing coincidence of things and stuff. The phenomenon of coincidence or 'colocation,' if possible, has many problems. But, it is usually construed as the problem of two or more *things* being in the same place at the same time. It has been noted by others that stuff-thing coincidence is less problematic than thing-thing coincidence.<sup>14</sup> Markosian can rightly say that, on his account, he does not have coinciding *things*, rather, his account only entails that every *thing* coincides with some *stuff* which it is distinct from.<sup>15</sup> (Note that there are two kinds of stuff-thing coincidence, that between a simple thing and some stuff, and a composite thing and some stuff. We will usually be concerned with the coincidence between simple things and stuff in what follows).

This possible response should provide no comfort for Markosian. Let's call the coincidence between some (non-particular) stuff and a thing 'stoincidence,' short for, 'stuff-thing coincidence.' Stoincidence is no less problematic than thing-thing coincidence. This may not move those who embrace standard coincidence, but, if one thinks that thing-thing coincidence is a problem, then they ought to hold stoincidence to be problematic as well. In the next section we will see some further problems for stoincidence when held jointly with MaxCon, e.g., the entailment of contingent particularity. In this section, however, I will focus on how nothing about stoincidence ameliorates the major objections levied against thing-thing coincidence.

The problems of thing-thing coincidence are many and varied and pointed out in detail elsewhere.<sup>16</sup> As is often noted, a few problems with thing-thing coincidence are: (1) it is intuitively odd, (2) it requires rejecting that what sort of thing a thing is would supervene on its intrinsic properties (see Burke 1994), and (3) it is open to the 'too-many-thinkers' objection (Olson 1997, 2002; Shoemaker 1999a, b).

Does stoincidence avoid these objections? Not at all. First we will see how stoincidence does not get around (1) and (2). Take a simple, maximally continuous

<sup>14</sup> See, for instance, Burke 1994, section VI. Also, Henry Laycock in his 2006, shows his relative insouciance about the stuff-thing coincidence issue, since his position entails a thoroughgoing coincidence of stuff and things, but he does not much discuss it.

<sup>15</sup> Markosian happily embraces coincidence. See 2004b: 408-9. Also, in 2004b, section 4, Markosian often asserts that we can (relatively) unproblematically have the coincidence between a person and some non-particular stuff which constitutes them.

<sup>16</sup> See esp. Zimmerman 1995 and Burke 1994. Of course, some think that coincidence, and the supervenience objection in particular, is not necessarily a problem for the three dimensionalist (see Wasserman 2002 and Sider 2008a, b). I'm not convinced, but tackling this issue would take us outside of the scope of this paper.

cup. Make it come, let us suppose, into perfect contact with another maximally continuous cup. Poof! Both cups go out of existence and are replaced by a new simple, call it a ‘double-cup’. While both cups go out of existence, the *stuff* they are made out of does not, so now we have two cup-portions-not-particulars coinciding perfectly with the double-cup.

What is the relation between the cup-portions and the cups before the contact? They are not identical, since the cup-portions, but not the cups, can survive perfect contact. According to Markosian, the cup-portion was *constituting* the cup. But, why isn’t the cup-portion a cup? It is cup-shaped, it can be drunk out of, it will shatter if dropped, and so on. How do we differentiate the cup from the cup-portion, since both are made up of the same stuff, with all the same intrinsic properties?<sup>17</sup> How can the cup-portion *fail* to be a cup? Markosian cannot say that the intrinsic properties of a thing make the thing a cup—since the cup and cup-portion have all the same intrinsic properties—and the cup-portion is not a cup. So he must say that (in part) some modal or extrinsic properties of a thing make a thing a cup. Part of what MaxCon entails is that ‘being a thing’ is an *extrinsic* property.<sup>18</sup> The cup and the cup-portion’s only difference is that the latter, but not the former, is in perfect contact with something. Since we are supposing that the cup goes through no intrinsic change by coming into contact with the other simple cup, then it follows that whether or not a thing-candidate is indeed a thing depends on what goes on outside of it. Hence, ‘being a thing’ is not an intrinsic property.

But, how can we think *de re* of the cup, for instance, and not the cup-portion, in order to differentiate their modal or extrinsic properties, unless we’ve *already* differentiated them by their intrinsic properties? I don’t see how the appeal to stuff helps us get around the objection that, if coincidence, or, stoincidence in this case, is possible, then sortal differences would be brute differences. But, sortal differences *cannot be* brute differences.

He can reply, of course, that he has singled out a non-brute, non-arbitrary modal feature that does not appeal merely to intrinsic properties to distinguish cups from cup-portions—namely, the persistence through perfect contact. But this is just puzzling. Why does contact make something go out of existence? It will not do to rely on MaxCon at this point. Furthermore, I don’t think Markosian has firmly squared with how radical his proposal is, which entails that what kind of thing a thing is does not supervene on its intrinsic properties. A maximally continuous person is *not* a (thing-) person when he or she dives into a pool of maximally continuous water.<sup>19</sup> In fact, all a simple person needs to do in order to go out of existence is put their finger tip in the pool (see McDaniel 2003: fn15).

In defense of Markosian, here is one reason to say that contact can make something go out of existence, which can also help us distinguish between a thing and some intrinsically identical stuff, at least in some cases. If Theodore Sider is

<sup>17</sup> See Burke (1994) for arguments like this.

<sup>18</sup> Later I will discuss the nearest principle to this one that has some plausibility, which is that what *kind* of thing a thing is is extrinsic. This is somewhat reasonable, but it does not support Markosian’s principle, which states that it is extrinsic whether an entity is a thing at all.

<sup>19</sup> When we suppose that at least part of the persons body comes into perfect contact with at least some of the water.

right, then many ordinary sortal properties are *maximal*. A property F is maximal, “if and only if, roughly, large parts of an F are not themselves Fs.” (Sider 2001: 357). Properties such as *being a house* are ‘border-sensitive’, in that, whether or not something is a house depends on what is going on around it. If proper parts of houses are not houses (and there is good reason to believe this, since otherwise what we ordinarily count as one house is actually a swarm of numerous, largely overlapping houses), then *being a house* is not an intrinsic property.<sup>20</sup> For instance, suppose we have a house *sans* window, and we call all of its parts taken together *Jerry*. If we attach a window, and the new sum, *Jerry+*, is now a house, then it must be that *Jerry* itself is no longer a house, but rather, a proper part of one (Sider 2001). Fine.

But this reply, which appeals to extrinsic properties, cannot help Markosian distinguish between some stuff and some intrinsically indistinguishable thing in all cases. The simple person who dives into a simple pool of water is not distinguished by being part of a larger thing which is of the same kind. While maximality can help us distinguish between an intrinsically identical simple rock and the non-rock it once was when it was embedded in a larger rock, it cannot help us distinguish between the (now) rock itself and the putatively non-identical stuff it is made of. Furthermore, the maximality criterion cannot help us distinguish between a thing-person and a stuff-person.

This brings us to the ‘too many thinkers’ objection. (see Olson 1997, 2002; Shoemaker 1999a, b) Does arguing that a thing-person coincides with a stuff-person prevent the awkward consequences of standard thing-thing coincidence? No. Markosian deals with some of these issues when he addresses the ‘Maximally Continuous People in Perfect Contact Scenario’ in his paper ‘Simple, Stuff, and Simple People.’ (2004b: sections 3–4).

Suppose that, in another possible world there are ‘simple people’. That is, maximally continuous people. Suppose we have some young lovers Romeo and Juliet. If Romeo and Juliet came into (perfect) contact, then Juliet would go out of existence, given MaxCon. But, intuitively, if Romeo and Juliet came into contact, she would not go out of existence, so, MaxCon is false.

Markosian replies in the following way.<sup>21</sup> Juliet *does* go out of existence, but it’s not so bad for her:

...Juliet need not worry. For while it is true that the thing that is Juliet will go out of existence, it is also true that the stuff that is Juliet will continue to exist. Not only that, but the stuff will continue to support all of the properties—being alive, consciousness, being a person, loving Romeo—that she cares about having....Juliet...will continue to exist, to be alive, to be a person, and to love her Romeo just as much as ever. Being a thing that goes out of existence is not, as it turns out, the worst thing that can happen to a person (2004b: 424-5).

<sup>20</sup> For related issues to Sider (2001), see Unger (1980) and Lewis (1999). Also, see Chisholm (1976), Appendix B. Chisholm argues that some proper parts of tables are themselves tables.

<sup>21</sup> Note that I am skipping over a lot of interesting detail, in order to get to the parts salient for the too-many-thinkers objection.

At least in worlds like this, where there are macroscopic simple objects that remain relatively stable, our naming and individuating practices will actually pick out at least two entities associated with proper names:

...they will be ambiguous in this sense: many names will have two distinct—although intimately related—actual referents at a given time. One of them will be a thing and the other will be some stuff. Similarly with personal pronouns. When I utter the word ‘I’ on this account, my utterance picks out both a thing and a portion of stuff. Each referent has the property of being a person; or, in order to avoid the appearance of treating the stuff in question as a thing, we can say that each referent is *personable*, i.e., exemplifies the property of personhood (Markosian 2004b: 423).

So, Markosian’s reply is that ‘Juliet’ refers to at least two entities—or the entity pair as a whole—Juliet the thing-person and Juliet the stuff-person. After Juliet comes into perfect contact with Romeo, tokens of ‘Juliet’ cease to refer to a thing-person, but continue to refer to a stuff-person. Before examining this in detail, let me explain what is wrong with standard coincidence in regards to the too-many-thinkers objection.

Suppose that Queen Elizabeth coincides with a distinct, but particular, mass of matter. They are distinct since Queen Elizabeth can lose parts, but the mass cannot. Suppose Queen Elizabeth thinks, truly, ‘I once had high-tea in Morocco.’ Does the (mere) mass of matter have the same thought? If it does, then the mass of matter is not a mere mass of matter; it is also a person with a mistaken belief.<sup>22</sup> If the mass of matter does not have this thought, then we must believe that an entity’s thoughts do not supervene on the events going on in its brain; for the mass of matter has the very same events going on in it as the person does. So, if coincidence is possible, we must either believe that, where we think there is one person, there are actually two, or, that an intrinsic duplicate of a thinker somehow is prevented from thinking.

Many coincidentalists will just bite the bullet here. But, can the appeal to a ‘stuff-person’ which is not a thing that stoicizes with a thing-person ameliorate matters? No. Markosian embraces one horn of the dilemma above and accepts that there are two persons where we thought there was only one. Even before Juliet touches Romeo, since stuff-Juliet could survive contact, and thing-Juliet could not, we have two thinkers in the same place at the same time, thinking the same thoughts (e.g., ‘I’m going to go out of existence if I touch Romeo!’), one of them thinking falsely, the other, truly.<sup>23</sup> There is no explanatory gain in supposing that the coinciding portions of matter are non-particular. We solve no difficulties with coincidence that solely thing-countenancing theories do, and merely add some more problems, namely, the puzzlements about the logical and ontological status of portion-talk and portions as pointed out in section 2.. Perhaps Markosian could get out of this problem by saying that Juliet the stuff-person can not be counted, stuff can only be

<sup>22</sup> And, if the mass of matter is a person—who would it be except Queen Elizabeth?

<sup>23</sup> Of course, if *stuff Juliet* scratches her nose, she goes out of existence too. It’s pretty rough, and short, being Juliet on Markosian’s account. Of course, if he wants to say that Juliet will continue existing even if she touches Romeo while scratching her nose, then there must be at least *three* people in the same place at the same time. Thanks to Kris McDaniel for help and suggestions on this point.

measured or packaged by prefaced partitive phrases. I'm not sure how this would help. For, while a thing-person is, trivially, a thing, a stuff-person is not. Stuff people cannot be counted. So, while there is *more* than one person, there are not two. Strange! Just how much Juliet is there? One person's worth of person stuff? In any case, though, this is a direction which Markosian does not go in.

#### 4 Contingent Particularity

It is hard to know what to do when your opponent embraces what you believe to be a *reductio* of his position (i.e., there being 'two' coinciding and intrinsically indistinguishable persons), but perhaps I can show some further entailments that would make matters even worse for stuff-thing coincidence than I have shown already. I think that the reply Markosian gives to the Maximally Continuous People in Perfect Contact Scenario is supposed to be generalizable. That is, just as Juliet the-stuff-person will survive perfect contact, so will stuff-cups, stuff-dogs, etc., survive contact. But, if this is right, then *every* particular is only contingently so. Now, as I will show, this will mean either that we shouldn't believe that there are any things at all, or, that identity is neither transitive nor necessary, or, that the distinction between stuff and things is a distinction without a difference. Since none of these are acceptable, and follow from supposing that stoincidence is possible, then we ought to reject stoincidence as a possibility. But, stoincidence follows from MaxCon. So, MaxCon must be false.

Note the oddities in the following:

When I utter the word 'I' on this account', my utterance picks out both a thing and a portion of stuff. Each referent has the property of being a person; or, in order to avoid the appearance of treating the stuff in question as a thing, we can say that each referent is *personable*, i.e., exemplifies the property of personhood (Markosian 2004b: 423).

...for example, if someone says 'Let's call this dog Shun,' while pointing at a particular dog, then a certain episode of dogginess is thereby invoked and attached to the name 'Shun.' From then on...the name refers, at any given time, to whatever portions of stuff is involved in that episode of dogginess at that time (Markosian 2004b: 422).

According to this account, some non-particular stuff can have the property of *being a person* and *being Juliet*. Similarly, we should think, some mere stuff could have the property of *being John's cup*, *being an instance of canis lupus*, and so on.

The predicate, 'being Juliet,' can be either univocal or not when applied to stuff-Juliet or thing-Juliet. If not, then there are *two* properties expressed by the predicate 'being Juliet'; *being a thing-that-is-Juliet*, and, *being some stuff-that-is-Juliet*. But, if this is the case, then some stuff survives and has the property of *being some stuff-that-is-Juliet*, but nothing survives that has the property of *being a thing-that-is-Juliet*. So Juliet does *not* continue to support all the properties she cares about having, if, for instance, she cared about being a thing that is Juliet, or, a thing that

loves Romeo. It seems Markosian would not prefer to have the predicate ‘being Juliet’ be equivocal. This is because, if Juliet cared about both properties, then she would have something to fear before contact, since she will lose one of them. If she cared only about being a thing-that-is-Juliet, she should fear. But, if she only cared about remaining some-stuff-that-is-Juliet, how can this be, unless this is a distinction without a difference from being a thing-that-is-Juliet?<sup>24</sup> And so such predicates should not be equivocal.

So the predicate ‘being Juliet’ should be univocal, which means that the property of *being Juliet*, when had by either some stuff or a thing, ought to be the same property. I do not quite know what it could be for a predicate like ‘being Juliet’ to be univocal except by meaning one and only one property is referred to by the phrase. If this is so, then it is not of the essence of being Juliet to be either a thing or some stuff. Indeed Markosian insists that Juliet goes on persisting even when going out of existence as a thing. But, if Juliet was a thing, but could exist as merely some stuff which is Juliet, then it follows that Juliet the particular, is only contingently a particular. If Markosian’s solution to the contact scenario is to be generalized, we get the result that every (physical) particular is only contingently a particular.

Now, if particulars are only contingently particular, then either (i) we have no reason to believe that there are any *things* at all, (ii) identity is contingent or intransitive, or (iii) the distinction between stuff and things is a distinction without a difference. In any case Markosian is in trouble. Let me now show how at least one of (i) to (iii) follow from the possibility of contingent particularity. We shall see how (i) to (iii) follow from what I believe are exhaustive treatments of what it means for an entity to have the univocal property of *being Juliet*, if MaxCon is true.

One way to understand what it is for an entity to have the property of *being Juliet* in a stuff-ontological context is to interpret it as some (non-particular) stuff to be undergoing an activity or process of ‘Julieting’. For convenience, in the rest of the paper, let us use the terms ‘sthings’, ‘shobjects’, ‘shentities’, and their neologistic cognates as disjunctive terms which can refer to either particulars or putative concrete-non-particulars, such as portions. Now, if something can have the property of *being a building* without there being a (thing) building, then supposing that there are things that are buildings seems ontologically gratuitous. Why multiply entities beyond necessity? Once we have the portions, which we are supposing are not things, can’t we just construe things as stuff having certain complex (singular) properties (*a la* Jubien) or undergoing certain activities? (At least in the context of worlds with simple, non-scattered macroscopic objects) (see Jubien 1993) Cars and rocks are not *things*, rather, non-individuate stuff-portions which are contingently and predicatively ‘carring,’ or, ‘rocking.’ There are other reasons to think this, but, without a defense and a lot of work, we have no reason to think this will work, nor should we accept this lightly.<sup>25</sup> (Also, strictly speaking, Jubien’s treatment in 1993 does not postulate non-particular ‘stuff’. Jubien’s stuff refers to particular portions of matter, where the stuff-talk is used merely to draw attention away from persistence conditions associated with the sortals which these portions only accidentally fall under, such as *being George Bush*.) So, on this interpretation of what it is to have the

<sup>24</sup> I apologize for the ugly usage here and in what follows. I do not know how to improve on this.

<sup>25</sup> I do argue for a position like this in Steen (2008).



property of *being Juliet*, we will need many additional reasons to believe that there are things at all. This is quite ironic considering that the motivation for MaxCon is in part the motivation to affirm that there is stuff in addition to things.

One natural interpretation of what it is to have the property of *being Juliet*, is to say that something has the property of *being Juliet* just in case the sthng is identical with Juliet. But, on this interpretation of *being Juliet*, Markosian would have to say either that identity is not necessary, or that it is intransitive. Here is why. Since, as I argued above, Markosian would have to admit that ‘Juliet’ referred to both thing-Juliet and stuff-Juliet before contact, and only stuff-Juliet after contact, then, on this understanding of having the property of *being Juliet*, first Juliet-the-thing is identical with Juliet, and later only Juliet-the-stuff is identical with Juliet. But, if this is so, then two distinct sthngs became one, or, the thing became the stuff. Hence, something like temporary or occasional identity must be true, and the necessity of identity must be false (cf. Gallois 1998). Alternatively, Markosian could accept the foregoing analysis of *being Juliet*, but instead say that the thing is identical with Juliet, the stuff is identical with Juliet, but that the stuff is not identical with the thing. But then, he would be denying the transitivity of identity. Both these consequences are too high of a price to pay to respect the intuitions behind MaxCon.

Since Markosian would not want to accept that there are no things, that temporary identity is true, or that identity is intransitive, or that objects are just stuff undergoing an activity, he would have to interpret what it is to have the property of *being Juliet* in such a way that it is a distinction without a difference to be a thing with this property, versus being some stuff with this property. He seems to do just this when he states that

...Juliet need not worry. For while it is true that the thing that is Juliet will go out of existence, it is also true that the stuff that is Juliet will continue to exist. Not only that, but the stuff will continue to support all of the properties—being alive, consciousness, being a person, loving Romeo—that she cares about having....Juliet...will continue to exist, to be alive, to be a person, and to love her Romeo just as much as ever. Being a thing that goes out of existence is not, as it turns out, the worst thing that can happen to a person (2004b: 424-5).

Not being a thing is not such a big deal, and being a once-particular, now-portion does not affect a sthng in any important way. A sthng which is now just some stuff can have all the properties we need in things—principles of persistence,<sup>26</sup> individuation, identity and difference,<sup>27</sup> the association of portions with sortals,<sup>28</sup> parthood relations,<sup>29</sup> the bearers of properties,<sup>30</sup> etc., etc. The only two salient

<sup>26</sup> ‘every portion of matter has each of its sub-portions essentially’ (Markosian 2004b: 411).

<sup>27</sup> ‘there is *some* matter such that that matter constitutes that object at that time and for *any other matter* it is not the case that...’ Ibid., p. 409, emphases mine.

<sup>28</sup> ‘When a name is first introduced, it is introduced in connection with an episode of some sortal property...sooner or later, the name comes to be correlated with an episode of some sortal, with the correlation working as follows. For any time at which the name has a referent, the referent of the name at that time is whatever portion of stuff happens to be involved in the episode in question at that time.’ Markosian 2004b: 421-422.

<sup>29</sup> ‘the relation of parthood that relates a thing to a thing and the relation of parthood that relates a portion of stuff to a portion of stuff are the same relation.’ Ibid., p. 411.

<sup>30</sup> Markosian 2004a: 339-40.

properties that separate things from portions of stuff, (on Markosian's account, at least) is that the latter, but not the former, are maximally continuous with something else, and the latter are not given the honorific title of *things*.

One final way of getting at the problems of contingent particularity, and seeing how they follow from MaxCon is by the following thought experiment. Imagine a world, just like our world, with the exception that wherever there is empty space in this world there is instead 'ether' in that world.<sup>31</sup> Call it 'Plenum World.'<sup>32</sup> Ether, if it existed, would be completely space-filling matter that is relatively causally inert, with the exception of being a medium for energy transmission. Not only is this conceivable, but it was thought actual by many scientists until the completion of the Michelson-Morley experiment of 1887.<sup>33</sup> It certainly seems possible. This world would be a true plenum, with no empty space at all. If MaxCon is right, then there is only one object in this world—the whole thing. But, this would be incorrect—there would be many things in Plenum World. So, MaxCon must be incorrect.<sup>34</sup>

Markosian must insist that in Plenum World, our counterparts would refer, when talking about each other, to non-particular portions, not objects. Let's go along with Markosian a little bit here. Let us suppose that in our world, we already use 'stuff

<sup>31</sup> I assume that our world is not already like this.

<sup>32</sup> This is much like Spinoza (and Descartes) thought the world is.

<sup>33</sup> 'Albert Michelson...and Edward Morley...argued that if we were drifting through a sea of ether, like a fish in water, then, if light was a wave in the ether, a light beam shining in the direction of the Earth's motion should behave slightly differently from a beam traveling at right angles to the motion. Using extremely sensitive methods, they found no difference whatsoever. This was one of the great null experiments of all time.' Silver 1998: 198.

<sup>34</sup> For an interesting discussion of the possibility of a plenum world, see Rea (2001). It should be noted that there Rea's treatment is kinder to Markosian's analysis of simples (2001: 141-2). Rea, however, uses Markosian's analysis of what it takes to be a simple, in combination with Rea's other principles which can be used to establish that there is a Plenum World, to support the idea that our world is one simple object, which Markosian does not endorse. Since Rea's arguments for believing that the world is one single object also supports the idea that there is non-particular stuff, namely, any smaller-than-whole-world-sized portions of matter, it behooves me to say something about his paper. First, if Rea is right, then all the criticisms I rally against Markosian in section 4 based on the idea of 'contingent particularity' also count against Rea's proposal. Furthermore, crucial to getting Rea's argument off the ground is what he calls the "Plenum Principle," which is the principle that 'Spacetime is a connected set of points, and every region of spacetime, no matter how small, is filled by matter,' (2001: 130). He gives no argument for this very controversial principle, except by noting that it is consistent with contemporary physical theory and is often 'taken for granted as an idealizing assumption.' (2001: 130). The fact that it is an 'idealized' assumption actually undermines the notion that we should take it as strictly speaking true, since idealizing assumptions are usually regarded as useful fictions, such as how formalist mathematicians regard limits and actual infinite collections. Furthermore, it is dogma that what made the revolutionary Michelson-Morley experiment of 1887 revolutionary is that it proved that the Plenum Principle is *false*. (See the previous footnote). Since the Plenum Principle is a crucial premise that is foundational for all of the arguments in Rea's paper, we can safely ignore that something like Eleatic Monism has been established there (see pp 130-1). Note, however, that Rea in this article is not quite attempting to prove that Eleatic Monism is true, but merely that it is reasonable to believe, or at least not obviously false. In that respect, he succeeded. If the Plenum Principle is true, as well as Rea's other premises, then Eleatic Monism is reasonable to believe. Also, if MaxCon is true, and the Plenum Principle is true, then we should believe in Eleatic Monism. But, since Eleatic Monism is unreasonable to believe, because of the problems of contingent particularity I talk about in section 4, then it must be that at least one of MaxCon or the Plenum Principle is false. I believe they both are. Much work on these issues has come out after the writing of this paper, but before it was published (see Eklund (2008), Horgan and Potrč (2008), Schaffer (2010a, b, 2009) and Sider (2008a, b).

quantifiers' which are different than the normal thing quantifiers, and let us further suppose that there is an as-yet undiscovered but consistent and accurate logic for stuff quantifiers—a logic just as respectable as, and irreducible to, the ordinary quantifier logic. Now, let us suppose that, in the actual world, there is a succession of filled regions which instantiate the property *being the Eiffel Tower*, and suppose that, there is a correct logical description of the history of the Eiffel Tower that employs only thing quantifiers. Now, if Markosian is right, in Plenum World, since there are no things, the standard logic which employs thing-quantifiers cannot accurately model the sentences used to describe this world, and so is inadmissible. Instead, stuff-quantifier logic is needed. In Plenum World, we also ought to imagine that the property of *being the Eiffel Tower* is instantiated by a succession of filled regions, since arguably there is a counterpart of the Eiffel Tower in Plenum World, it is just that in Plenum World the Eiffel Tower is some stuff, not a thing. But, the logic of stuff-quantifiers will now be the only appropriate model to describe stuff-Eiffel Tower and all the truths about it and its history.

Now, here is the key question. In the actual world, would the logic of stuff-quantifiers be sufficient to describe the history of an entity which is the Eiffel Tower? If not, then it wouldn't be sufficient to describe the Eiffel Tower in Plenum World. But, by stipulation, the stuff logic was sufficient to describe the Eiffel Tower in Plenum World. So, in the actual world, the logic of stuff-quantifiers *is* sufficient to describe the Eiffel Tower. But, if it is sufficient, then there is no need to employ thing-quantifiers in the actual world. But, there is a need to employ thing-quantifiers in the actual world, so the logic of stuff quantifiers cannot be sufficient to describe the history of an entity which is the Eiffel Tower, and so, the Eiffel Tower cannot have a counterpart which is not a particular. But, if this is so, then MaxCon is false.

Another brief way of summing up the results is as follows. Either objects don't exist in our world (only scattered or contiguous portions do), or, objects do exist in Plenum World. Since objects *do* exist in our world, then they do in Plenum World. But then MaxCon is false. Also, if MaxCon is right, the presence of ether should make either no difference, or a great difference, to the logic we employ. If it makes no difference, then there's no reason to suppose there are objects. If it makes a big difference, then that seems problematic. Why should the presence or absence of ether be relevant to which logic we must use?<sup>35</sup>

In any case, we've seen how MaxCon entails contingent particularity. The price of making things being only contingently things, and regarding this as unproblematic or non-radical is that, now, thinghood is neither significant nor does any work that the stuff itself cannot do. If this is so, this brings us back to our earlier point—that there is no adequate reason to suppose there are any *things* at all. From what Markosian has said, stuff, or stuff-portions at least, can do *all* of the work that things can. Then, either we do not need to countenance things at all, or Markosian's stuff is really no different than what we all meant by 'things' all along. If the former, then the *thing* concept does no conceptual work—we could describe everything with portions of matter and their properties. If this is so, then there's no reason to countenance a stuff-thing dualism. If the latter, then the stuff postulated by

<sup>35</sup> Thanks to Irem Kurtal Steen for some very helpful comments and suggestions on the foregoing section.

Markosian is not any different in kind from things, leaving us with no reason to countenance a stuff-thing dualism. So in no case do we need to posit the dualism.

But we *cannot* say everything we want to about the world without quantifying over things. Non-particular portions cannot play the ontic and semantic role of *things*. So, it must be that Markosian's stuff-talk really is talk about things. But then, his stuff-thing dualism must be incoherent, since it collapses back into thing monism. The only way to avoid this collapse back into thing-monism, is to argue that the true position is some kind of 'neutral thing-stuff monism,' not a stuff-thing dualism. Juliet persists because there is actually a *third* kind of entity, which is neither essentially stuff nor a thing, but rather has 'thingish' and 'stuffy' aspects at one time, and merely stuffy aspects at another. I think, however, that any such kind of neutral monism's oddness would outweigh the benefits of respecting MaxCon and (now) only apparent thing-stuff dualism.

But it shouldn't be a surprise that Markosian's stuff is not really distinct from things, since he says that he can reduce all apparent thing-talk about portions or stuff into solely stuff-talk, while also maintaining that, in a Plenum World, we could talk about all these stuff-portions just like we could if they were things.<sup>36</sup> So, for all he's said, we've been given no reason to suppose the world is not things 'all the way down', since every portion of matter is just a thing. The persistence conditions of common sense things and portions of matter may be different, but this doesn't show that stuff is in a different category than things—rather, stuff may just be a special kind of thing or things, or, stuff-concepts might just help us think of the same old things in different ways.

I conclude that MaxCon, and Markosian's thing-stuff dualism (and anybody else's, for that matter, which would entail many of the same kinds of problems with stoincidence), are so problematic, that they ought to be denied.<sup>37</sup>

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<sup>36</sup> Note, he doesn't actually maintain this. He doesn't talk about Plenum World at all. But, he would have to, if he wanted to hold on to MaxCon.

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