

# Endurance, Perdurance and Metaontology

JIRI BENOVSKY

Department of Philosophy  
University of Fribourg, Switzerland

Email: [jiri@benovsky.com](mailto:jiri@benovsky.com)

Website: [www.jiribenovsky.org](http://www.jiribenovsky.org)

## Abstract

The recent debate in metaontology gave rise to several types of (more or less classical) answers to questions about “equivalences” between metaphysical theories and to the question whether metaphysical disputes are substantive or merely verbal (i.e. various versions of realism, strong anti-realism, moderate anti-realism, or epistemicism). In this paper, I will do two things. First, I shall have a close look at one metaphysical debate that has been the target and center of interest of many meta-metaphysicians, namely the problem of how material objects persist through time: the endurantism versus perdurantism controversy. It has been argued that this debate is a good example of a merely verbal one, where two allegedly competing views are in fact translatable one into each other – they end up, contrary to appearances, to be equivalent. In my closer look at this debate, I will conclude that this is correct, *but* only to some extent, and that there does remain room for substantive disagreement.

Secondly, and stemming from my considerations about the persistence debate, I will defend a metaontological view that emphasizes that when asking the question “Are metaphysical debates substantive or verbal?”, the correct answer is “It depends.” Some debates are substantive, some debates are merely verbal, and sometimes it is true that a problem or a question can be formulated in equally good frameworks where there is no fact of the matter as to which one is correct or where we just cannot know it. Furthermore, importantly, as my examination of the persistence debate will show, there is room for the view that a debate is *largely* merely verbal but *not* entirely and that some *parts* of it are substantive, and decidable by philosophical methods. It is possible, and it is the case with respect to the persistence debate, that *inside* a debate some points are merely verbal while other are places of substantive disagreement. A moral of this is that, at the end of the day, the best way to do meta-metaphysics is to do first-level metaphysics.

**Keywords:** endurantism, perdurantism, metaontology, methodology.

## 1. Introduction, Methodology

The recent debate in metaontology gave rise to several types of (more or less classical) answers to questions about “equivalences” between metaphysical theories and to the question whether metaphysical disputes are substantive or merely verbal. On the one side *realists*, such as for instance Sider (2001c, 2007, 2008, 2011), claim that metaphysical disputes *are* substantive and that metaphysical questions *do* have objective answers, while on the other side various kinds of *anti-realists* such as Sidelle (2002), Chalmers (2008) and Yablo (2008) defend the opposite view that metaphysical questions do not have objective answers and that they can be formulated and answered in different frameworks, where there is no fact of the matter as to which framework is the correct one. *Epistemologists*, such as for instance Bennett (2008), put forward a sort of a moderate view inbetween realism and anti-realism that says that some metaphysical questions *do* have genuine objective answers but that often we cannot discover them. As a consequence, it becomes difficult to motivate the decision to choose one side over the other. There are also *moderate anti-realists*, such as Hirsch (2005, 2007, 2008), who claim that many metaphysical debates are merely verbal disputes where the disputants seem to be saying different things but in fact they are making the same claims only formulated in different ways, or different “alternative” languages. In Benovsky (2008), I have argued that a kind of this moderate anti-realism applies to the debate between the bundle theory and the substratum theory.

In this paper, I will do two things. First, I shall have a close look at one metaphysical debate that has been the target and center of interest for many of those who work on meta-metaphysics, namely the problem of how objects persist through time: the endurantism versus perdurantism controversy. McCall & Lowe (2003), Miller (2005) and Hirsch (2008) have all argued, for different reasons and in different ways, that this debate is a good example of a merely verbal one, where two allegedly competing views are in fact translatable one into each other – they end up, contrary to appearances, to be equivalent. In my closer look at this debate, I will conclude that this is correct, *but* only to some extent, and that there does remain room for substantive disagreement. To do this, I shall proceed differently: instead of looking for a general way to translate or to make equivalent the two (actually, more, as we shall see) competing views, I will go through several *first-level metaphysics* steps and look for places where alleged disagreement turns out to be merely verbal.

Secondly, and stemming from my considerations about the persistence debate, I will defend a metaontological view that emphasizes a point that I think is often taken and acknowledged by many of those who are involved

in metaontology, but that is not so often explicitly defended,<sup>1</sup> namely, that when asking the question “Are metaphysical debates substantive or verbal?”, the correct answer is “It depends.” *Some* debates are substantive, *some* debates are merely verbal, and *sometimes* it is true that a problem or a question can be formulated in equally good frameworks where there is no fact of the matter as to which one is correct or where we just cannot know it. Furthermore, importantly, as my examination of the persistence debate will show, there is room for the view that such a debate is *largely* merely verbal but *not* entirely and that some parts of it are substantive, and decidable by philosophical methods. It is possible, and it is the case with respect to the persistence debate, that *inside* a debate some points are merely verbal while other are places of substantive disagreement. A moral of this is that, at the end of the day, the best way to do meta-metaphysics is to do first-level metaphysics, from which meta-metaphysical claims (such as equivalence claims) can arise. The priority should be given to the low-level considerations, and meta-metaphysical claims should not be made in a too general way but should come from particular decisions taken case by case on the level of metaphysics.

## 2. Perdurantism versus Endurantism

Perdurantism comes in two main versions – the *worm view* and the *stage view* – and endurantism comes also in two main versions – *indexicalism* and *adverbialism*. I will now carefully compare these four views, and in a way that is different from considerations put forward by McCall & Lowe (2003), Miller (2005) and Hirsch (2008), we will see that some of these traditional enemies (namely, the perdurantist worm view and the various endurantist theories) actually are very much alike, and that some alleged points of substantive dispute fall prey to closer scrutiny.

A good way to see how the perdurantist worm view and its alleged opponents work is by examining how these theories handle the case of intrinsic change through time. My neighbour Cyrano, for instance, had a big nose, but after some time he discovered a new easy, painless and very quick plastic surgery method that could replace his big nose with a small one. He decided to undergo the procedure and consequently he now has a small nose. In this case, Cyrano then undergoes intrinsic change – he first has a big nose and then a small one. What the worm view theorists claim here is that Cyrano is a *space-time worm*, that is, a temporally extended entity that has temporal parts at every time at which it exists, and that his possession of different incompatible properties at different times is a mat-

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<sup>1</sup> See also Bennett (2008) and Chalmers (2008).

ter of him having different temporal parts at different times that have *simpliciter* the incompatible properties. Temporal parts are entities just like Cyrano, only temporally smaller, but not necessarily instantaneous – they can be temporally extended exactly as Cyrano is. Thus, according to the worm view, people are spatio-temporally extended worms that have temporal parts, and the phenomenon of qualitative intrinsic change over time is handled in terms of the possession of qualitatively different temporal parts at different times.

Endurantism, on the other hand, claims that objects and people like Cyrano persist through time by being *wholly* present at all times at which they exist – they are thus *multiply located* at various times. Here is how one could start to try to understand this claim:

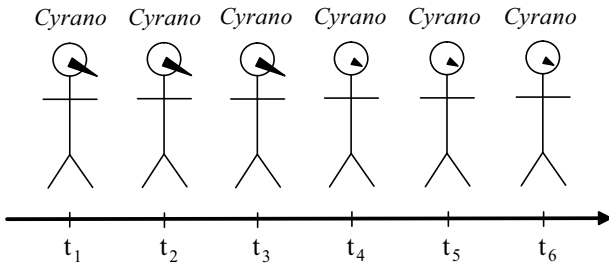


Fig. 1

Such a picture of what endurantism is or could be is (would be) a strange one. Try to consider the analogous spatial picture: an object like a person “multiply located” at several places in a conference room, for example. Imagine an entire audience at your talk, only composed of one “multiply located” person that would thus occupy the whole room. Since material objects are not universals, such a claim clearly sounds unacceptable, and the more natural thing to say would be that there is not one single object but a series of different objects laid before one’s eyes. Since we are working here under an eternalist hypothesis, the endurantist picture about how Cyrano persists through time would then be as strange as in the analogous spatial case.

None of this shows that there is a problem with endurantism. Rather, it shows that the picture above and the way this picture suggests we should understand how endurantism works is a bad one. To understand why, and to better understand what the endurantist claim amounts to, let us see how endurantists typically answer an often-raised objection against their view: the Lewis-style objection from temporary intrinsics. Following endurantism, Cyrano at  $t_1$  is numerically identical to Cyrano at  $t_6$ . At  $t_1$ , he has a big nose, at  $t_6$ , he has a small nose. But if we follow Leibniz Law, then if Cyrano at  $t_1$  and Cyrano at  $t_6$  are numerically identical then they

should have all the same properties. But this leads to the untenable claim that Cyrano, the very same object existing at  $t_1$  and  $t_6$ , has the two incompatible properties of having a big nose *and* having a small nose. David Lewis once considered this problem to be “the principal and decisive objection against endurance” (Lewis 1986, p. 203). To answer any worries about the possession of incompatible properties, *perdurantists* defend a claim that is revisionary about what it is that has the incompatible properties: temporal parts, rather than “whole” people – since the different temporal parts that compose a single space-time worm are not numerically identical, no threat of contradiction arises here. *Endurantists* typically appeal to at least two different strategies to answer the Lewisian worry. The first is Peter Van Inwagen’s strategy (Van Inwagen 1985), which is revisionary not about what it is that has the incompatible properties, but about the properties themselves. According to such a view, properties are always *time-indexed* and consequently Cyrano does not exemplify two incompatible properties such as “having a big nose” and “having a small nose”, but rather he has the time-indexed properties “having-a-big-nose-at- $t_1$ ” and “having-a-small-nose-at- $t_6$ ” which are perfectly compatible. Contradiction is thus avoided.

There is a follow-up to this argument that perdurantists often raise: granted, there is no problem in the possession of the two time-indexed properties, but even if we grant that there are such properties, there still also are non-indexed properties like “having a big nose” and if that’s the case, contradiction has not been avoided, because even if Cyrano has at different times non-contradictory time-indexed properties, he also has the non-indexed properties – and so trouble comes back through the back door.

I find this perdurantist reaction somewhat strange. What it commits one to is to claim that Cyrano’s possession of a property is his possession of it *simpliciter* without any disguised relations to times being involved. The reason why such a reaction is a strange one, coming from a perdurantist, is that while it is true that endurantism cannot accommodate this claim, the perdurantist (worm) view does not accommodate it either. Indeed, according to perdurantism, Cyrano also has his properties only via a *temporalizing device*: Cyrano, the temporally extended space-time worm, does not have a big nose. He can only be said to have this property by having a temporal part that has it. As a consequence, neither endurantism nor the perdurantist worm view can defend the claim that *Cyrano* has his temporary intrinsic properties *simpliciter*.<sup>2</sup> Perdurantists temporalize ob-

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<sup>2</sup> It is true that only the perdurantist worm view allows for *something* (but *not* Cyrano) to have temporary intrinsic properties *simpliciter*, namely, temporal parts of Cyrano. I will come back to this later.

jects, while endurantists temporalize properties, and despite Lewis's objection to the use of temporalized properties, and Van Inwagen's objection to the use of temporalized objects (see for instance Van Inwagen 1985, p. 194), what both views do is to use a theoretical temporalizing device that plays the same theoretical role of making it possible for *Cyrano* to have properties; more precisely, the device "to be a  $t_n$ -part of" plays here the same overall theoretical role, and helps to solve the same problem, as the device "-at- $t_n$ ". I like to call such theoretical tools "problem-solvers". In short, a problem-solver is a primitive of a theory that is there to solve a problem. Both perdurantists and endurantists account for the phenomenon of intrinsic change through time by using their primitives: the temporalization of objects, or the temporalization of properties. At the same crucial places, both views introduce a tool with the same function: avoid any contradiction arising from *Cyrano*'s persisting through time and having incompatible properties. Thus, both endurantism and perdurantism use a theoretical temporalizing device in order to avoid the threat of contradiction from the having of temporary intrinsic properties, and so, not only endurantists should be allowed to use *their* temporalizing device by their opponents, but also we have just made a first step towards the claim that the difference between endurantism and perdurantism is perhaps not as big as one would initially think. Furthermore, what we learn here is how we should picture endurantism correctly:

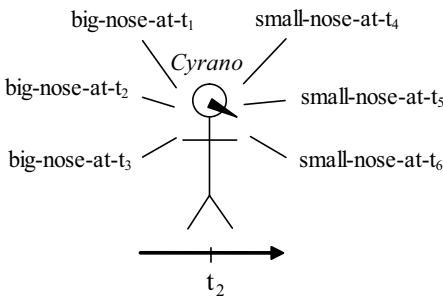


Fig. 2

Following Peter Van Inwagen's way of drawing the picture, if  $t_2$  is the present time, *Cyrano* is depicted as having a big nose, but he also has all of his time-indexed properties, which he has at all times at which he exists. This latter point is important, and we shall now see it brings us closer to the idea that endurantism and the perdurantist worm view resemble each other more than one could have thought. To better understand why, let us examine the traditional "no-change objection" to the worm view.

The worm view's solution to the problem of change through time in intrinsic properties has raised a worry about its adequacy. Peter Simons for

instance claims that the “four-dimensional [i.e. worm view] alternative is not an explanation of change but an elimination of it, since nothing survives the change which has the contrary properties” (Simons 2000, p. 64). The problem here is that instead of accounting for one object’s persistence and change through time, the perdurantist gives us a story about different objects (different temporal parts) that have different properties. Furthermore, if it is true that a temporal part of Cyrano has a big nose, it will always be true – such a fact cannot, accordingly to the worm view, ever change. One way to put this point as an objection is to charge perdurantism with the allegedly unpalatable task to defend a “static” ontology where everything just seems to *be there* and where no object can ever *genuinely* change.

Now, the point of interest for us today is that this objection, if it were correct, would apply in exactly the same way to endurantism. Under endurantism as well as under perdurantism, the fact that Cyrano has the property of having-a-big-nose-at- $t_1$  is true at all times and can never change. All properties, according to indexicalist endurantism, are time-indexed, and consequently any property that Cyrano has, he has at all times at which he exists. Interestingly, he has at  $t_1$  *the very same properties* that he has at  $t_5$ , and so, the friend of the “no-change objection” can claim, he does *not* undergo genuine change between  $t_1$  and  $t_5$  (and so on). My aim here is of course not to object to endurantism. As many others, I believe that these worries are easily answered. What is at the centre of my interest here is that *if* the “no-change objection” applies, it applies equally to both endurantism and perdurantism (and *if* it does not apply, it does not apply to either of the two views).

### 3. The Statue and the Lump

We have seen above the case of temporary intrinsics which was supposed to be an objection to endurantism and a reason to favor the perdurantist worm view, but we have seen that it is not. And we have also seen the case of the no-change objection which was supposed to be an objection to the perdurantist worm view and a reason to favour endurantism, but it is not. Either both theories are guilty or neither is. (Actually, if anything is guilty here, it is eternalism.) Thus, we have seen until now two steps towards the claim that the perdurantist worm view and endurantism work in a very similar way in some crucial places of alleged disagreement. Let us now see another traditional problem that is typically said to favor perdurantism over endurantism, and see the way the two views handle it: the Statue and the Lump case.

At  $t_1$ , there is a lump of clay that at  $t_2$  an artist forms into a statue. A statue is thus created at  $t_2$ . Let us suppose that it persists until some later

time, say  $t_3$ , and is then destroyed (squashed). Consequently, at some time after its destruction, at  $t_4$ , the statue does not exist any more but the lump of clay still does: it persists from  $t_1$  to  $t_4$  where it existed at  $t_1$  in some (let's say cubic) form, then it was shaped into the form of a statue and, after the destruction, it was shaped again into some other squashed form. The traditional puzzle consists in the fact that in the interval of time from  $t_2$  to  $t_3$ , the lump of clay and the statue are one and the same object (they have the same form, the same location, they are made up of the same particles) but that if they were one and the same object, they should, following Leibniz Law, share all their properties, which is not the case since the lump of clay has, for instance, the historical property of being cubical at  $t_1$  that the statue has not. So, after all, the statue and the lump of clay are different objects. But then, it seems that we have a situation where two distinct objects coincide between  $t_2$  and  $t_3$ , which is typically supposed to be an unacceptable claim (as Lewis puts it: if the lump weighs 500g, and the statue weighs 500g, and if both objects are there between  $t_2$  and  $t_3$ , why don't we have in this interval of time something that weighs 1,000g?). Traditionally, perdurantists use this case to show that their view is superior to endurantism. Indeed, perdurantism has a simple reply: the  $t_2$ -part and the  $t_3$ -part of the statue *are* numerically identical, respectively, to the  $t_2$ -part and the  $t_3$ -part of the lump of clay. The  $t_2$ -part of the statue and the  $t_2$ -part of the lump of clay *do* share all of their properties, and relevantly, they don't have any different historical properties such as "being cubical at  $t_1$ " because none of them existed at  $t_1$ . But this does not entail that the *statue* and the *lump of clay* (the worms) are identical since for instance the lump of clay has parts at  $t_1$  but the statue does not. So they are not identical but they share identical temporal parts: they temporally overlap. Consequently, following the perdurantist worm view, the case of "coincident entities" is no more remarkable than the spatial case of two overlapping roads, one of them being a sub-segment of the other (see Sider 2001a, p. 6 and p. 152). Endurantists, on the other hand, do not seem to be able to face this puzzle as easily, since it is the entire statue, and not a part of it, that is wholly present at  $t_2$  or  $t_3$ , since the same holds for the lump of clay, and since they are distinct objects because they do not share all of their properties, the endurantist has to endorse the claim that, between  $t_2$  and  $t_3$ , there are two numerically distinct objects that coincide. This is why the case of the Statue and the Lump (as well as similar cases involving coincident entities) is typically taken to be a strong reason to favour the perdurantist view over endurantism.

Before we see if this is really so, let us concentrate more carefully on how endurantism works and let us try to be more precise about the theory's structure. To be more precise, we need to stop drawing the endurantist picture in terms of drawings of people with big noses, and consider what the picture looks like when representing the fundamental compo-



nents of the nature of Cyrano. There are two main options: either Cyrano is a bundle of properties, or he is a bare particular (substratum) that instantiates properties.<sup>3</sup> Under the view which is a combination of eternalism, endurantism, indexicalism, and the bundle theory, Cyrano is a bundle of properties (that is, *all* of his time-indexed properties) glued together by a special primitive bundling relation whose theoretical role is to bundle together properties in order to make particulars such as Cyrano.

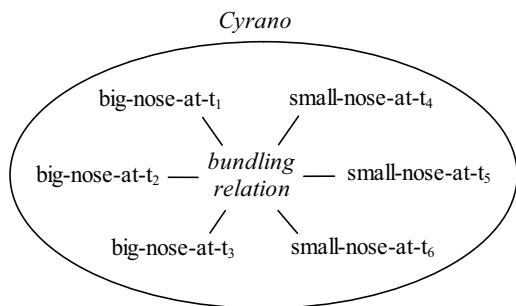


Fig. 3

Now, how can such a view handle the case of the Statue and the Lump? The *perdurantist* bundle-theoretic picture of the case is the following, where the bundle Statue is simply a *sub-bundle* of the bundle Lump – this is how, in terms of the bundle theory, we get the notion of temporal overlap used above by the perdurantist.

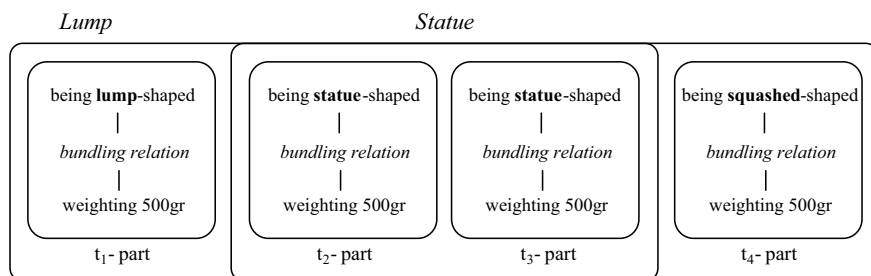


Fig. 4

Having learned how the *endurantist* (indexicalist) picture should look like, we can now see how it can treat this case:

<sup>3</sup> Given the purposes, the scope, and the length of this paper, I will ignore the 'substance' theory which would bring unnecessary complications here.

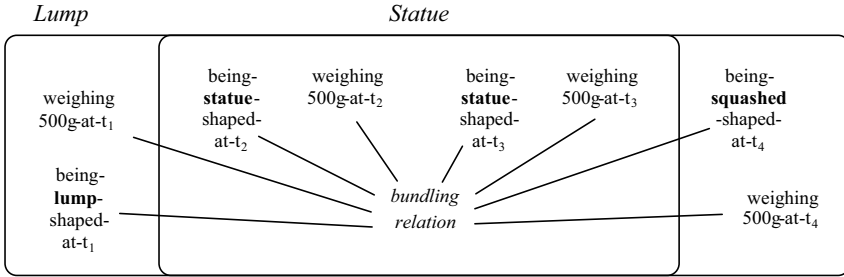


Fig. 5

Lump is a bundle of time-indexed properties, Statue is a bundle of time-indexed properties, and one of the bundles is simply a sub-bundle of the other. Thus, such a picture provides a nice surprise for the endurantist: she can use here the very same strategy to account for this case that the perdurantist has been using all along. Exactly as under the perdurantist worm view, the bundle Statue is a sub-bundle of the bundle Lump, and consequently we get here an implementation of the notion of temporal overlap. This notion gives us, under both perdurantism and endurantism, the means to talk about two objects (if you want, you can say two “coincident” objects, but they are not coincident in any objectionable way, there are two objects in the perfectly acceptable sense in which there are two objects where there is a common part of two Siamese twins), but also to talk about one object (the common part of the two Siamese twins is one). Both views can thus equally well account for talk of two objects and talk of one object in a non-objectionable way. The endurantist can simply appeal to the same strategy the worm view does.

(Nothing hinges here on the choice of the bundle theory, since the same treatment can be given under both perdurantism and endurantism if one embraces the substratum theory as well. According to the substratum (or “bare particulars”) theory, Cyrano is not only a bundle of properties, rather his properties inhere in a substratum that exemplifies them and unifies them in order to make a (thick) particular. With respect to my present concerns, this difference does not matter: whether it is a substratum that unifies the properties in order to make a particular, or whether they are united by the bundling relation, the resulting structure is such that it can easily accommodate the notion of temporal overlap as it is needed to provide a satisfactory treatment of the Statue and Lump case.)

It took us a little time to get here, since we needed to be careful about clarifying how endurantism is to be understood, but here we are: first, endurantists can handle as easily as perdurantists the case of the Statue and Lump (as well as all similar cases involving so-called “coincident entities”), and second, the general and more important truth is that the differ-

ence between the perdurantist worm view and endurantism is getting smaller and smaller. Contrarily to how these two alleged enemies are usually presented, *both views* implement the notion of *temporal overlap*.

#### 4. Perdurantism and Endurantism – a Second Look

We have seen above that endurantists can easily face some of the strongest objections that are often raised against their view, namely those that arise from apparent cases of coincident entities such as the case of the Statue and the Lump. Generalizing, we can conclude that endurantism and the perdurantist worm view have the same explanatory power with respect to the puzzle cases involving coincidence, and this completes another important step towards the claim that the difference between these two views is much smaller than what is usually thought. Up to this point, we have seen that both theories appeal to a *temporalizing device* (“to be a  $t_n$ -part of” and “-at- $t_n$ ”) in order to be able to say that Cyrano has a big nose or a small nose, and that neither of them can say that Cyrano has a big nose or a small nose *simpliciter*. We have also seen how both views can equally face the “no-change objection” in the same way, and finally that both views implement the notion of temporal overlap (indeed, of temporal parts!) and that consequently they both can equally well provide a satisfactory account of cases involving “coincident entities”.

All of these points have been considered to be decisive points of departure between these two theories, and even decisive points in favor of one over the other. For instance, David Lewis (1986, p. 203) at one point thought that endurantism should be rejected because it could not make room for Cyrano’s possession of a big nose *simpliciter*; Peter Simons (2000, p. 64) thinks that the “no-change objection” is a deadly objection to perdurantism; Peter Van Inwagen (1981, p. 90) thinks perdurantism should be rejected since the notion of a temporal part (and thus of temporal overlap) is unintelligible; and Ted Sider (2001a, ch. 5) thinks that cases involving coincidence give rise to decisive arguments against endurantism.

What exactly is the correct conclusion to be drawn from my “second look” at how perdurantism and endurantism work? If I am correct, does it mean that at the end of the day there is no difference at all between these two views, and that they only are some sort of terminological variants of each other? No. Such a conclusion cannot be drawn from the considerations I put forward in this paper, and I believe that it is also an incorrect one, because there are some genuine and substantive differences between the two theories.

A first and important point of departure between endurantism and the perdurantist worm view is that while it is true that neither of them

can say that Cyrano has a big nose or a small nose *simpliciter*, the worm view *can* say that *something* has a big nose or a small nose *simpliciter* (i.e. one of his temporal parts). A second difference between the two competitors is that they are structurally different: this is easily seen if one uses the substratum theory and not the bundle theory as I have done above, for the perdurantist worm view will claim that there is one substratum per time that unifies the properties of Cyrano at that time, while the endurantist view will claim that there is one substratum only that unifies all of the properties that Cyrano ever has. This justifies the *endurantist* claim that material objects persist through time by being *numerically identical at different times*, while this is how perdurantists account for the claim that *nothing is ever numerically identical at different times* and that objects persist through time by having temporal parts. There is a link between these two differences between our two theories, since it is only because of their different structure that they exhibit a difference in the way the two views can or cannot claim that *something* has properties such as having a big nose *simpliciter*. Thus, what we have learned is *not* that the perdurantist worm view and endurantism are somehow, on a general level, equivalent; rather, we have seen that some traditional important points of departure actually show how similar the two views are, but that they also are different with respect to some other points. It would thus be incorrect to say that they are “equivalent” or “merely terminological variants” in general, while it *is* correct to say that this is true to some (important!) extent.

## 5. Adverbialism

In the discussion above, I have used the indexicalist version of endurantism, but this is not the only strategy endurantists can appeal to in order to answer the problem from temporary intrinsics. Importantly, there is the “adverbialist” solution according to which one should not temporally modify the properties of Cyrano, but his possession of these properties. Under adverbialism, “Cyrano has a big nose at  $t_1$ ” is to be analyzed as “Cyrano has-at- $t_1$  a big nose” or as “Cyrano has  $t_1$ -ly a big nose” as Johnston (1987) more elegantly puts it. In this view, there is not just the possession of a property, there is always  $t$ -ly having (or having-at- $t$ ) of a property. Any worries about the possession of temporary intrinsic incompatible properties are thus easily dissolved, since while it is true that Cyrano has a big nose at  $t_1$  and has a small nose at  $t_4$ , and so he has both the incompatible properties, he has the former  $t_1$ -ly and the latter  $t_4$ -ly and this is how contradiction is avoided.

With respect to my discussion above, there is one important difference between adverbialist endurantism and indexicalist endurantism: only indexicalism, but not adverbialism, is compatible with the bundle theory. The *substratum* theorist, if she wants to be an adverbialist, can say that

there are three components in her view: a substratum, its properties, and a relation of exemplification that holds between the substratum and the properties (and which is time-indexed, as the adverbialist view requires it). The *bundle* theorist, on the other hand, does not have room for such a picture in her ontology, since she does not postulate a substratum that needs to be related by a special relation to its properties – rather, in her view, such intermediaries should be avoided and so she cannot be an adverbialist since there simply is no suitable place where to put the adverbialist index.<sup>4</sup> This of course holds only for a very special version of the substratum theory, namely an unpopular version of this view which insists on there really being this third component in the theory: the (time-indexed) relation of exemplification between the substratum and its properties. Many substratum theorists themselves often rightly agree that this is a bad version of their view, among other reasons because of Bradley-like regresses and related worries. As Sider (2006) in his recent defence of substrata insists, this relation of exemplification should not be taken too seriously, in the sense in which it is often claimed that exemplification is not a genuine relation, that it is a “non-relational tie”, and that we shouldn’t “reify” exemplification (see, for instance, Lewis 1983, p. 351–355). To my mind, these worries are justified, and relevant to my discussion in this paper, if the friend of the substratum theory follows these recommendations, she then cannot be an adverbialist for the simple reason that if she takes away from her view the ontologically significant relation of exemplification there will be no good place to put the adverbialist index any more. Only if she is not impressed by the troubles that arise when one takes exemplification ontologically seriously as a relation (that one can put an index on), has she the option of holding an endurantist-adverbialist-substratist view. (To my mind, this makes adverbialism an unpalatable solution to the problem of persistence through time in the first place.)

This being said, let us now see how adverbialism compares to indexicalism and to the perdurantist worm view. The first point of similarity between these views holds: exactly as it was the case for endurantist indexicalism and for the perdurantist worm view, adverbialism also has to use a temporalizing device (“ $t_n$ -ly”) in order to be able to say that Cyrano has a big nose or a small nose: all three views thus *cannot* say that Cyrano has a big nose or a small nose *simpliciter*. Furthermore, since the adverbialist theory is here combined with eternalism (simply because I do not consider presentism at all in this paper) it also has to (and easily can) face the “no-change objection” for the very same reasons already seen in the case of indexicalism (and the perdurantist worm view). Interestingly, adverbialism

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<sup>4</sup> If one were to put the index on the bundling relation, it would straightforwardly become a *perdurantist* view.

also implements the notion of temporal overlap and, exactly as the two other views, it can equally well provide a satisfactory treatment of cases such as the Statue and Lump case, as the following figure shows – analogously to what we have seen in the indexicalist’s case.

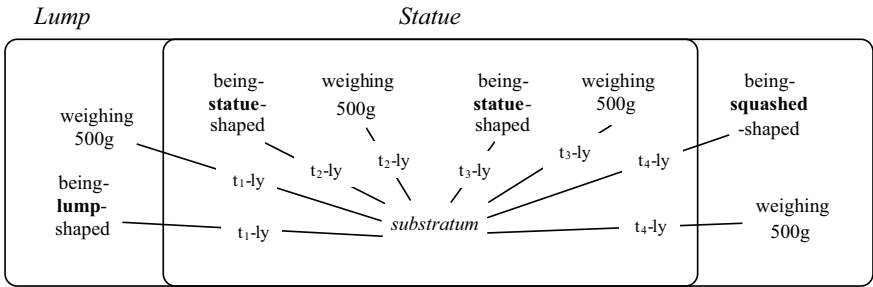


Fig. 6

As a consequence, we can affirm that endurantism-adverbialism-eternalism-substratism is *not* very different from the perdurantist worm view and the endurantist indexicalist view with respect to the same (important) points of alleged disagreement between endurantism and perdurantism, while it *does* differ from the perdurantist worm view for the same two reasons we have seen above concerning the difference between indexicalism and the worm view – the additional difference being here that only the worm view, but not adverbialism, is compatible with the bundle theory.

### 6. The Stage View

We have seen above that perdurantism understood as the “worm view” is not very different in many crucial respects from its traditional endurantist opponents. But there is another popular version of perdurantism, namely the “stage view” which, as we shall now see, *is* different from all the other views, *including* the perdurantist worm view, in several important respects. Indeed, as we will see, the stage view is the least similar to all of its competitors – the surprise being here that the two perdurantist views are less similar to each other than the perdurantist worm view is similar to endurantism.

Friends of the perdurantist “stage view” claim that Cyrano exists only at *one* time: he is an instantaneous stage that persists through time by having different *temporal counterparts* at other times. Contrarily to what the worm view theorists claim, when we say “Cyrano” we do not refer to a four-dimensional temporally extended entity – rather, there is a series of stages interconnected by a counterpart relation, and ordinary objects such

as Cyrano are conceived of as being the stages rather than the whole composed of them. While persistence through time is thus understood as the having of temporal counterparts at different times, the stage view does *not* deny the existence of temporally extended objects – the four-dimensional entities that are aggregates of stages – they exist as well as the stages do. It's just that, according to the stage view, the objects we ordinarily name and quantify over are stages rather than worms.

The stage view, contrarily to all the other views we have seen above, *can* claim that temporary intrinsic properties such as having a big nose are had *simpliciter* by ordinary objects like Cyrano themselves, since such objects are (instantaneous) stages which can have their properties *simpliciter* without making them to be (or to involve) relations to times. No threat of contradiction can arise from the fact that at one time Cyrano has the property of having a big nose and that he has the property of having a small nose at some other time, since the object that has the former property is a numerically different object from the one that has the latter (since no ordinary material object exists at more than one time). In this respect, the stage view is thus clearly different from both the worm view and endurantism.

Concerning the problem of change, and the “no-change” objection, the stage view also behaves differently from its competitors. One way to see this difference is to object to the stage view as being unable to provide a satisfactory account of intrinsic qualitative change through time. The worm view theorist can say that there is something that changes, namely the four-dimensional space-time worm Cyrano: he is composed of all of his temporal parts, and once one of his parts has any intrinsic property, it cannot change, and it will always be true that it has (tenselessly) this property, but the four-dimensional entity can be said to undergo a change by having different parts at different times. Change is simply the possession of different properties at different times, and the perdurantist's worm can easily accommodate this claim. And so can (obviously) the endurantist. Not so (easily), however, if one endorses the stage view, for the simple reason that there is no one thing that ever has the different properties. The friend of the worm view can claim that the temporally extended Cyrano has his properties in a derivative way (he is F in virtue of one of his temporal parts being F), and the endurantist can claim that he has different time-indexed properties, or that he has them  $t_n$ -ly, but there is nothing like this available for the friend of the stage view in her theory. There just is nothing in the stage view theorist's world that can undergo a change. The stage view of course can say that a given stage at  $t_1$  is F and will be  $\neg F$  at  $t_2$  in virtue of having as a temporal counterpart another stage existing at  $t_2$  that is  $\neg F$ . But, the objector says, this is only an appearance of a solution for these two stages are just two completely different things. Mellor (1998, p. 89) claims that “change needs identity as well as difference”,

but there is only difference in the stage view, there are only different things with different properties – and nothing that undergoes any change at all.

Of course, the stage view theorist will not let herself be so quickly defeated. What lies at the bottom of this point of dispute is a version of the “Humphrey objection” only applied here to temporal counterpart theory. The detailed (and interesting) discussion as to who is right and whether the stage view (or any counterpart theory) can or cannot satisfactorily face these worries is not my present concern – I am not involved here in the business of saying that the stage view is better or worse than its competitors. My business is to say that it is *different*. And one way to see that it is different is to realize that the stage view has more to do than the worm view or endurantism in order to answer the no-change objection, and that contrarily to its competitors its reply has to be different, since it cannot appeal to any *one* object having different properties at different times.

Thus on the one hand the stage view has the advantage of being able to say that Cyrano has his properties *simpliciter*, while on the other hand it seems to be in a weaker position with respect to the problem of change. Both of these points come from the fact that the stage view’s structure is different from the other view’s. According to the stage view, a person like Cyrano is “no more” than an instantaneous thing, while all the other views claim that in one way or another Cyrano is temporally bigger: he is a bundle<sup>5</sup> not only of properties he has at one time, but of *all* of the properties he ever has. This important difference in the general structure of the theory also creates a difference with respect to the case of the Statue and the Lump. While the worm view and endurantism appeal to the notion of *temporal overlap* in order to account for this case, the friend of the stage view cannot do anything similar to this approach since there is nothing temporally “big enough” that could be said to overlap in her view. At a time  $t_2$ , for instance, there is only one instantaneous entity that is a statue made out of a lump of clay but there are not two coincident objects at this time, since the reason for thinking that there could be two different objects was that they were suspected to have distinct historical properties like “being cube-shaped in the past” or “having existed at  $t_1$ ”, but no instantaneous entity has any such properties. It can be said to have them by having different temporal counterparts at different times, but the counterpart relation being flexible (context dependent) it will be able to have different counterparts *qua* Statue and different counterparts *qua* Lump –

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<sup>5</sup> As we have seen above, if one wants to be an endurantist *adverbialist*, one needs to appeal to the *substratum* theory, but this makes no relevant difference to my present concerns.



so what we have is just one object that has different counterparts under different counterpart relations and there is no threat of ending up with coincident entities. Again, my point here is not to establish whether such a strategy is better than the one appealing to the notion of temporal overlap, I only wish to point out that (and how, and why) it is *different*, and I have indicated several places (the very same places that make endurantism similar to the worm view!) where this is so. On a general level, all of the differences seem to come from the fact that the stage view takes objects like Cyrano to exist at one single time only, while the competing views take such objects to exist at more than one time.

What kind of a difference is this? Most importantly, is the difference a metaphysical one, or is it merely a semantic issue? The difference certainly does *not* lie in what there is, in the sense that all views I have considered in this paper are eternalist and postulate the existence of the same distribution of matter across space-time; furthermore, the stage view does not deny the existence of mereological sums of stages that correspond to the worm view's space-time worms. The difference thus lies in the analysis of what ordinary objects like tables or people are. Sider claims that such a difference is merely a semantic/linguistic one, since the disagreement only seems to be about ordinary language terms and reference – a disagreement located in what we usually name and quantify over when we make claims about ordinary objects (“Does ‘Cyrano’ refer to a worm or to a stage?”). But metaphysics is not only about what there is (see for instance Parsons 2004 or Schaffer 2009); it is also, and perhaps even more importantly, about *how* objects are. Granted, the worm view and the stage view agree on what there is (i.e. on what stuff fills up the world), but it doesn't follow from this that they agree on all metaphysical questions, precisely questions like what the nature of tables and people is, that is, *how* they are. Consequently, the question whether Cyrano is a three- or four-dimensional entity *is* a metaphysical one, and so it seems that the dispute between the stage view and the other competing views I have discussed in this paper is not merely semantic/linguistic but genuinely metaphysical, and that it is about whether ordinary objects are best conceived of as time-bound (instantaneous) or extended in time.

We have seen that the debate between endurantists and perdurantists is, to a large extent, verbal and that there is much less substantive disagreement than we could have thought. But, importantly, genuine differences and room for substantive disputes remain. I would like to suggest that this is quite representative of the state of metaphysics, given the recent meta-metaphysical ongoing debate: some areas of metaphysics, that we thought were well explored and that we thought gave rise to competing incompatible views, turn out to be places of merely verbal disputes. But not all. And more: even “inside” one particular debate, like the persistence one, there are merely verbal points and substantive ones. This is why I would like to

emphasize something that is probably (hopefully) not very original: that we should not make any too general claims about the status of metaphysical debates, and not even about a status of one metaphysical debate, in order to claim that it is verbal or substantive or otherwise; rather, we should do first-level metaphysics in detail, examine the nature of particular detailed points of disagreement, and only then raise any meta-theoretical claims, such as claims of metaphysical equivalence.

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