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Abstract
In the current debate on how ordinary objects persist through time, more than one philosopher has endorsed the following two theses: *stage theory* and *diachronic universalism*. In this paper, I would like to offer a solution to the problem (related to *lingering properties*) that Balashov poses to the joint acceptance of these theses. I will also offer a number of reasons why, even if it is not necessary to undermine Balashov's counterexamples, stage theorists can, without making their theory less appealing, reject Balashov's understanding of sorts, which plays a crucial role in his criticisms of *stage universalism*.

Keywords
Stage theory, diachronic universalism, stage universalism, *voints*, sorts.

Introduction

Three of the main theories in the current debate on how ordinary objects such as dolphins, statues or chairs persist through time are *perdurantism*, *endurantism* and *the stage theory*. *Perdurantism* affirms that dolphins, statues, etc., are temporally extended and have *temporal parts*[1] at all times at which they exist: they persist by having different temporal parts at the different times at which they exist. The *stage view* affirms that ordinary objects are instantaneous: they are *stages* or *temporal parts*. They persist through time by having *temporal counterparts* at different times: they *exdure*. Finally, *endurantism* claims that

[1] In Sider 2001's terminology: '*x* is an *instantaneous temporal part* of *y* at instant $t =_{df}$ (1) *x* exists at, but only at, *t*; (2) *x* is part of *y* at *t*; and (3) *x* overlaps at *t* everything that is part of *y* at *t*' (Sider 2001: 59).

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ordinary objects do not have *temporal parts* but are *wholly present*[2] whenever they exist.[3]

In order to fully characterize these theories, we should consider the many different aspects that, in one way or other, are involved in the persistence of ordinary objects. For instance, endurantists often answer the question of what relation ordinary material objects bear to the pieces of matter out of which they are made by claiming that *constitution is not identity*. This thesis affirms that, for example, a statue and the piece of clay from which it is made are not identical but, when coincident, the piece of clay *constitutes* the statue.[4] As Yuri Balashov says in Balashov 2007, perdurantists often endorse *mereological universalism*, the thesis that any class of objects has a fusion. For example, perdurantists often rely on the existence of all these objects, together with a semantic theory of vagueness,[5] to give an account of the apparent vagueness in persistence. It seems vague when exactly Tibbles (the cat) has perished. This is so because the expression 'Tibbles' is semantically indeterminate between slightly different but equally adequate referents — different adequate overlapping fusions slightly differing in their ending (cat-)temporal parts. Often, stage theorists also endorse mereological universalism. As Balashov remarks, the difference between these two theories is quite often regarded as more semantic than metaphysical.[6] For instance, Theodore Sider, a leading stage theorist, endorses the universalist thesis, and also offers an argument for it (cf. Sider 2001). Now, a crucial principle governing these explanatory elaborations of the different theories is that the conjunction of the different theses does not create insurmountable new difficulties. Balashov 2007 argues that when

[2] It is controversial whether there is a coherent account of the *wholly present* idea that can go beyond its characterization in terms of lack of temporal parts. See Sider 2001 for an interesting discussion and further references. See also Hawley 2008.

[3] Endurantism is endorsed, for example, by Thomson 1983 and Wiggins 2001; perdurantism is endorsed, for example, by Quine 1953 and Lewis 1986. Finally, the stage view is endorsed, for example, by Hawley 2001 and Sider 2001.

[4] See, for example, Baker 2000 or Thomson 1998.

[5] Broadly speaking, a semantic theory of vagueness claims that vagueness is semantic indecision. See, for example, Sider 2001.

[6] But see, for example, Hawley 2001 for some reservations.

adherents of the stage view acquire universalist commitments, they are breaking the principle.

In this paper, I want to focus on this criticism by Balashov. So let me explain it more carefully. Stage theory, as we have said, states that ordinary objects such as dolphins, trees or rocks are instantaneous. This, however, does not mean that ordinary objects cannot have *lingering properties* (properties such as *having a belief* or *travelling to New York*, i.e., properties that take time to be instantiated). As Katherine Hawley, in Hawley 2001, or Theodore Sider, in Sider 2001, have pointed out, a stage's possession of these properties will require that the stage in question be suitably (counterpart) related to other stages having the right properties. Thus, lingering properties will be highly relational, yet they will also be properties of stages.

Balashov 2007 argues that unsolvable problems related to *lingering properties* are to be expected for those wanting to defend stage theory and *diachronic universalism* at the same time.

Balashov posits the idea of an object having a lingering property, for example, Leon Tolstoy having the property of *writing 'War and Peace'*, in the following way: an object o at t (i.e., a momentary object-stage) has a lingering property P_L in virtue of:

(a) having intrinsic features pertinent to instantiating P_L at t; and
(b) bearing R_o to object-stages at times earlier and later than t, where the stages have certain intrinsic features pertinent to o's instantiating P_L at t and R_o is a counterpart relation unifying the object-stages in question.

Moreover, he understands *diachronic universalism* as the thesis that any class of momentary objects has a diachronic fusion. This thesis implies, Balashov argues, *counterpart universalism*, which is the thesis that any two momentary objects existing at distinct times bear a temporal-counterpart relation to each other.

In this paper I would like to offer a solution to the problem Balashov poses to the joint acceptance of these theses (together with a specific way to understand *sorts* that I will present below). I think that proponents of the stage theory and diachronic universalism can offer an answer to Balashov's criticisms without having to reject any of the theses he presents. However, I will also try to offer some reasons why, even if it is not necessary to undermine Balashov's counterex-

amples, stage theorists can, without making their theory less appealing, reject Balashov's understanding of sorts.

Stage universalism and *voints*

Before formulating what he thinks is the real difficulty for the joint acceptance of these theses, Balashov states what he calls 'problem (a)' for which he provides a solution that nevertheless points towards the real difficulty. Here is the problem and the solution.

The problem: a tennis-ball-stage *b* is just above the net. Is it travelling across the court? Using the theses above we arrive at incompatible answers: yes, it is travelling across the court in virtue of being counterpart-related to other certain tennis-ball-stages; no, it is not travelling across the court in virtue of being counterpart-related to certain tomato-stages in a grocery store.

The solution: lingering properties are sortal-indexed. Then, problem (a) disappears because apparently incompatible lingering properties are not really incompatible: *b* is travelling across the court as a tennis ball, but it is not travelling across the court as a tennis-ball-tomato (to give a name to this sort of entity).

How does Balashov understand sorts? He writes:

> What constitutes a sort for the stage universalist? Perhaps just a certain combination of qualitative properties and temporal counterpart relations which a given stage bears to other stages. But, in any event, the universalist must recognize many more sorts than we are aware of. Just as there are familiar and unfamiliar fusions, there are familiar and unfamiliar sorts. Diachronic trout-turkeys (objects that fuse earlier years of a trout with later years of a turkey), tennis-ball-tomatoes and writer-cucumbers all delineate sorts, unfamiliar though they are. Are there any limits whatsoever to be imposed on 'sortal universalism'? I submit that there are. (Balashov 2007: 29-30).

Balashov proposes three restrictions on the notion of sort:

(i) Sorts are in the same category as properties but they are purely qualitative, which requires that the properties and relations determining them be non-haecceitistic: no particular object, time or place must enter into their determination. This excludes, as Balashov mentions, properties such as *being identical with David*

Lewis or *being located at the Greenwich meridian*; but it does not exclude properties such as *being 150 metres away from a burning barn* or *running at 10 m/s away from a growling tiger.*

(ii) Sorts usually form hierarchies, often matching the determinable/determinate ones.

(iii) All objects fall under a sort/multitude of sorts.

After having offered a solution to problem (a) Balashov argues that sortal modification is incapable of offering a good solution to a more sophisticated version of the problem which he calls 'problem (b)'.

Suppose a continuous array of material points is stretched along the x-axis throughout the interval $[-T, T]$, with midpoint ($x = 0$) stage o at $t = 0$. Suppose that the universe is perfectly symmetrical with regard to reflections relative to the yz-plane. Let us focus our attention on these two classes of point-stages, MovingLeft^v and MovingRight^v, defined by Balashov as follows:

> $x_{\text{MovingLeft}^v}(t) = -vt$, $x_{\text{MovingRight}^v}(t) = vt$, for all $t \in [-T,T]$, where $v > 0$ is a constant. (Balashov 2007: 32).

Balashov goes on to say that all the MovingLeft^v stages are bound together by a certain relationship R_{-v} and partly in virtue of R_{-v} and partly in virtue of the intrinsic nature of the members of MovingLeft^v, i.e., being pointlike, they fall under a certain sort, which he calls '*voint*'. Moreover, he adds, by parity of reasoning and considerations of spatial symmetry, R_{+v}, relating the members of MovingRight^v, delineates, together with the intrinsic nature of the members of MovingRight^v, the same sort. This sort is firstly characterized by Balashov as follows (in Balashov's terms 'Both R_{-v} and R_{+v} incorporate (ii) and (iii), thus defining the same sort' (Balashov 2007: 32)):

> o is a voint in virtue of (i) being intrinsically pointlike, (ii) being spatiotemporally and qualitatively continuous with other voints, and (iii) moving with constant speed v away from a point (a characterization to be made more precise below). (Balashov 2007: 32).

The precision Balashov mentions in the quotation would consist in rephrasing (iii) as 'shmoving with constant shpeed v away from a point'. Balashov introduces the notions of *shmoving* and of *shpeed* as follows:

> In addition to having a particular instantaneous speed (*viz* zero and *qua* point), *o* has a different kind of broadly kinematic property *shpeed*, which it instantiates in virtue of being a member of MovingLeft^{v} and MovingRight^{v}, in virtue of being a voint. Like speed, instantaneous shpeed is a matter of being at particular infinitesimally close locations at infinitesimally close times. Perhaps, on the widely accepted Russellian, or 'at-at', theory of motion, this makes shpeed just as robust as speed. But I need not insist on their identity. Indeed, I can call the physical process in which *o* is involved in virtue of having a particular shpeed *shmotion,* not motion. (Balashov 2007: 33).

Balashov adds that voint is an ultimate sort: it is grounded in the finest-grained non-haecceitistic determinate properties and relations.

Now, problem (b) is the following. Stage *o* has several lingering properties, including among them that of shmoving. How fast is *o* shmoving? Balashov's answer:

> Clearly, it is shmoving with constant shpeed *v* away from a point. … On the other hand, even *qua voint*, *o* is involved in two incompatible states of shmotion, shmoving left and shmoving right. *o* is shmoving left (with shpeed *v*), in virtue of being R_{-v}-related to the members of MovingLeft^{v}. But *o* is also shmoving right (with the same shpeed), in virtue of being R_{+v}-related to the members of MovingRight^{v}. Although these two relations demarcate the same physical *sort*, they define physically distinct *states of shmotion*. (Balashov 2007: 33).

Now, I would like to reconsider a solution that Balashov considers and yet rejects to solve problem (b) and try to argue that, in fact, it points to the right solution. Therefore, problem (b) would not, in the end, be an unsolvable difficulty for those wanting simultaneously to defend stage theory, diachronic universalism (implying counterpart universalism) and the conception of lingering properties and sorts which Balashov states in his paper. Let me explain.

I think that, assuming that shmoving right and shmoving left are two incompatible physical states for voints, a plausible reaction to Balashov's problem (b) is, as he himself scrutinizes, to argue that voint is not an ultimate sort and that it comprises, in fact, two different sorts, and that, therefore, *o* does not have incompatible properties, as these are sortal-indexed to different sorts: *voint*+ and *voint*− demarcated by R_{+v} and R_{-v} respectively. To this proposal Balashov answers that, given the requirement that sorts have to be purely

qualitative, not grounded in haecceitistic properties (involving particulars), the distinction between left and right cannot split voint into two sorts. Why? Here is what Balashov says:

> Indeed, the distinction in question does not supervene on any intrinsic features of the situation, which is perfectly symmetrical with regard to reflections relative to the *yz*-plane. The distinction can only be drawn by introducing specific reference devices into the situation (with respect to which one direction could then be designated as 'left' and the other as 'right') and thus invoking manifestly haecceitistic properties (i.e., relational properties involving relations to such devices). If the purely qualitative nature of sorts is to be maintained, no such properties should be allowed to individuate them. (Balashov 2007: 34).

Even if it seems plausible to me to defend that the distinction can only be drawn by introducing reference devices into the individuation of the sorts *voint*+ and *voint*−, I do not see why this should imply the invocation of haecceitistic relational properties, involving haecceitistic relations to such devices. I think we could differentiate the two sorts in the following way. First, as far as I can see, we can speak of the kind of reference system Balashov uses to introduce problem (b). Moreover, as far as I can see, this kind of reference system does not involve, *per se*, any particular. But then, this being so, we could say that the objects falling under the sort *voint*+ are such that they shmove with constant shpeed *v* away from a point in the following way: with respect to the appropriate kind of reference system (the one mentioned before) voints+ are such that: as their position relative to the time-axis increases in number, their position relative to the x-axis also increases in number.

Before looking at how to characterize voints−, let me acknowledge that one may well wonder here about the appropriateness of using this property to individuate a class of entities. Bear in mind, however, that when Balashov himself offers examples of properties that can enter into the specification of sorts, he includes properties such as *being 150 metres away from a burning barn* or *running at 10 m/s away from a growling tiger*. I think that if these properties can enter into the specification of sorts, the one I propose should be considered a possible candidate as well.

However, it has been suggested to me that the kind of sorts which I propose to solve problem (b), even if they seem to respect Balash-

ov's general demands on sorts, do involve a kind of property that is relevantly different from the properties I said Balashov accepts (such as *running at 10 m/s away from a growling tiger*). The properties I propose would violate the relevant symmetries of a situation like the one involved in the example of voints by appealing to extrinsic features of the situation in a way that the properties Balashov accepts (involving, for example, distances) would not. And Balashov could add to his proposal that the properties that result in the violation of the relevant symmetries by appealing to extrinsic features cannot be part of sortal properties. It seems to me, however, that the notion of 'relevant symmetries' varies with the exact properties we consider of *the* situation in question, and that even if voint+(−) does not respect the relevant symmetries at a *certain level* (the level corresponding to the features characterizing *the* situation relative to which we have voints), this does not mean that they do not respect certain other relevant symmetries at a certain *other level* (the level corresponding to the features characterizing *the* situation relative to which we have voints+(−)). Let me try to illustrate what I mean with an example of a more ordinary sort in which one could say that certain relevant symmetries are illegitimately broken. Imagine you are facing what seem to be two absolutely alike pieces of gold in a certain form that were dropped from a certain height, at the same time, in the same way, by the same man. Imagine, however, that one drop was prepared by the man, who is an artist, with the intention of creating a statue, and that the other was produced by chance, but in an exactly parallel way. It seems plausible to me to think that as a result of 'extrinsic' features (some intentions, etc. of the man who pushed the objects) of the following situation: the existence of two absolutely alike pieces of gold with exactly the same form created in the same way… one of the pieces of gold will fall under the sort *statue* and the other will not. I guess one could wonder here if the situation can be said to be perfectly symmetrical for the two pieces of gold, since only one of them has been the subject of some intentions, etc. by the artist. But then, why not say, as I suggested before, that in the example of voints the situation is not perfectly symmetrical for the two (sequences of) voints, as only one of them maintains, to the relevant reference system, the relations characterizing (sequences of) voints+?

Now, for the case of the new-found sort *voint*−, we could say that the objects falling under the sort *voint*− are such that they shmove with constant shpeed v away from a point in the following way: with

respect to the appropriate kind of reference system (the same mentioned before), voints– are such that: as their position relative to the time-axis increases in number, their position relative to the x-axis decreases in number.

As far as I can see, no reference to any particular has been made. I have made reference to a certain kind of reference system (but reference to kinds is allowed, Balashov uses the sort *point* in his characterization of the sort *voint*) and to a certain possible kind of relation between (1) the position objects can occupy relative to the time-axis and (2) the position they can occupy relative to the x-axis (of these kinds of reference systems). The basic idea here would be that the kind of reference system and the kind of relations which we have been considering and which we could introduce as features of the new sorts proposed (preserving, in so doing, the non-haecceitistic character that Balashov demands), are such that they can be applied in a situation irrespective of the symmetries Balashov considers. Therefore, nothing seems to forbid the non-problematic instantiation of these new sorts in a situation like the one Balashov considers in such a way that no incompatible properties have to be attributed to one and the same object, as the properties will be sortal-indexed to the two new-found different sorts.

After considering this case, Balashov introduces a second one to make it clearer, perhaps, how proponents of the theses above cannot escape difficulties related to lingering properties:

> Suppose there is a continuous two-dimensional array of material points located on the *xy*-plane and symmetrical with respect to arbitrary rotations of this plane around the centre point with co-ordinates $x = 0$, $y = 0$. (Such an array could, for example, be a circle of a finite radius.) For the centre point-stage *o* at $t = 0$ one can ask the same questions as before about its state of shmotion (*qua* voint). Point-stage *o* is now shmoving, *qua* voint, not just 'left' and 'right', but at *all* angles α (relative to the positive direction of *x*, say) away from the point (0,0). It would hardly make sense to maintain that the distinction among the infinite number of angles between 0^{o} and 360^{o} could be grounded in any qualitative aspect of the situation. (Balashov 2007: 35).

Why, however, do we need to ground the difference between the different angles in qualitative aspects of the situation? Again, it seems to me that we can introduce kinds of reference systems and kinds of relations which do not imply haecceitistic properties or relations but

can do the job, even if the situations are like the one Balashov describes in the quotation: to individuate the new sorts we obtain from this more complex situation, i.e., sorts like voint-at-10°^{v} or voint-at-90°^{v} etc., the only thing we have to add to the features defining the sorts is that, in our example, the voints-at-10°(or 90°)^{v} are such that they shmove… in a plane forming an angle of 10° (or 90°) relative to the positive direction of the *x*-axis of the appropriate kind of reference device (of the kind Balashov uses to introduce the example). Moreover, in adding this new kind of reference system and these new kinds of geometrical characteristics to the features that individuate the new sorts, we have not, as far as I can see, made reference to any particular; moreover, nothing seems to forbid the application of the new sorts to a situation like the one Balashov describes above in a way such that we do not have to attribute incompatible properties to one and the same object, as they would be sortal-indexed to the newfound different sorts.

In conclusion, I have so far tried to show that problem (b), despite what Balashov says, is not an unsolvable problem for those wanting simultaneously to defend stage theory, diachronic universalism (implying counterpart universalism) and the conception of lingering properties and sorts set out by Balashov in his paper.

Now, let me go back to Balashov's understanding of sorts in the framework of stage universalism.

Sorts and stage universalism

As we have seen, Balashov holds that sorts have three characteristics. First, they are in the same category as properties, even if they are purely qualitative, and therefore no particulars are allowed to determine them. Second, they form hierarchies. Third, all objects fall under at least one sort. In relation to this last feature, bear in mind that Balashov considers stage theory together with diachronic universalism, holding that any class of momentary objects has a diachronic fusion, i.e., corresponds to an object. My purpose in this section is to argue that, if all objects have to fall under a sort, then there seems to be little reason to maintain that sorts have to be determined only by non-haecceitistic properties and relations.

First of all, I shall argue that, even if one is a proponent of stage universalism, this alone does not mean that one cannot recognize the

existence of different kinds of series of stages. Moreover, it can be done in different ways.

Following Hawley 2001, which refers to Hirsch 1993, we can differentiate between four-dimensional regions of space-time, which seem, intuitively, to correspond to the paths or histories of objects, and four-dimensional regions of space-time, which do not seem, intuitively, to correspond to the paths or histories of objects. We can call regions of the first kind 'natural regions' and regions of the second kind 'unnatural regions'. Moreover, proponents of stage theory can call the series of stages that correspond to the first kind of regions 'natural series of stages' and the series of stages that correspond to the second kind of regions 'unnatural series of stages'. Hawley presents three alternatives concerning the relation between these four-dimensional regions and their correspondence with objects. The first option is *ontological inegalitarianism*, which holds that only natural four-dimensional regions can correspond to objects; in terms of the stage view, only natural series of stages correspond to objects. The second option is *ontological egalitarianism*, which holds that there is no objective difference between natural and unnatural four-dimensional regions (all of them can correspond to objects) and that any perceived difference simply reflects our priorities and interests; in terms of the stage view, there is no objective difference between natural and unnatural series of stages, all of them correspond to objects and any perceived difference simply reflects our interests. The third option is *ontological elitist inegalitarianism*, which acknowledges an objective difference between natural and unnatural four-dimensional regions, without claiming that natural four-dimensional regions can correspond to objects while unnatural four-dimensional regions cannot; in terms of the stage view, there is an objective difference between natural and unnatural series of stages, but natural and unnatural series of stages alike can correspond to objects.

A quite widely held view among proponents of stage universalism seems to be ontological egalitarianism, in which there is no objective difference between series of stages and all of them can correspond to objects. First, however, let me review Katherine Hawley's own position: ontological elitist inegalitarianism, a plausible alternative to ontological egalitarianism for stage universalists. I will come back to ontological egalitarianism later on.

Katherine Hawley, in Hawley 2001, argues that there are objective differences between series of stages which correspond to ordinary

objects (natural series of stages) and those which do not correspond to ordinary objects (unnatural series of stages). In Hawley's opinion, a natural series of stages is one whose members stand in *non-supervenient relations* to one another. *Non-supervenient relations* are non-spatio-temporal non-supervenient relations which underpin the relation of immanent causation. The existence of these non-supervenient relations is, Hawley sustains, the best response to the homogeneous disc argument usually offered against perdurantism or the stage view. Opting for non-supervenient relations, she says, is the natural 'least move' in response to the homogeneous disc argument. Moreover, Hawley argues that the existence of non-supervenient relations has two more advantages. First, non-supervenient relations can ground the distinction between genuine change and mere difference over time between different objects. Genuine change, Hawley argues, would be the possession of incompatible properties by stages which are linked by non-supervenient relations. Second, in Hawley's opinion, for stage theory to be viable, it must be the case that, in general, when we refer to a stage, we thereby privilege a certain collection of stages apt to be the referent of the same term as it is used at different times. Non-supervenient relations would mark out these suitable referents.

Now, the point I would like to stress here[7] is that, from the point of view of the stage universalist maintaining ontological elitist inegalitarianism, we can distinguish between different series of stages. Natural series of stages would correspond to ordinary objects: elephants, persons, daffodils, crocodiles, elms, tables, statues and so forth. For these objects, if one pays attention to the sorts under which they fall, it seems quite plausible to sustain what Balashov says: sorts are determined by non-haecceitistic properties and relations. However, apart from these natural series of stages, we have all the other series, the gerrymandered unnatural series of stages that do not correspond to ordinary objects. The series which consists of all the instantaneous objects that, at some time or other, have been/are/will be located at the region, let us call it 'p', occupied now by the cap of my last pen, for example, corresponds to an unnatural series. If these series have to fall under a sort, as Balashov proposes in the third feature characterizing sorts, then I think it is perfectly legitimate to

[7] More than the particular way Hawley explains the distinction.

wonder about why they should have to fall under sorts of the same kind as the sorts under which natural series of stages fall. We could differentiate between natural sorts and unnatural sorts corresponding to natural series of stages (corresponding to ordinary objects) and to unnatural series of stages (not corresponding to ordinary objects) and hold that even if, intuitively, it seems to be true, as Balashov says, that natural sorts are not individuated by particulars, we do not have any intuition regarding these unnatural sorts[8]. There seems to be no reason to suppose that they are of the same kind as natural sorts, as natural series of stages are not of the same kind as unnatural series of stages. Why not say, for example, regarding the series mentioned before involving the particular p, that it falls under the following sort: to be composed at every moment at which it exists by the instantaneous object placed at point p? Imagine how the sort in question should be described using merely non-haecceitistic properties (series falling under it can be of infinite duration and can be made of the more varied kinds of instantaneous objects we can imagine). Can we assume that there is a non-haecceitistic description of p? Even if this description should exist, do we have any reason to require such a demanding requirement of unnatural sorts? What is the point of doing so?

Now, let us go back to the egalitarians' positions. The egalitarians' positions claim that there is no ontological distinction between natural series of stages and unnatural series of stages and that the differences between the regions are simply a question of our interests. Now, as before, it seems to me that the proponents of stage theory and diachronic universalism who are egalitarians can argue that, as Balashov says, for what our interests seem to classify as natural series of stages, it seems very plausible to sustain (after having considered a number of them) that sorts are determined by non-haecceitistic

[8] Some important questions arise from this distinction. For instance, more has to be said about how the distinction is to be exactly understood and justified, and how it applies to specific sortals. Also, there is the question of whether naturalness comes in degrees, and the question of whether there is a level of *perfect* naturalness. An adequate consideration of these and related questions, however, would shift focus too far away from the discussion I have undertaken in this paper. Let me point out, however, that the distinction between *natural* and *unnatural properties* made by David Lewis, in Lewis 1983, is of much importance here (he also highlights the importance of the distinction for many topics in philosophy). See also Armstrong (1978; 1989), Lewis 1986, Schaffer 2004, Taylor 1993 and Williams 2007 (especially, sections 2, 4 and 5).

properties and relations. Think, as before, of natural series of stages corresponding to tigers, sparrows, roses, weeping willows, tables and so forth. But, even if the only difference is a question of human interests, why cannot we say that, for unnatural series of stages, sorts are not restricted in such a way? It is true that there would not be ontological distinctions between natural series of stages falling under natural sorts and unnatural series of stages falling under unnatural sorts, but there would be distinctions (due to human interests) nonetheless. And, if it is useful to include particulars in the individuation of unnatural sorts, why would proponents of the stage view and diachronic universalism not be able to do so? Think about the usefulness and simplicity of individuating the sort mentioned before using p (instead of trying to individuate it using only non-haecceitistic properties and relations).

In short, if a proponent of stage universalism accepts either ontological egalitarianism or ontological elitist inegalitarianism, it seems plausible to defend that she has no reason to maintain Balashov's understanding of sorts.[9]

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