

## Lecture 4: Objects

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## Lecture 4: Objects

### 1. Introduction

- After overviewing the raging debate on properties, it is now time to focus on a *slightly* less controversial category: objects.
- By 'object' I mean 'object' in a broad sense of the terms: the kind of category that covers things such as flower pots, human beings, donkeys, chairs, rocks and molecules. (Note: objects are sometimes known, in philosophical jargon, as 'concrete particulars' or 'substances'; I'll stick to 'objects'.)
- Some uncontroversial features of objects:
  - They occupy a certain region of space and exist at different times.
  - They exemplify properties but can't themselves be exemplified by any further entity.
  - They can persist through change in some of their properties.
  - They can have spatial parts (which are also themselves objects).
  - They exist only contingently (i.e. they could have failed to exist - note however that some people think that *some* objects exist necessarily (e.g. God)).

## Lecture 4: Objects

### 1. Introduction

- In contrast to properties, there is *relatively* little debate regarding the existence of objects. Most (though not all) parties agree that these things exist. For instance, it is hard to see how one could possibly provide relevant paraphrases for true sentences involving singular terms that apparently refer to objects (e.g. 'My house is for sale').
- The main debate therefore centers on the question of reduction. This involves first of all deciding on one of the two following options:
  - Reductive Realism (with regards to objects): objects are analyzable into further components of a different, more fundamental kind.
  - Non-Reductive Realism: objects aren't analyzable in this way.
- For various reasons, most philosophers who countenance the existence of objects (i.e. most philosophers full stop) have attempted to go for the first option. Here we take a look at two well-known attempts to carry out this reductive analysis...

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### 2. The Bundle Theory

- According to the Bundle Theory, objects are 'clusters', or again 'bundles' of spatiotemporally coinstantiated attributes. Depending on the version, these attribute-like entities can be taken to be either properties or tropes.
- On this view, a particular tomato, for instance, is nothing but a cluster of coinstantiated attributes such as being spherical, having a stalk, being red, being smooth, etc. (alternatively, if you are talking clusters of tropes, rather than properties: a particular sphericity, a particular redness, etc.)
- Again on this view, to have a property is simply to have that property (alternatively a trope that is a member of the relevant set) as a constituent.
- Note that Bundle Theory obviously isn't available to either:
  - (a) anti-realists regarding properties (they don't countenance the required entities)
  - (b) proponents of Object-Based Reductive Realism regarding properties (they do countenance the required entities but they would end up offering a circular account).

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### 2. The Bundle Theory

- Bundle theorists aren't always clear as to how exactly we should understand the key notion of 'bundle':
  - Taking bundles to be mathematical sets is unpopular, as sets are widely thought to lack spatiotemporal location, whilst objects clearly *do* have spatiotemporal location (although it is of course possible for the established view on sets to be wrong).
  - It is also clear that attributes cannot be components of objects in the same sense that their spatial parts are (e.g. the redness of a tomato isn't a part of the tomato in the same sense that its left-hand half is; I assume here that it does make sense to claim that redness is a 'part' of the tomato in the first place – some disagree here).
- Whatever bundles are supposed to be, bundle theorists do however agree on the fact that, just as it is the case with sets, sameness of bundle-components entails sameness of bundles and vice-versa. This however, we will see, causes problems.

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### 2. The Bundle Theory

- Before moving on to further issues, a quick word on two important dimensions of variation of the account...
- First dimension of variation: Claiming that objects are nothing but bundles of properties leaves considerable wiggle-room as to *which* of the properties of an object qualify as components of that object. One could hold that *all* of them qualify or simply that *some* of them do. Most bundle theorists, however, subscribe to the former view. This, in my view, causes them trouble. More on this later.

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### 2. The Bundle Theory

▪ Second dimension of variation: As noted earlier, we have both a property-based and a trope-based version of Bundle Theory. A majority of bundle theorists subscribe to the latter. There are some good reasons for this. I will mention one important reason in a later section, but note at least for now that Bundle Theory appears to pose problems for those who also subscribe to Platonism regarding properties (and this *is* a problem because Platonism is extremely popular). If Platonism and Bundle Theory are both true, it seems plausible to claim that objects, as bundles of location-less entities, will themselves lack location. This is clearly the wrong result.

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### 2. The Bundle Theory > 2.1. Motivations

▪ **Argument for Bundle Theory from parsimony I (reduction of objects):** [1] Non-Reductive Realism with regards to objects commits us to the existence of at least two fundamental types of things (i.e. objects and properties/tropes). [2] Bundle Theory only commits us to the existence of at least one (i.e. properties/tropes). [3] Other things being equal, we should prefer a theory A over a theory B iff A commits us to the existence of fewer kinds of entities than B does. [4] Other things are equal (in particular, Bundle Theory doesn't face any decent counterarguments). Therefore [5] we should endorse Bundle Theory over its non-reductive counterpart.

Responses to this argument focus on [4], opponents of Bundle Theory claiming that the view has various unacceptable consequences.

Note that the argument fails to work against non-reductive realists about objects who also reduce properties to sets of objects (because [1] is false for them: they only believe in objects)

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### 2. The Bundle Theory > 2.1. Motivations

▪ **Argument for Bundle Theory from parsimony II (reduction of relation of exemplification).** [1] Non-Reductive Realism with respect to objects postulates a primitive relation of exemplification. [2] Bundle Theory takes exemplification to be an instance of the familiar relation of component-possession. [3] Other things being equal, we should prefer a theory A over a theory B iff A commits us to the existence of fewer kinds of entities than B does. Therefore [4] we should endorse Bundle Theory over its non-reductive counterpart.

Note that, again, this doesn't work against non-reductive realists with respect to objects who also reduce properties to sets of objects: these people also reduce exemplification to something familiar, namely set membership.

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### 2. The Bundle Theory > 2.1. Motivations

▪ **Argument for Bundle Theory from the impossibility of objects without properties.**

[1] For any fact F and any two theories A and B, if A explains F and B does not, we should prefer A to B. [2] Objects without properties are impossible (even if this is simply because having no properties is itself a property). [3] Bundle Theory offers an explanation of [2] (because, on this view, objects are composed of properties), whereas none of its competitors do. Therefore [4] we should prefer Bundle Theory to its competitors.

Opponents of Bundle Theory will presumably argue either that (a) [1] is false and no explanation of [2] is required, or that (b) there exists an alternative to Bundle Theory that explains [2] equally well.

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### 2. The Bundle Theory > 2.1. Motivations

- Before moving on, I would like to point out that there is also a popular 'epistemic' argument for bundle theory, according to which unless objects are bundles of properties/tropes, we have no justification in thinking that these things exist. I won't review this argument, due to (i) time considerations and (ii) the fact that doing justice to the issue would require an excursion into epistemology, which would be off-syllabus.

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### 2. The Bundle Theory > 2.2. Objections

- As noted above, bundle theorists are committed to the claim that sameness of bundles entails sameness of components and vice versa. This leads to a number of objections, just as a similar kind of equivalence posed problems for attempts to reduce properties to sets of objects or tropes (see previous lecture). Here again, we have an objection hinging on each direction of entailment...
- **Argument against Bundle Theory from sameness of bundles entailing sameness of components I (synchronic version).** [1] According to Bundle Theory, objects couldn't have had different properties/tropes than the ones they in fact have (because objects are bundles of properties/tropes and sameness of bundles requires sameness of components), and hence, according to Bundle Theory, sentences of the form 'x is F' are, if true, necessarily so. [2] However, sentences of the form 'x is F' can surely be merely contingently true. Therefore [3] Bundle Theory is false.

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### 2. The Bundle Theory > 2.2. Objections

Reply 1: [2] is false. The critic is confusing contingent truth with informativeness. All sentences of the form 'x is F' are indeed necessarily true. Nevertheless, this doesn't mean that they are uninformative.

Reply 2: [1] is false. There are other options open to the bundle theorist. As I mentioned above, it is open to the bundle theorist to identify objects with a bundle of a *proper subset* of their properties/tropes. One could then for instance claim that 'x is F' is true simply iff F-ness (or a trope that is a member of F-ness) (i) is a component of x or (ii) is coinstantiated with the components of x. This leaves it open for some sentences involving predication to be contingently true, i.e. those in which F-ness doesn't figure amongst the components of x. Of course, those sentences which involve a property/trope that does figure amongst the components of x will remain necessarily true (but this may not be a bad result anyway).

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### 2. The Bundle Theory > 2.2. Objections

▪ **Argument against Bundle Theory from sameness of bundles entailing sameness of components II (diachronic version).** [1] According to Bundle Theory, objects can't persist through changes in their attributes (because objects are bundles of properties/tropes and sameness of bundles requires sameness of components). [2] However, objects can persist through changes in their attributes. Therefore [3] Bundle Theory is false.

I won't be saying much about this topic until lecture 7 which will be devoted to the issue of persistence through change. Note however, that the bundle theorist is entitled to reject [1], and maintain that only a proper subset of the attributes of an object counts as its components. This allows for persistence through change in some attributes, though not all.

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### 2. The Bundle Theory > 2.2. Objections

- The next objection is probably one of the most widely endorsed and remains the main focus of the debate on the plausibility of Bundle Theory.
- First of all, note that Bundle theory is characterized by the following principle:  
BT: Necessarily, for any object  $x$  and any entity  $y$ , if  $y$  is a component of  $x$ , then  $y$  is a property. (in other words: all the components of objects are properties)  
Bearing this in mind, the following argument can be run against the bundle view...

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### 2. The Bundle Theory > 2.2. Objections

- **Argument against Bundle Theory from sameness of components entailing sameness of bundles (aka argument from the falsity of the principle of the identity of indiscernibles).** [1] The following principle (known as the 'Principle of Constituent Identity') is true: PCI: Necessarily, for any complex objects  $x$  and  $y$ , if, for any entity  $z$ ,  $z$  is a component of  $x$  iff  $z$  is a component of  $y$ , then  $x$  is numerically identical with  $y$ . (in other words: same components  $\rightarrow$  same objects). [2] BT & PCI jointly entail a principle known as the 'Principle of Identity of Indiscernibles' (PII): PII: Necessarily, for all particulars  $x$  and  $y$  and every property  $z$ , if  $z$  is instantiated by  $x$  if and only if  $z$  is instantiated by  $y$ , then  $x$  is numerically identical with  $y$ . (in other words: same properties  $\rightarrow$  same objects). [3] PII is false. Therefore [4] BT (i.e. the bundle view) is false.

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### 2. The Bundle Theory > 2.2. Objections

[3] (i.e. the claim that PII is false) is itself justified as follows:

**Argument for the falsity of PII from conceivability.** (due to Black 1952: 156): [1] it seems possible for a world to exist, such that two numerically distinct particulars are nevertheless qualitatively identical (Black's example is of a world that only contains two qualitatively identical iron spheres two miles apart from each other). [2] Conceivability is a good guide to possibility. Therefore [3] PII – which entails that the scenario described in [1] is impossible – is false. (this can be run as an inductive or deductive argument, depending on how 'good' a guide to possibility conceivability is taken to be)

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### 2. The Bundle Theory > 2.2. Objections

There are two ways of defeating the main argument: undermining [1] (i.e. the claim that PCI is true) and undermining [3] (i.e. the claim that PII is false), [2] being a logical truth. [1] is uncontroversial, so attention has focused on [3] and its supporting sub-argument...

Reply (1). Black's objection only applies to versions of bundle theory that hold that two particulars can exemplify the very same attribute. Trope theorists simply deny this. They will claim that Black's scenario involves two numerically distinct particulars that have tropes which exactly resemble each other, whilst remaining numerically distinct. PII, on their view, remains intact. But as we saw in the previous lecture, there remain a number of unresolved issues for Trope Theory. So what are the options for those who are unhappy with tropes?

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### 2. The Bundle Theory > 2.2. Objections

Reply (2). Black's particulars, call them  $x$  and  $y$ , aren't qualitatively identical:  $x$  has the property of being identical to  $x$ , whilst  $y$  has the property of being identical to  $y$ .

Counter-reply: the bundle theorist can't appeal to these properties as they presuppose the notion of particular (Loux calls these properties 'impure'). The bundle theorist should in fact endorse a version of PII restricted to 'pure' properties: PII\*: Necessarily, for all particulars  $x$  and  $y$  and every *pure* property  $z$ , if  $z$  is instantiated by  $x$  if and only if  $z$  is instantiated by  $y$ , then  $x$  is numerically identical with  $y$ . (In other words: same *pure* properties  $\rightarrow$  same objects).

Reply (3). The particulars also differ in terms of their spatial properties – they are located in different places.

Counter-reply: This response hinges on the assumption that space is absolute; if we endorse a relational account of space, spatial properties also turn out to be impure.

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### 3. The Substratum Theory > 3.1. Overview & Motivations

- Substratum Theory is essentially a 'Bundle Theory +'. It maintains that the properties/tropes that objects have are components of these objects, but further claims that objects have a component that isn't a property/trope. They call this additional component a 'substratum'.
- Beyond this point, things get a little confused (as you may have gathered from the set reading). It turns out that substratum theorists postulate the existence of substrata for a number of unconnected reasons and use substrata for a number of very distinct theoretical tasks...

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### 3. The Substratum Theory > 3.1. Overview & Motivations

- First and foremost, substrata are introduced as a way of patching up a property-based bundle theory in response to the argument from the falsity of P11 (a trope-based Bundle Theory, as we have seen, doesn't need patching up): substrata are supposed to be what make the difference between qualitatively identical but numerically distinct objects. It is of course *crucial* here that substrata are conceived of as non-repeatable entities: they cannot figure as components of more than one bundle. In other words, it must be the case that each object has its very own substratum.
- However, it turns out that we don't just get *property*-based substratum theories; we also find *trope*-based theories of this kind. But why would trope theorists feel the need to postulate substrata? Loux gives us the following argument...

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### 3. The Substratum Theory > 3.1. Overview & Motivations

- **Argument for Substratum Theory from the distinctness of properties/tropes and their exemplifiers.** [1] Objects have properties/tropes as constituents. [2] These properties/tropes must be exemplified by certain entities. However, [3] if an entity *e* exemplifies a property/trope *F*, it must be entirely distinct from *F*: i.e. *e* cannot have *F* as a constituent. Therefore [4] the properties/tropes that are components of objects are exemplified by entities other than the objects themselves. Furthermore, [5] the entities that do exemplify these properties must bear an 'intimate relationship' to the relevant objects: they must be constituents of these objects. Therefore [6] objects are constituted by both properties/tropes and a substratum, which (i) is the exemplifier of the said properties/tropes, and (ii) fails to itself have these properties/tropes as constituents.

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### 3. The Substratum Theory > 3.1. Overview & Motivations

- Important note. [6] (ii) leads to the common claim that substrata are supposed to be 'bare', i.e. lack any essential properties (properties that they must have if they are to exist). As you will have noticed from your readings, the alleged bareness of substrata is something that the opponents of Substratum Theory are very unhappy about.
- I am not going to discuss these objections in any detail here, for the simple reason that it just doesn't follow from [6] (ii) that substrata are 'bare'. [6] (ii) says that substrata do not have as constituents any of the properties/tropes that we typically associate with the corresponding objects. That doesn't mean that substrata cannot have *other* properties/tropes as constituents. Of course, this opens the way for a regress (if the substrata have properties/tropes as constituents, there must be another sub-substratum to act as an exemplifier, etc.), but the regress itself might not be objectionable. Furthermore, note that nothing appears to prevent us from claiming that entities can have essential properties that don't figure among their constituents.

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### 3. The Substratum Theory > 3.1. Overview & Motivations

- So we very clearly have two very distinct arguments which impose very different requirements on substrata. In view of this, it may be useful to distinguish between two versions of Substratum Theory, one for each of the arguments that we have reviewed.
- Before moving on to some brief criticisms of Substratum Theory, I would just like to draw your attention to an important point. Although Substratum Theory is a reductive theory, in that it reduces objects to a bundle of more fundamental components, it isn't a particularly ontologically economical one: it posits the existence of substrata + properties/tropes, when Non-Reductive Realism with respect to objects posits the existence of objects + properties/tropes. In other words Substratum Theory doesn't enjoy the ontological parsimony of Bundle Theory.

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### 2. The Substratum Theory > 3.2. Objections

- Given that substratum theory is essentially a 'Bundle Theory +', it shouldn't come as much of a surprise that it shares some of the objections to Bundle Theory (namely those objections that claim that Bundle Theory imposes requirements on object identity that are too strong).
  - The objection from persistence through change. As Loux points out, the issue arises from a very general principle according to which the identity of complex entities entails the identity of their components (i.e. the converse of PCI). The fact that substratum theorists include a substratum amongst the components doesn't affect the force of the argument.
  - The objection from the contingent truth of certain predicative statements. Again, it is plausible to claim that the same issue arises, for the very same reasons (there are some complications but I will have to leave these for now).

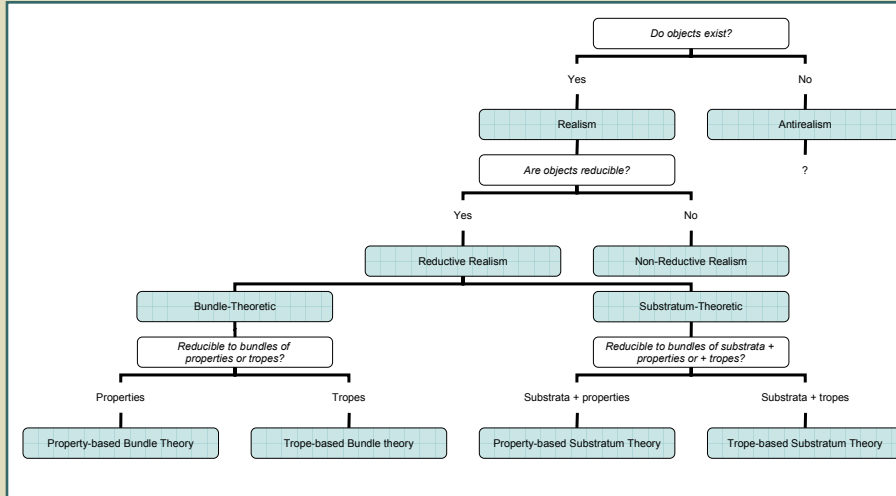
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### 2. The Substratum Theory > 3.2. Objections

- Furthermore, the claim, in the second supporting argument for Substratum Theory, that objects are not the bearers of the properties that we associated with them is also widely regarded as highly counterintuitive. Of course, this aspect of Substratum Theory can arguably be dropped.
- Finally, I should mention the fact that there is also a popular *epistemic* argument against Substratum Theory that crops up frequently in the literature. Again, I will have to skip this point, for the same reasons that I skipped the epistemic argument for Bundle Theory. If you are interested in the issue, take a look at the Allaire article on the reading list.

## Lecture 3: Properties II – Nominalism & Reductive Realism

### 4. Overview of the Positions Regarding Objects



J. Chandler

Metaphysics I: The Nature of Being

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## Lecture 4: Objects

### Next week... States of affairs, Facts and Events

- Set reading: Loux textbook, Chapter 4 'Propositions and their Neighbours', Section entitled 'Facts, states of affairs and events' (skip the material on propositions).
- Reminder: first assignment due in. ☺

J. Chandler

Metaphysics I: The Nature of Being

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