Philosophy 125 — Day 11: Overview

- Administrative Stuff
  - Ed Zalta's Lecture Notes are now on the course website
  - Deadline to add/drop without Dean's approval is October 17
  - Clarificatory questions on study questions or papers topics?
- Agenda: Concrete Particulars (not all today)
  - First: A leftover from trope theory (prelude to modality)
  - The Bundle Theory
    - Motivation
    - Objection #1: Subject-predicate discourse
    - Objection #2: The Identity of Indiscernibles
  - The Substratum Theory
    - Motivation
    - Some problems
  - An Alternative Account: Aristotelian substances

A Leftover from Trope Theory

- Loux gives the following argument against trope theory (from Wolterstorff):
  1. Sets have their members necessarily.
  2. According to trope theory, the predicate "Courage" denotes the set of courage tropes. That is: Courage = the set of courage tropes (**C**).
  3. So, the set of courage tropes has its members necessarily. Thus, the set of courage tropes could not have had more or fewer members than it does.
  4. According to trope theory, courageous persons are just those that have a courage trope, and each courageous person has a *unique* courage trope.
  5. Therefore, there could not have been more or fewer courageous persons than there are. But, this is patently false, so trope theory must also be false.
- What about: (*i*) The number of planets is 9, (*ii*) 9 could not have been less than 8, (*iii*) Thus, the number of planets could not have been less than 9?
- "The number of planets" doesn't *have to* denote what it *in fact* does (*viz.*, 9). Why does "the set of courage tropes" *have to* denote what *it* in fact does (**C**)?

Concrete Particulars I: Setting the Stage 0

- We have been talking about concrete particulars all semester. All parties in our metaphysical disputes about universals have accepted the existence of them. So, giving an account of their nature is central to metaphysics.
- We seem to know some things (or have intuitions) about concrete particulars.
  - Examples: persons, plants, inanimate material objects, ...
  - They cannot be exemplified, but they exemplify various attributes
  - They are "mortal": they come into being, and then pass away
  - They are *contingent beings* (they do not exist necessarily)
  - They undergo change (and yet persist through change)
  - They are located in space and time
  - They have (physical) parts (themselves particulars), unless they are physical *simples* (physical things with no parts that are physical things)

Concrete Particulars II: Setting the Stage 1

- Austere Nominalists think there are *only* concrete particulars. They admit there are many different ways we can describe particulars, but deny that this indicates the existence of anything other than the particulars themselves.
- Moreover, Austere Nominalists think that concrete particulars are not further analyzable into more primitive stuff ('blobs'). While concrete particulars can have parts, those parts are qualitatively just like the particulars themselves.
- Realists and trope theorists, on the other hand, believe that each (true) nonequivalent description of a particular indicates the existence of a (metaphysically) distinct entity that the particular exemplifies or has.
- For realists *&* trope theorists, then, concrete particulars are not metaphysical *simples* (or 'blobs'). Particulars are metaphysical *complexes* of different entities, structured certain ways. We will say they are *wholes* with *constituents.* Here, we are *not* talking about *physical* parts and wholes.

Concrete Particulars III: Setting the Stage 2

- It is important not to conflate the *physical parts* of a particular with its *metaphysical constituents*. The metaphysical theories of particulars will differ, mainly, in their claims about the metaphysical *constituents* of particulars.
- Austere nominalists think that particulars have *no* constituents. Realists and trope theorists will both say that particulars have *some* constituents: their attributes. Some will also say that particulars have another sort of constituent.
- On this view, particulars are constituted by attributes, and something else, which is a non-attribute that serves as the literal *bearer* of the particular's attributes. This seems counterintuitive, at first. *a*'s attributes are not really *a*'s?
- We normally talk about Socrates' courage. But, on this view, it wouldn't really be Socrates' courage. There would be some more *fine-grained constituent* of Socrates that would bear the attributes we attribute to Socrates.
- The former view is *bundle theory*, and the latter *substratum theory*. Both say particulars are complexes. Substratum theory posits additional fine structure.

Concrete Particulars IV: Background on Substratum Theory 1

- While substratum theory may seem strange at first, it does have some appeal, on reflection. Naively, we *do* distinguish things from their attributes. We seem to identify the bearer of properties, independently of the properties it bears.
- Consider a small red ball. We associate many different attributes with the ball – the color red, the spherical shape, a certain texture, a weight, a diameter, etc.
- The subject of any one of these attributes (*e.g.*, redness) seems (naively, at least) to be something with an identity *independent* of that attribute (*why?*). If *a* can't be identified independently of being *F*, then why assert "*a* is *F*"?
- *E.g.*, then, what literally possesses the color red is something that in itself is *not* red, something whose being what it is does not involve its being red.
- But if the ball *a* is not the subject of "*a* is red", then what is? There must be *some one thing* that bears all the attributes we associate with the ball. And, it must be a *constituent* of the ball (intimately related) — a *bare substratum*.

Concrete Particulars V: Background on Substratum Theory 2

- Substrata have an identity that does not depend on any of the properties (actual or possible) that are attributed to the particulars of which they are constituents.
- This may seem strange. But, if this weren't so, it would also be puzzling. We identify particulars across changes in their attributes. If their identity conditions depended on having the attributes they have, how could we do this?
- The substratum of a particular "glues" it together. It is the substratum that makes all the attributes of Socrates *his*, and not, say, the Eiffel Tower's. There is a single underlying subject that exemplifies each of his many attributes.
- On this view, particulars are not ontologically basic. It is the underlying substratum (and the properties or tropes it exemplifies or has) that is primitive.
- There are unattractive aspects of substrata. How can we know anything about substrata if they're really *bare*? We can't directly perceive them.
- Empiricists have deep epistemological worries here. They favor bundle theory.

Concrete Particulars VI: Background on Bundle Theory

- Bundle theorists agree with substratum theorists in denying that the concrete objects of everyday experience are ontologically basic or fundamental.
- According to Bundle Theory, a concrete particular is just a "bundle," a "cluster," a "collection," or a "congeries" of the empirically manifest attributes that common sense associates with it. No mysterious bare substrata.
- The "glue" that binds bundles is a *primitive* relation called "compresence," "collocation," "combination," "consubstantiation," or "coactuality". This primitive relation is explained informally as the relation of occurring together.
- According to bundle theorists, there are really only attributes, properties, or tropes. What we call "particulars" are mere constructions out of these.
- Different attributes entail different bundles, so where we have change we have numerically different bundles and, hence, numerically different objects.
- Loux claims this is also a problem for substratum theory — a general problem about changes in constituents leading to changes in wholes. Study Question.

Concrete Particulars VII: Objection #1 to Bundle Theory

- We make all kinds of claims about concrete particulars. For instance, "Sam is red," "Sam is spherical," "Sam is 2 inches in diameter", etc.
- Challenge from substratum theorist: Answer the following 2 questions:
  - What is the further thing to which an attribute is being said to be related?
    - A1: Just the bundle of attributes that is the thing we've dubbed "Sam".
      - But, then don't these claims come out *tautologous* (true by logic)?
      - However, we can use the name "Sam" to denote a bundle without knowing all of its constituents. So, claims can still be *informative*.
    - A2: The bundle of attributes "Sam" *sans* the attribute in question.
      - Not tautologous, but *no two statements are about the same thing*.
  - What relationship is being said to obtain between the two?
    - The relation of constituent to whole.
- But, bundles cannot change their membership, so they have their attributes *necessarily* (*familiar?*). *Key difference* between substratum & bundle theories.

Concrete Particulars VIII: Objection #2 to Bundle Theory 1

- The 2nd objection is an argument involving the following three principles:

(II) Necessarily, for any concrete objects, *a* and *b*, if for any attribute, ϕ, ϕ is an attribute of *a* iff ϕ is an attribute of *b*, then *a* is numerically identical with *b*.

- (II) says that complete qualitative *indiscernibility* (*agreement with respect to all attributes*) *entails numerical identity.* Its converse seems *trivial*. *Why*?

(PCI) Necessarily, for any complex objects, *a* and *b*, if for any entity, *c*, *c* is a constituent of *a* iff *c* is a constituent of *b*, then *a* is numerically identical w/ *b*.

- (PCI) is accepted both by substratum theorists and by bundle theorists. It says that *agreement with respect to all constituents entails identity*. As was the case with (II), the converse of this claim (which is a distinct claim) seems *trivial*.

(BI) Necessarily, for any concrete entity, *a*, if for any entity, *b*, *b* is a constituent of *a*, then *b* is an attribute. [this should be an *iff*, I think, see below]

- (BI) is basic for bundle theory – *only attributes are constituents of particulars*.

- Now, the argument behind objection #2 goes as follows (simplified):

(II) Agreement on all attributes entails identity.

(PCI) Agreement on all constituents entails identity.

(BI) The attributes a thing has are *all and only* (!) the constituents it has.

  - Step 1: (PCI) + (BI) entails (II). [Easy.]
  - Step 2: (II) is false. [Not so easy. This is where the real controversy is.]
  - Step 3: Since (PCI) is uncontroversial, (BI) is false. [Easy.]
  - Step 4: Since bundle theory entails (BI), bundle theory is false. [Easy.]

- NOTE: This argument *only* applies to the metaphysical realist. A trope theorist will either accept (PCI) and (II) in *vacuous* forms (with no consequences for their theory), or they will deny them. No two objects can *share* any tropes (*viz.*, constituents). "Agreement" is merely *similarity* between tropes. But that's not "agreement" in sense required to make (II) plausible. So, (II) *may* follow from (BI) and (PCI), but only *vacuously* for a trope theorist. There are no compelling trope counterexamples to (II)!
- The difficult step here is step 2. What are the *counterexamples* to (II)?

Concrete Particulars IX: Objection #2 to Bundle Theory 2

- Loux considers a pair of spheres (*a* and *b*) with the same shape, color, mass, texture, size, etc. As he puts it "they are so similar that no one can tell the difference between them." Could this be a counterexample to (II)?
- But, what about the properties *A* = being identical with *a*, and *B* = being identical with *b*. Don't *a* and *b* fail to share *these* properties?
- Here, Loux argues that the bundle theorist is not allowed to appeal to such properties, since they are *reductionists* about concrete particulars, and such properties *presuppose* the notion of a particular. Such properties are *impure*.
- This leads to a revised version of (BT).

(BT*) Necessarily, for any concrete entity, *a*, if for any entity, *b*, *b* is a constituent of *a*, then *b* is a *pure property/attribute.*

- (BT*) and (PCI) entail something stronger than (II) (w/only pure properties).

(II*) Necessarily, for any concrete objects, a and b, if for any *pure* property/attribute, ϕ, ϕ is an attribute of a iff ϕ is an attribute of b, then a is numerically identical with b.

- And, it seems, this provides an argument against bundle theory that cannot be escaped by appealing to properties like A and B which are patently impure.
- But, it is impossible for two different concrete objects to occupy the same region of space at a given time. So, no two concrete objects will agree with respect to *those* properties that specify their spatiotemporal location.
- In a rebuttal on behalf of the substratum theorist, Loux says:

  > . . . these properties are one and all impure. [the substratum theorist] will argue that since space and time represent relational structures, the properties that specify the spatiotemporal position of concrete objects are always properties like being 2 miles north of the Eiffel Tower – properties that already presuppose or involve concrete particulars and so cannot number among the items the bundle theorist construes as constituents of concrete objects.

- What do you think about this move? Are such properties *impure*? See Casullo.

Concrete Particulars X: An Argument for Substratum Theory

- Many people view the above argument [from not (II*) and (PCI) to not (BT*)] as a refutation of the metaphysical realist version of bundle theory [(BT*)].
- Thinking more deeply bout these conditions leads, according to Loux, to a persuasive *positive* argument *in favor of* substratum theory.
- If (II*) is false, then there will be *distinct* particulars which (nonetheless) share all *pure* properties. For instance, think about our spheres a and b.
- a and b will share all pure properties. And, their *impure* properties are not useful for determining their *constituents*. As Loux says:

  > . . . since our aim is to identify the constituents out of which concrete particulars are composed, the items we appeal to . . . cannot already presuppose the complex entities that are concrete particulars, and impure properties all do. No . . . impure . . . properties can explain the [nonidentity] of [a and b].

- But, since (PCI) is true, and $a \neq b$, there must be *some* constituent they do not share, which is not determined by any attributes a or b has — bare substrata!