

Metaphysics

Philosophy is a very broad subject. Typically, it is divided into the following areas:

- **Metaphysics** – The study of reality, or what exists.
- **Epistemology** – The study of knowledge, or how we *know* things.
- **Ethics** – The study of morality, or what we ought to do.
- **Logic** – The study of how to reason properly about things.

We'll be dealing with the first of these issues. When asking, 'What exists?', the first answer that comes to mind seems to be: Things! Things like tables, trees, cars, clouds, planets, and people. And furthermore, these things have properties, or attributes. There are rectangular tables, tall trees, loud cars, fluffy clouds, huge planets, and funny people. So, that's where we'll start; with things and properties.

Things

1. Substratum Theory: Consider this table. What *is* the table?

Let's start by asking, What do I *observe*?

When I observe the table, I notice certain qualities. I see that it is rectangular and brown. When I rap my knuckles on it, I experience solidity and hear a knocking sound. And so on. But, so far I have only listed some properties OF the table. The question remains, what is the nature of the *table*??? For, the following claim seems true:

- (1) *Properties cannot exist on their own (uninstantiated).* If I said to you, "Go get me some redness", what would you bring back? The best you could do is bring back red THINGS (red tomatoes, red rubies, red socks, and so on). Properties cannot exist on their own. It seems that they need to be 'instantiated' IN things.

So, if there are a bunch of table-y properties in front of me, surely there has to be some THING that HAS these properties, right? THAT thing must be the table. Furthermore:

- (2) *There seems to be something that bonds clusters of properties together and makes them difficult to separate.* There seems to be some GLUE or something that holds all of the properties TOGETHER. For instance, if I push the table into the corner, I could never accidentally push only the rectangularity and brownness, but leave behind the solidity.

Now sometimes the table DOES leave behind some of its properties—or rather, it can sometimes trade old ones in for new ones. But, the fact that things CHANGE only STRENGTHENS the claim that the table is the underlying thing that HAS the properties:

(3) *An object can survive the loss of (some of?) its properties.* This brown table could be painted white (losing its brownness) and it would still be the same table. But, then, in theory, perhaps some things could trade ALL of their properties but still remain the same thing. If so, there needs to be some underlying thing which remained the same throughout the change.

René Descartes gave us an example which nicely illustrates this last point:

The Example of the Wax Descartes examines a piece of wax, taken from a honeycomb. It tastes like honey, it smells like flowers; it has color, shape, size; it is hard, cold, and it makes a sound when he strikes it. But, he puts it near the fire, and the taste and smell go away. The color, shape, and size change; the wax becomes soft, hot, and no longer makes a sound when he strikes it.

Every perceivable property that the wax formerly had went away when heat was applied. Yet, remarkably, everyone will agree that it is still the same wax! So, what, exactly, IS this thing that remained throughout all of these changes? Describe it.

The wax isn't any of its described properties. For it LOST all of those! It must be whatever is "underneath" all of those. To get at the WAX itself, Descartes asks us to "distinguish the wax from its outward forms—take the clothes off, as it were, and consider it naked ..." Whoa, kinky!

But, what is it we are left with? What is the "naked" table? or the "naked" wax?

Conclusion: We are being driven to the conclusion that the table is some underlying THING which I cannot directly experience. This is called the **substratum** view.

But, what is this 'substrate' that underlies all of the properties?

We typically think that **matter** is the underlying substance or THING that possesses properties. But, what does that mean? Stripped of all its properties, such a thing is, by definition indescribable and unobservable. What Descartes shows us is that, while we may THINK we understand what matter is, the concept is ultimately unintelligible.

So, then, back to our question: **What IS the table?**

So far, it seems to be some “substrate” that is not brown, or rectangular, or hard, or four-legged, etc. For, we have said that the table itself is property-less. Rather, it is the thing that HAS the properties. But, then, the table is just some *bare, non-descript* thing.

Mumford likens this substratum to a pincushion (but an invisible, non-observable, quality-less pincushion). All of the pins stuck in it are properties, and the pincushion sort of holds them all together. But, what is the pincushion??? What is the “**bare particular**”?

Descartes says that the substratum is “extension”. By this, he simply means something like “extended in space; has length, width, and height.” For, as the wax melts, the one quality it ALWAYS keeps is that of being extended in space. Thus, perhaps the table, when stripped of all its properties, is mere extension? But, isn’t that ALSO a property?

[Side note: Descartes thought that the nature of matter was to be extended in space. But, he went further and said that matter and extension were one and the same thing. This meant that, anywhere there is extension, it is absolutely filled with matter. There is no such thing as empty space on Descartes’ view.]

2. Bundle Theory: The absurdities of the substratum view have led many to suggest that there is no substratum at all. What is the point of this property-less, unobservable, unfathomable thing? Can an indescribable, property-less, unobservable thing even BE a thing? Or isn’t it, rather, NOTHING? If all we ever observe are an object’s properties, perhaps the object just IS a set of properties (or a “bundle” of them).

On bundle theory, the table JUST IS the collection of the properties ‘brown’, ‘hard’, ‘rectangular’, ‘four-legged’, and so on.

Problem: If objects are just collections or sets of properties, then it doesn’t seem that they could survive changes like the wax clearly does when heated (or the table when painted). For instance, compare the following two sets:

{1, 2, 3, 4} {1, 2, 3, 5}

Are they the same set? Of course not! They have different members. But, then, very few objects survive for any extended period of time. Consider: When you stand up, you will no longer have the property of ‘being seated’. Other properties of yours are often changing too. Sometimes you are fast, or slow, or heavier, or lighter, or happy, sad, tired, frightened, and so on. If the identity of a collection changes whenever its members change, then you are not the same “bundle” when you trade in the property of sitting for standing (and therefore not the same object).

Reply: Perhaps we could just say that what we perceive to be individual objects are really just a SERIES of bundles over time. If you paint the table white, the new bundle no longer includes the property of brownness, but it includes all of the other properties that the old bundle had. Similarly, if you stand up, the new bundle no longer includes the property of sitting, but it includes pretty much all of the properties that the old bundle included. Perhaps so long as there is a sort of continuity from one bundle to the next, we can consider it to be the same object? But, now we have to offer an account of what constitutes “the right sort of continuity”. And we mustn’t appeal to some sort of underlying “glue” for that would be a return to the substratum theory! [*We will discuss the topic of identity over time in more detail, later in the semester.*]

Another Problem: What about identical twins? It seems that they have exactly the same set of properties. That is, the bundle of twin-1 seems to be same as the twin-2 bundle. (Alternatively, consider two identical ball-bearings fresh off of an assembly line). [*Now, it’s probably true that no two objects in the real world have EXACTLY the same properties—for instance, even two ball-bearings might differ ever so slightly in their atomic structures—but let us consider two objects whose properties ARE the same.*]

Reply: Still, two twins or two ball-bearings will have different RELATIONAL properties. Relational properties are those like ‘taller than’, ‘next to’, ‘inside of’, and so on. For instance, one twin might have the property of ‘being 5 feet from the door’, while the other has the property of ‘being 6 feet from the door’. So, they are different bundles.

Objection: But, imagine a world containing ONLY the two ball-bearings and nothing else. Now it seems that the two balls do not even differ in their RELATIONAL properties (since there is nothing else to be related to). [*We will discuss this last objection in much more detail later in the semester, when we read Max Black’s, “Identity of Indiscernibles”.*]

Or consider this exercise: Imagine that we are observing two qualitatively identical forks:



If objects are merely bundles of properties, then the two objects here are:

Bundle:
Fork-shape
Shiny
Metallic
Solid
On my left

Bundle:
Fork-shape
Shiny
Metallic
Solid
On my right

But, now imagine that I swap the places of the forks, like this:



The two bundles in THIS picture are:

Bundle:
Fork-shape
Shiny
Metallic
Solid
On my left

Bundle:
Fork-shape
Shiny
Metallic
Solid
On my right

But, these are the same bundles as before!!! Intuitively, the objects have swapped places. On bundle theory, however, it seems as if it is the same object on the left in both cases. The substratum view can account for this change easily. Sure, the object on the left has the same PROPERTIES in both sets of pictures—but the substrate of the first fork on the left is different than the substrate of the second fork on the left.

[Side note: But, if substrata have no properties, how can one substrate be "different" than another??? There seems to be no criteria with which we could individuate them.]