The Paradoxes of Material Constitution
A huge portion of things we say will involve talking about medium-sized material objects—stuff like table, chairs, buildings, trees, footballs, guitars, squirrels, people, etc.

There appear to be multiple paradoxes in the ways we ordinarily think about these objects, specifically related to when they exist, when they continue to exist, and when they cease to exist.

The paradox for today concerns when one thing is made of some other stuff.

When one object is made of another, such as a sculptor making a statue out of a piece of clay, it seems like the clay and the statue are distinct objects, and they both exist, and yet they are made of all the same stuff and occupying the same space, which seems impossible.
There are exactly 5 independent premises, which have gotten names because of their importance in this debate. If the argument is valid, it must be that one of these 5 is false.

But, like any good paradox, we can give a good case for each premise.
What to Deny?

5. If X and Y have different properties at the same time then $X \neq Y$.

- The sense of identity we want here is the sense in which Samuel Clemens is identical to Mark Twain and Superman is identical to Clark Kent.
- It is more than just looking alike, it is is *being the same object*.
- If X and Y pick out the same object, then everything true of X has to be true of Y.
- This appears to be an analytic truth.
### What to Deny?

<table>
<thead>
<tr>
<th>1. Lumps of clay exist.</th>
<th>EXISTENCE</th>
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- We certainly are able to talk about lumps of clay; in an art class I could ask for a new lump because I ruined by first one.

- If one is to deny lumps of clay, then one must similarly deny very many objects for which we can give similar paradoxes.

- Still, one might go this route and say that there really aren’t any lumps or statues or anything of the like; really the only objects are the subatomic particles, and any time we talk about composites this is really just a loose way of speaking. This view is called **nihilism**.

- The obvious problem for nihilism is that it seems crazy to deny the existence of all composite objects we ordinarily think exist.

- This is particularly problematic when it comes to people. You exist. You appear to be composed of parts. Nihilism must deny one of those two things.

- It is also difficult for nihilists to explain our willingness to talk about “the same” objects at various times.

- Another problem is, if space is continuous, how can we know for sure that there are any non-composite objects?
What to Deny?

2. When a sculptor makes a statue, a statue comes into existence.

- If the statue exists, it appears to come into existence when the sculptor makes it, so the only real way to deny this is to deny the existence of a statue.

- One could say that “statue-shaped” is just a property of the lump of clay, like its color or weight.

- If we grant the existence of the lump of clay (and of composite objects generally), it isn’t clear why one should want to deny a statue.

- Lumps don’t seem to play all the rolls we want for statues; for instance, it seems like a statue can survive having small parts replaced, but it doesn’t seem like the lump survives.

- If one goes that route, which object do I refer to as “me”, and how does it persist through time?
What to Deny?

8. Two distinct objects cannot occupy the same space and be made of the same stuff at one time.

- One way to deny 8 is to say that there really are two objects, the statue and the lump, but that this normal rule of object not being co-located doesn’t apply when one object constitutes the other.
- If you want to accept that there are two distinct objects located in the area of the statue, ask yourself, how much does each one weigh?
- If the lump was 3 pounds, then the statue also weighs 3 pounds, but if we put them both on a scale the scale will only read “3 pounds.”
- Another problem is that this seems to make it arbitrarily easy to create new objects.
- Suppose the statue is a replica of Rodin’s “The Thinker”, and I decide to make it the prize for the best philosophy paper written in the class. Have I now made there be a 3rd object in the area? Is there a lump of clay, a statue, and philosophy prize?
<table>
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<tr>
<th></th>
<th>EXISTENCE</th>
<th>CREATION</th>
<th>SURVIVAL</th>
<th>(1, 2, 3)</th>
<th>LEIBNIZ’S LAW</th>
<th>(4, 5)</th>
<th>(2)</th>
<th>(7, 8) ※</th>
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<td>6.</td>
<td>The statue ≠the lump of clay.</td>
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<td>DISTINCTNESS</td>
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<td>9.</td>
<td>The statue=the lump of clay.</td>
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There is a least a *prima facie* case for 1, 2, 5, and 8, which should lead us to try to deny 3.
3. When a sculptor makes a statue out of a lump of clay, the lump of clay still exists.

► One might think that when the sculptor makes a statue, there ceases to be a lump of clay.

► This allows there to be composite objects while avoiding the co-location problem because any group of particles can only compose one thing at a time.

► This view is sometimes referred to as the *takeover* theory since one object starts existing with the stuff that used to make up a different object.

► One problem for this view is that our term “statue” seems somewhat accidental, and if we consider again how the Martians speak, we could get different facts.

► If the Martians use “mstatue” to refer to statues in museums, and “nstatue” to refer to statues not in museums, then as we transport our sculpture to the museum it ceases to exist and gets replaced with a different object, which seems absurd. But why should we think our term “statue” is any less absurd?
3. When a sculptor makes a statue out of a lump of clay, the lump of clay still exists.

- A different problem is that this seems imply bizarre things.
- Plausibly, we currently constitute a class. (One could likewise say that people constitute armies, teams, governments, clubs, etc.)
- If “class” takes over each of us, then we cease to exist when we come in the room, and then an object pops back into existence when we leave and cease to constitute a class (though it is not clear whether that new object is me or not)
8. Two distinct objects cannot occupy the same space and be made of the same stuff at one time.

- Let’s consider a different way to deny 8—temporal parts.
- We saw when looking at different views of time, that if one views time as a giant 4-dimensional block, then one can view us as 4-dimensional worms spread out in
- While not strictly implied by this view, it is common to then say that each part of the 4-dimensional worm is a temporal part of me; they together make me up.
- If one goes for this view, then there is an easy way to deny 8.
- If objects have temporal parts, then the statue is a part of the lump of clay in the exact same way that my heart is a part of me.
- There is no paradox of two distinct objects sharing some parts; the only problem was them sharing all their parts.
Problems for Temporal Parts

- One obvious issue is, why think there are these instantaneous temporal parts constantly popping into and out of existence.

- A second issue is, if we identify something by its temporal parts, it seems to make it a necessary truth that you are born and die when you do—you would be a completely different object if you survived on more second.

- Third, its not clear that this can make sense of personal identity; I am the same person as I was yesterday, but my left hand is not the same as my right.

- The biggest problem is that there can be constitution problems which it doesn’t solve.

- Suppose one is making a large statue of Goliath, so she makes it in two parts, a top half and a bottom half, and then places them together. Eventually the statue is exploded. The lump of clay and the statue will have all the same temporal parts.
# Paradox of Material Constitution

1. Lumps of clay exist.  
2. When a sculptor makes a statue, a statue comes into existence.  
3. When a sculptor makes a statue out of a lump of clay, the lump of clay still exists.  
4. When a statute is made, a lump of clay and a statue exist and they have different properties (such as when they came into existence, what they can survive)  
5. If X and Y have different properties at the same time then $X \neq Y$.  
6. The statue $\neq$ the lump of clay.  
7. The statue and lump are made of the same stuff and occupy the same space.  
8. Two distinct objects cannot occupy the same space and be made of the same stuff at one time.  
9. The statue = the lump of clay.