

## The Paradoxes of Material Constitution (temporal versions)

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### 1. Paradox A: The long career of Clem contrasted with Jupiter's short one

The facts: at 10 am, I took a lump of modelling clay that I bought this morning in an art supply store, and I started to shape it with my fingers. As a result, we now (some time shortly after 11 am) have before us the proud statue. Let us introduce some names: call the statue which is before us 'Jupiter', and let us call the lump of clay which is before us 'Clem'. Here is our first paradox:

1. Clem existed at 9 am.
2. Jupiter did not exist at 9 am.
3. Jupiter is Clem.

Next, I squash the statue under my heel. Then we can run a similar paradox

- 1a. Clem exists at 11.30 am.
- 2a. Jupiter does not exist at 11.30 am.
- 3a. Jupiter is Clem.

### 2. Ways of resolving the paradox

It seems utterly obvious that the premises are inconsistent, so there is no option but to deny at least one of 1, 2 or 3. We will consider all of these options.

It is sometimes suggested that 2 is the one to deny. Someone who takes this line might propose the following *explanation* of our tendency to suppose (falsely) that 2 is true: while Jupiter (that is, Clem) did in fact exist at 9 am, Jupiter was not a *statue* at 9 am; because of the way the name 'Jupiter' was introduced, this misleads us into giving our assent to 2.

### 3. Paradox B: Jupiter survives the end of Clem's existence

An alternative continuation to the story: at 3 pm, I will become dissatisfied with the statue. I will tear its arms off and cast them into the flames. But then I will repent of my fit of pique. I will take some new bits of clay and lovingly mould them into a new pair of arms for the statue. As a result, by 4 pm there will once again be a two-armed statue in my workshop.

- 1b. Clem does not exist at 4 pm.
- 2b. Jupiter exists at 4 pm.
- 3b. Jupiter is Clem.

### 4. One way in which Paradox B is different from Paradox A

The strategy for explaining away our tendency to accept 2 and 2a which we discussed above doesn't seem to work to explain away our tendency to accept 1b. If Clem exists at 4 pm, then Clem is still a lump of clay at 4pm. So

## 5. Eliminativism about statues or lumps of clay

Some philosophers respond to these paradoxes by denying that there are any statues, or by denying that there are any lumps of clay, at least in scenarios such as the ones we have been considering. Clearly they don't accept all of 1, 2 and 3—but which ones do they deny? This brings us into a much-disputed bit of the philosophy of language, involving the truth-values of sentences that contain proper names that don't refer to anything. But we don't have to enter into these disputes, because we can reformulate the paradoxes in such a way that they don't involve proper names at all.

## 6. The paradoxes reformulated without the use of proper names

'R' is a name for the region of space that is full of clay at 11 am.

4. There is at least one lump of clay that occupies R at 11 am.
  5. There is at least one statue that occupies R at 11 am.
  - 6a. If there is a lump of clay that occupies R at 11 am, it existed at 9 am.
  - 7a. If there is a statue that occupies R at 11 am, it did not exist at 9 am.
  8. There is at most one thing that occupies R at 11 am.
- 6b. If there is a lump of clay that occupies R at 11 am, it does not exist at 4 pm.  
7b. If there is a statue that occupies R at 11 am, it exists at 4 pm.

## 7. Paradoxes of growth and diminution

The scenario: before us, at 3.30, we have a one-armed statue occupying region R. There has not always been a one-armed statue, however; things got to be the way they now are when I ripped off and cast into the flames the left arm of the two-armed statue that was standing here an hour ago. Soon I will repent, and repair the statue using fresh clay.

- 6c. If there is a lump of clay that occupies R at 3.30, it doesn't include a left arm at 3.00 [alternatively: at 4.00]
- 7c. If there is a statue that occupies R at 3.30, it does include a left arm at 3.00 [alternatively: at 4.00]

Another route into the intermediate conclusion that there is something that occupies R at 3.30 which doesn't include a left arm at 3.00 [or 4.00]: consider the big part of the statue that exists at 3.00 that comprises all of it except for its left arm. It seems obvious that this thing—call it Jupiter-Minus—still exists, and in fact occupies R, at 3.30