

Theseus' Ship

Sails Again

A Diachronic Continuant?



A (Metaphysical) Query

Is this fountain. . .



...the same as this fountain?



Just the (Empirical) Facts

- Built in the Coalbrookdale Iron Works in Shropshire England
- Shipped in pieces to Christchurch, N. Z.
- Erected in 1911, by the members of the Christchurch Beautifying Society
- Disassembled and put into storage in 1949
- Reconstructed and repositioned in the same botanic gardens in 1996
- Of the original 309 cast iron pieces, many were lost or destroyed; 158 had to be recast.

A Diachronic Continuant?



A Question or a Pseudo-Question?

- Well, it depends upon what you mean by the ‘same’.
 - OK, what I mean by the ‘same’ is numerically identical, where $x = y$ only if x and y have all of their properties in common.
- Perhaps, there is no fact of the matter — or no intention-independent fact of the matter.
 - Is this true of diachronic continuants generally?
 - If not, what marks the intention-dependent from the intention-independent?
 - If so, why might this be so? Is it a brute fact or a principled fact?

A Negative Answer to a Real Question

Heraclitus, you know, says that everything moves on and that nothing is at rest; and, comparing existing things to the flow of a river, he says that you could not step into the same river twice (Plato, *Cratylus* 402A).

The Austere Mereological Theory of Identity

AMT: $x = y$ *iff* (i) every part of x is also a part of y , and (ii) every part of y is also a part of x

For:

- Seems intuitive at first pass
- Provides clear conditions of sameness

Against:

- Rules out (or seems to rule out) all diachronic identity — or at least all diachronic identity where change is involved
- Compare Aristotle: It is most distinctive of substance to remain numerically one and the same while undergoing change

And Yet. . .

- If we reject AMT, then we seem open to any number difficult problems.
- Once the austere demands are abandoned, the floodgates open.
- As we shall presently see, the immediately commonsensical alternative, the spatio-temporal continuity view of identity is the first to go:
 - *STC*: x at t_1 is the same as y at t_2 *iff* x and y are spatio-temporally continuous

Two Puzzles

- The Ship of Theseus
- Temporary Intrinsic

An Uncomplicated Supposition

- Ordinary objects persist through change.
- So, ordinary objects can be numerically identical without being qualitatively identical.

The Ship of Theseus

The ship wherein Theseus and the youth of Athens returned had thirty oars, and was preserved by the Athenians down even to the time of Demetrius Phalereus, for they took away the old planks as they decayed, putting in new and stronger timber in their place, insomuch that this ship became a standing example among the philosophers for the logical question of things that grow, one side holding that the ship remained the same, and the other contending that it was not the same.

—Plutarch (*Vita Thesei*, 22-23)

The Argument

1. The working ship at t_2 , which has sustained material replenishment, has a claim to being identical with the original ship at t_1 .
2. The reconstructed ship at t_2 has a claim to being identical with the original ship at t_1 .
3. If both ships have a claim but neither ship has a better claim than the other to being identical w/ the original ship at t_1 , then either: (i) they are both identical w/ it; or (ii) neither is.
4. In fact, neither ship has a better claim than the other to being identical w/ the original ship.
5. So, either: (i) they are both identical w/ it; or (ii) neither is.
6. It's not possible that (5.i).
7. So, neither ship at t_2 is identical w/ the original ship at t_1 .

The Argument

1. The working ship at t_2 , which has sustained material replenishment, has a claim to being identical with the original ship at t_1 .
2. The reconstructed ship at t_2 has a claim to being identical with the original ship at t_1 .
3. If neither ship has a better claim than the other to being identical w/ the original ship at t_1 , then either: (i) they are both identical w/ it; or (ii) neither is.
4. **In fact, neither ship has a better claim than the other to being identical w/ the original ship.**
5. So, either: (i) they are both identical w/ it; or (ii) neither is.
6. It's not possible that (5.i).
7. So, neither ship at t_2 is identical w/ the original ship at t_1 .

Generalising. . .

1. If neither ship is identical with the earlier ship, then there is no diachronic identity.
2. Neither ship is identical with the original ship.
3. So, there is no diachronic identity.

A Solution?

- Ship_w and ship_r are of course distinct; it's just that they share some temporal parts.
- Just as my face and my nose share some spatial parts (there's a spatial overlap), so the ships overlap with respect to some of their temporal parts.
- Neither is *the* ship of Theseus; there is no such privileged object.

The Problem of Temporary Intrinsics

1. Suppose Rodrigo alters in respect of being ϕ (where ϕ is an arbitrarily selected intrinsic property).
2. Then, at t_1 Rodrigo is ϕ ; but at t_2 , Rodrigo is not ϕ .
3. The Indiscernibility of Identicals (that is, that if $a = b$, then a and b have all of their properties in common).
4. So, Rodrigo at t_1 cannot be identical with Rodrigo at t_2 .
5. If (4), then if Rodrigo persists, he cannot endure but can only perdure.
6. Rodrigo persists.
7. So, Rodrigo perdures, but does not endure.

An Easy Way Out?

- ✓ The logic is impeccable.
- ✓ (1) seems (obviously) true.
- ✓ (2) seems (obviously) true.
- ✓ (3) relies only on the indiscernibility of identicals (Leibniz's Law)

Yet, do not *we* exist through time as numerically one and the same beings?

Moreover, we do not seem to be clubs of atoms. . .

Our Map

- Unrestricted Mereological Composition or Nihilism
- Restricted Mereological Composition
 - Brute
 - Principled
 - Intention-dependent
 - Non-intention-dependent

The Problem Before Us

- Account for the existence of non-conventionally existing diachronic unities
- Desiderata
 - Identify a principle of diachronic identity which is non-aggregative
 - Identify a principle which is intention-independent
 - Do all of this in the context of an articulated theory of categories
 - Solve (or resolve) the problem of the ship of Theseus, and the problem of temporary intrinsics