Sameness and Sortals

A First Ingredient to a Recipe for a Resolution

Sortal Identity

- The approach I shall commend to questions of identity and individuation will be a sortalist one, claiming among other things that the identity of *x* and *y* is to be determined by reference to some fundamental kind *f* that *x* and *y* each exemplify. This approach is prefigured in Aristotle's question, definitive of his category of substance, *ti esti* or what is it? Contrast the question, definitive of his category of quality, *what is it like*?' —Wiggins (2012,1)

Some Bedrock

- For all x, $x = x$.
  - The *reflexivity* of identity.
- If $x = y$, then x is ϕ *iff* y is ϕ
  - This is Leibniz's Law
    - Or, rather, this is half of LL, viz. the Indiscernibility of Identicals.
      - The other half, the Identity of Indiscernibles, invites problems: if x is ϕ *iff* y is ϕ, then $x = y$
        - As a historical note, Leibniz held: $(x = y)$ *iff* (x is ϕ *iff* y is ϕ)

Some Evident Consequences

- If $x = y$, and $y = z$, then $x = z$.
  - This is the *transitivity* of identity.
    - Briefly, if $x = y$, then x has every property y has; y, we have just learnt, has the property of being identical with z; so, x too is identical with z.
- If $x = y$, then $y = x$.
  - This is the *symmetry* of identity.
    - Briefly, if $x = y$, then y has every property x has; x has the property of being identical with x; so, y too has the property of being identical with x.

But wait, there's more. . .

- If (x = y), then $\Box$(x = y)
  - This is the *necessity* of identity.
    - Briefly, if *x* = *y*, then *y* has every property *x* has; *x* has the property of being necessarily identical with *x*; so, *y* too has the property of being necessarily identical with *x*. So, if (x = y), then $\Box$(x = y).
    - More formally:

1. $(x)(y)[(x = y) \rightarrow (\phi x \rightarrow \phi y)]$
2. $(x)\Box(x = x)$
3. $(x)(y)(x = y) \rightarrow [\Box(x = x) \rightarrow \Box(x = y)]$
4. $(x)(y)[(x = y) \rightarrow \Box(x = y)]$

More Controversially

- If $x = y$, then x is determinately = y.
    - This is the *absoluteness* or *determinateness* of identity.
        - Briefly, if $x = y$, then y has every property x has; x has the property of being determinately identical with x; so, y too has the property of being determinately identical with x. So, if ($x = y$), then (x is determinately = y)
            - One thought here: if you tell me that x is fuzzy or a vague object, but then also tell me that ($x = y$), then it will follow that y too is a fuzzy or vague object.
                - It will not follow that their identity is vague; on the contrary, they will be determinately identical vague objects—if there are vague objects.

More Controversially Still

- If x = y, then x is permanently = y.
    - This is the *permanence* of identity.
        - Briefly, if $x = y$, then y has every property x has; x has the property of being permanently identical with x; so, y too has the property of being permanently identical with x. So, if ($x = y$) then (x is permanently = y)
        - Note in this connection that we seem to have the result that if cannot be the case that ($x = y$) at t_1 but that ($x \neq y$) at t_2.
            - But wait, you may say, is it not the case that at t_1 (BO = President of the US), but at some later time t_2 (BO ≠ President of the US)?
                - N.b. The permanence of identity does *not* entail or imply that nothing can change; it only says that if something changes, it remains the case that it is true of it after it has changed that it was a way it is no more.
                    - So, if x is ϕ at t_1 but not-ϕ at t_2, it remains true at t_2 that x was ϕ at t_1.
                        - In general, although things are necessarily self-identical, it does not follow that for all ϕ and for all x, if x is ϕ, then x is necessarily ϕ.

Two Observations

- Whenever we say *x* is the same as *y*, we evidently mean that *x* is the same ϕ as *y*.
  - This is the *sortal dependence* of identity.
- From this we cannot infer, however, that possibly *x* is the same ϕ as *y*, even though *x* is not the same ψ as *y*.
  - On the contrary, our commitment to the necessity of identity seems inconsistent with this claim, which is the *relativity* of identity.
    - In short, the sortal dependence of identity does not entail or imply the relativity of identity.
      - On the contrary, it seems to imply just the opposite.

One Further Implication

- If identity is necessary and absolute, then it also seems that the question of whether ($x = y$) should not be contingent on whether any z is or is not on the horizon as a competitor to y.
  - Further, if identity is permanent as well, then, taken diachronically, the question of whether x at t_1 is identical to y at t_2 should not be contingent upon, or otherwise conditioned by, the appearance of z as a potential competitor to y.
- This is Noonan's *only x and y principle*.
  - We will refer to it, less prosaically, the *indifference* of identity

What We Need

- A theory of predication.
- An account of universals and of properties generally.
- An account of particulars, both synchronic and diachronic.
- An account of time.
- A theory of categories.