Identity and Vagueness

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Vagueness

We all agree that someone who is 150 cm long is not tall.

Similarly we all agree that someone who is 200 cm long is tall.

But consider someone who is 182 cm long. Is that person tall?

This is a question about a borderline case.

Suppose that Johan is 182 cm long.

We might not wish to claim that

Johan is tall.

And we might also not wish to claim that

Johan is not tall.

But we would presumably wish to claim that

Johan is either tall or not tall.

Supervaluationism

One motivation for supervaluationism is that statements about borderline cases can be sharpened—that is, made more precise—in more than one way and a statement can be true on some sharpenings and false on others.

A sharpening of a statement is a way of making precise all the expressions of the language so that every sentence gets a truth-value (true or false but not both) in each sharpening.

Supervaluationism says that:

> A statement is true if and only if it is true on all sharpenings.
>
> A statement is false if and only if it is false on all sharpenings.
>
> A statement is indeterminate (neither true nor false) if and only if it is true on some sharpenings and false on some other sharpenings.

Suppose that Lanky is 190 cm, and consider the claim 'Lanky is tall'.

Suppose, for simplicity, that there are three admissible sharpenings of 'tall':

(1) x is tall if and only if x is longer than 175 cm.
(2) x is tall if and only if x is longer than 180 cm.
(3) x is tall if and only if x is longer than 185 cm.

(1) tall iff $>$ 175 cm	(2) tall iff $>$ 180 cm	(3) tall iff $>$ 185 cm
'Lanky is tall' is true.	'Lanky is tall' is true.	'Lanky is tall' is true.

'Lanky is tall' is true on all admissible sharpenings.

Hence, on supervaluationism, Lanky is tall.

Suppose that Shorty is 160 cm, and consider the claim ‘Shorty is tall’.

Suppose, again, that the three admissible sharpenings of ‘tall’ are:

(1) x is tall if and only if x is longer than 175 cm.
(2) x is tall if and only if x is longer than 180 cm.
(3) x is tall if and only if x is longer than 185 cm.

(1) tall iff $>$ 175 cm	(2) tall iff $>$ 180 cm	(3) tall iff $>$ 185 cm
‘Shorty is tall’ is false.	‘Shorty is tall’ is false.	‘Shorty is tall’ is false.

‘Shorty is tall’ is false on all admissible sharpenings.

Hence, on supervaluationism, Shorty is not tall.

Suppose that Johan is 182 cm, and consider the claim 'Johan is tall'.

Still, let the three admissible sharpenings of 'tall' be:

(1) x is tall if and only if x is longer than 175 cm.
(2) x is tall if and only if x is longer than 180 cm.
(3) x is tall if and only if x is longer than 185 cm.

(1) tall iff $>$ 175 cm	(2) tall iff $>$ 180 cm	(3) tall iff $>$ 185 cm
'Johan is tall' is true.	'Johan is tall' is true.	'Johan is tall' is false.

'Johan is tall' is true on some admissible sharpenings but not all.

Hence, on supervaluationism, it is indeterminate whether Johan is tall.

Suppose again that Johan is 182 cm, but this time consider the claim ‘Johan is tall or not tall’.

Suppose, one more time, that the three admissible sharpenings of ‘tall’ are:

(1) x is tall if and only if x is longer than 175 cm.
(2) x is tall if and only if x is longer than 180 cm.
(3) x is tall if and only if x is longer than 185 cm.

(1) tall iff $>$ 175 cm	(2) tall iff $>$ 180 cm	(3) tall iff $>$ 185 cm
‘Johan is tall or not tall’ is true.	‘Johan is tall or not tall’ is true.	‘Johan is tall or not tall’ is true.

‘Johan is tall or not tall’ is true on all admissible sharpenings.

Hence, on supervaluationism, Johan is tall or not tall.

This so even though: it is indeterminate whether Johan is tall, and it is indeterminate whether Johan is not tall.

Can Identity Be Indetermiate?

The Determinacy Thesis

If it is true (a) that there is just one person in place p at time t and true (b) that there is just one person in place p' at time t', then either it will be definitely true that the person in p at t is identical with the person p' at time t', or this will be definitely false.

We will discuss a very influential argument against the view that there might be vague objects by Gareth Evans.

A good way to understand this argument is to first take a look at a similar argument against contingent objects by Saul Kripke.

Both arguments make use of Leibniz's law:

> **The Indiscernibility of Identicals**
> If x is identical with y, then any property of x is a property of y.

Kripke's Argument against Contingent Identity

Suppose that it is contingent whether *a* is identical to *b*.

Then *b* is such that it is contingent whether it is identical to *a*.

So *b* has the property of being such that it is contingent whether it is identical to *a*.

Since it is necessary that *a* is identical to *a*, *a* is not such that it is contingent whether it is identical to *a*.

So *a* does not have the property of being such that it is contingent whether it is identical to *a*.

Since *a* does not have the same properties as *b*, the indiscernibility of identicals entails that *a* is not identical to *b*.

This contradicts our original supposition.

Evans's Argument against Indeterminate Identity

Suppose it being indeterminate whether a is identical to b.

Then b is such that it is indeterminate whether it is identical to a.

So b has the property of being such that it is indeterminate whether it is identical to a.

Since it is determinate that a is identical to a, a is not such that it is indeterminate whether it is identical to a.

So a does not have the property of being such that it is indeterminate whether it is identical to a.

Since a does not have the same properties as b, the indiscernibility of identicals entails that a is not identical to b.

This contradicts our original supposition.

One objection: something might be true of x without being a property of x.

So that it is indeterminate whether a is identical to b, might not be a property of b.

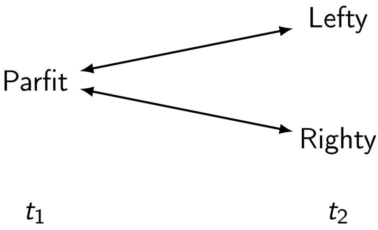
For example, it might be true of Tully that I believe he is identical to Tully.

But it is not true of Cicero that I believe he is identical to Tully.

This does not, however, seem to rule out that Cicero is identical to Tully.

This difference about my beliefs seems to be due to difference in how the thing or things is described, not in what properties they have.

Parfit's Division



Derek Parfit spelled out the various possibilities in his division case.

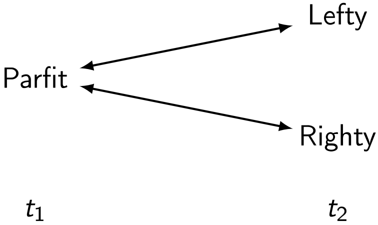
> *(1) I do not survive; (2) I survive as one of the two people; (3) I survive as the other; (4) I survive as both.*

Parfit rejects (1), (2), and (3) in favour of (4).

Parfit (1984, p. 256):

> *The objection to (1) is this. I would survive if my brain was successfully transplanted. And people have in fact survived with half their brains destroyed. Given these facts, it seems clear that I would survive if half my brain was successfully transplanted, and the other half was destroyed. So how could I fail to survive if the other half was also successfully transplanted? How could a double success be a failure?*

And, because of the symmetry in Parfit's relation to Righty and Lefty, he does not find plausible either of (2) he survives as one of the two people or (3) he survives as the other.



Jens Johansson (2010, p. 27) suggests the following possibility:

> It determinate that Parfit is identical to someone who exists at t_2, but it is indeterminate whether Parfit is identical to Lefty or whether Parfit is identical to Righty.

This possibility does not violate Parfit's symmetry requirement. Hence Parfit's argument against (1) and (2) does not work against this possibility.

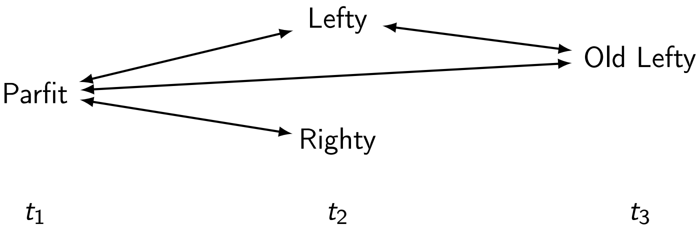
Consider the following readings of the common-sense platitude that identity is what matters in survival:

The Strong Reading of the Platitude
Person P_1 at t_1 stands in the relation that matters in survival to person P_2 at t_2 if and only if P_1 is identical to P_2.

The Weak Reading of the Platitude
Person P_1 at t_1 stands in the relation that matters in survival to some person existing at t_2 if and only if P_1 is identical to some person who exists at t_2.

Since it is not true that Parfit is identical to Lefty and not true that Parfit is identical to Righty, it is not true that he has what matters in survival to anyone at t_2 on the strong reading.

But, since it is true that Parfit is identical to either Lefty or Righty, it is true that he has what matters in survival to someone existing at t_2 on the weak reading.



Intuitively, Lefty is identical to Old Lefty, and Parfit has what matters in survival in relation to someone at t_3.

But, if identity is what matters in survival and Parfit has what matters in survival in relation to someone at t_3, Parfit must be identical to Old Lefty.

And then Parfit must be identical to Lefty.

But that contradicts that it was indeterminate whether Parfit is Lefty.

References

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Kripke, Saul (1971) 'Identity and Necessity', in Milton K. Munitz, ed., *Identity and Individuation*, pp. 135–164, New York: New York University Press.

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