

MELLOR ON NEGATIVE PROPERTIES

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In a recent paper, D.H. Mellor argues that there can be no negative, disjunctive or conjunctive properties.¹ This argument has been criticized by Alex Oliver² on the grounds that it rests on a contentious identity criterion for facts, but it seems to me that a simpler criticism is available. In what follows I shall concentrate on Mellor's argument only in so far as it concerns negative properties.

Mellor presents his argument in the following passage. Suppose, he says (p. 264),

that there are properties U, V and W such that $\neg P = U$, $P \vee Q = V$, and $P \& Q = W$. Then Ua and $\neg Pa$, for example, are the very same fact. But they cannot be, because they have different constituents, the first containing U but not P, the second P but not U. And similarly for Va and $Pa \vee Qa$, and for Wa and $Pa \& Qa$. So there are no such properties as U, V and W – which is not of course to deny the existence of the predicates 'U', 'V' and 'W'.

More formally, the argument is as follows:

Mellor's argument

1. $U = \neg P$ (premise, for *reductio*)
2. If $U = \neg P$, then the fact that Ua is identical with the fact that $\neg Pa$
3. Therefore, from (1) and (2), the fact that Ua is identical with the fact that $\neg Pa$
4. If the fact that Ua is identical with the fact that $\neg Pa$, then the fact that Ua has the same constituents as the fact that $\neg Pa$
5. But the fact that Ua does not have the same constituents as the fact that $\neg Pa$
6. Therefore, from (4) and (5), it is not the case that the fact that Ua is identical with the fact that $\neg Pa$
7. Therefore, from (3) and (6), it is both the case that the fact that Ua is identical with the fact that $\neg Pa$ and the case that the fact that Ua is not identical with the fact that $\neg Pa$
8. Therefore, from (1) and (7), $U \neq \neg P$.

By way of comparison, here are two other arguments, both of which are structurally analogous to Mellor's argument:

¹ 'Properties and Predicates', in his *Matters of Metaphysics* (Cambridge UP, 1991), pp. 170–82.

² A. Oliver, 'Could There be Conjunctive Universals?', *Analysis*, 52 (1992), pp. 97–103.

The property argument: suppose that there are properties F and G such that $F = G$. Then Fa and Ga , for example, are the very same fact. But they cannot be, because they have different constituents, the first containing F but not G, the second G but not F. So there are no such properties as F and G – which is not, of course, to deny the existence of the predicates ‘F’ and ‘G’.

The object argument: suppose that there are objects x and y such that $x = y$. Then Fx and Fy , for example, are the very same fact. But they cannot be, because they have different constituents, the first containing x but not y , the second y but not x . So there are no such objects as x and y – which is not, of course, to deny the existence of the singular terms ‘ x ’ and ‘ y ’.

Now I take it that neither the property argument nor the object argument is compelling. I say this because it seems clear that each proves too much. For if the property argument and the object argument were compelling, they would succeed in establishing the non-existence of properties as well as the non-existence of objects. But since I take it we have good reason to think that properties and objects do exist, to that extent also we have good reason for thinking that Mellor’s argument against negative properties is flawed.

What, then, *is* wrong with it? I suggest that the problem is traceable to an ambiguity in the semantics of the phrase ‘the fact that’. The phrase ‘the fact that’ can be understood as creating either an *extensional* or an *intensional* context. I shall argue as follows: if ‘the fact that’ creates an extensional context, then although (2) is plausibly true, (5) is false, and Mellor’s argument fails. On the other hand, if ‘the fact that’ creates an intensional context, then although (5) is plausibly true, (2) is false, and Mellor’s argument again fails. In brief, on no univocal reading of the phrase ‘the fact that’ is Mellor’s argument valid.

For the purposes of this discussion I propose to treat ‘the fact that’ as a sentential operator which takes sentences as arguments and yields singular terms as values. So, for example, given the sentence ‘Alfred is tall’ as argument, the sentential operator ‘the fact that’ will yield the singular term ‘the fact that Alfred is tall’ as value, and this singular term will have as its extension the fact that Alfred is tall. Expressions which occur after ‘the fact that’ will be said to be within the scope of ‘the fact that’ operator.

In addition, I shall say that ‘the fact that’ creates an extensional context if the substitution of co-referential expressions within its scope does not result in a change in its extension. And I shall say that ‘the fact that’ creates an intensional context if the substitution of co-referential expressions within its scope does result in a change in its extension. With these preliminaries out of the way, I now consider Mellor’s argument.

On the assumption that ‘the fact that’ creates an extensional context, premise (2) of the argument seems unobjectionable. For, on that assumption, (2) amounts to the claim that if $U = \neg P$, then the fact that Ua will be identical with the fact that $\neg Pa$ if substitution of ‘ $\neg P$ ’ for ‘ U ’ in ‘the fact that Ua ’ does not result in a change in its extension.

Thus, on the assumption that ‘the fact that’ creates an extensional context, what is immediately at issue in Mellor’s argument is (5). In particular, what is at issue is whether there is any reason for thinking that the fact that Ua and the fact that $\neg Pa$ have different constituents. Mellor’s reason for thinking that they have is quite simple. According to him, the two have different constituents because the fact that Ua contains U as a constituent, but not P , whereas the fact that $\neg Pa$ contains P as a constituent, but not U . If, however, facts are individuated extensionally, then Mellor’s reasoning seems suspect. For if the ‘the fact that’ operator is understood extensionally, and if the only difference between the fact that Ua and the fact that $\neg Pa$ is that the one contains U where the other contains $\neg P$, then it is very hard to see how the fact that Ua could possibly have constituents different from those of the fact that $\neg Pa$, since by hypothesis (1) $U = \neg P$. In short, if we understand ‘the fact that’ to create an extensional context, then (5) is surely false, and Mellor’s argument fails.

Quite generally, let the individuation conditions for facts be as fine- or as coarse-grained as Mellor likes. Still, if ‘the fact that’ creates an extensional context, and if U really is the same property as $\neg P$, then (5) begs the question against negative properties. For what reason could there be to suppose that the fact that Ua and the fact that $\neg Pa$ have different constituents other than that U and $\neg P$ are distinct, and so not identical? But to make that assumption in the context of Mellor’s argument is simply question-begging.

Perhaps, then, ‘the fact that’ should be understood as creating an intensional context instead. That is, perhaps we should think that substitution of co-referential expressions within the scope of ‘the fact that’ *can* result in a change in the extension of the resulting singular term. Now on this understanding of ‘the fact that’ operator, (5) seems plausible. At the very least, if ‘the fact that’ is understood as creating an intensional context, we cannot conclude that if ‘ U ’ and ‘ $\neg P$ ’ are co-referential then ‘the fact that Ua ’ and ‘the fact that $\neg Pa$ ’ are co-referential, or have the same extension.

On the other hand, according to (2), if $U = \neg P$, then the fact that Ua is identical with the fact that $\neg Pa$. But if ‘the fact that’ is understood intensionally then there is good reason to think that (2) is false. To see why, let us compare the ‘the fact that’ with another sentential operator, the sentential operator ‘the belief that’. The sentential operator ‘the belief that’ is a paradigm example of an intensional operator. For from the fact that the property of being water is the same property as the property of being H_2O we cannot conclude that the belief that x is water is the same belief as the belief that x is H_2O . And, I suggest, we should reach the same conclusion concerning facts if ‘the fact that’ is understood intensionally: from the assumption that U is the same property as $\neg P$ we cannot conclude that the fact that Ua is the same fact as the fact that $\neg Pa$. In short, if the phrase ‘the fact that’ is understood as creating an intensional context, then although (5) is plausibly true, (2) is not, and Mellor’s argument again fails.

It will perhaps be objected that I have ignored an important distinction between *intensional* contexts and *hyper-intensional* contexts, in Neale’s terminology.³ For it might

³ See S. Neale, *Descriptions* (MIT Press, 1990), pp. 127–9.

be argued that the phrase ‘the belief that’ is hyper-intensional, whereas the phrase ‘the fact that’ is merely intensional, and thus that the comparison I drew above is not relevant. This objection is not to the point, however. For it is very plausible to suppose that property designators are rigid designators, and thus that co-referential property designators are substitutable within intensional contexts without change in extension.⁴ But if so, and if the phrase ‘the fact that’ is merely intensional, then we are able to substitute ‘¬P’ for ‘U’ in ‘the fact that Ua ’ without change in extension, and (5) will again turn out to be false.⁵

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⁴ For arguments to this effect see, for example, S. Kripke, ‘Identity and Necessity’, repr. in S. Schwartz (ed.), *Naming, Necessity, and Natural Kinds* (Cornell UP, 1977), pp. 66–101; and F. Jackson, ‘A Note on Physicalism and Heat’, *Australasian Journal of Philosophy*, 58 (1980), pp. 26–34.

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