

with a commitment to endurance. Although Lewis's concerns are rightly placed on the issue of predication, his argument rests on assumptions which the endurance theorist need not grant. Although the endurance theorist's resistance does not demonstrate that endurance is preferable to perdurance overall, it does offer a response to the charge that the endurist position is metaphysically untenable. That the position is tenable is significant, for it is the endurance theory which allows us to preserve the intuition that there are some objects which persist through a change in their intrinsic properties.⁸

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IDENTITY THROUGH TIME AND THE DISCERNIBILITY OF IDENTICALS

By DONALD L. M. BAXTER

ONE of the reasons identity through time is a problem for metaphysicians is that often they force a solely present tense use of the 'is' of identity onto ordinary ways of speaking. Metaphysicians want to ask, say, whether Pittsburgh in 1946 is the same city as Pittsburgh today. But this question assumes that it is appropriate to use a present tense 'is'. That assumption prejudices the answer to the question, by making it hinge on whether Pittsburgh in 1946 exists in the present. If it does then presumably the answer is yes. They are identical. But their identity ceases to be identity

through time. If it does not exist in the present, then it cannot be anything that does, so the answer is no. They are not identical. Thus the problem is how there can be identity which is nonetheless through time.

Proceeding on the metaphysicians' assumption precludes without consideration the possibility that Pittsburgh in 1946 existed only in 1946 and yet was Pittsburgh, the same city that Pittsburgh today is. This is the possibility I will be discussing and recommending. Thinking of identity through time as a relation between Pittsburgh in 1946, Pittsburgh today, and Pittsburgh helps explain how it is both through time and identity. The first mentioned and the second mentioned differ in temporal location, but were and are respectively identical with the third mentioned.

What motivates the metaphysicians' assumption is the firmly held conviction that nothing can differ from anything it is identical with. That is, nothing can differ from itself. Identicals are indiscernible. Given this conviction there is identity between Pittsburgh in 1946 and Pittsburgh today only if both exist today. But thinking in terms of Pittsburgh in 1946 as well as Pittsburgh unqualifiedly helps in seeing that identicals can be discernible without contradiction. The apparent contradiction is the result of a scope ambiguity.

Another problem with the question under consideration is that it is hard to know what to make of noun phrases such as 'Pittsburgh-in 1946'. If Pittsburgh in 1946 is simply Pittsburgh, and Pittsburgh today is too, then the identity is simply that of Pittsburgh and Pittsburgh. But then again the identity does not seem to be through time. And if either is not Pittsburgh then there does not seem to be identity, whether through time or not, between Pittsburgh in 1946 and Pittsburgh today.

Fortunately 'Pittsburgh in 1946' is an ordinary concept and so can be learned about by considering how it is ordinarily used.

What follows is an attempt to discover (1) a way to formulate statements of identity through time more like an ordinary way, (2) a related problem with identity through time that comes to the same problem I started out with, and (3) a solution to the problem. I avoid simple present tense formulations. They make identity statements and the problem easier to state. But this ease distorts the discussion away from ordinary ways of thinking, the consideration of which suggests a solution.

We might ask someone 'Do you remember Pittsburgh in 1946?'. There are various ways this could be asked: (i) 'Do you remember how Pittsburgh was in 1946?'; (ii) 'Do you remember Pittsburgh as it was in 1946?'; (iii) 'Do you remember the Pittsburgh of 1946?'. Asking (i) is asking more about Pittsburgh's characteristics. But (ii) and (iii) are asking about Pittsburgh, though not about Pittsburgh *simpliciter*. It seems as though thinking about these phrases can help in thinking about 'Pittsburgh in 1946'.

Once someone has recollected Pittsburgh in 1946, he might go on to describe it: 'Pittsburgh was dirty in 1946.' The phrase 'in 1946' seems to modify the verb. But he might also have said 'The Pittsburgh of 1946 was dirty'. Here the phrase 'of 1946' either modifies the subject or more likely is part of the noun phrase which is the subject. It seems to me that 'in 1946' can either be part of a noun phrase, or modify a verb. The latter is its usual role. If there is an appropriate verb, the phrase modifies it. But in the absence of such a verb the phrase can be part of a noun phrase the way 'of 1946' can be.

For example one might say 'Pittsburgh in 1946 resembled Gary, Indiana today'. This could be closely reformulated as 'The Pittsburgh of 1946 resembled the Gary, Indiana of today'.

A metaphysician might well wonder how to understand these noun phrases that include mention of times. He might wonder whether the Pittsburgh of 1946 exists today. At first this query seems absurd. The Pittsburgh of 1946 existed in 1946, only. It does not exist today. The Pittsburgh of today exists today. This is the ordinary understanding. But on second thought the query makes more sense. After all, the Pittsburgh of 1946 was Pittsburgh. And Pittsburgh exists today. So, despite its oddness, the conclusion seems to follow that the first mentioned also exists today. Here then the metaphysician has found a place to go to work. There is an apparent contradiction: (a) The Pittsburgh of 1946 does exist today and (b) The Pittsburgh of 1946 does not exist today.

One seemingly easy way out is to deny that the Pittsburgh of 1946 was Pittsburgh. Consequently you deny (a) that the Pittsburgh of 1946 does exist today. Thus one side of the contradiction (viz. (b)) is chosen at the expense of the other (viz. (a)). This denial would be best followed up by saying that the Pittsburgh of 1946 was *part* of Pittsburgh. But this seems an extreme move. Was the Pittsburgh of 1946 a city? Yes. Is Pittsburgh a city? Yes. Are they different cities? It seems odd to me to say yes. A person in a Pittsburgh jail for the duration of 1946 would have been in at least two cities. There is no need to accept this. Alternatively the easy way out could have it that Pittsburgh in 1946 was not a city. Perhaps it was a city-stage or some special kind of thing. But now I'm lost. I understood the phrase 'the Pittsburgh of 1946' when we were talking about a city, but if it is something else then the easy way out is no longer easy. Appealing to temporal parts is theoretically elegant. But if done in either of these ways, the appeal tramples our ordinary understanding of what we are trying to explain. It would be better to avoid this if possible. The trampling would certainly be mitigated by further ingenuity. But a theory that requires less such ingenuity, that tries to preserve ordinary ways of thinking rather than explain them away, would be better. At least it would be on my view of metaphysics. So the first seemingly easy way out should be avoided if possible.

It might be objected that I am too hasty in rejecting temporal parts theory the first way I did. It does not really conflict with common sense in the case of the person in a Pittsburgh jail during 1946. The temporal parts theorist can grant both the following: When we, speaking ordinarily, say the inmate was in just one city we are right. And a theory that makes us be wrong tramples common sense. But the temporal parts theorist can explain how it is that we are right. He can say we are right to count things which spatially coincide at a time, as one at that time. So he can believe that the inmate was in two cities — the temporal whole and the temporal part — while explaining why it is right for us ordinarily to say that during 1946 the inmate was in only one city.¹

But this defence of the temporal parts theorist fails. If we are right to count the two cities as one city, then we are right to count them as the same city. It cannot be right to count them as one and yet consider them to be distinct. To consider them distinct is to consider them to be two. The temporal parts theorist cannot here plead that we are counting the composite of the two as one, nor that we are counting the common part of the two as one. He is explicitly saying we rightly count the two themselves as one. So we rightly take them to be identical.

The problem comes because there is more that the ordinary person says. He says that Pittsburgh exists today, and also that the Pittsburgh of 1946 does not. To explain why these are right the temporal parts theorist would say the person is talking about the temporal whole in the first case, and the temporal part in the second. The problem with all this is that the theorist has now ceased to help with the original contradiction. Given the indiscernibility of identicals, if the ordinary person is right to take the temporal whole and the temporal part to have been identical, then apparently he is right to claim that the city the inmate was in both exists today (because the whole does) and does not exist today (because the temporal part does not). But now the temporal parts theorist has explained how both an ordinary claim and its apparent denial are right. To write down the claims would be to write a sentence and its negation.

Given the meanings he has supposed, the theorist has not contradicted himself nor attributed semantic inconsistency to the ordinary speaker. But the theorist has left the ordinary speaker in the bewildering position of, for all he can tell, being told that he is right to make and deny a claim. Furthermore it is bad semantics to make a sentence and its negation both true.

So the temporal parts theorist ought not try to preserve all these ordinary ways of speaking. So he is not a help in my project of trying to preserve them while resolving the apparent contradiction.

¹ See David Lewis, 'Survival and Identity', in his *Philosophical Papers* Volume I (Oxford: Oxford University Press, 1983), pp. 61–5.

To continue then, let's look more carefully at the sense in which the Pittsburgh of 1946 exists today. The idea is to try to put things idiomatically so as to preserve whatever ordinary understanding there is. Is the Pittsburgh of 1946 identical with the Pittsburgh of today? This is metaphysician talk using just a present tense 'is' of identity. To express this in a more ordinary way I imagine we would say, 'The Pittsburgh of 1946 was the same city as the Pittsburgh of today is.' Which city is that? Pittsburgh. This formulation still sounds odd because it is hard to imagine an ordinary context in which it would be appropriate. But it greatly resembles the more ordinary claim 'I am the same person I was yesterday, despite all the changes.' There is a person who I was yesterday and am today, even though the me of yesterday was very different than the me of today is. There is a city which the Pittsburgh of 1946 was before, and which the Pittsburgh of today is now. Ordinary talk would avoid using just the present tense to state identity through time by means of locutions of the form, 'There is something which one thing was and another thing is.'

I am not trying to invent theoretically useful ways of talking. I am trying to uncover ordinary ways of talking that can later be put to the modest theoretical use of systematization. But any attempts to reformulation are at least low-level theorizing, so I can't pretend to be uncovering unprejudiced data.

Saying that Pittsburgh of 1946 was Pittsburgh could be construed another way which is another seemingly easy way out. It might well be understood that the two are identical, in the conventional philosophical sense expressed by the present tense 'is'. This tack would be to deny the second conjunct of the apparent contradiction, i.e. deny (b) that the Pittsburgh of 1946 does not exist today. However, this strategy has its drawbacks. It makes it true to respond in 1986 as follows: 'Do you remember the Pittsburgh of 1946?'. 'Sure. I was there for New Year's 1986.' But this is not right. Again ingenuity could be used to explain that this response is true but somehow inappropriate. But I think the early stages of theorizing should require more discernment than ingenuity. There will be time enough for ingenuity.

The problem with each seemingly easy way out is that it chooses one or the other side of an apparent contradiction for which both sides are motivated. And it does so without respecting the motivation for the rejected side. There should be a better way.

Here is the seemingly inconsistent set of claims: The Pittsburgh of 1946 does not exist today. The Pittsburgh of 1946 was Pittsburgh. Pittsburgh exists today. These entail that the Pittsburgh of 1946 was something that exists today. What it was is something that exists today. However, it follows that the Pittsburgh of 1946 exists today only given the following principle: If something, x , was something that exists today, then x exists today. Denying this would remove contradiction, and so far no ordinary beliefs would

be repudiated. In fact this abstruse principle is in question precisely because all the ordinary beliefs canvassed so far are being preserved.

But can the principle consistently be denied? Borrowing the philosopher's solely present tense use of identity the following problem can be raised: If x was y and x is no longer y then x is identical with y and x is not identical with y . But that is absurd.

This may be an important problem. But it does not threaten until it is time to employ a solely present tense use of identity. Nothing as yet forces this use.

But our original problem has not gone away. Presumably if two things are identical then they exactly resemble each other. Neither has a property lacked by the other. But this, when added to the set of ordinary claims, makes it entail a contradiction. If the Pittsburgh of 1946 was Pittsburgh then the Pittsburgh of 1946 was something which exists today. It could not *have been* something which exists today unless it *exists* today. So it exists today.

But the Pittsburgh of 1946 does not exist today. So the Indiscernibility of Identicals, a worthy principle, creates the problem. If identicals could be discernible, there would be no problem. But how could identicals be discernible? Seemingly it is absurd that the same thing have and lack a property. Seemingly a contradiction would be true of it.

However, there is not really a contradiction. The situation is more complex than it appears. The Pittsburgh of 1946 is Pittsburgh as it was in 1946. The grammar of sentences using 'as' in this way is confusing. There is a scope ambiguity when a 'not' is involved.

Consider another example. A king is in the terrible position of having to jail his own daughter. As law-enforcing king he supports the sentence. As loving father he does not support it. As father he is more lenient than he is as king. But nonetheless, as king, he sentences her. He asks his daughter, 'Please, when in prison, remember me as the father who loves you, not as the king who sentenced you.'

He as father, and he considered unqualifiedly, are the same person. As father he did not support the sentence. But it does not follow that he, considered unqualifiedly, did not support the sentence. Why not? To say that he, considered unqualifiedly, did not support the sentence is equivalent to saying: Not as anything did he support the sentence. But from the fact that as something he did not support the sentence, it does not follow that not as anything did he support the sentence.

Likewise Pittsburgh as it was in 1946 does not exist today. And Pittsburgh as it was in 1946 was Pittsburgh. But it does not follow that Pittsburgh does not exist today. Because it does not follow that: Not as existing at any time does Pittsburgh exist today.

So there is not really a contradiction in the discernibility.

Thinking that there was resulted from an ambiguity in the scopes of an 'as' phrase and a 'not'.

'As' phrases allow us to discern differences in identicals, but not in a way that makes contradictions true. The familiar principle of the Indiscernibility of Identicals as misnamed and should be recognized for what it is — the principle of Non-contradiction. There is a way for identicals to be discernible without violating this principle.

One might object that if identicals are discernible then there is no identity after all. There being no discernibility is a condition as constitutive of identity as anything could be. But I think this is just wrong, at least about the ordinary concept of identity. What is constitutive of identity is being one thing, being a single thing. The fact is single things undergo change in time. The thing of one time does not exist at the time at which itself at another time does exist. There is identity without indiscernibility.

The Pittsburgh of 1946 existed during 1946 and does not today. The Pittsburgh of today exists today and did not during 1946. Each was or is, respectively, identical with Pittsburgh, which existed during 1946 and exists today. In other words the Pittsburgh of 1946 was identical with the same city the Pittsburgh of today is identical with — Pittsburgh. So now we see how to resolve the original contradiction while respecting the motivations. Accurately speaking the Pittsburgh of 1946 does not exist today. But even so, it was identical with something that does.^{2, 3}

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²For more on related topics see Donald L. M. Baxter, 'Identity in the Loose and Popular Sense', *Mind* 97 (1988) 575-82, and 'Many-One Identity', *Philosophical Papers* 17 (1988) 193-216.

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AN ALTERNATIVE TRANSLATION SCHEME FOR COUNTERPART THEORY

By MURALI RAMACHANDRAN

I INTRODUCTION

GRAEME FORBES points out that the translation scheme David Lewis proposes for translating sentences of quantified modal logic into sentences of his (Lewis's) theory of counterparts inter-