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OVERTERMINATION AND EVENTS

So either pretheoretic judgments about what causes what are in need of a major overhaul, or causation is not transitive, or it is not a relation, or its relata are not events, or a coarse-grained analysis of events has to go.

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REFERENCES


CAUSAL POWERS AND CONCEPTUAL CONNECTIONS

By David Christensen

IF I HAVE a molecule-for-molecule duplicate on twin earth, where the lakes, rivers, etc., are filled with twater instead of water, my twin does not share my belief that water is potable, since he lacks the concept of water. Such considerations have been claimed to refute psychological individualism, which holds that the psychologically important properties of an individual belong to her in virtue of what’s inside her skin. Jerry Fodor, however, has recently offered a modal argument designed to support psychological individualism (‘A Modal Argument for Narrow Content’, Journal of Philosophy 88, 1991, pp. 5–26). It aims to show that my twin-earth molecular duplicate and I have thoughts with the very same (psychological) causal powers. If this is so, Fodor argues, then my twin and I do not differ in any psychologically important way, and individualism is not, after all, threatened by twin-earth considerations.
The heart of Fodor's argument, then, involves the individuation of causal powers. And, as Fodor notes, the importance of this issue goes beyond the issue of individualism in psychology: 'Getting some of this stuff sorted out may ... be of use to metaphysics and the philosophy of science, even if it leaves things more or less unaltered in semantics and the philosophy of mind' (p. 7).

One might well be tempted to support individualism by arguing that only intrinsic or non-relational properties could serve as causal powers to individuate natural kinds in science. But Fodor explicitly disavows any such strategy; in fact, he takes it as part of his task to accommodate the legitimacy of certain clearly relational kinds which are recognized by practicing scientists, such as meteors and planets. This makes Fodor's account particularly interesting. If the account could show that my twin and I share all of our psychological causal powers, yet did not show this simply on the basis of the fact that we share all of our non-relational properties, it would, I think, be very likely to yield results whose interest went well beyond the issue of psychological individualism.

On Fodor's account, causal powers are individuated by their effects in the domain of the relevant science. Roughly: my twin and I will have different psychological causal powers only if our different environmental connections are responsible for some difference in our psychological properties. Moreover, Fodor notes, with a nod to Hume, that 'your causal powers are a function of your contingent connections, not of your conceptual connections' (p. 19). He proposes, as a first approximation, the following necessary condition on distinctness of causal powers: for two properties to be distinct causal powers, the difference between them must be responsible for a difference in effect, and it must not be a merely conceptual truth that this difference in causal powers is responsible for this difference in effects.\(^1\)

We are now, says Fodor, in a position to distinguish between properties like being a planet on the one hand, and being water-connected on the other. Ceteris paribus, a planet will have a Keplerian orbit, while a molecular duplicate that is not a planet will not. Planethood, then is responsible for this difference, and it is a contingent fact that this is so (i.e., it is a contingent fact that planets have Keplerian orbits at all). But according to Fodor, 'it is conceptually necessary that if you are connected to water in the right way then you have water thoughts (rather than twater thoughts) ... To have a water thought just is to have a thought that is connected to water in the right way' (pp. 21-1). Thus planethood, but not water-connectedness, fulfills the necessary condition for being a causal power in its science.

\(^1\)The existence of any important distinction between conceptual and non-conceptual truths has not, of course, been uncontroversial in post-positivist thought; but I will accept it uncritically here.
Unfortunately, as Fodor acknowledges, this first necessary condition is too weak. Consider the following example, attributed to Stephen Stich: Suppose that water is Bush's favourite drink. Then there is another difference between my twin's thoughts and my own thoughts. I have thoughts about Bush's favourite drink, but my twin does not. Here, then, is another difference in psychological properties between my twin and me, a difference which obtains in virtue of our different environmental connections. And this time, the psychological difference between us does not simply flow from some conceptual connection; Bush's beverage preferences are surely contingent if anything is. Thus we do, after all, have a way of distinguishing between water-connectedness and twater-connectedness that satisfies the first version of the contingency requirement.

Fodor's response to this problem is a strengthening of his requirement. He never provides a general formulation of the strengthened requirement; rather, he applies it to some examples. The examples are meant to show how the strengthened condition can discriminate between the planethood/having a Keplerian orbit relationship on the one hand, and the water-connectedness/having thoughts about Bush's favourite drink relationship on the other. Fodor claims (and I will not dispute this claim here) that the following test sentence is conceptually necessary, where 'B' might stand for the property of being about Bush's favourite drink:

\[
TS1 \text{ If } B \text{ is a property water-thoughts have, then if I am connected to water in the right way, then } B \text{ is a property that my thoughts have. (p. 23)}
\]

The consequent of the main conditional describes the problematic relationship between water-connectedness and thinking about Bush's favourite drink. Fodor explains the antecedent as follows: 'Stich gets a contingent connection between water-connectedness and water thoughts de re by invoking such contingent premises as, for example, that water is Bush's favourite drink; and thus trivially satisfies [the first contingency requirement]. In effect [TS1] provides a substantive version of [the contingency requirement] by conditionalizing on these contingent premises' (p. 23, fn). Fodor concludes that the connection between being water-connected and having thoughts about Bush's favourite drink is, after all, conceptual in the relevant way. Therefore, the fact that I (but not my twin) can think about Bush's favourite drink cannot be cited to show a difference in causal powers between us.

Fodor invites us to compare TS1 with TS2, where 'E' can be taken to stand for the propety of being elliptical:

\[
TS2 \text{ If } E \text{ is a property that Keplerian orbits have then, if I am a planet, then my orbit has } E. \text{ (p. 23)}
\]
Unlike TS1, TS2 is clearly contingent, since planets might not have had Keplerian orbits. The contingency of TS2 is taken to show that the strengthened contingency requirement is not too strong. Presumably, it would not preclude us from citing differences in having a Keplerian orbit to show a difference in causal power between a planet and its molecular twin.

But let us look a bit more carefully at these test sentences. They are, remember, supposed to allow us to differentiate between the following two cases in which the difference between having and lacking a certain 'cause' property is responsible for a difference in some further 'effect' property:

Case 1: A difference in being water-connected is responsible for a difference in thinking about Bush's favourite drink.

Case 2: A difference in being a planet is responsible for a difference in having a Keplerian orbit.

We saw above that the consequent of TS1 is a conditional describing the very relationship that is central to Case 1: that between water-connectedness and having thoughts about Bush's favourite drink. We should, then, expect TS2 to stand in this same relationship to Case 2. However, a moment's inspection shows that it does not! The consequent of TS2 describes a relationship between being a planet and having an elliptical orbit, not between being a planet and having a Keplerian orbit. In Fodor's words (p. 25), 'Oi! Halt thief!'.

Let us take stock. What Fodor wants is to differentiate between the cases by showing that the relationship in Case 1 passes a certain modified contingency test, but that the relationship in Case 2 does not. Test sentences TS1 and TS2 are supposed to show this; but, as we have seen, they cannot, since they do not stand in the same relations to the two cases.

What should we make of this? Lacking any explicit formulation of the modified contingency test, we cannot say which of the test sentences is formulated 'correctly'. What we can do, however, is look at Fodor's test sentence for each case, and see whether a test sentence for the other case constructed in a parallel way would allow us to differentiate between the cases. If this succeeded, perhaps we could give an explicit formulation of a modal necessary condition for distinctness of causal power, of the sort Fodor had in mind. If we could do this, we might well help illuminate not only the philosophy of mind, but metaphysics and the philosophy of science as well.

Unfortunately, constructing various test sentences parallel to the ones offered by Fodor yields no such result. Let us begin by constructing a new test sentence for Case 2, in a way that parallels the way TS1 is constructed from Case 1.

TS2' If having a Keplerian orbit is a property that celestial bodies (other than comets, meteors, and satellites) that
revolve around stars have, then, if I am a planet, I have a Keplerian orbit.

As in TSI, the consequent of T$S_2'$ is a conditional relating the two properties that figure in the relevant Case. As in TSI, the antecedent describes a relationship between the 'effect' property in the relevant Case and a new property, one not mentioned in the Case. But clearly, T$S_2'$ is every bit as conceptually necessary as TSI, since being a planet 'just is' being a celestial body (other than a comet, meteor, or satellite) that revolves around a star. So TSI and T$S_2'$ provide no way of distinguishing between Case 1 and Case 2.

It might be thought here that this parallel between TSI and T$S_2'$ is not really relevant. Perhaps it doesn't matter that the connection described in Case 2 can be seen as conceptual. Maybe the point is that the connection described in Case 1 can only be seen as conceptual. Perhaps an asymmetry will be revealed in our inability to construct a contingent test sentence for Case 1, parallel to our contingent T$S_2$ for Case 2.

A little experimentation on the model of T$S_2$, however, reveals no such asymmetry. Consider, for example:

TS$1'$ If being about a Republican's favourite drink is a property that thoughts about Bush's favourite drink have, then if I am connected to water in the right way, my thoughts are about a Republican's favourite drink.

As in T$S_2$, the consequent here describes a relationship between the purported causal power in the relevant Case and a new property not mentioned in the Case description. As in T$S_2$, the antecedent describes a relationship between that new property and the 'effect' property mentioned in the relevant Case. But TS$1'$ is clearly as contingent as Bush's beverage preferences. Once again, when we form test sentences from our two Cases in parallel ways, we discover no asymmetry at all.

We have seen, then, that the test-sentences Fodor provides to illustrate his modified contingency test cannot support his argument, because they are not drawn from the Cases in parallel ways. More importantly, it turns out that the examples suggest that there is no uniform way of constructing Fodor-style test sentences that would give Fodor what he needs. The basic idea — that causal powers are to be individuated by their (contingent) effects in the relevant science — has a certain intuitive appeal. But it does not seem that this idea can be utilized by means of a revised contingency requirement of the sort that Fodor envisions.

\footnote{My conceptual truth about planets comes from \textit{Webster's New Collegiate Dictionary} (Springfield, MA: G. & C. Merriam, 1974). The details of the definition are not important here; any property that is conceptually necessary for planethood will do.}
There may be other ways of fleshing out Fodor's basic idea in ways that avoid the problem of Bush's beverage preferences. If one could independently argue for the claim that beliefs de re were not proper objects of psychological study (and I have no such argument to offer), then we might be able to rest content with Fodor's original contingency requirement. Absent that, though, we have as yet seen no reason to think that Fodor's idea about the individuation of causal powers can be transformed into a non-question-begging modal test for distinctness of causal powers in general, or into an argument for psychological individualism in particular.3

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THE SPIRIT OF TWIN EARTH

By Gregory McCulloch

I

Tracey and Sandra are atom-for-atom doppelgänger who inhabit distinct but qualitatively identical environments. Unbeknownst to them, whereas what Tracey calls 'water' is H₂O, what Sandra calls 'water' is XYZ, a superficially similar substance with a different chemical constitution.

As we all know, 'Twin Earth' scenarios like this are used to make trouble for the two traditional theses

(a) meaning determines extension,

and

(b) psychological state determines meaning grasped: thus see [5], pp. 215–27. First, assume that H₂O and XYZ are different substances: then

(1) Tracey's uses of 'water' pick out a different extension from Sandra's.

From here we have it, via (a), that

(2) Tracey's uses of 'water' have a different meaning from Sandra's.