

15 *Intentional Properties and Causation*

In “A Modal Argument for Narrow Content”^a Jerry Fodor tries to show that psychological properties typed by ordinary intentional propositional content (which he calls ‘broad content’) cannot be associated with distinctive causal powers for purposes of psychological taxonomizing. Causal powers are relevantly distinctive insofar as they are distinguished from twin-earth psychological properties. Thus Fodor attempts to show that ordinary intentional propositional content cannot be basic for taxonomizing causal powers in psychology. I think that he does not succeed.

Before discussing his argument, I want to remark on his methodology. Fodor calls his argument “*apriori*”. He seems to mean by this only that it is the sort of argument that could be given from an armchair (p. 12). Certainly, most of his claims (for example, the claim about H- and T-particles) do not seem to be *apriori* in any traditional sense. Something is a T-particle at time t if it is a physical particle and the coin in Fodor’s hand at time t is tails up. Our knowledge that being a T-particle is not having any particular causal power is perfectly obvious apart from any particular investigation; but it clearly relies broadly on our empirical experience.

Fodor takes his proposal to be justified by its sorting examples, like the T-particle example, and by its respecting Humean intuitions about causation. It seems to me that he is simply attempting to generalize about causal explanation in the empirical sciences. This is certainly a philosophically valuable enterprise. But I think that it is treacherous when its conclusions appear to be in opposition to actual scientific practice.

Fodor’s conclusion does appear to be in opposition to the actual practice of psychological explanation. Psychologists use ordinary content in many of their causal explanations. There is no wholesale movement in intentional psychology to make its explanations more “general”, or more in accord with Fodor’s conception of causally relevant kinds, by replacing ordinary content attributions with attributions of another sort of content (which he calls ‘narrow content’).

I am indebted to Ned Block for several very valuable criticisms.

^a J. Fodor, “A Modal Argument for Narrow Content”, *The Journal of Philosophy*, 88 (1991), 5–26. Subsequent page references to this article are given parenthetically in the text.

Narrow content seems to play no explicit role that would replace that of ordinary content. So I think that there is strong armchair reason to think that Fodor's argument will not establish its conclusion. I think that it is another in a long line of philosophical proposals to revise science. Such proposals have a poor track record; they have given philosophy a bad name. Fodor is advocating a change in the formulation of scientific generalizations rather than a flat-out denial of scientific claims. But I think that it is no more likely to be scientifically useful than its more notorious ancestors. Let us consider the argument itself.

Fodor begins by assuming that differences in intentional properties are the only relevant differences between the behavior of a person and a twin-earth twin (p. 7). I think that this is a mistake. Non-intentional descriptions of behavioral relations between an individual and specific kinds in his or her environment seem to be a significant part of what psychology is interested in.

Fodor dismisses non-intentionally and relationally described behavior (for example, getting water) by reference to his "cross-context" test. He maintains, 'you have to judge identity and difference of causal powers in a way that bears the counterfactuals in mind, namely, *across* contexts rather than *within* contexts' (p. 8). The idea is that a twin would get water if placed on Earth, and an earthling would get twater if placed on Twin Earth, given that they made the same requesting sounds in their respective languages. Fodor concludes that the behavior of the two protagonists, on Earth and Twin Earth, is the same as far as psychological taxonomy and causal power are concerned.

Fodor is certainly right that causal power is a counterfactual notion. But his test, at least in the way he applies it, is useless for individuating causal powers. The trouble is that deciding which contexts are relevant for determining and distinguishing causal powers is not independent of assumptions about how to individuate explanatory kinds.¹

Imagine that a heart and an organ that pumps digestive waste (from a completely different evolutionary scheme) were physically indistinguishable up to their boundaries. Clearly they would be of two different biological kinds, with different causal powers, on any conception of causal power that would be relevant to biological taxonomy. Judging the heart's causal powers presupposes that it is connected to a particular type of bodily environment, with a particular sort of function in that environment. One cannot count being connected to such a body to pump blood as just one of many contexts that the heart might be in, if one wants to understand the range of its biologically relevant causal powers. It would show a serious misconception of biological kinds to argue that the causal powers and taxonomically relevant effects of the heart and its physical twin are the same because if one hooked up the waste pump to the heart's body, it would pump blood and cause the blood vessels to dilate; and that if one hooked the heart to the waste pump's body, it would move waste.

¹ I have made this point with essentially the example that follows in "Individuation and Causation in Psychology", *Pacific Philosophical Quarterly*, 70 (1989), 303–322 (Ch. 14 above).

But that is how Fodor argues regarding relational behavioral effects of psychological states. The argument ignores the fact that specific relations between an entity and its normal environment may be of interest to a special science, and fundamental to its causal taxonomy. Causal power is judged against background assumptions about what kind of thing is being evaluated. And kinds are sometimes what they are because of their relations to, and functions within, a specific environment. Fodor's treatment of any environment as being on a par with other "contexts" for testing causal powers is in effect an assimilation of the special sciences to physics. It certainly begs the question against my view.

The test gives no reason to think that psychology should not be, or is not, interested in explaining non-intentional behavioral relations between an individual and specific sorts of things in his or her environment. In fact, psychology is engaged in explaining many successes and failures that relate an individual's intentional states to kinds of things in the individual's environment: specific successes or failures in perception, in knowledge, in action. I see no good reason to think that psychology does or should gloss these explanations of success or adaptation in environmentally neutral ways (as Fodor attempts to do in his Appendix).

Fodor concentrates his discussion on intentionally described behavior. He does so because he thinks that such descriptions pass his cross-context test (p. 8). He therefore devises a further condition which is supposed to show that ordinary intentional psychological states are not distinctive causal powers with respect to intentionally described behavior.

Fodor offers a necessary condition for when a difference between having causal properties CP1 and CP2 is a difference in "causal powers" in virtue of the difference's being responsible for a certain difference between effect properties EP1 and EP2. (The difference in causal properties CP1 and CP2 is said to be responsible for the difference between the effect properties in the same sense that if CP2 had been instantiated instead of CP1, the effect would have had property EP2 instead of EP1; and if CP1 had been instantiated instead of CP2, the effect would have had EP1 instead of EP2; (p. 9).

Fodor never formulates his condition in final form. But his core answer is:

(C): Only when it is not a conceptual truth that causes that differ in that one has CP1 where the other has CP2 have effects that differ in that one has EP1 where the other has EP2. (p. 19)

The idea is that being a meteor can be a causal power in virtue of the fact that meteors are responsible for craters because the relation between the difference between meteors and rock-twins-of-meteors which are not meteors and their respective effects (the effects: making craters and whatever effects the rock-twins have) is 'non-conceptual' (p. 20). By contrast, Fodor says, "it is conceptually necessary that people who have water thoughts (rather than twater thoughts) produce water behavior (rather than twater behavior)" (p. 21). So being a water thought (a thought that involves the concept *water*) cannot be a distinctive causal

power in virtue of the fact that water thoughts are responsible for water behavior. Fodor thinks that his condition is a necessary condition on causal properties' being 'psychological natural kinds' (p. 14).

Fodor stipulates that condition C is not to apply to causal properties that are individuated *as* causal powers with certain specific sorts of effects. He cites being a camshaft and being soluble in water as properties that are non-contingently causal powers of their characteristic effects. The problem Fodor anticipates is that characteristic camshaft effects (lifting valves of certain sorts) necessarily have the effect properties which the property of being a camshaft is conceptually associated with. And any such effects will be different, on conceptual grounds, from characteristic effects of physical-camshaft-twins that have different functions. Yet it would seem that being a camshaft is a distinctive causal power in good standing. So condition C should not apply to such causal properties, canonically described.

By contrast, Fodor assumes that being a meteor is only contingently a causal power with respect to such effects as making craters. And he explicitly says that being a water thought is contingently a distinctive causal power with respect to its effects on behavior characterized, intentionally, in terms of the concept *water*. More generally, he believes that specific propositional attitudes characterized in the usual way are only contingently causal powers with respect to intentionally described behavior characterized in terms that indicate intentional elements in the propositional attitudes (p. 19). So condition C is applicable to them.

Since Fodor believes that propositional attitudes characterized in the usual way fail condition C, he concludes that they are not causal powers in virtue of their characteristic intentionally described effect properties: they do not differ in their causal power from propositional attitudes of twin-earth counterparts. That is, it is a conceptual truth that 'broad content' propositional attitudes differ in their characteristic intentionally described effect properties from those of their "broad content" twins. So condition C is violated. So "broad content" propositional attitudes do not differ in causal power from their twins. I find the complexity of these formulations unappealing, and less than immediately intuitive. I characterize Fodor's position to have it on the table for discussion.

There's more complexity than I have so far mentioned. Fodor has to do some patching of his core answer (pp. 21–22). For by redescribing causal properties or effect properties, one can produce a non-conceptual relation between concepts of any given pair of properties. Fodor does not make fully clear what his patch is to be, but as Ned Block has pointed out, it appears that the line of response that he proposes cannot solve the problem. For in all the examples he gives (pp. 21–25) the properties he cites could still be redescribed to produce statements that are about the same properties but that are not conceptually necessary. The problem is that conceptual necessity is (if anything) a property of relations between concepts of properties, not of relations between properties.

In my view, however, this is not a fundamental problem for Fodor. I think that he can and should speak of canonical descriptions (or canonical conceptions)

of properties—descriptions (or conceptions) that are candidates for use in explanatory theories. ‘Being a meteor’, ‘being a water thought’, ‘being phlogiston’, and so on are of this sort. ‘Being Harry’s favorite property’ is not. At least I am willing to accept this emendation, despite its vagueness. I agree also not to cavil over the notion of conceptual necessity. Given that we assume that we are testing canonical descriptions (or conceptions) of the property of being a water thought, I think Fodor need not do any patching on his original proposal at all.

I want now to return to Fodor’s assumption that having thoughts involving the concept *water* are not themselves necessarily distinctive causal powers with respect to behavioral effects intentionally described in terms of the concept *water*. To put it another way, Fodor assumes that it is contingent that ‘having mental states that differ in their broad content is having mental states that differ in their causal powers’ (pp. 16, 24–25).

As noted, he contrasts the property of having thoughts whose intentional content involves the concept of water with the property of being water-soluble. He observes that it is not contingent that having this latter property is having a distinctive causal power (pp. 17–18). And he thinks that it is ‘reasonably unententious’ to assume that having intentional thoughts are different in this regard:

friends of broad content argue that it perfectly well *could turn out*—that there is no metaphysical reason why it should not turn out—that having mental states that differ in their broad content is having mental states that differ in their causal powers. (For example, it could turn out that there are causal laws that distinguish between twins.) But I do not remember hearing anyone argue that having mental states that differ in the way that the mental states of twins do *just is* having mental states that differ in their causal powers. On the contrary, according to the usual understanding, it is their causal *histories* that distinguish the mental states of twins. And the intuition about features of causal history is that some of them are causal powers (e.g. *having been dropped in transit...*) and some of them are not (e.g. ... *having been born on a Tuesday*) and it is contingent which are which. (p. 18)

I cannot speak for others. But this articulation of Fodor’s assumption contains several misunderstandings of the point of view that has motivated my anti-individualism. I will discuss some of them as a preliminary to discussing the assumption.

What distinguishes the twins is not confined to their causal histories. Their propositional attitudes themselves differ. Their intentionally described behavior differs. Their interactions with their environments, including their effects on their environments, differ. I believe that intentional ascriptions of psychological states and specific relational behavioral descriptions are taxonomically primitive: they characterize psychological kinds. Some of the other properties of a person not shared with the person’s twin are *not* psychological kinds. In particular, I think it highly unlikely that the historical individuating conditions of specific psychological states will be psychological kinds.

It is for psychology and other scientific enterprises an empirical question whether and to what extent they will make use of ordinary propositional attitude

ascriptions in their explanations. I believe that the question whether they will use ordinary propositional attitude ascriptions is already settled for psychology and a wide range of other explanatory endeavors. But perhaps in some cases it could, in principle, 'turn out' otherwise.

An analogous epistemological point applies to the property of being water-soluble. Water solubility is in itself a causal notion. Let us suppose that it serves some explanatory enterprises (though it may in fact be explicable in more general terms). It could have 'turned out' that there was no such property or that it had no distinctive explanatory role.

We can also say about water solubility that it is necessarily a causal notion, and that it is individuated partly in terms of its effects. So its canonical description implies necessary or conceptual relations between the causal property and appropriately described effects. On the supposition that it is an explanatorily useful property, anything that has it is taxonomically or explanatorily distinct from anything that lacks it.

I think that in these respects intentional psychological properties are similar. They necessarily have causal implications as such. They are scientifically and causally relevant kinds.² And many of them bear a conceptual relation to standard conceptions of the properties that are causally effected by them. (I shall return to the sense in which this is so.) Given, as I think, that ordinary intentional properties are causally relevant kinds, they are necessarily distinct from other causally relevant properties, including twin-earth analogs.

Fodor is right that much of the focus of the discussion of anti-individualism has been on the role of causal-historical antecedents in concept individuation. One reason for this focus is that the arguments for anti-individualism grew out of previous work on reference in the philosophy of language.³ Another reason, at least for me, is that in view of the failure of behaviorism and the programmatic, almost empty, character of all the sorts of functionalist reductionism that I know of, it is difficult to state in an illuminating, even sketchy, way what causal relations most psychological states bear to behavior (intentionally characterized or otherwise). It is approximately as difficult as psychology is.

Nevertheless, I think that it is probably a fault of some expositions within this tradition (a fault I myself am guilty of) that there has been so much more emphasis, in the account of attitude individuation, on historical chains leading up to employment of a concept, than on the individual's activity in interacting with an environment. Still, even causal-historical antecedents have consistently been said to involve *interaction* between individuals and their environments. Interaction is not passive reception of input.

² Cf. my "Mind-Body Causation and Explanatory Practice", in J. Heil and A. Mele (eds.), *Mental Causation* (Oxford: Oxford University Press 1993) (Ch. 16 below).

³ Cf. my "Philosophy of Language and Mind, 1950-1990", *The Philosophical Review*, 100 (1992), esp. pp. 45 ff. (Ch. 20 below).

In any case, it seems to me clearly true that specific actions by individuals on their environment are part of what is involved in individuating ordinary intentional contents. This is what underlies the conceptual relation between certain sorts of behavior and intentional psychological states. For example, what an individual perceives is not independent of what the individual or conspecifics can discriminate.⁴

The theory of perception takes for granted that among the things that in a patterned way cause perceptual representations, the kinds of things that are represented can, in most cases, only be those that the creature's perceptual apparatus can function, under appropriate conditions, to discriminate. Discrimination here is a behavioral as well as teleological notion. But it is a notion whose application is circumscribed by the possibilities for discrimination in the individual's normal environment. Necessarily, things perceived, in optimum or normal conditions, function in some way not only in a species' or individual's causal history but in the species' members' actions on the world. The individuation of various beliefs about macro-objects and properties also depend on looser but still significant relations to the individual's acting on the relevant objects or properties.

Despite the relative concentration on historical antecedents in parts of the anti-individualist tradition, it is strange that Fodor regards his assumption as untendentious. Fodor would be begging the question to assume that ordinary intentional psychological properties, standardly conceived, are not distinctive causal and explanatory kinds. But it is obvious that if they have causal implications, some ordinary intentional properties, under their standard conceptions, bear conceptual relations to some of the properties that are causally effected by them, standardly conceived. These effect properties include both intentionally described behavior and behavior described in terms of relations to specific kinds of things in the environment. That ordinary intentional properties are necessarily distinct from twin analogs in their causal implications follows from the anti-individualist view that they are taxonomically relevant kinds. It is not an independent question.

Fodor's attribution of the view that it could 'turn out' that there are ordinary intentional causal laws (or causal law-like generalizations) is at best misleading. He purports to be talking about necessity. But 'could turn out' talk is epistemic, not modal in the ordinary senses. Epistemic contingency is irrelevant to the application of condition C. It may well be that Fodor has confused an epistemic view with a metaphysical or causal-taxonomical view.

⁴ B. O'Shaughnessy, *The Will* (Cambridge: Cambridge University Press, 1980), ii. ch. 8; M. Davies, "Individualism and Perceptual Content", *Mind*, 100 (1991), 461–484; *idem*, "Perceptual Content and Local Supervenience", *Proceedings of the Aristotelian Society*, 92 (1992), 21–45. I think that by concentrating on the role of behavior in perceptual-state individuation, one can produce a simpler, stronger argument for anti-individualism than the general philosophical one I give in 'Individualism and Psychology' (Ch. 9 above).

Fodor's main argument rests on the assumption that ordinary intentional psychological states are unlike being a camshaft and water solubility in that they are not necessarily causal powers and are not necessarily distinct in their causal implications from twin-earth analogs. Since this assumption is mistaken, the argument is inapplicable.

In a brief note, Fodor anticipates this response late in his paper (n. 22). He claims that if ordinary intentional states are like water solubility in being both conceptually and causally connected to their behavioral effects—and in a way that distinguishes them from their twin analogs—then there is even less reason to think them causally and taxonomically significant:

the broad content psychological generalizations that distinguish twins (like, 'if you have water wants [rather than twater wants] then you drill for water [rather than twater]') themselves all come out conceptually necessary ... The moral would then be: no causal laws about broad intentional states as such ... It is true that being soluble is a causal power even though it is conceptually connected to dissolving. But the price for thus evading condition C is the 'quasi-logical' status of 'if soluble then dissolves'. (n. 22)⁵

But this point contains a simple fallacy. The fact that there is some conceptual connection between explanans and explanandum (or antecedent and consequent) does not mean that the psychological generalizations come out to be conceptually necessary. It does not preclude their being interesting causal law-like statements. The conceptual link between antecedent and consequent may be merely that 'water' occurs in both (intensionally in the former, either intensionally or extensionally in the latter), and that being a thought about water has some causal implications or other, with respect to water.⁶ It does not follow that the consequent follows conceptually from the antecedent.

⁵ I am sure that Fodor knows that nothing about twater would occur in a psychological generalization about water. His point must be that 'water' really occurs primitively in the generalization. I must also point out that Fodor's idea that 'wants water' means something like 'thirsty and born here' (p. 17) is wildly inaccurate. As I have shown, 'water' contains no indexical element. Cf. my "Other Bodies", in A. Woodfield (ed.), *Thought and Object* (Oxford: Oxford University Press, 1982) (Ch. 4 above). At best he is proposing some replacement for the ordinary use of 'water' in psychological discourse.

⁶ It is important not to oversimplify here. Having water thoughts does not necessitate the existence of water. One can imagine a chemist who has theorized about the existence of H₂O and has imagined and visualized the macro-properties of H₂O. Such a being could have water thoughts but lack any causal relations to water. So having water thoughts cannot necessitate having causal relations to water, except relative to fairly strong parameters stating optimal conditions. In cases where a thinker has water thoughts but there is no water, the water thoughts will necessitate causal relations to instances of other physical kinds in the thinker's environment. And there will be necessary causal relations to acts or actions intentionally characterized in terms of the concept *water*. But the causal relations to actual entities in the thinker's environment that are necessitated by having the concept *water* are quite complicated and merely bring in relations to and concepts of *some* kinds in the thinker's actual environment. (I made this point years ago in "Other Bodies".) None of this constitutes the slightest concession to the idea that beings on Twin Earth, in the relevant thought experiments, have the concept *water*.

In fact, psychological law-like generalizations do sometimes have such conceptual links between statements about psychological antecedents and statements about behavior. And if they amounted to no more than ‘if something is a water-type thought, it tends under optimal circumstances to cause water-related or water-conceived behavior’, they would yield no real insight into causal relations.⁷ But such generalizations in intentional psychology presuppose or contain existence assumptions that are contingent. For example, some generalizations presuppose or entail that water thoughts exist. They also contain detailed specifications of conditions in their antecedents and consequents. The detail makes the generalizations scientifically interesting, as well as contingent.⁸

One can see this by thinking about the heart case again. One could plausibly claim that it is a conceptual truth that hearts differ from twin waste-pumps in that they pump blood. One could plausibly claim that it is conceptually necessary that if something is a heart, then when functioning normally, it pumps blood. Although these are true statements, they do not provide deep insight into causal relations. If physiology contented itself with such statements, it would certainly be remiss. But these points do nothing to show that hearts are not taxonomically significant kinds.

The interest for physiology lies first in the existence of hearts and blood. This is both contingent and empirically known. Interest lies second and more richly in the account of how much blood a given type of heart pumps, in what particular ways it pumps it, in what ways pumping action causes blood vessels to dilate, and so on. Answers to these questions are non-trivial, contingent causal truths, even though ‘heart’ and ‘blood’ are conceptually connected.

Psychology is broadly like that. Many of its intentional notions are individuated partly in terms of very broadly described cause–effect relations. This form of individuation insures some conceptual relations between taxonomically relevant descriptions of causes and taxonomically relevant descriptions of effects. This is one of the grains of truth in functionalism. But these conceptual

⁷ Fodor describes the relevant necessary statements in rather puzzling ways. ‘If soluble then dissolves’ and ‘Having water thoughts is identical to having (*inter alia*) the power to drill for water’ and ‘if you have water wants ... then you drill for water’ are obviously not necessary. I have done the best I can on Fodor’s behalf in formulating rough necessities of the sort he seems to be gesturing toward. I think that when one fills out what the necessities really are—involving as they do terms like ‘normally’, ‘in appropriate circumstances’—they come to seem familiar and harmless. Filling them out by determining relevant circumstances both produces contingent statements and illustrates how hard and complex causal generalizations in intentional psychology are.

⁸ Fodor’s mistake here seems to me to infect his main condition on being a causal power, even if one waives the point that Fodor’s mistaken presupposition about intentional psychological properties makes the condition irrelevant. The idea of the condition (pp. 19–20) seems to be that if a conceptual connection between properties of a cause and properties of its effect is not based on individuating the cause as a causal power, then the conceptual connection prevents a causal relation between those properties from being of any taxonomical interest. But this seems to me to be a more subtle form of the same fallacy I have just criticized. The conceptual connection between the properties need not be so full that it allows no room for a taxonomically interesting connection.

relations provide only a broad frame for psychological theorizing. They do not make intentional psychology anything like trivial.

Fodor's main argument does not succeed because it fails to apply to the cases at issue. His subsidiary argument that typical statements about causal properties that are individuated partly in terms of effect properties are "quasi-logical" and useless for science is based on a fallacy.

The difficulty with Fodor's attempt to apply Humean and Rylean intuitions about causation is that the conceptual relations between descriptions of causes and effects occur at a very high level of abstraction. The relevant propositional attitude concepts have causal implications. But the implications are very general. They are at the level: something is not a perception unless it functions in a system for causing discriminative behavior; one cannot attribute perception of rough texturedness to an organism unless its perceptual system functions to cause it to respond to or otherwise discriminate rough texturedness under environmentally normal circumstances; water thoughts enter in some way, under some appropriate conditions, into causing behavior having to do with water, or at least behavior whose intentional description involves the concept of water. Some intentional psychological properties have even looser causal implications than these. Psychological law-like generalizations, by contrast, are much more specific. They involve statements of specific, contingent conditions that must be satisfied for the causal relations to occur.

Arguments against the scientific relevance of intentional notions that invoke Humean principles or Rylean intuitions are likely to gloss over (as Fodor's does) the enormous difficulty and complexity of stating a true, interesting law-like generalization in psychology. In my view, such arguments tend to carry on bad habits of behaviorism and physics-worship. The habits can remain even in those who are to be admired for what they have done to undermine behaviorism and over-simple pictures of the special sciences.