Found: The Missing Explanation

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1. The missing explanation thesis

If someone takes a realist view of the things people are disposed to say in any area of thought or discourse, then that is presumably because he thinks that their dispositions are sensitive to how things are: the dispositions are manifested, not at random, and not under inappropriate influences, but dependently on what there is. As Socrates argued that the gods love the holy because it is holy – and not the other way around – so the realist about a discourse involving a concept C, will hold that, all going well, if participants judge that something is C or have an experience of it as C then that is because it is C, and not the other way around. When all goes well, the participants' judging that something is C or their having an experience of it as C is explained by its actually being C (Pettit [6]).

Mark Johnston (in [1], [2], [3]) has argued that this sort of explanation goes missing, and realism is confounded, under any response-dependent approach to a discourse. Such an approach will present it as a priori (and, indeed, necessary) for a relevant concept C, that something is C if and only if it is disposed, all going well, to elicit a suitable C-response in participants: to elicit the judgment that it is C or an experience of it as C. For example, a familiar response-dependent account of colour concepts presents it as a priori (and necessary) that something is red if and only if it is disposed to look red to normal observers in normal conditions. Johnston argues that such an a priori connection is incompatible with the sort of explanation required by a realism about colour: it is incompatible with the claim that something is disposed to look red to normal observers in normal conditions because it is red. The argument would extend to all response-dependent theories, be they theories of modality or chance, aesthetics or morals, intentionality or causation. (See Menzies and Price [4])

We think that it is possible to be simultaneously realist and response-dependent about various discourses, including colour discourse. We accept that realism requires the availability of the sorts of explanations mentioned and we take response-dependence to involve a priori biconditionals that would allegedly conflict with those explanations. We think that realism with response-dependence is possible, because we reject the thesis that such biconditionals cause the corresponding explanations to go missing.[1]

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[1] For other critiques of the missing explanation argument, critiques that make many congenial points, see Miller [5] and Wright [9].

2. The missing explanation argument

The missing explanation thesis, as Johnston formulates it, asserts an inconsistency between two claims. First, the claim that it is a priori (and necessary: henceforth we assume this addition) that S* if and only if S. And second, the claim that S* because S: the claim that 'S* because S' states a true empirical explanation. That the because-statement asserts a true empirical explanation means that in its literal meaning it conveys empirical information – information that is contingent, for all that someone who understands it may be in a position to know – about a pattern of dependence in the world: perhaps a causal pattern of dependence, perhaps a pattern of some other kind. (Johnston [2])

Johnston [1] argued for this thesis from a substitution principle, to the effect that substituting a priori equivalents in empirical explanations must preserve their truth as empirical explanations: must preserve their actual explanatoriness, as we might put it. If this principle were sound, then the a priori linkage between 'S' and 'S*' would allow us to substitute 'S*' for 'S' in the explanatory claim, yielding 'S* because S*'. But 'S* because S*' is not actually explanatory, so we must reject the a priori linkage or the explanatory claim: one or other of them must go, as the missing explanation thesis suggests.

But this argument doesn't work, because the substitution principle invoked is not sound. Elliott Sober [7] asks us to imagine a machine which determines whether the top of a certain sort of metal block is a closed plane with three straight sides and which lets the block pass if and only if it meets this condition. If the machine lets a block through, it will do so because the top is three-sided. But, though it is a priori that the top is three-sided if and only if it is three-angled, we cannot substitute into the explanation and say that the machine lets the block pass through because the top is three-angled. Hence the substitution principle employed in the original argument doesn't work.

Johnston [2] relies on a weaker substitution principle in order to support the missing explanation thesis. The result of substituting into the explanation imagined may not be true – it may not preserve actual explanatoriness – but it is a possible explanation; there is no way to rule out a priori the possibility that the machine lets the block through because the top is three-angled. Johnston [2] conjectures that a priori equivalent sentences must preserve such 'possible explanatoriness', if not actual explanatoriness, when they are substituted for one another in explanatory contexts. They must preserve a feature that is lacking in an 'explanatory solecism' like 'S* because S*': with such a solecism, we can know a priori that this is not a true empirical explanation.

The weaker substitution principle would serve as well as the stronger to support the missing explanation thesis. We are told that it is a priori that

S* if and only if S and that S* because S. Substituting 'S*' for 'S' in the explanatory claim, we derive the explanatory solecism that S* because S*: we derive something that we can rule out a priori as an empirical explanation. And so, if the substitution principle is sound, one or other of our two claims must go. The missing explanation thesis holds.

3.   Is the argument significant?

Is the missing explanation argument sound? Is it really the case that an a priori relationship between two sentences, 'S*' and 'S', is incompatible with those sentences standing towards one another as *explanans* to *explanandum*? The issue turns, we believe, on whether the substitution principle employed in the argument is reliable; this is the only point at which the argument looks vulnerable.

We are prepared to concede that the principle may be reliable and the argument sound. We do so, because we think that the concession does not amount to much. Even if the principle is reliable, it may not have any impact on the sorts of cases where it appears to be relevant: it may not be particularly significant. Even if it is reliable, it may not turn out to be applicable to those cases. We believe that a little reflection shows that many of the pairs of claims that the principle would seem to undermine, via the missing explanation argument, are not in fact vulnerable to it. At first glance, they involve presenting two sentences both as a priori equivalents and as an *explanans-explanandum* pair. But appearances are often misleading, as some paraphrase makes clear.

Consider the two following claims. One, it is a priori that John became an uncle (for the first time) if and only if his sole sibling became a parent (for the first time). And two, John became an uncle because his sole sibling became a parent. Intuitively, both of these claims could be true; indeed it would be outlandish to think otherwise. So why doesn't the missing explanation argument rule them out? Why can't we substitute in accordance with the principle given and, confronted with the solecism that John became an uncle because John became an uncle, conclude that the pair of claims cannot be maintained?

A little reflection suggests a reason why. The sentence 'his sole sibling became a parent' conveys a different proposition as it is used in each of the claims. The phrase 'his sole sibling' plays a subtly different role in each case and the difference comes out in the fact that we naturally paraphrase the claims on different lines. The first claim is that it is a priori that, *if* John has an only sibling, then John became an uncle if and only if that sibling became a parent. The second is that John became an uncle because he has an only sibling *and* that sibling became a parent. The phrase 'his sole

sibling' in the original claims serves once in the role that invites the if-reading and once in the role that invites the and-reading.

A second example may help to reinforce the point. It is a priori that Xanthippe became a widow if and only if her husband died. Yet it also seems informative to say that Xanthippe became a widow because her husband died. That it is informative comes out in the fact that it would be misinformative to say she became a widow because someone else died; she became a widow as a result of that particular person's death, not anyone else's.

How can these claims be simultaneously defensible, if the substitution principle is applicable here and the missing explanation argument is sound? The answer, again, is that the sentence 'her husband died' conveys a different thought, as it occurs in each claim. The first claim is that it is a priori that Xanthippe became a widow if and only if she had a husband and that husband died. The explanatory claim is not that Xanthippe became a widow because she had a husband and that husband died: this is not an empirical explanation, since it does not convey epistemically contingent information about a dependence in the world; it is a sort of conceptual articulation on a par with 'Tom is a bachelor because he is unmarried and male'. The explanatory claim is rather that Xanthippe became a widow because that particular person who happens to be identified as 'her husband' died. It is incidental that that person, Socrates, is identified as 'her husband' in the explanation; in the explanation the phrase has wide scope. The difference between equation and explanation comes out in the fact that we can render the explanation as follows: Xanthippe had a husband and she became a widow because that person died. We cannot render the equation on parallel lines, for the following is false: Xanthippe had a husband and it is a priori that she became a widow if and only if that person died.

A third example may help to sheet home the extent to which pairs of claims that first seem to fall foul of the missing explanation turn out not to do so after all.[2] It is a priori, most of us will agree, that a certain stick, x, is the same length as the metre rod in Paris if and only if it is a metre long. Yet, assuming a suitable stick, it is also true that x is the same length as the metre rod in Paris because it is a metre long. This is true in the sense in which it can be true that John is the same height as Jim because he is five feet ten inches tall: the intrinsic length or height of something explains why it is the same length or height as something else. How can these claims both stand, if the missing explanation thesis holds?

The claims can both stand because, plausibly paraphrased, they turn out to say things that do not offend against that thesis. The first claim is that

[2] Tim Williamson put us in mind of it.

it is a priori that x has the particular length that the metre rod happens to have if and only if it is a metre long. It says that it is a priori that x has that length, that length of the metre rod, if and only if x is a metre long. The second, explanatory claim is that x has whatever length the metre rod has because it is a metre long: x has the relational property of being the same length as the metre rod, whatever that length is, because it has the intrinsic property of being a metre long. The phrase 'the same length as the metre rod' in the equation refers to a particular length, identified as the length that the actual metre rod happens to have, while in the explanation it refers to whatever length the metre rod has.

The lesson of these examples should be clear. Perhaps the substitution principle is reliable and the missing explanation argument sound. Perhaps it is the case that two sentences, used in virtue of their literal meaning to convey the same content, cannot be simultaneously related as a priori equivalents and as *explanans-explanandum*. This result may still fail to impact on the cases we might have expected it to affect. For it is always possible that as we look at such cases, we will find that one of the sentences is used now to convey this content, now to convey that; it is always possible that the missing explanation argument will fail to apply there.

4.   *Is the argument damaging?*

We must turn now to the case that concerns us in particular. Is there any difficulty in store for someone who wishes to defend both realism and response-dependence about a discourse? Such a person will want to defend a pair of claims that are apparently inconsistent, if the missing explanation argument is sound. To take the colour example, he will want to say both that it is a priori that something is disposed to look red to normal observers in normal conditions if and only if it is red; and that something is disposed to look red to normal observers in normal conditions because it is red. The missing explanation argument, if sound, would make it impossible to maintain such things simultaneously. So the question is whether the argument really applies here.

We think that it does not apply. There is a shift, as between the two claims, in the propositions expressed by the sentence 'something is disposed to look red to normal observers in normal conditions'. Or so we shall argue.

Suppose someone asks why something is disposed to look red to normal observers in normal conditions. There are two distinct questions he may be posing. First question: why does the object possess that disposition rather than any other; what is the ground of the disposition in the object? Second question: why, in appropriate circumstances, does the thing look red; what

is the trigger that activates the disposition and accounts for the appearance of redness? The first question inquires after why the disposition exists, why the object possesses it; the second asks after why the disposition is manifested, focusing our attention on occasions when manifestation occurs. The different senses of the query point us to a difference in how we can hear the corresponding assertion. 'Something is disposed to look red to normal observers in normal conditions' may be understood with the emphasis on 'disposed' and with the focus on the object's possession of the disposition. Or the assertion may be heard with the emphasis on 'look red' and with the focus on the manifestation, now here, now there, of the disposition.

Granted the difference in how this assertion may be taken, let us go back now to the two claims – the a priori equation and the empirical explanation – in which it figures. We think that the equation involves the possession-reading of the dispositional assertion and the explanation the manifestation-reading. The equation holds that it is a priori that something possesses the disposition to look red to normal observers in normal conditions if and only if it is red. The explanation says that when something manifests the disposition to look red to normal observers in normal conditions, it manifests the disposition – it looks red – because it is red. The first claim says that there is an a priori linkage between the possession of the disposition by something and its being red: what it is to be red, as it were, inherently involves the realisation of that disposition. The second claim says, not that the object possesses the disposition because it is red, but that when the disposition is manifested – when something looks red to normal observers in normal conditions – it is manifested because the object is red. The redness of the object is not presented as a factor on which the possession of the disposition depends: perhaps that would be inconsistent with the a priori claim. The redness of the object is presented, rather, as a factor on which the manifestation or the triggering of the disposition depends, at least when observers and conditions are normal.

The shift that we are alleging can also be brought out, if we go along with a conditional style of rendering the two claims. Under this rendering, the first claim is that it is a priori that if normality reigns (were to reign), then something looks red if and only if the object is red; the second is that if normality reigns (were to reign), then something looks red because the object is red. The difference in content can be brought out now with the help of bracketing. The first claim is that it is a priori that (if normality reigns, then something looks red) if and only if (the object is red). The second claim is not the corresponding assertion that (if normality reigns, then something looks red) because (the object is red): that would express the thought that possession of the disposition depends on the redness.

Rather the second claim, expressive of the thought that the manifestation depends on the redness, is that (if normality reigns, then (something looks red) because (the object is red)); or, less elliptically, (if normality reigns and something looks red, then (the object looks red) because (the object is red)). The a priori claim is that the conditional truth relating normality to looking red holds if and only if the object is red. The explanatory claim is that the categorical truth that the object looks red, as it looks red when normality reigns, holds because the object is red.

The simultaneous tenability of the a priori and explanatory claims in this sort of case should not be surprising. The obtaining of the sort of a priori linkage involved in response-dependence is consistent with two sorts of stories and it is characteristic of the realist to want to defend one of these (Pettit [6]). Under the first, realist story, the disposition involved is triggered by the relevant property, as the disposition to look red is triggered in appropriate circumstances by the thing's being red. Under the other story, this is not so. It is a priori that when they are sufficiently reflective (and, in that sense, normality reigns) something is taken as U by the Sloane Square set – as the thing to do or have or be – if and only if it is U: the Sloanes are the authorities in the matter. But it is not the case that when they are sufficiently reflective something is taken as U by the Sloane Square set because it is U; rather it is taken to be U as a matter of explicit or implicit collusion between members of the set. The disposition of something to be taken as U by the Sloane Square set is not triggered by its being U; it is triggered – the thing is taken as U – by the fiat of the authorities.

The realist who accepts a response-dependence biconditional about colour wants to deny that things are in the same pickle here. He wants to deny that collusion on the part of observers, even normal observers in normal conditions, is responsible for something's looking red to them. He wants to assert that such observers are in an 'epistemically servile' relationship to the redness of things, not in the sort of relationship exemplified by the Sloane Square set (Pettit [6]). That is why the realist adds the explanatory claim about looking-red to the a priori claim involved in response-dependence.[3]

The missing explanation argument may not be the only argument for

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[3] Of course the realist may have a problem if he is thought to have to defend, not the epistemic servility described here, not the empirical dependence of looking-red on redness, but rather the dependence of something's possessing the disposition to look red on its being red. Johnston ([2]) suggests that the realist will have to defend 'epistemic receptivity' and it may be possible to interpret his 'receptivity' as involving this sort of dependence, not epistemic servility. But it is hard to see why the realist should have to maintain receptivity in that sense rather than just servility; the requirement would not seem to be motivated.

why this sort of explanatory claim is not available to the realist, or at least to the realist who asserts response-dependence. But we are not concerned with those other arguments here. Our only concern is the missing explanation argument and we hope to have shown that even if it is endorsed, even if the missing explanation thesis is defended, still we need not worry about the co-tenability of realism and response-dependence. The claim which the realist characteristically wishes to make can be maintained simultaneously with the sort of a priori linkage that is definitive of response-dependence.

5. An objection

Finally, and briefly, an objection. The realist's claim is that if something is disposed to look red to normal observers in normal conditions and the disposition is activated, then it looks red because it is red. Or, alternatively: if normality reigns and something looks red, then it looks red because it is red. But that claim is matched, under response-dependence, by a different sort of a priori condition from any that has been considered so far. It is matched by the claim that it is a priori that if something is disposed to look red to normal observers in normal conditions and the disposition is activated, then it looks red if and only it is red. Or, alternatively: it is a priori that if normality reigns and something looks red, then it looks red if and only if it is red.

The objection that may now be raised is that this pair of claims is inconsistent in the manner alleged in the missing explanation argument. The explanatory claim asserts a conditional dependence: something of the form, if C and S*, then S* because S. The other claim asserts an a priori conditional: it is a priori that if C and S*, then S* if and only if S. Doesn't this pairing of claims open up, once again, precisely the sort of challenge that we have been trying to avoid?

No, it doesn't. The substitution principle used in the missing explanation argument bears on a priori equivalent sentences, holding that they must be intersubstitutable without destroying possible explanatoriness. It says nothing about a priori conditional equivalent sentences and so it will not license the substitution of 'S*' for 'S' in the conditional dependence: if C and S*, then S* because S. Thus it will not raise any questions about the co-tenability of the two claims.

The substitution principle might have applied if the a priori claim had been, not an a priori conditional equivalence, but a conditional a priori equivalence. With the a priori conditional equivalence, with the equivalence that we actually have, it is a priori that if C and S*, then S* if and only if S. With the conditional a priori equivalence what we would have is: if C and S*, then it is a priori that S* if and only if S. That the a priori

conditional equivalence holds does not entail that the conditional a priori equivalence obtains: it would entail this only if it was also a priori that the condition in question held, only if it was also a priori that C and S*.[4]

But perhaps there is still trouble in the offing. Is it reasonable to think that sentences of which it is a priori knowable that they are conditionally equivalent can substitute for one another in a similarly conditional dependence claim or explanation, without compromising possible explanatoriness? Is there a plausible, conditional version of the original substitution principle? We think not.

The conditional principle proposed would raise all sorts of counter-intuitive problems. We say that it is a priori that if there is no other cause possible for influenza, then Mary caught the flu if and only if she was infected by the flu virus. And so we say that if there is no other cause possible, then Mary caught the flu because she was infected by the flu virus. Equally we hold that it is a priori that if there was no one else about (and current science is reliable), then the box moved if and only if the magician pushed it. And so we say that if there was no one else about (and current science is reliable), then the box moved because the magician pushed it. Far from there being any conflict between such claims, the first sort is quite naturally used to support the second. The conditional principle of substitution that would raise problems for the attempt to combine realism with response-dependence would also raise problems for this general pattern of justification. It is not a principle that compels assent.[5]

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[4] Mark Johnston ([2], p. 166) may seem to be guilty of confusing these two conditional varieties of equivalence when he takes his substitution principle to apply to certain conditional contexts in arguing against Crispin Wright. But it is important that while Wright [8] introduces a priori conditional or provisional biconditionals, he also thinks that in relevant cases it is a priori credible that the condition or proviso is fulfilled; thus he allows under that condition that the biconditional is itself a priori credible. In effect, Wright countenances conditional a priori equivalence, not just a priori conditional equivalence: see [8], p. 252)

References

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