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Horwichian Minimalism and the Generalization Problem

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Recently Paul Horwich (2009) returned to, and improved on, a number of the responses that he had made to objections levelled against his brand of deflationism, Minimalism (forthwith, 'Horwichian Minimalism', 'HM', for short). Among the myriad objections that he has so ingeniously answered, one strikes me as particularly worrisome: the *Generalization Problem* (forthwith, 'GP'), which captures the worry that HM, which comprises both a theory and a conception of truth, is inadequate to explain our commitment to general facts about truth. While the GP appears to test, or challenge, any *deflationary* account of truth (for reasons noted below), the problem was clearly flagged by Tarski (1983).

Although Tarski had already assigned primacy of place to the instances of

(T) 'p' is true iff p

(where, for present purposes, an instance results from substituting a sentence of a given language, L, for both quoted and unquoted occurrences of 'p'), he did not see those instances as characterizing truth, namely, as taking the totality of instances as *axioms* of one's theory of truth-in-L.[1] Moreover, even where such instances are taken as theorems, Tarski pointed out that they are insufficient for the provability of a generalization like

(1) Every sentence of the form 'if p then p' is true,

since (T) is ω-incomplete.

We arrive at a related problem, when we combine a reliance on the instances of (T) with Quine's (1970, 1990) discussion of the utility of the truth predicate. He (1990: 81) considers (1), the purpose of which is to generalize over sentences like

(2) If it is raining then it is raining, and
(3) If snow is white then snow is white.

In addition to semantically descending from (1) to get (2) and (3), he also pointed out that we want to be able to generalize over those sentences and, by semantically ascending, get (1). But, as Tarski (1956) noted, this feat may not be achieved, given only a commitment to (the instances of) (T). To be sure, from (T) and (1), we can prove (2) and (3) but, given the finitude of deduction,

1 What Tarski *did* hold (1983: 187) was that a good definition of truth would be one that implied an attribution of truth-conditions to all sentences, *s*, of a given language, L, of the form '*s* is true iff p', where that sentence that goes in for 'p' translates *s*.

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equipped only with the instances of (T), we cannot prove its generalization. As he noted, since anything provable from the totality of instances of (T) is provable from just finitely many of them, any theory that takes the totality of instances of (T) to characterize truth will be unable to prove any of the generalizations on the order of (1). One of the issues that I will address is *why* these ('true'-involving) generalizations need to be proved.

The plan is as follows. §1 briefly reviews Deflationism, with especial attention to HM. §2 explains why deflationists must establish at least some 'true'-involving generalizations and highlights some worries about whether an advocate of HM will be in a position actually to establish them. §3 presents Horwich's version of the GP, together with his most recent response to it; §4 evaluates that response; and §5 concludes.

1. *Deflationism: genus and species*

Say that one who endorses a 'deflationary claim' about the truth-predicate is a *deflationist* (about truth), and call the conception 'Deflationism'. Disquotationalists, Minimalists (à la Horwich), Prosententialists and the like are all deflationists. But, while a deflationist will adopt a particular theory of truth, her doing so is different from her endorsement of Deflationism. As such, objections directed at particular deflationary theories of truth, while potentially serious, are not, *ipso facto*, objections to Deflationism.[2] Be that as it may, for what follows, the focus will be on HM, understood as a *species* of which Deflationism is *genus*.

1.1 HM and the GP

Horwich's theory of truth consists of all (consistent) instances of (ES), namely,

(ES) <p> is true iff p,

where '<p>' abbreviates 'the proposition that p' and 'iff' is the material biconditional. According to him, the meaning of 'true' amounts to our disposition to accept all instances of (ES); it is that which fixes its meaning. Moreover, he holds that the sum of everything that we do with the truth predicate can best be explained by taking the fundamental fact about its use to be our disposition to accept the instances of (ES), where, in (ES),

(a) each *p* is replaced by a token of an English sentence;
(b) the tokens are given the same interpretation as one another;
(c) under that interpretation, they express a proposition; and

2 What would be a problem for a deflationist would be if some objection could be lodged that could not be resolved adequately by any deflationary account, namely, by any of the species of which it is genus.

(d) the terms 'that' and 'proposition' are given their (standard) English meanings.

Finally, Horwich (1998, 2009) holds that, in addition to being conceptually and explanatorily fundamental, (ES) is also *logically* fundamental, in that its instances are taken to be underived.

One further point to mention is that (ES) does not include any universal generalizations about truth, as found, for example, in (1). For reasons to be discussed in §2, this raises a problem – the GP – for the advocate of HM, as it suggests that there cannot be a derivation of (1) from the instances of (ES). But, since Horwich's theory of truth is exhausted by all instances of (ES), it seems that Horwich's theory of truth will not suffice to derive 'true'-involving generalizations like (1). (And, via some minor tweaking, we could likewise conclude that our acceptance of (1) cannot be explained by the account of the meaning of 'true' that the HM provides.) Hence, if HM is to have a chance of being accepted then, in light of the afore-noted points, something more is needed.

Over the years, Horwich (1998, 2001, 2009) has proposed a number of strategies for proving the needed 'true'-involving generalizations.[3] Before considering his most recent attempt, I provide some reasons for thinking that 'true'-involving generalizations have to be proved in the first place.

2. *Deflationism and generalizations*

Let us introduce a tristinction, that of *formulating*, *establishing* and *proving* certain 'true'-involving generalizations. To formulate 'true'-involving generalizations is a matter of representing those generalizations, both colloquially and formally. Field (2006, 2008), Quine (1970) and others have noted that one of the main purposes for having a truth predicate is that it enables us to formulate generalizations that, at least prima facie, would otherwise be inexpressible, for example, in addition to (1),

(4) Every sentence of the form 'p or not-p' is true.

I will take it as given that any reasonable theory of truth will allow for the *expressive formulation* of such generalizations.

While we need to be able to *formulate* 'true'-involving generalizations, we should distinguish the question of why we need to be able to *establish* them from that of why we need to be able to *prove* those generalizations. The distinction – between establishing and proving – is important, since, while it is uniformly recognized that if we wish to assert such generalizations, we

3 For worries about Horwich's (1998) previous attempt at resolving the GP, see Raatikainen (2005).

must be in a position to establish them (as true, correct, etc.),[4] there really is no need for *proving* all of the 'true'-involving generalizations that people aim to assert.

For example, one need not – indeed, one most likely cannot – *prove* the likes of

(5) Everything G.E. Moore said was true

(if, say, with Russell, we accept it and aim to assert it). Rather, like anyone who aims to make such an assertion, a speaker will be entitled to conclude (5) by consideration of the meaning of 'true', together with *induction* on the basis of a (fairly large) class of instances. For this reason, the GP is restricted to *certain* 'true'-involving generalizations, e.g., those of (1) and (4), the assertibility of which requires a proof (that is, a derivation). Here, appeal to simple induction and evidence regarding previous cases will not help us.

But why must we be able to derive the likes of (1) and its ilk? For what follows, I consider three reasons for why 'true'-involving generalizations must be proved. The first two reasons regard constraints that govern an account of the meaning of 'true', and the third regards constraints on the adequacy of a theory of truth (to be contrasted with a theory of the meaning of 'true').

2.1 *Proving generalizations*

Horwich (2009) imposes a condition that governs the acceptability of an account of the meaning of 'true'. Say that we accept at least some 'true'-involving propositions on the order of (1) and (4), namely,

(6) that every proposition of the form $<p\rightarrow p>$ is true, and
(7) that every proposition of the form $<p \vee {\sim}p>$ is true.[5]

Call the set of such propositions 'A'. According to Horwich (2009: *passim*), an account of the meaning of 'true' will be deemed adequate only if it aids in the explanation as to why we accept the members of A, where such *explanations* amount to derivations of those propositions by, among other things, employing an explanatory premiss that does not explicitly concern the truth predicate. So, one reason it is important to be able to derive a 'true'-involving generalization is because doing so serves as a condition of adequacy for an account of the meaning of that term.

4 Since the GP does not specifically trade on a particular conception of 'proof', I shall assume a rather generic reading of that notion, namely, as a general notion under which 'derivation' and 'deduction' are subsumed.

5 Throughout, I assume that we are dealing with propositions, rather than sentences, although this assumption is dispensable (and is only in place so as to comport with HM).

Differently put, one might argue that one who grasps the concept of truth (doing which, for Horwich, consists of possessing the disposition to accept all instances of (ES)) and that of the relevant conditional should be said to know (6).[6] But if a given account of truth, together with an account of the conditional (along, perhaps, with other logical notions), does not entail (6) then it does not give us an acceptable account of what truth is. Hence, in order to give an acceptable account of what truth is, our account of truth, together with other considerations (e.g., accounts of the meanings of the connectives), must entail 'true'-involving generalizations like (6) (and ditto, of course, for (7) and others).

Here is another reason. A theory of the meaning of 'true' should explain our acceptance of propositions like that expressed in (6), which, as Gupta (2005) and Chris Hill (2002) have emphasized, should be seen as a priori, by one who possesses the concept of truth (and who grasps the relevant logical concepts). But if such a proposition can be seen a priori to be correct on the basis of a grasp of the concept of truth (and that of the relevant logical concepts) then a theory that purports to specify the meaning of 'true' should serve the task of explaining our acceptance of that proposition. But if an account of the meaning of 'true' is to explain our acceptance of an a priori proposition such as (6) then it must be possible to derive the proposition from one or more of the clauses of which the definition is comprised.

I have thus far considered some adequacy conditions for an account of the meaning of 'true'. One might also contend that a good theory of truth must be able to explain all of the facts about truth. Since 'true'-involving generalizations are among those facts, it would follow that a good theory of truth must explain those generalizations, where to *explain* those generalizations just is to be able to derive them.

This last point is worth emphasizing. 'True'-involving generalizations, like (6), (7) and ilk, do seem to be part of an overall theory of truth.[7] As such, it seems that they ought to be provable from our theory of truth, if that theory is to be deemed acceptable. If they are not provable (again: not derivable, in some sense of 'derive') from a given theory of truth then it would seem that that theory would be too weak to meet our needs. So, any theory of truth that does not deliver such 'true'-involving generalizations would be too weak to meet (at least some of) our needs for having the truth predicate in the first place.

We have seen reasons for thinking that certain 'true'-involving generalizations must be derivable from (ES), if HM is to be sustained. Before turning to Horwich's proposed solution to the GP, I note a reason for thinking that 'pure' HM – that is, HM, without Horwich's proposed 'extra

6 Assuming, of course, that (1) is correct (and, if not, please substitute a (1)-style generalization that is).

7 Of course, for one who rejects propositionalism, the same may be true of (1), (4), (5), etc.

premiss' (to be discussed in §3) – will be unable to derive (or prove) such generalizations.

2.2 *Scepticism about pure HM*

If, as noted, a theory of truth will be adequate only if it explains our acceptance of a priori truth-involving propositions then it must derive such propositions from one or more clauses that comprise the definition for 'true'. Let us suppose that one such proposition is expressed by (6).

Restricted to the resources available through (pure) HM, we can show that (6) cannot be derived. Here is how. If (6) could be derived then it would have to be derived from instances of (ES). But this is problematic. First, the instances of (ES) do not contain any universal generalizations; so, (ES) will not include

(6*) <Every proposition of the form <p→p> is true> is true iff every proposition of the form <p→p> is true.

But, second, in general, there cannot be a valid derivation of a universal generalization from a set of particular propositions unless that set is inconsistent. Now, since, *ex hypothesi*, every instance of (ES) is consistent, it follows that there cannot be a derivation of (6) that takes us from the instances of (ES). This is a purely logical point. As such, considerations of pure logic appear to dictate that our acceptance of (6) cannot be explained by the definition of truth that is provided by HM.[8]

As we have seen, while there are a number of reasons for expecting, or even demanding, that a condition of adequacy on a theory of truth is that it be capable of establishing 'true'-involving generalizations, there are also reasons for being sceptical about the prospects of an advocate of HM actually fulfilling those expectations or satisfying that demand, at least given the resources that are available for 'pure' HM. But what are the prospects for *impure* HM – that is, for HM supplemented by additional premisses? I will answer this question in the ensuing section, after first presenting Horwich's solution to the GP.

3. *Horwich on the GP*

Horwich (2009) admits that if the task that he has set for himself is to account for *all* uses of 'true' then a mere allegiance to (ES) will not suffice. As such, he acknowledges that an extra, explanatory premiss is needed – in

8 For a further reason for being sceptical about the prospects for HM's response to the GP, see Gupta (2005) and Soames (1999).

particular, one that does not mention the word 'true'. The reason for this is simple. If the extra premiss mentions the truth predicate then the explanatorily adequate laws of use governing that truth predicate go beyond our underived acceptance of the instances of (ES), in which case Horwich-style deflationism would be, as he admits, defective. Accordingly, he needs a 'true'-free premiss, in order to explain, and, thus, to justify, our acceptance of generalizations about truth.

Horwich (2009) proposes the following ('true'-free) extra premiss,

(P1) For any proposition of structural type F (forthwith, 'F-proposition'), whenever someone is disposed to accept that it is G (and to do so for uniform reasons) then she will be disposed to accept that every F-proposition is G,

where (P1) is restricted to kinds of entities, F, and properties, G that satisfy the following condition:

(C) We cannot conceive of there being additional Fs – beyond those Fs we are disposed to believe are Gs – which we would not have the same sort of reason to believe are G's.

As he sees it, given (P1), (ES) and the restriction placed in (C), the HM can now explain our commitment to general facts about truth, such as (6). Here is how.

Grant, for the sake of argument, that we are disposed to accept, for any proposition of the form <p→p>, that it is true and further grant that the rules that account for such acceptances are uniform, meaning that they apply, whichever proposition is being considered. As such, and given (P1), Horwich contends that we will infer (and, presumably, are entitled to infer) that all such propositions are true, which is to say that we will infer and, thus, will come to accept (and, so, will be in position to assert) that all propositions of the form <p→p> are true. Moreover, since (P1) does not mention the word 'true', there is no reason for thinking that the meaning-constituting use of the truth predicate must go beyond that which is dictated by HM.

Has Horwich resolved the GP? I do not think that he has. If I am right about this, the GP remains a live problem for the advocate of HM, Horwich's recent proposal notwithstanding.

4. *HM or the Generalization Problem*

To see the problem with Horwich's most recent solution to the GP, first notice that, whatever is its virtue, (P1) cannot be correct as it stands, for one will not be disposed to accept (the proposition) that all F-propositions are G, from the fact that, for any F-proposition, she is disposed to accept that it is G (NB, even for uniform reasons), unless she is *aware* of the fact that, for any F-proposition, she is disposed to accept that it is G. What this means is that some other premiss, which takes account of this deficit, implicit in (P1), is needed, if Horwich is to explain our general commitment to a generalization like (6).

What can be done? If we are to follow Horwich and propose a premiss in the spirit of (P1) then, in the light of this need for such awareness, it seems that we will want something like the following:

(P2) For any F-proposition, whenever someone is disposed to accept that it is G (and to do so for uniform reasons) and is aware of the fact that, for any F-proposition, she is disposed to accept that it is G then she will be disposed to accept that every F-proposition is G.

Now, (P2) might do the trick. But recall that 'G' can be replaced with 'true', so that a partial instance of (P2) can be read as

(P2*) For any F-proposition, whenever someone is disposed to accept that it is true (and to do so for uniform reasons) and is aware of the fact that, for any F-proposition, she is disposed to accept that it is true then she will be disposed to accept that every F-proposition is true.

All may seem well, but a problem emerges once we address the question of what is it for one to be *aware* of such a fact. Here is a plausible answer: For one to be aware of the fact that, for every F-proposition, she is disposed to accept that it is true is for that person to be aware of the fact that she is disposed to accept that every F-proposition is true.[9] Hence, in the final analysis, (P2*) can be read as

(P2**) For any F-proposition, whenever someone is disposed to accept that it is true (and to do so for uniform reasons) and is aware of the fact that she is disposed to accept that every F-proposition is true then she will be disposed to accept that every F-proposition is true.

But now Horwich's argument for how this generalization is reached is viciously circular, for here is how the needed premiss reads, as a partial instance of (P2**):

(P2***) For any proposition of the form <p→p>, whenever someone is disposed to accept that <p→p> is true (and to do so for uniform reasons) and is aware of the fact that she is disposed

9 One way of thinking about this is that we should see an imagined subject as actually holding each of the things in mind, recognizing that she is disposed to think of each as F and then considering whether she's disposed to think that all of them are G. If we do, this plausible answer seems difficult to resist.

> to accept that any proposition of the form <p→p> is true then she will be disposed to accept that every proposition of the form <p→p> is true.

To further clarify the point: If this revision of (P1) is to be sanctioned then we have Horwich claiming that, from

(i) Our being aware of the fact that, for any F-proposition, we are disposed to accept that it is true,

it follows

(ii) Our being aware of the fact that we are disposed to accept that any F-proposition is true.

My crucial move is to say that – in contexts of ‘our being aware’ – Horwich would be forced to accept an inference from a statement wherein the quantifier phrase, ‘any proposition of structural type F’, is outside of the ‘We are disposed to accept’ context to one in which that quantifier phrase is inside the context – replacing the ‘it’, as it were. And, given that needed step in his argument, the argument is, therefore, viciously circular.

This crucial move is, of course, coupled with the fact that (P1) alone is not enough: Someone must be aware of their tendency.[10] That is, one will not be disposed to accept that every F-proposition is G, from her disposition to accept, for any F-proposition, that it is G, unless she is aware of her disposition to accept, of any such F-proposition, that it is G. But why must one be aware of one’s own tendency?

My argument for this is as follows: She might have such a disposition, but not know that she has it. If someone asks: ‘Don’t you accept that every F-proposition is G?’, she might say ‘I don’t know – probably not’, simply because she does not realize what her disposition is.

Does this show that Horwich’s most recent solution to the GP fails? I believe that it does, for it suggests that (P1) is not enough – that something else is needed if the generalization is to be reached. And what is problematic about this, in light of the failure of (P2), is that it seems that

(a) S is disposed, for any F-proposition, to accept that it is G

will yield

(b) S accepts that all F-propositions are G

only if

10 To be clear, I am not objecting to the psychological plausibility of (P1). Rather, I am noting that (P1) must be augmented in accordance with something like (P2), but that, once the augmentation is made, the resultant rule is circular. Thanks to an anonymous referee, for suggesting this clarification.

(c) S accepts that he is disposed, for any F-proposition, to accept that it is G,

which would make (c) *explanatorily prior* to (b), as a pre-condition for (a) to engender (b).

5. Concluding remarks

After putting forward his solution to the GP, Horwich (2009: 11) concludes that his proposed premiss, (P1), is 'a sound explanatory premiss which, in conjunction with our commitment to (ES), will enable us to explain our acceptance of generalizations about truth.' Additionally, since that premiss does not mention the word, 'true', he contends that the need for it does nothing to suggest that the basic (hence, the meaning-constituting) use of it must exceed the bounds set by Minimalism.

What we have seen is that Horwich's proposed premiss is not a sound, explanatory premiss. And this is so even when it is supplemented to account for the awareness of speakers. This does not show that the meaning-constituting use of the truth predicate must exceed the bounds set by HM, e.g., by introducing a premiss that mentions the word 'true'. But, given the reasons for thinking that a deflationist must prove at least some 'true'-involving generalizations, it does show that, in so far as Horwich will rely on something like (P2), an advocate of HM is still plagued by the GP, which, as Field (2008) has said, renders it 'totally inadequate as a theory of truth'.[11]

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