Conceivability, Minimalism and the Generalization Problem

SERGI OMS *University of Barcelona, Logos Group*

ABSTRACT: One of the main problems that Paul Horwich's Minimalist theory of truth must face is the generalization problem, which shows that Minimalism is too weak to have the fundamental explanatory role Horwich claims it has. In this paper, I defend Horwich's response to the generalization problem from an objection raised by Bradley Armour-Garb. I also argue that, given my response to Armour-Garb, Horwich's proposal to cope with the generalization problem can be simplified.

RÉSUMÉ : L'un des principaux problèmes auxquels la théorie minimaliste de la vérité de Paul Horwich doit faire face est le problème de la généralisation. Horwich soutient que le minimalisme a un rôle explicatif fondamental, mais le problème de la généralisation montre que cette théorie est trop faible pour tenir ce rôle. Dans cet article, je défends la réponse d'Horwich au problème de la généralisation à partir d'une objection soulevée par Bradley Armour-Garb. Je prétends également que ma réponse à Armour-Grab nous permet de formuler d'une manière plus simple la réponse d'Horwich au problème de la généralisation.

Keywords: Minimalism, truth, Paul Horwich, generalization problem, conceivability

I. Introduction

Paul Horwich has presented and defended, in a number of places,[1] the Minimalist theory of truth. Its main thesis is that the instances of the T-schema,

[1] See, for instance, Horwich (1998, 2001, 2010b).

***Dialogue* 58 (2019), 287–297.**

doi:10.1017/S0012217318000288

(T-schema) $< p >$ is true if, and only if, *p*[2]

are conceptually, explanatorily and epistemologically fundamental with respect to the notion of truth. That means, in the first place, that they implicitly define the truth predicate.[3] This is so because the basic and fundamental regularity of use that determines the meaning of ‘true’ is our disposition to accept all instances of the T-schema. This, together with the fact that, according to Horwich, meanings are concepts, implies the conceptual fundamentality of the instances of the T-schema. In the second place, the instances of the T-schema are all we need to explain all our uses of ‘true’. This explains why they are explanatorily fundamental.[4] Finally, the instances of the T-schema are “immediately known”[5]; they cannot be deduced from anything more basic. This is why, claims Horwich, they are epistemologically fundamental.

Given these considerations, it is not surprising that Horwich’s theory of truth, Minimalism, contains as axioms all instances of the T-schema applied to propositions, and nothing else.[6]

In this paper, I consider one of the main problems for Minimalism: the *generalization problem*. Horwich[7] presents a way to cope with this problem, which has been criticized by Bradley Armour-Garb.[8] The aim of this paper is to defend Horwich’s answer to the generalization problem from Armour-Garb’s criticism and raise some consequences that stem from it. I will present the problem in Section 2. In Section 3 I will introduce Horwich’s response and Armour-Garb’s objection to his response. In Section 4, I will present my rejoinder to this objection and, in Section 5, I will draw some consequences from it. Specifically, not only is Horwich’s solution to the generalization problem free from Armour-Garb’s objection but, the discussion

---

2 The symbols ‘$<$’ and ‘$>$’ surrounding a given expression *e* produce an expression referring to the propositional constituent expressed by *e*. Thus, when *e* is a sentence, ‘$< e >$’ means ‘the proposition that *e*.’

3 Horwich (1998, 145).

4 This is an exaggeration; strictly speaking, we will need other theories besides the truth theory to explain all facts about truth because some of these facts will involve other phenomena. As Horwich says, Minimalism “provides a theory of truth that is a theory of nothing else, but which is sufficient, in combination with theories of other phenomena, to explain all the facts about truth.” See Horwich (1998, 24-25).

5 Horwich (2010b, 36).

6 That characterization is not completely accurate; as Horwich admits, the theory should also have an axiom claiming that only propositions are bearers of truth. See Horwich (1998, fn. 7, 23, 43).

7 Horwich (2010b).

8 Armour-Garb (2010).

will show that, given some provisos, Horwich's response to the generalization problem can be simplified.

II. The Generalization Problem

As several authors have noted,[9] Minimalism is too weak and has serious problems explaining many generalizations about truth.[10] This is a major difficulty for Minimalists, for it means that the instances of the T-schema are no longer explanatorily fundamental. Consider, for example, the following claim:

(ID) Every proposition of the form $\ulcorner \alpha \to \alpha \urcorner$ is true.

Can (ID) be derived from all the instances of the T-schema, that is, from the Minimalist theory of truth? Certainly, we can derive each instance of (ID), for every proposition *p*, but that does not mean that we can derive the general fact expressed by (ID). In Scott Soames' words:

> Because the Minimal theory is just a collection of instances, it is conceivable that one could know every proposition in the theory and still be unable to infer [(ID)] because one is ignorant about whether the propositions covered by one's instances are all the (relevant) propositions there are. For example, given only the Minimal theory, one might think: perhaps there are more propositions and the [truth predicate] applies differently to them. A person in such a position has no guarantee of [(ID)] and might lack sufficient justification for accepting it.[11]

The generalization problem has the undesired consequence that the Minimalist theory of truth is not enough to explain all our uses of the truth predicate, because it cannot explain our acceptance of (ID) only in terms of the instances of the T-schema (and basic logical principles not involving the truth predicate).

III. Horwich's Solution

Horwich[12] offers a solution to this problem in which he proposes a further explanatory premise that, on the one hand, allows us to explain our acceptance of certain general facts concerning truth and, on the other hand, does not involve the truth predicate, for that would jeopardize the minimal character of Horwich's theory of

---

9 See, for instance, Gupta (1993a, b); Soames (1997, 1999); Armour-Garb (2004, 2010); and Raatikainen (2005).

10 A version of the same problem was put forward by Tarski (1983, 257).

11 Soames (1999, 247).

12 Horwich (2010b, 43-45, 92-96).

truth.[13] It should be stressed that this is not an unfamiliar point, for we need principles concerning other phenomena to explain all facts about truth;[14] what is important, though, is that such principles do not use the truth predicate, for, if they did, they would show that we need to go beyond the instances of the T-schema to explain all facts concerning truth. Horwich proposes the following extra premise:

(P1) Whenever we are disposed to accept, for any proposition of structural type *F* (henceforth, *F*-proposition) that it is *G* (and to do so for uniform reasons), then we will be disposed to accept that every *F*-proposition is *G*.

Furthermore, this premise is restricted to structural kinds of propositions *F* and properties *G* that satisfy the following condition:[15]

(C) We cannot conceive of there being additional *F*s—beyond those *F*s we are disposed to believe are *G*—that we would not have the same sort of reason to believe are *G*.

To see how Horwich's proposal works, interpret *F* as having the form $\ulcorner \alpha \rightarrow \alpha \urcorner$ and *G* as truth.[16] First, let us suppose that they satisfy condition (C) (more on

13 In a postscript to his 1998 book, Horwich makes a previous attempt to solve this question with the use of a version of the ω-rule, a rule of inference that allows us to deduce a general conclusion about some domain of objects from an infinite set of premises concerning each object of the domain. This attempt, though, suffers from important problems. First, one of the features of this kind of rule is that it has an infinitary nature, so it can hardly be used by a human being. Thus, it cannot explain our acceptance of general claims about truth. Second, as Horwich himself admits in his 1998 book (fn. 4, 20), the Minimal theory of truth is not a set, for it is too large to be a set, which certainly implies that it is uncountable. But rules of reasoning like the ω-rule require that every element of the universe be named, which is impossible if the intended universe is uncountable. Finally, in order for the ω-rule to be valid, its relevant quantifier must be able to be interpreted substitutionally. But substitutional quantification is standardly explained in terms of truth. This means that, as Horwich (1998, 25) himself notes, this kind of quantification does not fit well with Minimalism and, hence, neither does the ω-rule. (See Raatikainen 2005 for more details.)

14 See fn. 4.

15 As Horwich himself notes (2010b, 44), (P1) is not enough, for our disposition to accept that all *F*s are *G* can coincide with the (erroneous) belief that there are further *F*s that have not been taken into account. That is why he defends restricting (P1) to entities satisfying (C).

16 Although in some passages Horwich does not take any particular stance on which kinds of property *F* might be (see his 2010b, 43-45), in some others (2010b, 92-96) he explicitly claims that *F* is a logical structural property—like, for example, being of the form $\ulcorner \alpha \rightarrow \alpha \urcorner$ or the form $\ulcorner \alpha \vee \neg \alpha \urcorner$. *G* will typically be the property of truth. Thanks to an anonymous referee for prompting this clarification.

this below). Then, given that we are disposed to accept that every proposition of the form ⌈$\alpha \rightarrow \alpha$⌉ is true, (P1) allows us to infer that we are disposed to accept that all such propositions are true and, hence, to explain why we accept that all such propositions are true. Finally, since (P1) does not involve the truth predicate, the explicative fundamentality of the Minimal theory is preserved.

Armour-Garb[17] criticizes and rejects this solution to the generalization problem. According to him, (P1), when well understood, makes Horwich's argument to conclude (ID) circular. Let us see why. Armour-Garb claims that the extra explanatory premise should mention the awareness of the fact that we are disposed to accept, for every *F*-proposition, that it is *G*:

(P2) Whenever we are disposed to accept, for any *F*-proposition, that it is *G*—and to do so for uniform reasons—and we are aware of this fact—that is, we are aware that we are disposed to accept, for any *F*-proposition, that it is *G*—, then we will be disposed to accept that every *F*-proposition is *G*.

The reason for that is that being disposed to accept a given collection of facts is consistent with not knowing the existence of such a disposition and, hence, someone who is disposed to accept, for any *F*-proposition, that it is *G*, will accept that all *F*-propositions are *G* only if she knows that she has the disposition to accept, for any *F*-proposition, that it is *G*. Let us focus now on the partial instance of (P2) where *G* is interpreted as 'true':

(P3) Whenever we are disposed to accept, for any *F*-proposition, that it is true—and to do so for uniform reasons—and we are aware of this fact—that is, we are aware that we are disposed to accept, for any *F*-proposition, that it is true—, then we will be disposed to accept that every *F*-proposition is true.

At this point, Armour-Garb claims that we need to clarify the notion of *being aware of the fact that we are disposed to accept, for any F-proposition, that it is true*. And he proposes the following:

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.[18]

Hence, (P3) becomes (P4):

(P4) Whenever we are disposed to accept, for any *F*-proposition, that it is true—and to do so for uniform reasons—and we are aware of the fact that we are disposed to

17 Armour-Garb (2010).
18 Armour-Garb (2010, 700).

https://doi.org/10.1017/S0012217318000288 Published online by Cambridge University Press

accept that every *F*-proposition is true, then we will be disposed to accept that every *F*-proposition is true.

The problem with (P4) is that, according to Armour-Garb, it makes Horwich's argument for (ID) "viciously circular"[19]; it infers that we have a certain disposition (that of accepting (ID)) from the fact that we are aware that we have such a disposition.[20]

For the sake of the argument, I will grant to Armour-Garb that we need to be aware of the fact that we have the relevant disposition in order to be able to derive the desired generalization. But, as far as I can see, condition (C) is sufficient to guarantee this awareness. Let us see why.

IV. Conceivability and Imagination

Recall that condition (C) poses a restriction to the entities to be used in the extra premise Horwich proposed for the argument that allows us to conclude generalizations involving truth like (ID). The instance of (C) we are interested in is the following one:

(C1) We cannot conceive of there being additional *F*-propositions—beyond those *F*-propositions we are disposed to believe are true—that we would not have the same sort of reason to believe are true.

---

19 Armour-Garb (2010, 700).

20 To be clear, suppose we fix a subject *S*, and we use 'A' and 'D' to express '*S* is aware of the fact that' and '*S* is disposed to accept that' respectively and let the variable *p* range over propositions (to simplify, and *for the sake of the explanation*, suppose we are using substitutional quantification). Then (P1) and (P2) can be compactly expressed as

(P1') $\forall p(Fp \rightarrow DGp) \rightarrow D\forall p(Fp \rightarrow Gp)$

(P2') $(\forall p(Fp \rightarrow DGp) \wedge A\forall p(Fp \rightarrow DGp)) \rightarrow D\forall p(Fp \rightarrow Gp)$.

Next, what Armour-Garb proposes is the following definitional equivalence:

$A\forall p(Fp \rightarrow DGp) \equiv AD\forall p(Fp \rightarrow Gp)$.

Hence, (P4) (now using 'T' to express the truth predicate) becomes:

(P4') $(\forall p(Fp \rightarrow DTp) \wedge AD\forall p(Fp \rightarrow Tp)) \rightarrow D\forall p(Fp \rightarrow Gp)$.

But Horwich wants to use (P4') to explain our disposition to accept (ID), which is, precisely, a claim of the form

$D\forall p(Fp \rightarrow Tp)$.

So, according to Armour-Garb, in the end, Horwich is trying to conclude that we have a certain disposition to accept a certain generalization in terms of our awareness of the fact that we have such a disposition. But it is the former that should be explanatorily prior to the latter, and not the other way around. Thanks to an anonymous referee for helpful comments on this clarification.

As I said, what I want to defend is that the reasons we have for accepting (C1) already imply our awareness of the fact that we are disposed to accept, for any *F*-proposition, that it is true. So, how are we convinced of the truth of (C1)? To answer this question, first, we need to address another question: what does it mean to conceive something?

Conceivability is an evasive notion. Nevertheless, as many authors have claimed,[21] there is a close connection between conceivability and imagination; in Stephen Yablo's words:

> Conceiving that *p* is a way of imagining that *p*; it is imagining that *p* by imagining a world of which *p* is held to be a true description.[22]

I am not saying that conceivability conflates with imagination; it will be sufficient for my purposes to weaken Yablo's idea and grant that conceiving that *p* implies imagining that *p* (in Yablo's sense).[23] Thus, going back to (C1), according to the above characterization of conceivability, we *cannot conceive* of [there being *F*-propositions—beyond those *F*-propositions we are disposed to believe are true—that we would not have the same sort of reason to believe are true] if we *cannot imagine* a world of which [there being *F*-propositions—beyond those *F*-propositions we are disposed to believe are true—which we would not have the same sort of reason to believe are true] is a true description.

Now, what reasons might we have for accepting that we cannot imagine something? To my mind, the most natural response is because we tried and we failed. To wit, we tried to imagine a world with an *F*-proposition that we would not have the relevant reasons to believe is true and we realized that we were unable to. Since we tried, we became aware of our inability to imagine such a world. In other words, we just became aware of the fact that if we were presented with an *F*-proposition, we would consider it as true (if it were not the case, then we would certainly be able to imagine a world in which this proposition is not true; the actual world). Hence, we just became aware of the fact that we are disposed to accept, for every *F*-proposition, that it is true, which is what we needed to conclude.

For example, when *F* is the property of being a proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$, (C1) holds because we try to imagine a world with a proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$ that we would not have reasons to believe it true and we realize that we are unable to do it. We realize, hence, that we cannot imagine such a world and, since conceiving implies imagining, we conclude that we cannot conceive of such a world. (C1) holds. Moreover, it is in the process of trying and failing

21 See, for instance, Yablo (1993); Tidman (1994); Bealer (2002); Szabó Gendler and Hawthorne (2002); and Chalmers (2002).

22 Yablo (1993, 25).

23 Thanks to an anonymous referee for prompting this clarification.

to imagine a world with a proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$ that we would not have reasons to believe it true that we become aware of the fact that we are disposed to accept any proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$; this is so because we realize that if we were presented with a proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$ such that we would not accept as true, then we would be in a world with a non-true proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$ and, hence, we would be able to imagine such a world.[24]

To sum up, the reasons we have for accepting (C1) already provide us with the guarantee that we are aware of the fact that we are disposed to accept, for every *F*-proposition, that it is true.

At this point, the following objection could be raised. It may well be that there are some *F*-propositions that we are not disposed to judge true or non-true. This may be so, for example, because we are dealing with an *F*-proposition that can only be expressed in English with a sentence, say, a billion lines long. Let us call such a proposition '*q*'. Confronted with *q*, we might not be able to accept it as true but, nevertheless, we could not conclude that *q* is not true and, hence, we could not conclude that we can imagine a world in which *q* is not true.[25] As far as I can see, there are some idealizations that must be made explicit in order to cope with this objection. Such idealizations, though, are already present in Horwich's view and, hence, they can be presupposed without being dialectically at fault. First, we might suppose that propositions are structured entities and that that structure is reflected in the syntactic structure of the sentences that express them. This, of course, seems to be presupposed by Horwich when he claims that we have a disposition to accept any instance of the T-schema (to wit, we need to recognize that the instances of the T-schema are biconditionals and that they have a proposition and its truth ascription as components). Second, we may presuppose that any subject will be able, in principle, to determine the logical form of any sentence, by inspecting its syntactic structure (again, for the previous reasons, Horwich seems to presuppose it too).

24 Note that, as far as I can see, I can use 'we' in the explanation above because it is reasonable to suppose that any subject will be unable to imagine a world with a non-true proposition of the form $\ulcorner\alpha \rightarrow \alpha\urcorner$. But this does not mean that there will be consensus in any other similar property *F*. For example, if *F* is the property of being a proposition of the form $\ulcorner\alpha \vee \neg \alpha\urcorner$ there will be no consensus about whether a world with a non-true proposition of such a form is imaginable; people—like, for example, a paracomplete logician—who deny the law of excluded middle will certainly claim to be able to imagine it, while classical logicians will not. In any case, it is natural to expect that there will be some truth generalization ((ID) is a good example) that will be generally accepted and, that, in consequence, will be in need of explanation by the Minimalist theorist. Thanks to an anonymous referee for prompting this clarification.

25 Thanks to an anonymous referee for raising this objection and prompting this line of thought.

V. Concluding Remarks

The analysis presented in the previous sections has as a consequence that Horwich's response to the generalization problem can be simplified, as premise (P1) is not needed at all; this means that Horwich can explain our disposition to accept truth generalizations like (ID) with the only aid of the fulfilment of condition (C1).[26] This means that Horwich can explain the fact that we are disposed to accept truth generalizations like (ID) with no extra explicit premise, but only with the aid of a restriction to *F*'s satisfying (C1).[27]

As I said, for the sake of argument, I grant that, as Armour-Garb proposes, we need to be aware of the fact that we are disposed to accept, for every *F*-proposition, that it is true. I also grant the analysis he offers of this awareness. Taking this into account, it can be shown that only (C1) is needed to obtain the desired truth generalizations. For Armour-Garb is claiming that:

1. being aware of the fact that we are disposed to accept, for every *F*-proposition, that it is true,

is the same as

2. being aware of the fact that we are disposed to accept that every *F*-proposition is true.

This is the reason why, according to Armour-Garb, Horwich's argument is eventually viciously circular. But, if this analysis is right (that is, 1 is equivalent to 2), we do not need (P1) at all, we just need condition (C1) which, as I said, implies 1 and, hence, according to Armour-Garb, implies 2, which is what Horwich needs to be able to explain our acceptance of truth generalizations like (ID).

Hence, Minimalism, with the only use of condition (C1), can give a satisfactory response to the generalization problem as stated in the second section[28];

---

26 Thanks to Elia Zardini for suggesting this line of thought.

27 Although, to the best of my knowledge, nothing essential hinges on this simplification, it is still good to obtain it for general methodological reasons; other things being equal, a simpler explanation is better than a more complex one.

28 This is not to say that Minimalism has the generalization problem completely solved. Horwich has defended that the Minimalist stance in front of the Liar Paradox (prompted by the proposition that declares its own untruth) must consist in a restriction of the T-schema. This, without further development, means that generalizations like (ID) cannot be applied to paradoxical propositions. See Horwich (1998); Beall and Armour-Garb (2005); Restall (2005); Horwich (2010a); Schindler (2018); and Oms (forthcoming).

it is enough to guarantee that propositions with certain forms and the notion of truth are the kind of entities that satisfy condition (C1). And as we have already noted, we have good reasons to accept (C1), which are, precisely, what guarantees our awareness of the fact that I am disposed to accept that every proposition of the relevant kind is true.

Consequently, Horwich's response to the generalization problem becomes much simpler; instead of an extra premise like (P1) to explain our acceptance of certain general facts concerning truth, it is enough that condition (C1) obtains for the relevant propositions.

Acknowledgements: I would like to thank José Martínez Fernández, Elia Zardini and three anonymous referees for all their helpful comments and suggestions. I am also grateful to Susan Dimock and Jill Flohil. During the writing of this paper, I have benefitted from the project FFI2015-70707P of the Spanish Ministry of Economy, Industry and Competitiveness on *Localism and Globalism in Logic and Semantics*.

References

Armour-Garb, Bradley
2004 "Minimalism, the Generalization Problem and the Liar." *Synthese* 139 (3): 491–512.

Armour-Garb, Bradley
2010 "Horwichian Minimalism and the Generalization Problem." *Analysis* 70 (4): 693–703.

Bealer, George
2002 "Modal Epistemology and the Rationalist Renaissance," in *Conceivability and Possibility*, edited by Tamar Szabó Gendler and John Hawthorne. Oxford: Clarendon Press, Chapter 1.

Beall, J.C., and Bradley Armour-Garb
2005 "Minimalism, Epistemicism and Paradox," in *Deflationism and Paradox*, edited by J.C. Beall and Bradley Armour-Garb. Oxford: Oxford University Press, Chapter 6.

Chalmers, David J.
2002 "Does Conceivability Entail Possibility?," in *Conceivability and Possibility*, edited by Tamar Szabó Gendler and John Hawthorne. Oxford: Clarendon Press, Chapter 3.

Gupta, Anil
1993a "A Critique of Deflationism." *Philosophical Topics* 21 (2): 57–81.

Gupta, Anil
1993b "Minimalism." *Philosophical Perspectives* 7: 359–369.

Horwich, Paul
1998 *Truth*. 2nd edition. Oxford: Oxford University Press.

Horwich, Paul
2001 "A Defense of Minimalism." *Synthese* 126 (1-2): 149–165.

Horwich, Paul
2010a "A Minimalist Critique of Tarski," in his *Truth Meaning Reality*. Oxford: Oxford University Press, pp. 79–97.

Horwich, Paul
2010b *Truth-Meaning-Reality*. Oxford: Oxford University Press.

Oms, Sergi
Forthcoming "Minimalism, Supervaluations and Fixed Points." *Synthese*.

Raatikainen, Panu
2005 "On Horwich's Way Out." *Analysis* 65 (287): 175–177.

Restall, Greg
2005 "Minimalists about Truth Can (and Should) Be Epistemicists, and it Helps if They Are Revision Theorists too," in: *Deflationism and Paradox*, edited by J.C. Beall and Bradley Armour-Garb. Oxford: Oxford University Press, Chapter 7.

Schindler, Thomas
2018 "A Note on Horwich's Notion of Grounding." *Synthese*.

Soames, Scott
1997 "The Truth About Deflationism." *Philosophical Issues* 8 (1): 1–44.

Soames, Scott
1999 *Understanding Truth*. Oxford: Oxford University Press.

Szabó Gendler, Tamar, and John Hawthorne (eds.)
2002 *Conceivability and Possibility*. Oxford: Clarendon Press.

Tarski, Alfred
1983 "The Concept of Truth in Formalized Languages," in *Logic, Semantics, Metamathematics*, edited by John Corcoran, translated by J. H. Woodger, 2nd edition. Indianapolis: Hackett Publishing Company, pp. 152–278.

Tidman, Paul
1994 "Conceivability as a Test for Possibility." *American Philosophical Quarterly* 31 (4): 297–309.

Yablo, Stephen
1993 "Is Conceivability a Guide to Possibility?" *Philosophy and Phenomenological Research* 53 (1): 1–42.