



Belief, Truth, and Biological Function

Law and the
Whole Truth

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Ema Sullivan-Bissett

University of
Birmingham

e.l.sullivan-
bissett@bham.ac.uk



+ 0. Preliminaries



Belief, truth, and transparency

- In the philosophical literature it is commonly thought that beliefs are necessarily connected to truth.
- This is not to say that beliefs cannot be false, but rather that it is part of their nature that they are *supposed* to be true.
- Where debate lies is in how it is we are to understand this connection, which has been captured by the slogan that *belief aims at the truth*.

+ Standard of correctness

- A belief is correct if and only if it is true.
- So the belief that *Jeremy Corbyn won the election* is *correct* if and only if it is true that Jeremy Corbyn won the election.
- *Correct* means something distinct from *true*: while other cognitive states can have contents which are true or false, truth and falsehood are a 'dimension of assessment of beliefs as opposed to many other psychological states or dispositions' (Williams 1970: 136).



+ Why is this interesting?

- Consider other mental states which can have *Jeremy Corbyn won the election* as their content: *supposing, imagining, assuming*. When are these other states *correct* or *incorrect*?
- All sorts of other considerations might come into play here, but what is clear is that the standard of correctness for suppositions, assumptions, and imaginings is not *truth*. If I imagine that *Jeremy Corbyn won the election* when he did not, I haven't done anything *incorrect*.
- So truth as the standard of correctness is peculiar to belief. Why?

+ Standards and oughts

Judging that ϕ -ing is correct is compatible with judging that one ought not to ϕ .

Judging that ϕ -ing is incorrect is compatible with judging that one ought to ϕ .

When it is a fact that ϕ -ing meets a certain standard, there is always a further question whether the standard ought to be met. In some cases, the standard ought to be met, in others, not.

(Bykvist and Hattiangadi 2013: 103)

- Some standards generate an ought, some standards do not. Judging that 'driving as a woman in Saudi Arabia contravenes conventional standards is not to think a woman in Saudi Arabia ought not to drive' (Bykvist and Hattiangadi 2013: 103).
- My explanation of belief's standard of correctness will go via the claim that our mechanisms of belief production have the function of producing true beliefs, and this is the only sense in which true beliefs are correct and false beliefs are incorrect.



Ground-clearing



- I've argued against other accounts of the connection between belief and truth, and their explanations elsewhere (Sullivan-Bissett 2017b; Sullivan-Bissett and Bortolotti 2017; Sullivan-Bissett and Noordhof 2013, 2017, *manuscript*).
- Wherever you find a *believer*, you'll find an agent linked up to truth.
- My explanation casts truth-as-correctness not as showing us something grand about the very metaphysical nature of belief (namely, it's being necessarily connected to truth), but rather as contingently characterising the beliefs of believers like us.
- The kind of creatures we are, our biological histories, and how we evolved in response to environmental pressures, is something philosophers would do well to attend to. My account shows us that our belief forming practices are not so closely tied to truth as has been supposed.



+ 1. Truth and Function



Background condition on belief

- Necessary and sufficient condition on belief: an attitude which '*by itself*, and relative to a fixed background of desires, disposes the subject to behave in ways that would promote the satisfaction of his desires if its content were true' (O'Brien 2005: 56).
- Strategy: sever the connection between belief and truth to which philosophers have clung so tightly. Then, add to this an account of actual world beliefs, the beliefs of humans.
- These beliefs, insofar as they're beliefs, will meet the motivational condition, but they will also have some additional features in virtue of the particular circumstances in which they are formed. It is these additional features which are key to explaining why truth is the standard of correctness for belief.



Biological function

- I adopt an etiological account of biological history (defended elsewhere, Sullivan-Bissett 2016).
- To simplify: the proper function of a biological trait is a function that was performed by a trait's ancestors, which 'helped account for the proliferation of the genes responsible for it' and thus also 'helped accounts for its own existence' (Millikan 1989: 289).
- For it to be appropriate to ascribe a biological function to our mechanisms of belief-production, they need to have been selected. There are several reasons to think that this is the case (see Millikan 1995c: 49; Fales 1996).



Relational proper functions



- To say of a device that it has a *relational proper function* is to say of it that ‘its function [is to] produce something that bears a specific relation to something else’ (Millikan 1984: 39).
- Relational proper functions are the effects that have helped account for the selection of the producing mechanism (Millikan 1984: 26).
- It is along similar lines I suggest we understand belief’s connection with truth. Specifically, the mechanisms which produce beliefs in us have the relational proper function of producing true beliefs.

+ Truth and function



- Our mechanisms of belief-production have as their biological proper function the production of true beliefs (for representative views, see Papineau 1997; Millikan 1993a, 1993b, 1993b, Sullivan-Bissett 2017a, 2017b).

‘[C]reatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind.’

(Quine 1985: 39)

- Of course, true beliefs are not always adaptive (see for example Stich 1990, Stephens 2001), but such exceptions should not deter us from accepting the plausible claim that they usually are (Cowie 2014: 4007, Street 2009: 235).



+ 2. Truth is not the only end

+ Merely false beliefs



[A] description of the biological functions of the cognitive systems will in no way resemble a catalogue of psychological laws. It is certainly no psychological law, for example, that our beliefs are true, though it is a (teleo)function of our belief-fixing systems to fix true beliefs.

(Millikan 1993a: 177)

- Functions can fail to be performed, and something possesses a function because *in certain key moments*, the performance of it contributed to the reproductive success of its bearers.

+ Properly functioning true beliefs



- If there are cases in which our mechanisms for belief-production are functioning properly (that is, doing what ancestral tokens of that type were selected for doing) when they produce false beliefs, this falsifies the claim that the only function of these mechanisms is to produce true beliefs.
- Consider cases of beliefs produced via self-enhancement bias, partiality bias (different doxastic treatment of one's friends over strangers), and self-deception.
- Such cases show that the mechanisms responsible for belief-production are not solely geared, in all cases, towards truth.

+ Another proper function

- *Organising* beliefs: those beliefs which facilitate self-organisation, maintain esteem, avoid psychological damage, deal with intellectual frailties which might encourage one to depart from the standard of belief, and so on.
- These organising beliefs do not have their utility in virtue of being an approximation to truth, but rather in their assisting the the effective functioning of the believer.
- Call the production of true beliefs *proper function one*, and the production of organising beliefs in the sense just specified *proper function two*.



+ 3. Explaining Truth as Belief's Standard of Correctness



Explaining belief's standard of correctness



- Our belief-producing mechanisms have as one of their proper functions the production of true beliefs, and this provides the only sense in which true beliefs are correct and false beliefs are incorrect.
- The contents of belief can vary with respect to their meeting the correctness conditions laid down by biology. When a belief is true, the mechanisms which have produced it have performed their function, when a belief is false the mechanisms have failed to perform their function.
- It is in this sense only that beliefs have truth as their standard of correctness.



Global extension



- The standard of correctness for belief is a result of the biological history of our mechanisms of belief-production, and so this standard does not hold for all believers.
- An aside... Introducing Swampman:
- E.g. it is not already determined that Swampman's beliefs are correct when true. This is because Swampman doesn't have a biological history.
- For a rational creature with a different history, most philosophers interested in the standard of correctness of belief will take it to apply to such a creature. For my account, whether this creature's beliefs are correct when true is an empirical question, in particular, one which may turn on that creature's biology of other relevant historical factors.

+ Local extension



- I am seeking to explain this standard as it holds for the large subset of our beliefs which are produced by mechanisms performing (or trying to perform) proper function one: the production of true beliefs.
- Those beliefs which are produced by mechanisms of belief production functioning to produce *organising* beliefs, do not come under the standard of truth for belief.
- This is a consequence of locating the correctness of belief in the proper functions of the mechanisms which produce them. This means that not only does the standard of correctness as truth not apply to all believers, it also does not apply to all of the beliefs of humans.



Summing up

- The standard of correctness for belief is a contingent feature of the beliefs of some believers (i.e., those believers with a biological history), not as a necessary feature of all belief.
- Our explanandum is *our* beliefs are correct when true, which is why I approach this by moving away from the nature of belief, to talking about the biological circumstances of believers.
- To take the standard of correctness to be a necessary feature of belief would just be to project the particular circumstances of our biological heritage into a modal claim. Whether a non-human other worldly believer has correct beliefs when they have true beliefs should be approached as an empirical question. In particular, one which may turn on that creature's biology or other relevant historical factors.



Conclusions

- I gave a biological account of belief's standard of correctness which had it that such a standard comes out as a contingent feature of the beliefs of some believers.
- We ought to be open to this alternative approach, one of understanding the nature of belief as divorced from truth, and then looking to the particular circumstances of belief formation in the actual world.
- Human believers are not so strongly hooked up to truth. Focus on biological function can explain truth as the standard of correctness for belief, but also shows that the connection to truth had by human believers is more tenuous than is often supposed.



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