

**Jake Chandler**

Department of Philosophy, University of Glasgow,  
67-69 Oakfield Avenue, Glasgow G12 8QQ  
✉ J.Chandler@philosophy.arts.gla.ac.uk

UNIVERSITY  
of  
GLASGOW



## [14] Evolution and Epistemology

### 0. Outline

1. Plantinga's proposal
2. Problems for Plantinga

## 1. Plantinga's proposal

- In the previous lecture:
  - Outline of reliabilist accounts of warrant and knowledge with an eye to accounting for their popularity.
  - Presentation of Plantinga's 'accidental reliability' objection to both Goldman- and Nozick- style reliabilist accounts.
  - Sketch of Plantinga's diagnosis of the accidental reliability cases.
- Today:
  - Full outline of Plantinga's theory.
  - Discussion of some potential problems.

## 1. Plantinga's proposal

- As we saw last time, Plantinga argues:

Both warranted belief that *P* and knowledge that *P* require that the relevant belief-producing mechanisms *operated in accordance with the way they were 'designed' to operate.*
- Intuitive motivation:
  - (i) Were this not to be the case, any resulting beliefs would have to be, if true, true by accident.
  - (ii) Beliefs that would turn out, if true, true by accident cannot enjoy any kind of positive epistemic status.
- Plantinga soon argues that this first requirement alone isn't sufficient to guarantee non-accidentality of true belief.
- He piles on some further conditions.

## 1. Plantinga's proposal

- Second requirement (Plantinga [1988:33]):  
Both warranted belief that *P* and knowledge that *P* require that the relevant belief-producing mechanisms *operated in the kind of environment in which they were designed to operate* (their 'natural' / 'native' environment if you want).
- Motivation: again, were this not to be the case, any resulting beliefs would have to be, if true, true by accident.
- Note: Bergmann [2004] offers a 'proper functionalist' account of warrant (not knowledge) that *doesn't* make this 'native' environment requirement.
- He argues: beliefs formed by cognitive processes operating as designed can be said to be warranted whether or not the environment in which the processes operate is 'native'.

## 1. Plantinga's proposal

- Intuition pump: 'New Evil Demon' scenarios (originally raised as counterexamples to the Goldman-style account of warrant mentioned in the previous lecture).  
*New Evil Demon*: (1) Were we to find ourselves in a world in which a malevolent demon saw to it that our expectations were constantly flouted, we would nevertheless have just as much warrant for our beliefs as we currently enjoy. (2) Problem: our faculties wouldn't, in that world, be operating in the kind of environment in which they were designed to operate.
- Third requirement (Plantinga [1988:39]):  
Both warranted belief and knowledge require that the relevant belief-producing mechanisms *were designed to yield true beliefs*.

## 1. Plantinga's proposal

- Motivation:
  - (i) Arguably, belief-forming mechanisms can be designed to produce certain beliefs irrespective of their truth-value.
  - (ii) A belief resulting from a mechanism operating as designed albeit not designed to produce true beliefs will inevitably be, if true, only coincidentally so.
- Plantinga gives some examples in support of (i) (similar, incidentally, to cases discussed in the Papineau reading – see Papineau [1993:61]):

‘Someone may remember a painful experience as less painful than it was, as it is sometimes said to be the case with childbirth... I may believe that I will recover from a dread disease much more strongly than the statistics justify.’

## 1. Plantinga's proposal

- Further cases are discussed in Plantinga [1993:11-13].
- Incidentally, some similarly claim that the mechanisms that produce our ethical intuitions weren't designed to produce *true* ethical judgments: they were simply designed to produce these judgments full-stop, irrespective of their truth-value (e.g. Ruse & Wilson [1986]).
- Fourth requirement (introduced a few years later, in Plantinga [1993:17])

Both warranted belief that *P* and knowledge that *P* require that *the probability of S's forming a true belief regarding whether or not P is high, conditional on that belief having been formed in accordance with the way it was designed to be produced.*

## 1. Plantinga's proposal

- This fourth requirement incorporates of course the popular reliabilist intuition that warrant/knowledge requires a high conditional probability of true belief.
- Motivation: as usual, were the requirement not to be met, any resulting beliefs would have to be, if true, true by accident.
- Question:
  - Plantinga requires that the relevant cognitive mechanisms were designed to produce true beliefs (requirement #3).
  - But doesn't it then follow that, conditional on the mechanisms doing what they were designed to do, the probability of forming a true belief = 1 and hence this fourth requirement is redundant?

## 1. Plantinga's proposal

- Finally, Plantinga accommodates the intuition that warrant comes in degrees...
- The proposal that you might perhaps expect:
  - Degree of warrant in believing that  $P$  = increasing function of the probability of formation of true belief conditional on its formation in accordance with design.
- What Plantinga in fact suggests (Plantinga [1988:33-34]), *assuming that the previous conditions for warrant are met*:
  - Degree of warrant in believing that  $P$  = increasing function of  $S$ 's subjective degree of confidence in  $P$ .
- Does he get this right? Markie [1996] suggests that he doesn't. I refer you to his article for further details

## 1. Plantinga's proposal

- So, to sum up, according to Plantinga,  $W_S(P)$  iff:
  - (i)  $S$  believes that  $P$ .
  - (ii) The cognitive mechanisms that produced  $S$ 's belief that were designed to produce true beliefs as to whether or not  $P$ .
  - (iii) These mechanisms operated in accordance with design (i.e. in accordance with the way they were designed to operate and in an environment of the kind they were designed to operate in).
  - (iv) the probability of  $S$ 's forming a true belief as to whether or not  $P$  is high, conditional on that belief having been formed in accordance with design.

## 1. Plantinga's proposal

- Finally, Plantinga tells us that  $K_S(P)$  iff (i)  $B_S(P)$ , (ii)  $P$ , and (iii)  $S$  is sufficiently warranted in believing that  $P$ . (Plantinga [1993:9])
- Question: but how sufficient is 'sufficient'?
- Answer: it depends on the context of attribution.
- Indeed, Plantinga seems to want to accommodate epistemological 'contextualist' intuitions, according to which the *truth* of knowledge attributions varies according to the *context* of the person making the claim (see Rysiew [2007] for a recent and accessible overview).
- How does Plantinga's view handle Gettier cases?
- His initial suggestion (Plantinga [1988:40-43], preempted by Millikan [1984:244-246]):

## 1. Plantinga's proposal

Lack of knowledge in Gettier cases is due to departure from the circumstances in which the cognitive machinery was designed to operate.

- Illustration (see Plantinga article for further cases):

*Brown-in-Boston*: the disjunctive belief formed on the basis of Smith's allegations is formed in an improper environment. Our devices that form beliefs on the basis of other people's allegations are designed to operate in environments in which, amongst other things, allegations are true.

- As we will shortly see, however, Plantinga ultimately abandons this line in favour of a series of progressively more convoluted alternatives.

## 2. Problems for Plantinga

- In what follows: some problems that arise for Plantinga's account of warrant/knowledge.
- I will grant, for sake of argument, Plantinga's intuitions concerning lack of warrant/knowledge in accidental reliability cases.
- This doesn't seem to be an intuition shared by all: a number of critics seem to argue that the design requirement is too strong granting warrant/knowledge in (at least some) accidental reliability cases.
- For discussion, see Sosa [1993:55], Feldman [1993:47-49] and Taylor [1991:187-188].
- Plantinga [1991, 1993:30-31] replies to these charges.

## 2. Problems for Plantinga

- Note: somewhat confusingly, his writings here seem to suggest that he *grants* the objectors' intuitions on these cases (however, he informs me that, in fact, he *doesn't* share their intuitions: the apparent concessions are simply made for sake of argument).
- I will discuss just two important problems for Plantinga's views:
  - [1] Worries pertaining to his handling of Gettier problems.
  - [2] Worries pertaining to his ultimate appeal to an agent-based, rather than natural-selection-based, notion of 'design' in his epistemological theory.
- For further discussions see Kvanvig's edited collection, available in the library (Kvanvig [1996]). See especially contributions by: Klein, Sosa (2 articles) and Feldman.

## 2. Problems for Plantinga

- [1] *Plantinga on Gettier*:
  - Plantinga's treatment of Gettier cases has been, and is still, controversial.
  - A number of complaints (e.g. Feldman [1996] and Klein [1996]), led him to back down on the initial treatment - mentioned a few slides ago.
  - This led to a first attempt at supplementing his account of knowledge with an additional clause (Plantinga [1996]), a proposal which then itself came under fire (Crisp [2000]), leading to a further modification (Plantinga [2000:156-161]).
  - It isn't clear that his latest offering is any more successful...



## 2. Problems for Plantinga

- Original suggestion: the environments in which Gettier-victims are situated aren't the kinds of environments in which their relevant cognitive faculties were designed to operate.
- This seems awkward however: isn't it plausible to claim that Gettiered subjects *are* situated in the environments in which their relevant cognitive devices were designed to operate?
- Example: it is surely plausible to claim that Jones (of *Brown-in-Boston* fame) forms his belief in the kind of general social environment in which his relevant faculties *were* designed to operate (a social environment in which deception isn't the norm).
- After all, it is perfectly rational to design an object to perform a certain task in an environment which is generally, though not always, auspicious.

## 2. Problems for Plantinga

- In fact, a few years later, Plantinga [1996] abandons the claim that Gettier-victims aren't situated in the right kind of environment.
- So what now?
- Plantinga's first attempt at a fix (Plantinga [1996]): supplement the existing proposal with a Nozick-style counterfactual.
- More specifically:
  - Add the requirement that in nearby possible worlds in which *S* forms a belief as to whether or not *P* by means of the very same kind of cognitive mechanism that produced her actual belief, she ends up with a true belief regarding whether or not *P* (Plantinga [1996:328-329]).

## 2. Problems for Plantinga

- Application:

*Brown-in-Boston*: the nearby possible worlds in which the Jones forms his belief in the way he in fact does, include worlds in which Brown doesn't go to Boston and Jones ends up believing a falsity.

- Problem: the new theory faces some of the same kinds of Gettier counterexamples that its purely reliabilist relatives do.

*Hologram*: I am staring through a window at what I take to be a willow tree. And there *is* indeed a willow tree at precisely the spot where I believe there is one. However, unbeknownst to me, a trickster has set up a 3D camera to capture the scenery outside the window and recreate it using a holographic display system. I have been Gettiered.

## 2. Problems for Plantinga

- The problem for Plantinga:

In nearby possible worlds compatible with the proper functioning of my faculties in the right kind of environment (including some worlds in which there is no willow outside) the exercise of my faculties will lead me to true beliefs about the presence or not of a willow outside.

- Plantinga's first reaction [1996:329]: it isn't clear that I don't know that there is a willow tree...

- Do you agree?

- Plantinga [2000:160] then seems to admit defeat and proposes yet another modification of his original proposal, this time in the spirit of 'no-defeater' analyses.

## 2. Problems for Plantinga

- Generic no-defeater analysis of knowledge:  
 $K_S(P)$  iff (i)  $B_S(P)$ , (ii)  $P$ , (iii),  $W_S(P)$  and (iv) there is no true proposition  $D$  such  $W_S(D) \square \rightarrow \neg W_S(P)$
- Application:  
*Hologram*: there is a state of affairs  $D$  (my turning out to be looking at a hologram of a tree) such that were I to be warranted in believing  $D$ , I would cease to be warranted in believing that there is a tree outside.
- There is a large literature on this kind of no-defeater proposal.
- However, whether or not this line pans out needn't concern us here: Plantinga makes no original contribution to this specific debate.

## 2. Problems for Plantinga

- One last quip regarding 'proper functionalism' and Gettier...
- So far: focus on whether or not *given that the relevant beliefs were produced in accordance with the way they were designed to be produced* there is still room for accidentally true belief.
- But there seem to be other kinds of accidental true belief cases still lurking: 'accidental proper functioning' cases...
- Recipe: take a belief fulfilling all of the requirements outlined above, then make it the case that it is an *accident* that the beliefs were produced in accordance with the way they were designed to be produced (can you think of an example?).
- Result: surely a case of accidentally true belief, no?

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- Kvanvig J.L. [1996] *Warrant In Contemporary Epistemology: Essays in Honour of Plantinga's Theory of Knowledge*. New York: Rowman & Littlefield.
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- Rysiew, P. [2007]: 'Epistemic Contextualism', *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/fall2007/entries/contextualism-epistemology/>>.
- Sosa, E. [1993]: 'Proper functionalism and Virtue Epistemology' *Nous* 27(1): 51-65.
- Taylor, J.E. [1991]: 'Plantinga's Proper Functioning Analysis of Epistemic Warrant', *Philosophical Studies* 64(2): 185-202.

## Next lecture: Evolution & Epistemology (ctd.)

- Reading:
  - Plantinga, A. [2002]: 'Introduction', in J. Beilby (ed.) *Naturalism Defeated? Essays on Plantinga's Evolutionary Argument Against Naturalism*. Ithaca & London: Cornell University Press.
- Further reading:
  - Fitelson, B. & E. Sober [2001]: 'Plantinga's Probability Arguments against Evolutionary Naturalism', in R. T. Pennock (ed.) *Intelligent Design Creationism and its Critics*. Camb. Mass. MIT Press.
  - Plantinga, A. [1993] *Warrant & Proper Function*. Oxford: OUP. Ch12 'Is Naturalism Irrational?' (same as above, but slightly more detailed)

**Next lecture: Evolution & Epistemology (ctd.)**

- Ramsey, W. [2002]: 'Naturalism Defended', in J. Beilby (ed.) *Naturalism Defeated? Essays on Plantinga's Evolutionary Argument Against Naturalism*. Ithaca & London: Cornell University Press.