Reliabilism, Bootstrapping, and Epistemic Circularity*

(This is the penultimate draft of a paper that is forthcoming in *Synthese*)

Jochen Briesen
University of Konstanz
jochen.briesen@uni-konstanz.de

Abstract. Pretheoretically we hold that we cannot gain justification or knowledge through an epistemically circular reasoning process. Epistemically circular reasoning occurs when a subject forms the belief that p on the basis of an argument A, where at least one of the premises of A already presupposes the truth of p. It has often been argued that process reliabilism does not rule out that this kind of reasoning leads to justification or knowledge (cf. the so-called bootstrapping-problem or the easy-knowledge-problem). For some philosophers, this is a reason to reject reliabilism. Those who try to defend reliabilism have two basic options: (I) accept that reliabilism does not rule out circular reasoning (or bootstrapping), but argue that this kind of reasoning is not as epistemically "bad" as it seems, or (II) hold on to the view that circular reasoning (or bootstrapping) is epistemically "bad", but deny that reliabilism really allows this kind of reasoning. Option (I) has been spelled out in several ways, all of which have found to be problematic. Option (II) has not been discussed very widely. Vogel (J Philos 97: 602-623, 2000) considers and quickly dismisses it on the basis of three reasons. Weisberg (Philos Phenomenol Res 81: 525-548, 2010) has shown in detail that one of these reasons is unconvincing. In this paper I argue that the other two reasons are unconvincing as well and that therefore option (II) might in fact be a more promising starting point to defend reliabilism than option (I).

Keywords. Justification, Reliabilism, Bootstrapping, Epistemic Circularity, Skepticism

1 Introduction

For our present purposes it suffices to concentrate on the following basic version of process reliabilism with respect to justification:

(R) S' belief that p is epistemically justified iff (i) S' belief that p is the result of a cognitive process that is (highly) reliable, and (ii) S is not in possession of defeaters with respect to the belief that p.

Jonathan Vogel (2000) has presented the so-called bootstrapping problem for (R).[1] Assume that Roxanne's perception is reliable and that she drives a

*Thanks to...

[1] Vogel actually presents the bootstrapping case as a problem for reliabilism with respect to knowledge, but it can easily be adapted to reliabilism with respect to justification, as Vogel

car with a reliable gas gauge. She neither believes that her gauge is reliable nor that it is unreliable—she has no reason whatsoever to believe either proposition. She drives her car, reads her gauge, and reasons as follows:

(a) On occasion x_1, the gauge reads "F".

(b) On occasion x_1, the tank is full.

(c) Hence, on occasion x_1, the reading on the gauge matches the content of the tank.

By the lights of reliabilism, Roxanne is justified in believing each of the propositions (a)-(c), because each of the involved belief-forming mechanisms is reliable and Roxanne is not in possession of any defeaters with respect to the beliefs in question. Her belief in (a) is justified, because her perception—which led her to believe (a)—is reliable. Based on (a) Roxanne believes (b), where the belief in (b) seems to be justified as well. By the lights of reliabilism her belief in (b) is justified, because the process that led her to believe (b) can be described as: believe what the gauge says, and this is a reliable process as long as the gauge is in fact working reliably, which, by hypothesis, it does. And her belief in (c) is justified, because deducing a conclusion from justified premises also is a reliable belief-forming mechanism.

Now, Roxanne simply repeats this pattern of reasoning many, many times and thereby gains very robust track-record evidence:

(d) On occasions x_1- x_n, the reading on the gauge matched the content of the tank.

Based on this evidence she draws the inductive conclusion:

(e) The gas gauge is reliable.

Since reliabilists usually agree that inductive reasoning via robust track-record-arguments is a reliable belief-forming mechanism, they have to agree that Roxanne's belief in (e) is justified as well. But it seems obvious that justification cannot be so easily achieved. One cannot gain justification concerning the reliability of gauges simply by reading the gauge over and over again without performing any independent check (for example: using a dipstick and comparing the results with the reading of the gauge). Hence, reliabilism is in trouble because it allows for this kind of bootstrapping. The problem with bootstrapping can be located in a specific form of epistemic circularity: The justification for one of the premises, namely (b), presupposes the truth of the conclusion (e).

Defenders of reliabilism have two basic options:

(I) They accept that reliabilism does not rule out circular reasoning (or bootstrapping in general) but argue that circular reasoning (or bootstrapping) is not as epistemically "bad" as it seems.

himself has already suggested (see Vogel 2000, 603).

(II) They hold on to the view that circular reasoning (or bootstrapping in general) is epistemically bad but deny that reliabilism really allows for epistemically circular reasoning (or bootstrapping).

Option (I) has been spelled out in different ways, all of which have found to be wanting (cf. Bergmann 2004, Schmitt 2004, Titelbaum 2010, Kallestrup 2011, Reed 2006). Option (II) has not received much attention yet. Vogel (2000) himself discusses and quickly dismisses it. I will argue that Vogels reasons to dismiss (II) are not convincing and that option (II) might in fact be a more promising starting point to defend reliabilism than option (I).[2]

Option (II) can be characterized like this: By the lights of reliabilism, Roxanne does not acquire justification to believe (e) (that the gauge is reliable), because she reaches that conclusion via bootstrapping, and bootstrapping is not a reliable belief-forming process. After all, you can apply bootstrapping to a great many underlying processes, some reliable, some not. So bootstrapping often generates false beliefs, and must therefore be considered unreliable. Hence, reliabilism does not allow for bootstrapping or epistemically circular reasoning.

Vogel (2000, 616-169) puts forward three objections against this idea:

(A) The problem of identifying the relevant process-type.

(B) The problem of losing an important motivation for reliabilism.

(C) The problem of explaining where the supposed unreliability enters into the bootstrapping process.

In the following, I will only discuss objections (A) and (B). This is due to the fact that (C) has already been discussed and resolved by Jonathan Weisberg (2010).

Problem (C) basically consists in the following: Roxanne's reasoning process in the gas-gauge case involves different steps. Each individual step is supposed to be reliable, so how can the whole process, which is nothing but a combination of reliable steps, be unreliable? Weisberg (2010) answers this question by introducing and defending an interesting constraint on inductive reasoning, which he calls the "No-Feedback" constraint. Since Roxanne's last step in her bootstrapping reasoning, namely the inductive step, violates this constraint, Weisberg is able to locate where the unreliability enters into Roxanne's reasoning process (Weisberg 2010, 542-543). In this way, Weisberg defends option (II) against objection (C).

Of course Weisberg's defense against (C) might have problems of its own (cf. Douven & Kelp 2012). However, for our present purposes let us assume that something along the lines of Weisberg's consideration is right and let us face the remaining objections (A) and (B).[3]

[2]Besides Vogel, only Jonathan Weisberg (2010) seriously considers option (II). I will at least outline Weisberg's main idea at the end of this section.

[3]It might be that Weisberg's resolution of problem (C) in effect also immunizes reliabilism against objections (A) and (B). But rather than following this line of thought, I will show that (A) and (B) can be resolved totally independent of Weisberg's considerations.

2 The problem of identifying the relevant process-type

Vogel's objection (A) against option (II) is based on a methodological worry. Option (II) identifies the process leading to Roxanne's belief in (e) as a token of a relatively wide process-type, namely *bootstrapping (or circular reasoning) in general*. The fact that many process-tokens of this very general process-type lead to false beliefs is supposed to epistemically discredit Roxanne's reasoning. But, Vogel claims, this is a dissatisfying solution of the bootstrapping problem, because it is *always* possible to find some process-type T_1 under which a particular belief-forming mechanism M falls, such that M counts as unreliable. Likewise, it is generally possible to find another process-type T_2 under which M falls, such that M counts as reliable. There is no principled way of identifying which is the proper process-type to consider in evaluating the reliability of Roxanne's particular belief-forming mechanism. As long as there is no principled way of identifying the relevant process-type, there is no way to judge whether Roxanne's particular mechanism in the bootstrapping case is reliable or not (Vogel 2000, 616). Vogel takes this to be a serious methodological worry with respect to (II).

Yet this criticism of option (II) is unfair. The criticism basically rests on (or is more or less identical to) the well-known generality problem, which is a serious problem for reliabilism anyway. Consider the following maple-tree-case (cf. Conee & Feldman 1998): Smith has good eyesight and is familiar with the visible differences among species of trees. She sits in her office, looks out of a closed window, sees a maple tree, and thereby forms the belief that there is a maple tree nearby. Reliabilists agree that Smith's belief is justified, so they want her belief-forming mechanism to come out as reliable. But whether Smith's mechanism is reliable or not depends on identifying the relevant process-type of which Smith's particular belief-forming process is supposed to be a token. Smith's belief-mechanism may, for example, be identified as a process of a retinal image of such-and-such specific characteristics leading to a belief that there is a maple-tree—and so described, the mechanism seems very reliable. But it might just as well be identified as a process of classifying by species a tree located behind a solid obstruction—and described in this way, it seems very unreliable.

This case illustrates the heart of the generality problem: Any belief-forming mechanism falls under numerous types and each type can have a different level of reliability. Thus, so long as there is no principled way of identifying which type is relevant in evaluating the reliability of any particular belief-forming mechanism, reliabilism is in a certain sense radically incomplete.

It is obvious that even independently of the bootstrapping objection, reliabilists have to solve this problem. However, assuming the generality problem is solved, then Vogel's methodological worry with respect to option (II) vanishes.

As specified above, if we follow option (II), we consider Roxanne's particular belief-forming mechanism in the bootstrapping case to be unreliable. Vogel's objection (A) regarding (II) seems to be: As long as the generality problem is

not solved, there is no principled way of identifying the proper process-type to consider in evaluating the reliability of Roxanne's mechanism in the first place. Thus, as long as the generality problem is not solved, there is no way to determine whether Roxanne's mechanism is reliable or unreliable. Formulated this way, it is obvious that objection (A) does not raise a problem over and above the generality problem—which is a serious difficulty for reliabilism anyway. Thus, blocking the bootstrapping problem along the lines of option (II) at least does not raise additional problems for reliabilism. So we can conclude that Vogel's first objection does not seriously undermine the prospects of option (II).

However, one might object that the given defense underestimates Vogel's concern. In order to rehabilitate option (II), it is not enough to merely solve the bootstrapping-problem, i.e., it is not enough to merely identify the relevant process-type. Furthermore, this identification must be done in a specific way—namely in such a way that Roxanne's bootstrapping process *does not* count as legitimate. Otherwise option (II) would not be rehabilitated but refuted, since contrary to the assumption of (II) the bootstrapping process would then count as reliable.

As far as I can see, even this strengthened version of the worry does not raise a substantially new problem. The easiest way to see why this is so is to reconsider the above mentioned maple-tree case. Regarding this case we pretheoretically judge that Smith's belief that there is a maple tree nearby is justified. However, the maple-tree case illustrates that Smith's belief-forming mechanism falls under numerous types, where some of these types count as reliable and some not. In solving the generality problem, a reliabilist therefore has to identify the relevant type for evaluating the reliability of Smith's process. But of course not just any old way of identifying such a type will constitute a satisfactory solution to the problem. With regard to the maple-tree case, a reliabilist has to identify the relevant process type in such a way that Smith's belief-forming process of seeing-a-tree-through-a-window counts as reliable. Otherwise reliabilism would not fit our pretheoretical judgement that Smith's belief is justified, which in turn would count as evidence against reliabilism as a theory of justification.

Hence, we can formulate the following adequacy condition for a *satisfactory* solution to the generality problem: Reliabilists need a principled way to identify which process type is relevant in evaluating the reliability of a particular belief-forming mechanism, such that the processes which led to S' beliefs that we pretheoretically judge as justified count as reliable, and the processes which led to S' beliefs we pretheoretically judge as unjustified (assuming that S is not in possession of any defeaters with respect to the belief in question) count as unreliable.

It is precisely this condition which makes a satisfying solution to the generality problem hard to come by. Reliabilists have to consider all kinds of cases in which we pretheoretically judge the beliefs of an epistemic subject S as justified or unjustified. Furthermore, they need to find a principled way to identify the relevant process type in each of these cases such that the results of the evaluation with respect to the reliability of S' belief-forming mechanisms correlate with our pretheoretical judgements concerning the justification of S' beliefs.

Seen in this light, if a reliabilist decides to follow option (II) with regard to the bootstrapping-problem, then she should consider the bootstrapping case as just another case she has to take into account in her solution of the generality problem. Since we pretheoretically judge that Roxanne's belief in the bootstrapping case is unjustified, a *satisfying* solution to the generality-problem will give us a way to identify the relevant process-type such that Roxanne's belief counts as unreliable—just as a *satisfying* solution to the problem will give us a way to identify the relevant process-type in the maple-tree case such that Smith's belief, which we pretheoretically judge to be justified, counts as reliable.

It is important to note that, as it stands, the strengthened version of Vogel's worry does not entail that taking the bootstrapping case into account makes it significantly harder to meet the adequacy condition for a satisfying solution to the generality problem. So far nothing has been done to show that certain characteristics of the bootstrapping case make it especially difficult to find a principled way of identifying the relevant process type such that our evaluations of the reliability of S' processes correspond to our pretheoretical judgements regarding the justification of S' beliefs. Thus, even with respect to the strengthened version of Vogel's worry, it is at least unclear whether it raises any substantial problem over and above the difficulty of finding a *satisfying* solution to the generality problem. A reliabilist follower of option (II) can still claim that as soon as the generality problem is solved *satisfactorily*, even the strengethened version of Vogel's worry simply vanishes. And since reliabilists have to find a satisfying solution to the generality problem anyway, we can conclude that neither Vogel's original objection (A) nor the strengthened version of it seriously undermine the prospects of option (II).

3 The problem of losing an important motivation for reliabilism

Another reason why Vogel dismisses option (II) is based on the assumption that reliabilists are committed to circular reasoning in order to answer problems of skepticism. And since one of the main motivations for reliabilism consists in being able to *block* skeptical arguments, reliabilists cannot claim that epistemically circular reasoning is unreliable. By claiming that circular reasoning is unreliable, they would lose an important virtue of their theory, namely being able to answer skepticism (Vogel 2000, 618-619).

This objection is not as devastating as Vogel thinks. By drawing a distinction between *first-* and *second-order* skepticism—a distinction Vogel himself misses—option (II) can be defended. The general outline of the defense can be sketched like this: Vogel's criticism of option (II) rests on the assumption that reliabilists are committed to epistemically circular reasoning to block the skeptical argument. At least with respect to arguments of first-order skepticism, it can be shown that this assumption is simply wrong. Nevertheless, it still appears that reliabilists are committed to circular reasoning in answering problems

of second-order skepticism. Hence, if reliabilists claim that circular reasoning is not a reliable belief-forming mechanism (see Option (II)), then they can answer first- but not second-order skepticism. But that does not discredit the motivation of their theory. Being able to block first-order skeptical arguments is good enough.

Before I discuss and motivate each step of the outlined defense of my claim, some preliminary remarks are in order. Like Vogel, I will only consider external-world-skepticism. But since I am concerned with reliabilism with respect to epistemic *justification* rather than *knowledge*, I will concentrate on *justification-specific* rather than *knowledge-specific* skepticism. First-order skepticism of that sort holds that we are not justified in believing anything about the world around us. And second-order skepticism of that sort holds that we are not justified in believing that our beliefs about the world around us are justified.

Now we are in a position to elaborate on the defense outlined above. First, why is it that reliabilists are *not* committed to circular reasoning in order to block first-order skeptical arguments? Take a look at the following skeptical argument:[4]

(p1) If S is justified in believing p, then S is justified in believing $\neg sh$.

(p2) S is not justified in believing $\neg sh$.

- (1) If S is justified in believing $\neg sh$, then S is justified in believing $\neg sh$ by evidence.
- (2) S is not justified in believing $\neg sh$ by empirical evidence.
- (3) S is not justified in believing $\neg sh$ by non-empirical evidence.
- (4) All evidence is either empirical or non-empirical.
- (5) Therefore, S is not justified in believing $\neg sh$.

(c3) Hence, S is not justified in believing p.

In this argument, 'S' stands for an epistemic subject, 'p' stands for a proposition concerning the external world, and '$\neg sh$' stands for the proposition that the skeptical hypothesis, for example the brain-in-a-vat hypothesis, is false. The argument consists of a main-argument with premises (p1) and (p2), along with the skeptical conclusion (c3), and a sub-argument with sub-premises (1)-(4), together with the sub-conclusion (5). (p1) rests on the widely accepted closure-principle of justification,[5] and (p2) rests on the sub-argument (1)-(5).

[4]For a discussion of this type of argument and a partial defense of the view that it is the best kind of skeptical argument there is, see Wright (2004), Weatherson (2007)

[5]Two related principles can be differentiated: the closure-principle of knowledge and the closure-principle of justification. Let 'K' stand for the knowledge operator, then the first pinciple, in its simplest form, states: $[K(\phi)\&K(\phi \rightarrow \psi)] \rightarrow K(\psi)$. Let '$J$' stand for the justification-operator, then the second principle analogously states: $[J(\phi)\&J(\phi \rightarrow \psi)] \rightarrow J(\psi)$. (p1) is based on the second principle, because (p1) can be interpreted as a shortened instance of it. For a detailed discussion of the closure-principle of knowledge, see Hawthorne (2003). Most of his considerations can be easiliy transferred to the closure-principle of justification.

The skeptical argument is valid, but whether it is convincing depends on the plausibility of its premises.

Even though each premise of this skeptical argument has been contested, reliabilists usually dismiss sub-premise (1). (1) rests on the internalist principle that evidence is a necessary condition for justification: For all S and q, if S is justified in believing q, then S' belief in q is justified by evidence. By reliabilists lights, this principle is plainly false—it is not a necessary condition for justifiably believing a proposition that the belief in that proposition be justified by evidence. For a reliabilist, S' belief is justified iff S' belief is the result of a reliable process, and S lacks any defeaters with respect to the belief—no need for evidence. By dismissing the principle on which (1) is based, reliabilists are in a position to dismiss sub-premise (1). As a result, reliabilists are able to block the skeptical argument—the skeptic is unable to motivate the main premise (p2) and thereby unable to prove that all our beliefs concerning the world around us are unjustified.

If this is a fair way to reconstruct the reliabilist blockade of the skeptical argument, which I think it is, then Vogel's assumption that reliabilists are committed to bootstrapping or circular reasoning in order to answer skepticism is simply wrong. Reliabilists block the skeptical argument by dismissing sub-premise (1), and this dismissal solely rests on the basic thesis of reliabilism and not on some kind of circular reasoning process.

However, this is not the whole story. If it is really that obvious that reliabilists are not committed to circular reasoning in their answer to skepticism, how could Vogel possibly think that they are? Well, in a certain limited sense Vogel is still right. We have to concede, that reliabilists are committed to circular reasoning in order to answer *second-order* skepticism. In order to see that, we first have to show that reliabilists—even if their blockade of the skeptical argument goes through—still face a problem of *second-order* skepticism.

So far the reliabilist anti-skeptical move consisted in dismissing premise (1) of the sub-argument (1)-(5). This sub-argument was supposed to motivate one of the main premises of the skeptical argument, namely (p2). Hence, reliabilists have basically shown that one of the main skeptical premises is unmotivated or unjustified. But if you merely show that one of the main skeptical premises is unjustified without additionally showing that it is actually false, then you are immediately confronted with second-order skepticism. This can be demonstrated by the following argument:

(i) $(P_1 \& P_2 \& \ldots P_n) \rightarrow C$

(ii) $\neg C \rightarrow \neg(P_1 \& P_2 \& \ldots P_n)$

(iii) $J(\neg C \rightarrow \neg(P_1 \& P_2 \& \ldots P_n))$

(iv) $[J(\neg C) \& J(\neg C \rightarrow \neg(P_1 \& P_2 \& \ldots P_n))] \rightarrow J(\neg(P_1 \& P_2 \& \ldots P_n))$

(v) $J(\neg C) \rightarrow J(\neg(P_1 \& P_2 \& \ldots P_n))$

(vi) $\neg J(\neg(P_1 \& P_2 \& \ldots P_n)) \rightarrow \neg J(\neg C)$

'P_1' - 'P_n' stand for the main premises in a skeptical argument, 'C' stands for the skeptical conclusion, and 'J' is the justification-operator. Line (i) simply

states that the main skeptical premises imply the skeptical conclusion. Line (ii) is the contraposition of (i). Line (iii) says that we are justified in (ii), which is plausible since the implication in question obviously holds. Line (iv) is an instance of the closure-principle of justification, which most reliabilists accept.[6] Line (v) follows from (iii) and (iv). Line (vi) is the contraposition of (v) and says: If you are not justified in believing that at least one of the main premises of a skeptical argument is actually false, then you are not justified that the skeptical conclusion is false—that is, you are not justified in believing that your beliefs about the world are justified. And this is exactly the thrust of second-order skepticism that a reliabilist has to face. In order to answer second-order skepticism, it is not enough to argue that one of the main skeptical premises, namely (p2), is unmotivated. Reliabilists also have to argue that one of the main premises, namely (p2), is actually false. And Vogel is right that in arguing that (p2) is false, reliabilists are committed to some kind of circular reasoning. Why?

If reliabilists want to argue that (p2) is false, they have to argue, contra (p2), that one is justified in believing $\neg sh$ (e.g., that one is not a brain-in-a-vat). Since reliabilists think that we are justified in a belief only if the belief is the result of a reliable belief-forming mechanism, they have to show that the belief in $\neg sh$ is the result of such a reliable mechanism. And Vogel thinks that the only route for a reliabilist to show just that is via a Neo-Moorean argument (Vogel 2000, 618-619):[7]

(vii) I have a hand.

(viii) It appears to me as though I have a hand.

(ix) Therefore, my appearance of having a hand is veridical.

(x) Therefore, I am not a brain-in-a-vat (Therefore, $\neg sh$).

Reliabilists assume that perception and introspection are reliable belief-forming mechanisms. Under this assumption, the beliefs in (vii) and (viii) are, by reliabilist lights, justified. And since deduction from beliefs arrived at by a reliable process itself counts as a reliable process, the beliefs in (ix) and (x) are justified as well. After all, (ix) follows from (vii) and (viii), and (x) follows from (ix).[8] Hence, by reliabilist lights the belief in (x) is arrived at by a reliable process, so the belief in (x) is justified. Thereby it is justified that (p2) is false. This is how reliabilists try to answer second-order skepticism.

Vogel rightly observes that the Neo-Moorean line of reasoning (vii)-(x) is in a certain sense structurally analogous to Roxanne's reasoning in the gas-gauge case (Vogel 2000, 619). Both reasoning processes exhibit epistemic circularity. Just as the justification of premise (b) in the gas-gauge case already presupposes the truth of the conclusion (e), the justification of (vii) already presupposes the

[6] See fn. 5 for a simple version of the principle.

[7] As I do not discuss knowledge-specific skepticism as Vogel does, but rather justification-specific skepticism, I have to reformulate Vogel's line of thought here. However, nothing substantial hinges on this reformulation.

[8] I presuppose a formulation of the brain-in-a-vat hypothesis that entails that all apearances are non-veridical.

truth of (x). Hence, if reliabilists discredit Roxanne's reasoning in the gas-gauge case by claiming that epistemically circular reasoning of this kind is not a reliable belief-forming mechanism, they thereby also discredit their own answer to second-order skepticism.

Now, it might be contested that pointing to the Neo-Moorean line of reasoning really is the only way available for reliabilists to show that our belief in $\neg sh$ is the result of a reliable process. Or it might be contested that the line of reasoning (vii)-(x) and Roxanne's reasoning in the gas-gauge case really are structurally analogous in any interesting sense. But if one accepts these assumptions—which for the purpose of this paper I will—then reliabilists cannot solve the bootstrapping problem by claiming that epistemically circular reasoning is unreliable (see option (II)), without thereby losing their answer to second-order skepticism. But does that seriously discredit their theory?

First, it is essential here to note that by following (II) reliabilists at most lose their answer to *second-* and not to *first-order* skeptical problems. And in the face of the ongoing discussion of first-order skeptical arguments, being able to satisfactorily block these first-order arguments can still be considered an important virtue of reliabilism— especially if we take into account that even widely discussed internalist anti-skeptical alternatives to reliabilism can only handle first- and not second-order skepticism (cf. Wright 2004, 204).[9]

Furthermore, it should be noted that by following option (II) reliabilists are not committed to the assumption that S' belief in $\neg sh$ is *unjustified*, i.e., that the skeptical premise (p2) is in fact correct. If a follower of option (II) were committed to that assumption, then the resulting position might be in trouble. In such a case, a reliabilist who follows option (II) and holds on to the anti-skeptical view that S' belief in p is justified would then be committed to giving up the closure-principle of justification.[10]

But fortunately following option (II) does not force reliabilists to claim that S' belief in $\neg sh$ is unjustified, i.e., that the skeptical premise (p2) is actually correct. To be sure, in following option (II) reliabilists have to give up the idea that the Neo-Moorean reasoning process is reliable. Hence, they are committed to the assumption that if S' belief in $\neg sh$ is justified at all, then it is not justified by the Neo-Moorean process of reasoning—or more precisely, the process that led S to believe $\neg sh$ cannot be the Neo-Moorean reasoning process specified above. But this assumption does not imply that S' belief in $\neg sh$ is *unjustified*—after all, the belief could be formed by some other supposedly reliable process P. Now, a reliabilist might even accept that this process P cannot be identified, thereby accepting that it cannot be shown that our belief in $\neg sh$ is the result of a reliable process, which in turn implies that it cannot

[9] I do not mean to claim that Wright's theory of entitlement is correct (cf. Wright 2004). I am merely claiming that the primary motivation for Wright's theory consists in the anti-skeptical strategy it provides, where—even though this anti-skeptical strategy is limited to first-order skepticism—providing this strategy is generally assumed to be good enough to seriously consider the theory. The fact that Wright's strategy only affects first-order skepticism does not discredit his theory right from the start.

[10] Again, see fn. 5 for a simple version of the principle.

be proven that the skeptical premise (p2) is false. But again, this at most invites problems of second-order skepticism. It does not threaten the reliabilist antiskeptical-strategy with respect to first-order skepticism.

Thus, by following option (II), reliabilists do not inevitably lose an important motivation for their theory, namely providing an answer to first-order skeptical arguments.

4 Concluding Remarks

In the face of the bootstrapping problem, defenders of reliabilism have the following options:

(I) They accept that reliabilism does not rule out circular reasoning but argue that circular reasoning is not as epistemically "bad" as it seems.

(II) They hold on to the view that circular reasoning is epistemically bad but deny that reliabilism really allows for epistemically circular reasoning.

Contrary to (I), (II) has not received much attention. Vogel (2000) discusses and quickly dismisses it on the basis of three reasons. Weisberg (2010) has argued in detail that one of Vogel's reasons is unconvincing. I have argued that Vogel's remaining reasons, namely objections (A) and (B), are unconvincing as well.

Vogel's objection (A) cannot seriously undermine option (II) because it consists in a methodological worry that does not raise any additional problems for reliabilism. Even independently of the bootstrapping problem, reliabilists have to answer the methodological worry on which Vogel's first objection with regard to option (II) hinges.

Vogel's objection (B) against (II) is unconvincing because it rests on the false assumption that reliabilists are committed to epistemically circular reasoning in order to block skeptical arguments. At least with respect to arguments of first-order skepticism, I have shown that this assumption is simply wrong. Vogel misses this point because he does not draw the important distinction between first- and second-order skepticism.[11] With respect to second-order skepticism, Vogel's assumption might be correct, but that does not seriously discredit option (II).

Since all approaches to spelling out option (I) have well-known disadvantages, and all objections raised heretofore against option (II) are unconvincing, I recommend that defenders of reliabilism against the bootstrapping problem should shift their attention from option (I) to (II).

[11] Vogel's mistake basically consists in not realizing that motivating the falsity of (p2)—which commits reliabilists to epistemic circularity—is at most a condition for answering second-order, but not for answering first-order skeptical problems.

References

Bergmann, M. (2004). Epistemic circularity: Malignant and benign. *Philosophy and Phenomenological Research* 69, 709-727.

Conee, E. & Feldman R. (1998). The Generality Problem for Reliabilism. *Philosophical Studies* 89, 1-29.

Douven, I. & Kelp, C. (2012). Proper Bootstrapping. *Synthese*, advance online publication, DOI:10.1007/s11229-012-0115-x

Hawthorne, J. (2003). The Case for Closure. In: Matthias Steup & Ernest Sosa (Eds.), *Contemporary Debates in Epistemology* (pp. 26-43). Oxford: Blackwell.

Kallestrup, J. (2011). Bootstrap and rollback: generalizing epistemic circularity. *Synthese*, advance online publication. DOI: 10.1007/s11229-011-9990-9

Reed, B. (2006). Epistemic circularity squared? Skepticism about common sense. *Philosophy and Phenomenological Research* 73, 186-197.

Schmitt, F. (2004). What is wrong with epistemic circularity? Philosophical Issues 14, 379-402.

Titelbaum, M. G. (2010). Tell me you love me: bootstrapping, externalism and no-lose epistemology. *Philosophical Studies* 149, 119120.

Vogel, J. (2000). Reliabilism leveled. *The Journal of Philosophy* 97, 602-623.

Weatherson, B. (2007). The Bayesian and the Dogmatist. *Proceedings of the Aristotelian Society* 107, 169-185.

Weisberg, J. (2010). Bootstrapping in General. *Philosophy and Phenomenological Research* 81 (3),525-548.

Wright, C. (2004). Warrant for nothing (and foundations for free)? *Supplement of the Proceedings of the Aristotelian Society*, 78, 167-212.