

Does cognitive science show belief in god to be irrational? The epistemic consequences of the cognitive science of religion

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Abstract The last 15 years or so has seen the development of a fascinating new area of cognitive science: the cognitive science of religion (CSR). Scientists in this field aim to explain religious beliefs and various other religious human activities by appeal to basic cognitive structures that all humans possess. The CSR scientific theories raise an interesting philosophical question: do they somehow show that religious belief, more specifically belief in a god of some kind, is irrational? In this paper I investigate this question and argue that CSR does not show that belief in god is irrational.

Keywords Religious epistemology · Cognitive science · Rationality · Justification · Religious skepticism

Introduction

The last 15 years or so has seen the development of a fascinating new area of cognitive science: the cognitive science of religion (CSR). Scientists in this field aim to explain various religious human activities by appeal to basic cognitive structures that all humans possess. Although humans exhibit rather diverse religious activities, the fact that nearly all human cultures engage in widespread religious activity of some kind or another cries out for explanation. CSR answers the cry. Part of what makes CSR so interesting and potentially powerful is that it does not take religion to be a metaphysically basic aspect of human nature. In addition, by hypothesizing that religious activity can be explained by more basic human cognitive structures, CSR is

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able to develop testable hypotheses about why people engage in religious activities. Furthermore, a few of these hypotheses seem to have been confirmed.

There are lots of reasons to find CSR interesting, as the previous paragraph shows, but I don't think the reasons I've so far described get to the heart of why people find CSR so interesting. After all, many projects are as theoretically and explanatorily interesting as CSR, but few other such projects have received the same public press as CSR. I suggest that the main reason people find CSR interesting is that the findings of CSR seem—on the face of it, to many people—to directly impact whether religious beliefs are rational. Scientists working in the field have usually been careful to not address this issue in their scientific writings, but it has come up in more popular writings. For example, Paul Bloom, a prominent researcher in CSR, wrote the following in “Is God an Accident?” a popular-level account of CSR in *The Atlantic Monthly*:

Religious authorities and scholars are often motivated to explore and reach out to science ... They do this in part to make their world view more palatable to others, and in part because they are legitimately concerned about any clash with scientific findings. ... If people got their religious ideas from ecclesiastical authorities, these efforts *might* lead religion away from the supernatural. Scientific views *would* spread through religious communities. Supernatural beliefs *would* gradually disappear as the theologically correct version of a religion gradually became consistent with the secular world view.¹

Bloom goes on to say that this would never happen because people's religious beliefs and activities in fact are not solely guided by ecclesiastical authorities, but “are accidental by-products of our mental systems,” and are “part of human nature.” However, the clear implication is that our mental systems lead us astray about religion, notwithstanding the illicit slip from “might” to “would.”

Despite general public interest in the consequences of CSR for the rationality of religious belief, philosophers have just begun to engage this issue in print. In this paper, I hope to advance the philosophical conversation on this issue. As we have already seen, there have been suggestions, both in conversation and in print, that CSR renders religious belief irrational. But, there have also been suggestions in conversation and print that CSR is consistent with reasonable religious belief and, perhaps, may support religious belief.^{2,3} There are also interesting issues about whether CSR

¹ Bloom (2005), italics are mine.

² For suggestions in print that CSR is consistent with the rationality of religious belief, see Barrett (2004, 2007a,b) and Ruse (2007).

³ There is an argument that shows up in popular-level Christian apologetics that might gain support from, or perhaps be undermined by, CSR. Something like the argument shows up in Augustine and Aquinas, but C.S. Lewis gives the most explicit formulation: “Creatures are not born with desires unless satisfaction for these desires exists. A baby feels hunger; well, there is such a thing as food. A duckling wants to swim; well, there is such a thing as water. Men feel sexual desire; well, there is such a thing as sex. If I find myself a desire which no experience in this world can satisfy, the most probably explanation is that I was made for another world” (Lewis 1960). CSR seems highly relevant to the potential success of this argument given its ability to explain our religious dispositions. This argument of Lewis's has received very little treatment amongst professional philosophers. To my knowledge, there are only two professional philosophical publications that have dealt with this argument: Haldane (2006) and Wielenberg (2008).

affects the rationality of religious belief by decreasing the degree of justification for religious beliefs or by undermining certain arguments for religious beliefs. In neither case would it follow that religious belief is unjustified, but it would follow that CSR negatively affects the rationality of religious belief in some way. For reasons of space, I will save discussion of whether CSR supports or reduces the degree of justification of religious beliefs for another paper. In this paper I will restrict myself to considering arguments that use the findings of CSR to argue that belief in a god of some kind is unjustified.

It is worth getting clear about some terminology before proceeding. Most researchers in CSR mean by “religious belief” a belief in a god of some kind of other and take ‘god’ to mean any kind of superhuman being, including the Judeo-Christian God, ghosts, ancestor spirits, and space aliens.⁴ They know that there are beliefs that we would call religious that don’t have to do with gods (belief in nirvana, for example), but they’re not interested in explaining those beliefs with the theories we will discuss here (these theories aren’t directed at explaining those beliefs, although aspects of them may help to explain those beliefs). We can understand these meanings as stipulations that delineate what the researchers are trying to explain. I will simply accept these understandings of the terms. When I intend to refer specifically to the monotheistic belief in an omnipotent, omniscient, morally perfect creator god, I will use the word ‘God’.

I am going to argue that the CSR theories do not show that religious beliefs are unjustified. I will do this by developing a strong argument that the CSR theories show that religious beliefs are unjustified. This argument will capture, I think, the intuitive worry that CSR theories seem to present for the rationality of religious beliefs. I will then show that this argument fails and we will see that the reason why it fails makes it unlikely that other arguments that CSR shows that religious belief is unjustified will be able to be developed.

The structure of the paper is as follows: in Section “Three CSR theories” I will briefly present the main findings of CSR that potentially bear on the justification of religious belief. There are two main competing theories, one of which has received more detailed empirical study. In addition to presenting these two main theories, I will also suggest a way of combining the two theories, thus giving us three main competing theories. In Section “The CSR unreliability arguments” I will present a family of arguments—the CSR Unreliability Arguments—that use these theories to argue that religious beliefs are unjustified. In Section “A problem for the CSR unreliability arguments, leading to the development of the CSR process defeater argument” I argue that these arguments fail, but I then construct a stronger argument—the CSR Process Defeater Argument—that CSR shows that religious belief is unjustified. In Section “A chink in the armor—taking a closer look at the religious belief-forming and sustaining process” I argue that the CSR Process Defeater Argument fails as well. In Section “A cunning rejoinder” I examine and reject an interesting objection to my argument in Section “A chink in the armor—taking a closer look at the religious belief-forming

⁴ See Barrett (2004, p. 21) and Atran (2002, Chap. 1).

and sustaining process”. Finally, in Section “Conclusion” I conclude that CSR does not show that religious belief is unjustified.

Three CSR theories

There are three general classes of CSR theories⁵: first, those that regard religious activity as adaptations (i.e., religious activity is selected for). Second, those that regard religious activity as the by-product of other features that are adaptations. Such by-products are often called spandrels, named after the V-shaped structure that forms between two rounded arches.⁶ Third, those that regard religious activity to have arisen as a by-product, but subsequently became adaptively advantageous. Thus, the persistence and expansion, but not the origin, of religious activity is due to its being adaptively advantageous. Traits that arose as by-products but were subsequently selected for are called exaptations. I will now describe the most prominent adaptationist, by-product, and exaptationist theories.

David Sloan Wilson presents the most developed theory on which religious features are adaptively advantageous.⁷ Wilson argues that religious activities and beliefs are adaptively advantageous on the group level. That is, groups that engage in religious activities and hold religious beliefs are more likely to survive and reproduce, and thus religious activities and beliefs are selected for. Religious groups are more likely to survive and reproduce because religious commitments and activities make a group more cohesive, more likely to cooperate, and make it more likely that the group will contain individuals that will sacrifice for the good of the group, amongst other advantages.

A quite different type of adaptationist theory is the meme theory, developed most notably by Daniel Dennett, according to which religious belief/behavior is adaptive, but it isn't necessarily humans that benefit, but rather the religious memes that benefit by spreading widely throughout human hosts.⁸ The existence and conceptual coherence of memetic selection is intensely controversial, and so this theory hasn't garnered much support.⁹

The most prominent by-product theory has been developed through the efforts of several researchers, including most notably Scott Atran, Justin Barrett, Paul Bloom, and Pascal Boyer. Barrett gives a nice overview of the theory in his 2004 book, *Why Would Anyone Believe in God?* According to this theory, a constellation of cognitive features combine to explain why humans are highly disposed to accept and promulgate religious beliefs and activities. Humans possess what Barrett calls a hypersensitive

⁵ See Schloss (2009) and Schloss and Murray (2010) for more detailed taxonomies of actual and possible theories of religion. Also see Barrett (2007a) for a nice general introduction to the cognitive science of religion.

⁶ In principle, a feature could *both* be a by-product of adaptively advantageous features *and* be itself adaptively advantageous. Such features are called 'exaptations'. A third kind of CSR theory, then, treats religious activity as an exaptation.

⁷ See Wilson (2002). Further support for his theory is given in Wilson (2005). See Bulbulia (2007) for a different kind of adaptationist (perhaps exaptationist) theory.

⁸ Dennett (2006).

⁹ For criticisms, see Chap. 9 of Atran (2002) and Wilson (2005).

agency detection device—HADD (2004, p. 32ff). In virtue of HADD, “people seem to have a strong bias to interpret ambiguous evidence as caused by or being an agent” (2004, p. 31). Such a bias is evolutionarily adaptive because “if you bet that something is an agent and it isn’t, not much is lost. But if you bet that something is not an agent and it turns out to be one, you could be lunch” (2004, p. 31).

So, we are prone to see agency all around us, on some occasions when there in fact is no agent present, such as when we hear a bump in the night that is in fact due to a falling object. Now, of course, HADD doesn’t all by itself explain why people believe in God, ghosts, angels, ancestor spirits, and the like because often enough we can tell when HADD has delivered a false positive. We take a closer look and find no agents, we look downstairs and find a fallen picture that we remember had been hanging precariously. But, sometimes, we are not able to verify the deliverances of HADD, and sometimes even if we do—as perhaps with the fallen picture—the inclination to suspect the unseen actions of an agent still lingers. After all, why did that picture just happen to fall right now? Occasions such as these prime us to believe in unseen agents. Now, again, this doesn’t by itself explain belief in gods. But, other aspects of our cognitive architecture dispose us to find gods to be plausible explanations for various events; these cognitive elements together with HADD’s unchecked suspicions dispose humans to believe in gods.

One important element in our cognitive architecture that disposes us to find gods to be plausible explanations for various occurrences is the fact that god concepts are “minimally counterintuitive.” Cognitive science has discovered that all humans possess certain common cognitive tools, by which people identify animals, artifacts, and describe certain general features of animals, living things, minds, and artifacts.¹⁰ A concept is intuitive when it fits perfectly with the categories provided by these cognitive tools. A concept is minimally counterintuitive when it violates the expectations of one of these tools. So, for example, the concept of a tree that loses branches in the wind is intuitive, but the concept of a tree that talks is minimally counterintuitive because our ‘living thing’ descriptors do not project the ability to verbally communicate to plants. Concepts that violate the expectations of our cognitive tools in multiple ways are more counterintuitive. An example would be the concept of a rock that talks, can hear everything in a 10-mile vicinity, is invisible, and can instantaneously transport itself. Minimally counterintuitive concepts—which include god concepts—have the dual advantage of being memorable and, in virtue of their strange properties, being able to explain a variety of abnormal occurrences that HADD chalks up to agency. More counterintuitive concepts are too odd to easily remember and reason with, so they are less likely to be used to explain strange phenomena.

Researchers have found evidence for the existence of two more cognitive features that help to explain the attractiveness of god concepts. First, mind-body dualism is not counterintuitive to our cognitive tools because our mind contains two distinct tools, one that describes minds, and one that describes living material things. Second, the properties of omniscience and omnipotence that are characteristic of the Judeo-Christian god aren’t counterintuitive either because young children are disposed to regard

¹⁰ See Barrett (2004), Chap. 1 for a brief summary of these cognitive tools.

persons in general as omnipotent and omniscient and they have to learn that people aside from god are more limited in their powers and knowledge. So, the concept of a disembodied mind that is all-powerful and all-knowing isn't counterintuitive to our cognitive tools.

Let's put the theory together. In virtue of the minimal-counterintuitiveness of god concepts, humans are disposed to talk and think about them, and they are simple enough to reason with while different enough to be useful for explaining strange phenomena. The typical human will have experienced numerous odd events that HADD attributes to agency. HADD disposes us to seek an agent-based explanation for these events and god concepts are memorable enough and have enough explanatory power to make them a very attractive explanation. Hence, our belief in gods.¹¹

The main advantage of the by-product theory over Wilson's group selection theory is that the by-product theory can explain why *religious* beliefs are the cohesive-producing cultural beliefs that have become widespread. Henig quotes Atran as arguing that,

“the adaptationists [which includes Wilson] cannot in principle distinguish Marxism from monotheism, ideology from religious belief ... they cannot explain why people can be more steadfast in their commitment to admittedly counterfactual and counterintuitive beliefs—that Mary is both a mother and a virgin, and God is sentient but bodiless—than to the most politically, economically, or scientifically persuasive account of the way things are or should be” (Henig 2007).

But, Wilson's theory seems to have the advantage of being able to explain why, once religious beliefs are on the market, so to speak, they dominate the market and become central, organizing aspects of communities. The fact that the by-product theory and Wilson's adaptationist theory each have their advantages suggests that an exaptationist theory—such as the conjunction of Barrett et al.'s by-product theory and Wilson's adaptationist theory—might be plausible.¹² The by-product theory is best seen as a theory of the origin of religious beliefs, namely as a by-product of the operation of our other cognitive processes in normal environments. It also explains why religious beliefs are widespread, and to some degree why they are persistent. Wilson's theory is best seen as a theory of why religious beliefs become more central to communal life—and thus also further explains their persistence—and why particular communities accept the specific religious beliefs that they do.¹³

¹¹ Barrett describes a few other factors that play a role in reinforcing religious beliefs, including the way our mental tools encourage belief in life after death, the role that gods play in social and moral interactions, and the way that religious actions and ceremonies reinforce religious belief. See chapters 4 and 5 of his 2004 for a discussion of these factors.

¹² See Bering (2006); Bulbulia (2007), Bulbulia (2009), Johnson and Bering (2009), Norenzayan (2010), Shariff et al. (2010) for other examples of exaptationist theories. One of the ways these theorists differ is in why religious cooperation is adaptive.

¹³ Barrett (2004, p. 65) recognizes that adaptationist theories can supplement, rather than compete, with by-product theories. The developmental psychologist Jesse Bering advocates a version of the exaptation theory that is similar to the one presented here (although his does not, as far as I can tell, require group selection). See Bering (2006) for an overview.

Although there is some evidence for elements of each of these theories, much more empirical work needs to be done. For instance, there is evidence (1) for the existence of HADD, (2) that young children find it very easy to think about super-powerful and knowing gods, (3) that minimally counterintuitive concepts transmit better than intuitive and massively counterintuitive concepts, and (4) that religious people and groups cooperate better than nonreligious people and groups.¹⁴ It is fair to say that theory far outstrips experimental evidence at this point, although there has been an increase in the amount of experimental work done, and the rate of work being done is definitely on the increase. Since in this paper I'm only interested in the epistemic implications of these theories were there good evidence for at least one of them, I will simply grant for the sake of argument that belief in one of these theories is justified by the evidence.

The CSR unreliability arguments

Now on to the main question: do these three theories provide any reason for thinking that religious beliefs are not justified? Well, the three theories propose that religious beliefs are formed and sustained by certain processes and those processes seem to not be entirely reliable at getting the truth. HADD is hypersensitive after all, so it is likely to get false positives, especially in the kinds of situations that might contribute to producing one's religious beliefs. This, then suggests the following argument schema:

The CSR unreliability argument schema

- P1: If theory T is true, then religious beliefs are produced and sustained by process P.
 P2: Process P is unreliable and does not make use of good evidence when it is used to form and sustain religious beliefs.
 P3: If the process by which a belief is formed and sustained is unreliable and does not make use of good evidence, then that belief is unjustified.

 C: If theory T is true, then religious beliefs are unjustified.

Does this schema produce good arguments on each of the three theories? Well, P1 is true for each theory just in virtue of what the theory says. P3 looks fine. It is designed to be attractive to both externalists and internalists about justification. So, the crucial premise for each instance of the schema is P2.

In order to simplify the discussion and save space, I am only going to evaluate this argument schema for the by-product theory. I think that my arguments concerning the success of this argument will all apply with only slight modifications to the adaptationist and exaptation theories as well.

According to the by-product theory, the process that produces and sustains religious beliefs is P_{BP} = explaining HADD positives by use of a minimally counterintuitive god

¹⁴ See Cohen et al. (2009) and Barrett and Burdett (2010) for a summary of some of the evidence for CSR theories and evidential gaps in the theories. Also see Atran and Norenzayan (2004) for a nice discussion of theories and empirical evidence in CSR.

concept. What are the output beliefs of this process? There seem to be two possibilities. HADD, using a minimally counterintuitive god concept that has become plausible to the agent, can produce two kinds of beliefs: (B1) god¹⁵ did this, and (B2) god exists. The former might arise when just considering one strange event, the latter might arise once HADD operates on a host of strange events stored in memory. It seems fairly clear that P_{BP} would not be reliable at producing beliefs of type B1. Again, HADD is oversensitive, so it is likely to register many unlikely or not well-understood events that have no agential cause as caused by god. It is also likely that it will register strange events that are due to normal, but undetected, agents as being caused by god.

However, it is much harder to argue that P_{BP} is not reliable at producing B2-type beliefs. For, even if B1-type beliefs are not reliably produced by P_{BP} , some sort of god may exist and cause at least some of the strange events that the agent experiences. It might seem, then, that we don't have a good argument for P2 regarding this process, because in order to show that this process is unreliable we would, it seems, need to show that it yields false beliefs about whether God exists. But, we couldn't judge that issue using CSR; we would have to go back and evaluate all the standard arguments for and against the existence of God and other religious entities. But, then, the results of CSR wouldn't pose any special threat to the reasonability of religious belief. A threat would only be posed if *we already had* independent evidence against God and other religious entities. In response to an argument that is related to the argument schema I have been developing in this section, Barrett makes the same point:

“To be able to call genuinely religious beliefs “illusions” we need to be able to demonstrate that they too, upon further examination, are in error. However, this task is not aided by the evolutionary or cognitive sciences of religion. To determine that a theistic belief amounts to an “illusion” requires a metaphysical commitment. To call theism “cognitive illusion” is a premise and not a conclusion of this argument” (Barrett 2007b).

Although this point *seems* to present a problem for attempts to argue that P_{BP} is unreliable, I don't think it presents a genuine problem. There are two reasons why we can still argue that P_{BP} is unreliable for B2-type beliefs. First, even if some sort of god causes some of the strange events people experience, in order for P_{BP} to be reliable it would have to reliably produce the correct belief about which god actually causes these strange events. Since lots of gods are possible candidates in virtue of their concepts being minimally counterintuitive, and many gods are in fact appealed to by different people, the process by which a particular god is selected seems to be especially unreliable. Even if what I have just argued is correct, however, it would not show that P_{BP} is unreliable for the output belief that some god exists. This rather general religious belief would thus far escape criticism. As Clark and Barrett suggest, “while the god-faculty alone (in ordinary circumstances unprompted by God) may be unreliable in securing belief in Yahweh and Yahweh alone, it may be reliable in

¹⁵ The word ‘god’ is here used in Barrett’s looser sense, as described on the top of p. 5. It is so used whenever ‘god’ is lower-case.

producing belief in a divinity.”¹⁶ However, my second argument will show that even this belief is unreliably formed.

Here is my second argument that we can still argue that P_{BP} is unreliable for B2-type beliefs: on the by-product theory, if there were no gods and we still possessed all the features required for using P_{BP} , there would still be strange events that HADD would chalk up to the activity of gods. So, whether or not gods exist, on the by-product theory, using P_{BP} , we would believe in gods. A process with this feature is not reliable. Such a process is simply insensitive to the existence of gods. As William Alston points out, “reliability is not a matter of actual track record but rather is a ‘propensity’ or ‘dispositional’ notion,” and “the applicability of a dispositional term depends on whether the appropriate manifestations *would* result from the satisfaction of the relevant antecedent conditions in a suitable range of cases” (Alston 1995). Surely the range of cases that matter includes cases where everything in the environment is held constant, particularly the believer’s existence and the fact that the believer uses the same belief-forming method, except the existence of the thing purportedly detected (and whatever causally results from this change). For example, for perception to be reliable, it must be the case that when a certain physical object is not present in normal circumstances, for the most part, one will not believe that the object is present via perception. Contrary to perception, if the target belief of P_{BP} —i.e. some god exists—were false because no gods exist, one would still believe that a god exists.

Anselmian forms of monotheism that understand God not only to be the creator of the universe, but also to necessarily exist, pose an interesting challenge to this argument. On such views, the proposition,

(NG1) if God did not exist and we were to form beliefs about gods using P_{BP} , there would still be strange events that HADD would chalk up to the activity of gods,

has a necessarily false antecedent, and, on the standard model, counterfactuals with necessarily false antecedents are trivially true. But, then, the proposition,

(NG2) if God did not exist and we were to form beliefs about gods using P_{BP} , there would not be strange events that HADD would chalk up to the activity of gods,

would also be trivially true, and so my above argument would fail, as that argument requires that NG1 be true while NG2 is false.

However, several philosophers have argued against the standard treatment of counterfactuals with impossible antecedents—so called ‘counterpossibles.’¹⁷ Philosophy often involves deciding whether to accept or reject a necessary proposition (i.e. a proposition that, if true, is necessarily true and if false, is necessarily false), and arguments are given for and against accepting it that rely on drawing out the consequences of each position. For example, most think that the correct moral principle is necessary. But, in arguing for and against various moral theories, we look at what actions would

¹⁶ Clark and Barrett (2010), p. 187.

¹⁷ See, e.g. Zagzebski (1990) and Nolan (1997).

be right if each of the theories were true; we do this for each of the theories even though we full well believe that all of them but one are necessarily false. The same thing happens in metaphysics regarding material constitution, the nature of time, and causation, in epistemology regarding the nature of knowledge and justification, and in philosophy of religion regarding God's attributes (to take just a few examples). If our practices in these areas are legitimate—and it certainly seems that they are—then counterpossibles are not trivially true, and so the challenge posed to my argument by the notion of a necessary God fails.

According to another common theistic view, all contingent things necessarily depend upon God for their existence. If this view were true, then once again, but in a different way than before, the antecedent of NG1 and NG2 would be necessarily false. But, again, this should not pose a challenge to my defense of NG1 for the same reasons just given. But, there is another reason why such a view should not pose a challenge to NG1. The fact (if it is a fact) that we depend upon God for our existence is irrelevant to assessing whether our belief that God exists is reliable. This can be shown through a simple example. Suppose Jones believes that there is beer in his refrigerator because of wishful thinking. Furthermore, suppose there is beer in his refrigerator. Now, suppose also that the six-pack of beer in his refrigerator is sitting on a button and, if the button were not pressed, it would cause Jones to be instantly annihilated. Jones's belief that there is beer in his refrigerator is plainly unreliably formed and the reliability of using wishful thinking to believe that there is beer in his refrigerator simply does not depend on the fact that Jones's existence depends upon the presence of beer in his refrigerator. We should ignore such dependence in assessing the reliability of his belief-forming process. We do this by asking what he would believe on the basis of wishful thinking if there were no beer in his refrigerator *and he still existed and used wishful thinking to form a belief about whether there is beer in his refrigerator*. To answer this question we have to imagine scenarios where Jones's existence does not depend on the presence of beer in his refrigerator. Similarly, we should ignore the fact (if it is a fact) that we depend upon God for our existence when assessing the reliability of P_{BP} in forming a belief that some god exists. We do this by asking what we would believe on the basis of P_{BP} if there were no gods *and we still existed and used P_{BP} to form a belief about whether there are any gods*. Thus, we must consider whether NG1 or NG2 is true and, for the reasons given above, NG1 seems plainly true while NG2 is false.^{18, 19}

There is a worry about whether the test for reliability that I have used is a generally good test.²⁰ My argument has been that

(SG) If there were no gods and we were to form beliefs about gods using process P, we would still believe, via P, that some kind of god exists

¹⁸ After writing this argument I came across Murray (2009) essay, "Scientific Explanations of Religion and the Justification of Religious Belief," in which he uses the fact that he believes that we depend upon God for our existence to escape an argument that bears some resemblances to my CSR Unreliability Argument. For the reasons I have given, I think Murray's move fails.

¹⁹ Thanks to T. J. Mawson and Richard Swinburne for very helpful discussions on this point.

²⁰ Thanks to Andrew Moon for drawing my attention to this worry.

is true for the belief forming and sustaining processes described by the by-product theory, and that the truth of SG shows that the belief forming and sustaining processes described by the theory is unreliable regarding beliefs about the existence of some kind of god. But, this kind of test for reliability seems plainly unsatisfactory when used to judge whether certain inductive belief-forming processes are reliable. Here's an example of Jonathan Vogel's that supports this point:

“Suppose two policemen confront a mugger, who is standing some distance away with a drawn gun. One of the officers, a rookie, attempts to disarm the mugger by shooting a bullet down the barrel of the mugger's gun. (I assume that the chances of doing this are virtually nil). Imagine that the rookie's veteran partner knows what the rookie is trying to do. The veteran sees him fire, but is screened from seeing the result. Aware that his partner is trying something that is all but impossible, the veteran thinks (correctly as it turns out): the rookie missed.”²¹

It seems clear that the veteran is using a reliable belief-forming process (i.e. induction using how unlikely the event is given evidence about the past) and that his belief that the rookie missed is justified, however the following claim is true:

(SR) If the rookie hadn't missed and the veteran formed a belief about whether the rookie missed using induction with the same background knowledge, the veteran would have believed that the rookie missed.

The test for reliability that I have proposed would conclude from SR that induction with the background knowledge in this case is unreliable. But, this is plainly the wrong result.

Although I think Vogel's example shows that my test gives the wrong result in this case, and in cases that use similar kinds of inductive inferences, I don't think these examples cause a serious problem with using the test for the CSR belief-forming processes. First, CSR belief-forming processes are supposed to be basic belief-forming processes (not inferential), and the test seems to work well for basic belief-forming process (such as perception). Second, even if we give up on using the test I have used, it seems likely that whatever test we replace it with will still give the result that the CSR belief-forming and sustaining processes are unreliable because there is the following big difference between Vogel's case and P_{BP}, for example: the veteran has a good inductive argument that the rookie will miss, but the fact that there are some strange events is not a very good inductive argument that there is a god that caused those strange events. Whatever fix we make to the test will be designed to allow good inductive arguments and disallow bad inductive arguments, so whatever fix we make should still have the result that P_{BP} and the other CSR belief-forming and sustaining processes I have discussed do not pass the test for reliability.

Even if this move succeeds, there is another, more persuasive, reason for doubting that the reliability test used by the CSR Unreliability Arguments is a good test. In the next section I present this reason and, in responding to it, construct a new argument that CSR renders religious beliefs unjustified.

²¹ Vogel (1987, p. 212).

A problem for the CSR unreliability arguments, leading to the development of the CSR process defeater argument

The arguments I have given for P2 assume that if SG is true of a process P delivering judgment p, then P is unreliable with respect to p. But, there are cases (aside from induction, discussed at the end of Section “The CSR unreliability arguments”) that indicate that this principle is not generally true. Consider a calculator. If ‘ $1500+1500=3000$ ’ were false, the calculator would still say that $1500+1500=3000$ because it operates according to mathematical principles that we think are true. If those principles were false (as they would have to be if ‘ $1500+1500=3000$ ’ were false), the calculator would still give results that follow from the principles we have built it to follow. Perhaps the mathematical principles we have built the calculator to follow are necessarily true, and so the above conditional is counterpossible, but as I have argued before there are non-trivially true counterpossibles, so this should provide no challenge to applying the reliability test. The calculator thus fails the reliability test I have been using. But, calculators are reliable. So, the test is mistaken. Consider a handheld device that tells you the locations of the planets and various nebulae and galaxies that operates by simply having the coordinates of these things pre-loaded, along with their velocities other laws of nature to track how they change their location over time. This device is reliable. But, it fails the test I’ve been using because if Mars were at a different location than it now is, the device would not get the right result because it would be operating in accord with information and laws that would then be false.

The calculator and astronomical device are reliable because they’ve been designed by people who know that the principles these devices are designed to follow are true. But, then, for the same reasons, if the belief-forming mechanisms posited by the CSR theories were put there by God to generate belief in a divinity of some kind, it would seem that those mechanisms would be reliable. Thus, not only does the reliability test I have been using fail, it seems that we can’t show that the CSR belief-forming processes are unreliable unless we can show that there are no gods. But, then, the results of CSR wouldn’t pose any special threat to the reasonability of religious belief. A threat would only be posed if *we already had* independent evidence against God and other religious entities. This reply to the CSR Unreliability Argument, considered and rejected above (pp. 11–12), is revitalized in light of the calculator and astronomical device examples.

But, what should we believe when we first come across a device that is programmed to deliver certain judgments about the world? Suppose, to play on Paley for a moment, that one day, hiking in the forest, you stumble across a device that seems to indicate the locations of various planets, nebulae, and galaxies. You investigate the device and discover that it is built with putative information about the locations of these things at a certain time in the past, and then calculates their present location by applying various functions to that information. The device does not send out or receive signals from the planets to determine their positions. Should you trust this device? It seems not. You should suspend judgment about whether this device is reliable until you can somehow confirm its reliability. If it gives the right result for the next week, as determined by independent observation, then maybe you should start to trust it. If you take it to an astronomer, who confirms the accuracy of the design, then you should trust it.

If you've heard of other such devices on the market that people regularly purchase and use, and the device does not seem damaged, then you should probably trust it. But, without independent evidence of one kind or another that the device is reliable, you should suspend judgment on its reliability.

Similarly, if we are structured in such a way that in the course of life, in pretty much any environment on earth, humans are highly disposed, and very often form, belief in gods as a result of cognitive processes that we are built with (or evolutionary pressures, or some combination of the two)—as CSR theories suppose—then, we should suspend judgment about whether those processes are reliable until we can obtain independent evidence for their reliability. But, the CSR theories are supposed to describe our religious belief forming and sustaining processes, so, if they're correct, we don't rely on any independent information for our religious beliefs. So, we should suspend judgment about whether these processes are reliable regarding belief in gods. Furthermore, if we should suspend judgment about whether the belief-forming process we use is reliable with respect to *p*, we should suspend judgment about *p*. Thus, we should suspend judgment about whether there are any gods, once we learn about the CSR theories (assuming we have evidence for at least one of them, which, again, I am granting for the sake of argument).

Does it make a difference that the astronomical device is external to our mind whereas CSR mechanisms are, to various degrees, internal to our minds? Well, suppose we found ourselves with a belief that there are aliens on Mars and that we discovered that this belief forms as a by-product of our innate cognitive mechanisms operating in our native environment. Should we, after making this discovery, believe that there are aliens on Mars? It doesn't seem like it. It seems that we should suspend judgment about whether there are aliens on Mars. If we received some evidence that there are aliens on Mars, then maybe we would be justified in believing that there are aliens on Mars, and maybe we'd be justified in believing that they built us to believe in them, but not until we had some independent evidence.

It's important to note that my argument does not assume or entail that we need positive evidence of the reliability of our faculties prior to being justified in using those faculties. Such an assumption would seem to lead straight to global skepticism.²² My argument rather entails that if we have good evidence that our belief-forming mechanisms for *p* are structured in such a way that if *p* were false, our mechanisms would still generate belief that *p* (and the mechanism is not the use of an inductive argument—this exception must be made for the reasons given at the end of Section “The CSR unreliability arguments”), then we should suspend judgment about the reliability of those mechanisms with respect to *p* in the absence of independent evidence for the reliability of those processes. This is quite compatible with thinking that beliefs formed from our innate cognitive mechanisms are “innocent until proven guilty,” *prima facie* justified, as well as with forms of epistemic and phenomenal conservatism. On any of these views, belief in a god could be *prima facie* justified. My argument allows for that. My argument entails only that learning that one's belief-forming mechanisms for *p* are

²² See Bergmann (2004) for an argument for this claim.

structured in a certain way provides a defeater for whatever prima facie justification one might have had for p.

I grant, then, that the calculator and astronomical device examples undermine the CSR Unreliability Arguments by falsifying the principle about reliability used to support P2. However, discussion of those examples has generated a new argument for the same conclusion, which I summarize here:

CSR process defeater argument

- PD1: If theory T is true, then religious beliefs are produced and sustained by process P, which is a basic belief-forming process.
- PD2: Process P has the following feature: if religious beliefs were not true (i.e. no god existed), then P would still produce religious beliefs.
- PD3: If the process by which a belief p is formed and sustained is structured in such a way that if p were false, the process would still generate belief that p (and the process is not an inductive argument), then we should suspend judgment about the reliability of that process with respect to p in the absence of independent evidence for the reliability of the process.
- PD4: If we should suspend judgment about whether the belief-forming process we use is reliable with respect to p, we should suspend judgment about p.
- PD5: If we should suspend judgment about p, then we are not justified in believing p.
- PD6: There is no independent process to validate the reliability of P (from P1).

- C: If theory T is true, then our religious beliefs are not justified.²³

PD1 is equivalent to P1. PD2 has been defended above in the context of a defense of P2. Although P2 was rejected, PD2 remains true. PD3 was defended by the calculator and astronomical device examples. PD4 is an immensely plausible epistemic principle. PD5 is also very plausible, especially since I am understanding the ‘should’ in the antecedent as an epistemic ought. One can’t be justified in both believing and suspending judgment in p at once. At most one of those attitudes is justified. PD6 was argued to follow from PD1.

The CSR Process Defeater Argument seems to provide a strong case that the CSR theories (provided there is evidence for them, which again I have granted for the sake of argument) show that religious belief is not justified. However, as strong as this case seems to be, I believe there is a flaw in the argument. In the following section I identify the flaw.

²³ This argument only applies to the by-product theory and the exaptation theory. The religious belief forming and sustaining process at the heart of the adaptation theory seems rather to have the following feature: if there were no gods, then we might or might not still believe in gods via P. Examples similar to the astronomical device example can show that we should suspend judgment about the reliability of such a process in the absence of independent evidence for its reliability. PD2 and PD3 thus have to be slightly altered in order to apply to the adaptation theory, but for the reasons just given, this is easily done.

A chink in the armor—taking a closer look at the religious belief-forming and sustaining process

I will begin this section by considering what I think is a failed attempt to argue that the findings of CSR do not show religious belief to be unjustified. Seeing how this argument fails will reveal an important insight that helps us to see how the CSR Process Defeater Argument fails.

It is tempting to argue as follows that the three CSR theories do not show religious belief to be unjustified: the theories tell us the genesis of religious beliefs, and the genesis of a belief is irrelevant to its justification. After all, some scientific theories have odd origins (the idea for the shape of benzene is said to have originated in a hallucination), but that doesn't at all imply that the theories are unjustified. This argument fails for several reasons. First, all three theories concern not just the genesis of religious beliefs, but the reasons they are continually held.²⁴ If a scientific theory were still held on the grounds that a hallucination presented the idea, that theory would be unjustified. Plainly the reasons a belief is currently held are relevant to its justification. Second, suppose a belief is produced by an unreliable process that uses poor evidence²⁵, but later on the believer continues to hold the belief in virtue of memory even though he does not remember what originally produced the belief. The fact that the genesis of the belief is an unreliable process that makes use of poor evidence renders the belief unjustified when it is first held.²⁶ So, the genesis of a belief can matter for its justification, contra the argument in question. In addition, later on, when the agent continues to hold the belief because of memory, but does not remember his original grounds for the belief, he arguably is justified (despite the original belief being unjustified) either because memory is generally reliable or because memorial experience provides evidence.²⁷ However, if he were to find out that his belief was produced by an unreliable process without good evidence (say, he finds the event recorded in his diary) and he has no other reasons for holding the belief, then his belief would cease to be justified. So, yet again, the genesis of a belief can matter for whether the belief is justified.

Now, of course, the genesis of the belief doesn't always matter for its justificatory status. Suppose I come to believe a certain proposition because of a dream or what an oracle says, but I then later come to have good evidence for the claim. At the later time I am propositionally justified in believing the proposition in question (on an internalist story, because I have good evidence, and on a simple externalist story, because my belief would be reliably formed if it were based on the evidence). If I believe the proposition at the later time because of the evidence, I am then also doxastically

²⁴ Wilson's theory considered alone only concerns why it is currently held, not why it arose in the first place.

²⁵ I include both so that I can run the argument for both internalists and externalists about justification.

²⁶ Given the way I have set up the case, both internalists and externalists will agree about this.

²⁷ See [Conee and Feldman \(2001\)](#) and [Feldman \(1988\)](#) for a defense of this view. For a critique, see [Meeker \(2004\)](#). It is worth noting that if I am wrong, and later on when he doesn't remember why he holds the belief he still is not justified because of the way that the belief was formed, then the argument in question still fails. It would fail because then the genesis of a belief would matter for justification later on even if we forgot about how the belief originated. So, my claim that the argument fails doesn't depend on whether my way of treating situations where you forget the original grounds for your belief is correct.

justified because my belief is *based on* the good reasons that I have.²⁸ One can be propositionally justified in believing a proposition without being doxastically justified in believing the proposition. This happens when one has good reasons for believing the proposition but one does not base one's belief on those good reasons.

The observations made in the previous paragraph provide the tools for undermining the CSR Process Defeater Argument. The distinction between propositional and doxastic justification demonstrates an important limitation of those arguments. At best, the CSR Process Defeater Argument can show that we are not doxastically justified in holding our religious beliefs; they are simply unable to show that we are not propositionally justified in holding our religious beliefs. The CSR Process Defeater Argument draws on information presented by the CSR theories about how people's religious beliefs are formed and sustained. Even if it can be shown (as the CSR Process Defeater Argument attempts to show) that the processes by which religious beliefs are *actually* formed and sustained are such that we should suspend judgment about their reliability, it does not follow that we lack evidence that in fact supports some religious beliefs (although it would follow that if we had such evidence we wouldn't base our belief on it). No matter how messed-up was the process that we used to form a belief, it simply does not follow that we don't have other reasons that we could have rationally based our belief on.²⁹

So, the CSR Process Defeater Argument cannot establish that we are not propositionally justified in holding religious beliefs. Nevertheless, the argument would still have a powerful skeptical result if it could establish that our religious beliefs are not doxastically justified. For, it would follow that we should suspend judgment about our religious beliefs and look for better reasons to believe. I think, however, that the arguments fail to establish even this. The main reason why is that the three CSR theories describe the belief-forming processes that people use to form religious beliefs in an unrealistically general way.

Consider the kinds of reasons people cite in favor of their religious beliefs. Let's take Christianity to get a concrete example. People believe because: they think the Bible is reliable, they think they have witnessed, or know others who claim to have witnessed certain miracles, certain prayers get answered, their life has been changed for the better since believing, the world seems so carefully designed, they've had or know of others who claim to have had religious experience of various kinds, and it is hard to explain all the evidence we have about early Christianity if Jesus wasn't raised from the dead. Of course, I am not claiming that all Christians believe for these reasons. Some may believe simply because their parents have told them and encouraged them to believe. But, these reasons are offered by many average people over the course of conversation. Believers in other kinds of religions have their own reasons that tend to get put forward as well.

²⁸ Feldman and Conee (1985) call "propositional justification," "justification" simpliciter, and call "doxastic justification," "well-foundedness." Goldman (1976) calls the former, "ex ante" justification and the latter, "ex post" justification.

²⁹ Again, "reasons that we could have rationally based our belief on" can be given either an externalist or an internalist gloss. On (one kind of) an externalist gloss, these reasons would amount to mental states such that, if we based our belief on them, then the process of inferring our belief from those states would be reliable.

These kinds of reasons plainly play a role in the belief forming and sustaining processes that believers actually use. Indeed, these kinds of reasons play an important role in the belief forming and sustaining processes that are described by the three CSR theories. HADD certainly disposes us to look for agents, sometimes even when there aren't agents, and it is appealing to explain various strange events by appeal to gods in virtue of the minimal-counterintuitiveness of god concepts. But, why do believers choose the particular god concept that they do? No doubt, in part, because of the above kinds of reasons. As Barrett writes, "the degree of HADD's sensitivity varies, depending on personal and immediate contexts. By personal contexts, I refer to individual histories and dispositions" (2004, p. 39). One's individual history certainly can include an awareness of such evidence and one's dispositions can include a disposition to rely on such evidence. Social pressure and testimony of elders no doubt plays a role as well, but even when these kinds of factors are dominant, people normally accept the testimony of elders because they think the elders have good reasons. And the good reasons the elders cite include reasons like those mentioned in the previous paragraph.³⁰

What the three theories show is that if we lacked the kinds of reasons described above that people often give in support of religious beliefs, it is likely that we would still have some sort of religious beliefs. But, this fact is insufficient for establishing that peoples' religious beliefs are unjustified. To do that, one would have to show that the processes they *actually* use, which make use of the kinds of reasons described above, are unreliable. But, that can be done only by doing what philosophers do: by assessing the relevant reasons. CSR thus doesn't, by itself, give any reason for thinking that religious beliefs are not doxastically justified. That conclusion can only be obtained by first assessing the reasons people give. Furthermore, let's suppose that a thorough assessment of those reasons shows that they do not support religious beliefs. Well, then, religious belief will have been shown to be unjustified and the findings of CSR about how people actually form their religious beliefs will be superfluous. So, the findings of CSR don't by themselves show religious belief to be unjustified and once we have assessed the reasons that people actually give for their religious beliefs, the findings of CSR won't affect that assessment in any way.

I stated earlier that the scientific evidence seems to support at least one of the three CSR theories. However, since the belief-forming and sustaining processes of many believers makes use, either directly or indirectly (through testimony), of traditional kinds of reasons, at best the evidence indicates that the belief-forming and sustaining mechanisms posited by these theories is *an important part of* people's religious belief-forming and sustaining processes. The evidence does not support the claim that these mechanisms, such as P_{BP}, *constitute the whole of* people's religious belief-forming and sustaining processes.

My objection, then, comes down to this. Either the three CSR theories take into account the kinds of religious reasons many people offer (as described above) in their account of people's belief-forming and sustaining processes, or they don't. If they

³⁰ These kinds of reasons play a role in Wilson's theory as well. They can help to explain the cohesiveness of the community, and how the community upholds its religious identity in the face of intellectual challenges from other religious and nonreligious communities.

don't, then the theories are false, and so even though C (i.e. if theory T is true, then religious beliefs are not justified) is true for each CSR theory, we can't conclude that religious beliefs are not justified, and so the CSR theories pose no threat to the rationality of religious belief. In addition, the inference from PD1 to PD6 would fail because there would be independent methods to evaluate the reliability of people's religious belief-forming processes, namely, evaluating the traditional kind of evidence and arguments. The conclusion C could not be drawn until the evidence and arguments has been examined and found wanting, but that's something philosophy does and once done successfully (if it can be done), CSR adds nothing to the case for C.

If the CSR theories do take into account the kinds of religious argument people have traditionally offered, then PD1 is false because many people's religious belief-forming and sustaining processes would be partially inductive. This is crucial because the principle in PD3 only applies to basic belief-forming processes (again, for reasons given at the end of Section "The CSR unreliability arguments"). In addition, PD2 would be unjustified because it will only be true if people's religious experience, as they in fact are, would have occurred even if God did not exist. But, the only way one could accept this claim is if one already had reason to think that religious experience has no evidential force. For, if religious experience did have evidential force then we would have good reason to reject PD2 because we would have reason to think that those experiences would not have occurred if God did not exist (because we'd have reason to think he caused them), and so if God did not exist, we wouldn't believe that God exists using the same process. So, whether or not the CSR theories account for the kinds of traditional religious reasons people offer, the CSR Process Defeater Argument fails.³¹

It is worth noting that if my objection to the CSR Process Defeater Argument is the only problem with the argument, then it follows that if one is aware of the cognitive science literature, one must either have some sort of traditional religious reasons, or have good testimonial evidence that others have these sorts of reasons and that these reasons are good, in order to be justified in one's religious beliefs.³² Without some such reasons, one would be unjustified in holding one's religious beliefs. Such a person would be one who finds himself believing in God for no apparent reason other than one of the explanations offered by the CSR theories. Note, though, that this consequence is consistent with reformed epistemology, according to which belief in God can be properly basic. As I've mentioned earlier, one might have religious experiences of one sort or another—perhaps something as momentous as a Paul's experience on the road to Damascus, perhaps a more common kind of experience as of God guiding

³¹ It's worth noting that my objection in this section also directly undermines the CSR Unreliability Arguments, for similar reasons.

³² If one isn't aware of the CSR findings and theories, then whether one is justified or not depends upon one's other epistemological views. If you think that readily available information in one's society can defeat one's justification (as, e.g. Meeker (2004) argues), then you might think that even if one isn't aware of CSR, one's religious beliefs aren't justified (again, as long as one lacks other reasons for holding one's religious beliefs). If you accept epistemic conservatism or phenomenal conservatism, then you might think that religious beliefs, along with other beliefs, are justified (perhaps as long as one has an appropriate 'seeming') until one runs across a defeater. For a version of epistemic conservatism, see Harman (2001, 2003), and for a version of phenomenal conservatism, see Huemer (2001).

one's decisions, or as of God's forgiving one for one's sins, or perhaps, as Paul Moser has recently suggested, an experience as of being convicted via conscience of one's wrongdoing and of being invited, by God, into a relationship of perfect love.³³ These experiences may well, all on their own, without additional argumentation (although in the absence of defeaters, of course), justify belief in God. My objection to the CSR Process Defeater Argument does not rule out such a view. And, if such a view were true, then belief in God would be properly basic, or, as Moser puts it in the context of his religious epistemology, "this experienced love, in other words, [would be] a foundational, noninferential ... ground of knowledge of God's reality."³⁴

A cunning rejoinder

Now, one might object to my argument as follows. Don't the findings of CSR describe not only how our religious beliefs are formed and sustained, but also the process that underlies an assessment of the force of the reasons people offer for their religious beliefs? And if so, that process will be very likely biased towards accepting such religious arguments even if the arguments are not in fact good. Perhaps there will be such a bias because if HADD (together with the rest of the story) or group selection will dispose us to accept the existence of gods, then they will also dispose us to accept arguments for the existence of gods in order to simply avoid cognitive dissonance. Thus, the findings of CSR might seem to show that our religious belief forming, sustaining, and religious argument evaluating processes are all unreliable.

This is a challenging objection; however, I don't think it succeeds. The crucial premise:

(CP) If HADD (together with the rest of the story) will dispose us to accept the existence of gods, then it will also dispose us to accept arguments for the existence of gods,

is not sufficiently motivated. As Barrett points out, we can easily cancel a HADD-based judgment that a specific agent A caused event e by taking a closer look at e. If we find evidence that some other agent accounts for e, HADD no longer disposes us to think that A caused e. The initial HADD-based judgment that A caused e does not necessarily infect our ability to investigate other evidence about whether A caused e. Now, since there will always be events that HADD disposes us to attribute to agency and since gods are such an attractive candidate for explaining such events, perhaps we will still be disposed in general to believe in some kind of god or another. Will that disposition affect our ability to assess arguments about the existence of various gods? Not necessarily. We might be perfectly well able to see the problems with supposing certain gods to explain what we see, just as we may well be able to see the virtues that certain religious explanations possess. The disposition to believe in gods might well be exhibited simply as a disposition to believe (or perhaps regarding as some-

³³ See Moser (2008), especially Chaps. 1 and 2, for his view.

³⁴ Moser (2008, p. 131). For an interesting discussion of how to best understand reformed epistemology in light of CSR theories, see Clark and Barrett (2010).

what attractive the idea) that some kind of god explains everything even after we have properly assessed the reasons for specific gods and found them wanting. Whether we *actually* believe may well depend upon how we assess the evidence.

In addition, our ability to assess evidence for a proposition is a more general ability that is employed across a wide range of propositions. Our general evidence-evaluating skills, in virtue of their being supported and developed by our evaluation of other propositions, may thus to some degree counteract a bias in favor of religious explanations. In fact, even if there is a general bias in favor of religious explanations, it does not follow that the bias is active when one is evaluating evidence. Consider the following two cases: Case 1: a father loves his son deeply, his son is accused of raping a girl, there is some evidence for this, but the father firmly believes his son is innocent simply because he loves him. In this case, the father is biased to believe his son is innocent. Case 2: Same father. The father loves his son just as deeply, but now there is substantial evidence that the son is innocent, which the father is aware of, and so the father believes that the son is innocent on the basis of this evidence. In this case, the father doesn't seem at all biased. He is aware of the evidence and evaluates it competently. In some sense he may be biased, perhaps in that if he didn't have such strong evidence he would believe his son was innocent anyway, but that kind of bias does not cause his judgment to be biased in case 2 where he has the evidence of innocence in front of him and he recognizes it as evidence for innocence. So, whether our judgment of the evidence is biased will depend upon the evidence we have, how strong it is, and on our abilities to evaluate the evidence. It is hard to say whether, all things considered, the bias would still be present and substantial. For these two reasons, the crucial premise of this objection, CP, is unjustified and so the objection fails.

One might argue that surely it is possible and likely that at least some people are biased to accept religious arguments simply because of their disposition to believe that God exists. Perhaps so, but it doesn't follow that religious belief in general is unjustified because many people may still be able to evaluate the evidence in an accurate way. It also doesn't follow that the individuals that *are* biased to accept religious arguments are unjustified in their religious beliefs because they may well have good testimonial evidence that others are aware of these arguments and reasons, have evaluated them competently, and find them persuasive. If so, their religious beliefs would be justified. Now, of course, once they find out about people who seem to have competently evaluated the evidence and found it wanting, they may have an epistemic religious crisis, and may be unjustified (I'm officially staying neutral on whether they would). But, if their religious beliefs were unjustified in these circumstances, their religious beliefs would be unjustified because of *religious disagreement*, not because of the findings of CSR.

Conclusion

I have presented and criticized two arguments that the three main theories in CSR show that religious belief is unjustified. The main problem with the arguments is that the belief-forming and sustaining process of many believers makes use of various standard reasons offered in support of religious beliefs, and so it cannot be argued

that the belief-forming process is unreliable or that we should suspend judgment on its reliability—even given the CSR theories’ descriptions of the belief-forming and sustaining process—without previously arguing that these standard reasons are not good reasons. It follows from what I’ve argued that people who do not at all rely, even through testimony, on these reasons (be they epistemically basic or inferential), but who become aware of the CSR findings, will have their belief in God rendered unjustified. But, for the reasons I’ve presented, such a situation is probably rare. Certainly no philosophers or even minimally reflective theists find themselves in this position.

There could be other, more plausible, arguments that make use of the findings of CSR to show that religious belief is unjustified. Barrett (2007b) has considered a couple of other arguments and found them wanting. However, the fact that standard religious arguments play a role in people’s belief-forming and sustaining processes renders any argument that religious belief is irrational based on CSR findings vulnerable to the problem I presented in Section “A chink in the armor—taking a closer look at the religious belief-forming and sustaining process”. Perhaps, then, the only way CSR findings could challenge the rationality of religious belief is if they could show that our religious argument evaluating processes are unreliable. But, this seems unlikely for the reasons mentioned in Section “A cunning rejoinder”. So, not only do the CSR Unreliability Arguments and the CSR Process Defeater Argument fail to establish that religious belief is irrational, but I conclude that CSR findings in general do not show religious belief to be irrational.

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