

## **Milvian Bridges in Science, Religion, and Theology: Debunking Arguments and Cultural Evolution**

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### **1. Introduction**

Religious beliefs are a common target of evolutionary debunking arguments (EDAs). EDAs seek to show that the processes underlying religious beliefs are epistemically unreliable. Religious beliefs turn out unjustified if the processes that produce them are unreliable. By exposing the psychological or evolutionary origins of a belief, one casts doubt upon that belief—or at least this is how EDAs are supposed to work (Kahane 2011). In recent years, many such arguments have invoked the results and theories of cognitive science of religion (CSR). CSR is a multidisciplinary field that seeks to explain why and how humans are so prone to accept various religious beliefs and adopt religious practices, like rituals and prayer. After the field cut its scientific teeth in the early 2000s, a philosophical debate about the religious (and non-religious) implications of its results has also emerged.

It is widely acknowledged that a major obstacle to a successful EDA is the very real possibility of collateral damage. While claiming that certain evolutionary factors undermine beliefs in one domain, such as religion or morality, the argument must avoid the consequence that the same evolutionary factors undermine beliefs in other domains, such as science. Otherwise, the argument is in danger of undermining itself. Alvin Plantinga (2011) has famously argued that naturalism coupled with evolution undermines itself. Naturalism plus evolution

entails full-blown, global skepticism about our cognitive faculties as a whole. After all, if “natural selection does not care about truth,” but “only about reproductive success” (Stich 1990: 62), how can we trust any of our cognitive system to lead us to true beliefs?

The main purpose of our paper is to discuss a recent EDA invoking cultural evolution and develop a response to it. We will begin by recapitulating a well-known EDA by Paul Griffiths and John Wilkins (2013) and a response to it by Jonathan Jong and Aku Visala (2014). According to Griffiths and Wilkins, in order to avoid evolutionary skepticism about beliefs in any given domain, the truth-value of beliefs in that domain must be linked to their reproductive value (as when true beliefs about predators better guard against being eaten than false beliefs). They argue that true commonsense beliefs would have been more beneficial for our ancestors than false beliefs. Scientific beliefs can be likewise vindicated by appealing to commonsense reasoning. The evolutionary success of religious or moral beliefs, however, have nothing to do with their truth-value. Jong and Visala respond that such an EDA confuses the causes of belief with reasons to believe. What is crucial, they maintain, is that a believer has access to evidence for her belief. If commonsense reasoning can help debug our belief-forming process so as to allow for scientific beliefs, a similar debugging can perhaps vindicate religious beliefs as well. It all depends on whether one has evidence to support one’s beliefs.

Taylor Davis (2020) has responded to this by reworking Griffiths and Wilkins’s argument. By appealing to recent work on the cultural evolution of religion, he argues that cultural selection, not genetically inherited cognitive capacities, explains why the selection process of scientific beliefs is truth sensitive while the one for religious beliefs is not. The cultural fitness of scientific beliefs depends—at least partly—on their power to predict, while the cultural fitness of religious beliefs is tied to their ability to produce prosocial behavior. He agrees

with Jong and Visala that reasons and evidence can help salvage religious belief, but notes that few ordinary people can point to good reasons to believe. We will respond to Davis' EDA by building a Milvian Bridge for theistic and core Christian beliefs in the context of cultural evolution.

## **2. The EDA of Griffiths and Wilkins**

Griffiths and Wilkins (2013) have presented a much-discussed argument that seeks to undermine moral and religious beliefs while vindicating commonsense and scientific beliefs. They begin by explaining the logic of evolutionary skepticism. Evolutionary science shows that our cognitive systems are products of natural selection. Since natural selection only cares about survival and reproduction, not truth, this raises the question of whether we can ever achieve knowledge. Moreover, research on cognitive heuristics and biases suggests that in some cases evolution has favored error-prone cognitive systems instead of truth sensitive ones (McKay & Dennett 2009). Given that beliefs are products of evolved cognitive systems, they argue, all beliefs are guilty until proven innocent. They stand in need of vindication against evolutionary skepticism.

Griffiths and Wilkins move on to offer an evolutionary vindication of commonsense beliefs. Since cognitive mechanisms are clearly adaptations, "it is hard to see what the basic evolutionary function of cognition could be other than tracking truth" (Griffiths & Wilkins 2013: 137). Some measure of truth sensitivity is necessary for reproduction and survival. While natural selection may not care about truth *as such*, it cares about truth to the extent it contributes to reproductive success. For instance, truthlike commonsense beliefs about ourselves and middle-sized objects in our environment serve this goal better than false beliefs. However, even here the mind operates under constraints. Brains require a large amount of energy. Evolution has favored

economic solutions so that “an optimally designed cognitive mechanism will represent the world in such a way that the actions resulting from those beliefs have the highest expected value” (Griffiths & Wilkins 2013: 138). Our limited cognition provides us with a view of the world that may not be an exact reprint of reality, but it’s not hopelessly arbitrary either. It helps us to operate successfully in our environment. Without some truth-like beliefs, this seems impossible.

However, not all beliefs have an evolutionary function that is connected to truth in this way. According to Griffiths and Wilkins, “to defeat evolutionary skepticism, true belief must be linked to evolutionary success in such a way that selection will favor organisms which have true beliefs” (Griffiths & Wilkins 2013: 134). In reference to Emperor Constantine’s historical victory in 312 CE (which he attributed to his newfound Christian beliefs), they call this principle a Milvian Bridge:

Milvian Bridge: X facts are related to the evolutionary success of X beliefs in such a way that it is reasonable to accept and act on X beliefs produced by our evolved cognitive faculties. (Griffiths & Wilkins 2013: 134)

Griffiths and Wilkins argue that while commonsense beliefs are directly linked to adaptive behavior, scientific beliefs are linked to it *indirectly*.

The reasons we have to think that our scientific conclusions are correct and that the methods we use to reach them are reliable are simply the data and arguments which scientists give for their conclusions, and for their methodological innovations. Ultimately, *these have to stand up to the same commonsense scrutiny as any other addition to our*

*beliefs*. Thus, if evolution does not undermine our trust in our cognitive faculties, *neither should it undermine our trust in our ability to use those faculties to debug themselves*—to identify their own limitations, as in perceptual illusions or common errors in intuitive reasoning. Nor should it undermine our confidence in adopting new concepts and methods which have not themselves been shaped by the evolution of the mind, but whose introduction can be justified using our evolved cognitive faculties. (Griffiths & Wilkins 2013: 140; italics ours)

Since scientific beliefs can be vindicated in the court of commonsense reasoning, we have reasons to believe they are constrained by reality, and hence truth sensitive. But in the case of religious or moral beliefs, they argue, no Milvian Bridge, direct or indirect, is available. Scientific explanations of the evolution of religion and morality provide us with very little reason to think that natural selection has favored hominids with true religious or moral beliefs over hominids with false beliefs. If religion and morality are adaptive, tracking truths about religious and moral facts is not their function. As an example, Griffiths and Wilkins briefly mention the CSR theory of the *hypersensitive agency detection device*, or HADD. According to this theory, people are hypersensitive to sensory cues of hidden animals or humans in their vicinity (Barrett & Lanman 2008). For our ancestors, detecting predators and prey was a question of life and death, and thus our minds are trigger-happy regarding agency. Like a smoke detector that often goes off even when there is no fire, HADD errs on the side of caution. As a by-product, HADD also sometimes reinforces ideas of undetected or invisible supernatural agents. Justin Barrett, the main architect of the HADD theory, explains how it relates to common religious beliefs:

It might be that HADD rarely generates specific beliefs in ghosts, spirits, and gods by itself, and hence does not serve as the origin of these concepts. Nevertheless, HADD likely plays a critical role in spreading such beliefs and rejuvenating them. Christians devoted to their faith often refer to answered prayer, special communications, and other events they attribute to God’s activity thanks to HADD at work. (Barrett 2009: 88)

According to Griffiths and Wilkins, if the HADD theory is true, “people believe in supernatural agents which do not exist for the same reason that birds sometimes mistake harmless birds passing overhead for raptors” (Griffiths & Wilkins 2013: 142–143). While there is now some evidence against the HADD theory (Maij, Schie & van Elk 2019), Griffiths and Wilkins’ debunking argument does not depend on it. Their point is that whatever naturalistic explanation we offer for religion, there is no reason to think that evolution would have favored cognitive mechanisms that produce true religious beliefs. Thus, religious belief is debunked.

### **3. An Internalist Response to EDAs**

In their response to Griffiths and Wilkins’ EDA, Jong and Visala (2014) argue that the debunkers have not provided sufficient reasons to rule out the possibility of an indirect Milvian Bridge for religious beliefs. If scientific beliefs can be—at least in principle—vindicated by common sense, evolutionary and cognitive considerations do not rule out the parallel possibility of religious beliefs vindicated by theology, history and philosophy.

First, Jong and Visala provide some critical epistemological considerations about the role of evidence in debunking arguments. They argue that EDAs tend to confuse the causes of belief with reasons to believe, and the *context of discovery* with the *context of justification*. They

recapitulate the well-known historical story about the chemist August Kekulé who discovered the ring structure of the benzene molecule. Kekulé came up with the theory after having a dream where a snake caught itself by the tail (context of discovery). Experiments eventually confirmed his theory was correct (context of justification). Now, no one thinks dreams serve as evidence in science. But neither do they provide evidence against any scientific theory. Rather, they are epistemically irrelevant.

Jong and Visala draw a lesson from this tale: how beliefs are originally brought about is of secondary importance. Here, it is important to note that not all genealogies are epistemically irrelevant: knowledge of the genealogy of a belief might also function as evidence for or against that belief. From an internalist point of view, what matters is whether one has sufficient evidence overall for one's beliefs, scientific or religious. This evidence might include the genealogy as well. But if one lacks evidence to support a belief, "EDAs do not seem to be any better than simply asking S to provide reasons for her belief that p, and when she fails to do so, pointing out that her belief is not justified" (Jong & Visala 2014: 250). To apply this lesson to the example given by Griffiths and Wilkins, the important question regarding justification is not simply whether HADD has been active in generating one's belief in god. Rather, justification depends on the evidence to which the person has access. Beliefs about the untrustworthiness of HADD might very well be a part of the evidence base. However, the evidence base might include other beliefs about the trustworthiness of our experience of agency, historical events, philosophical arguments, scientific results, and so on. Overall, this evidence could be sufficient to justify one's belief in god even while HADD in general might be unreliable.

Jong and Visala go on to argue that commonsense reasoning might help salvage religious belief just as it might vindicate scientific beliefs—at least in principle. Recall that according to

Griffiths and Wilkins, scientific beliefs “have to stand up to the same commonsense scrutiny as any other addition to our beliefs.” But since “evolution does not undermine our trust in our cognitive faculties, neither should it undermine our trust in our ability to use those faculties to debug themselves.” Jong and Visala comment as follows:

Now, if this is all that it takes to provide an indirect Milvian Bridge, one wonders why such a bridge could not be constructed for other kinds of beliefs, say, moral or religious beliefs. In response regarding religious beliefs, Griffiths and Wilkins state, quite rightly, that “none of the leading accounts of the evolution of religious beliefs makes any reference to the truth or falsity of those beliefs when explaining their effects on reproductive fitness.” But of course, the same can be said for our scientific beliefs, and as in the case of scientific beliefs, this simply rules out a *direct* Milvian Bridge, not an indirect one. It seems that if scientific beliefs can be saved from evolutionary debunking by resorting to the role commonsense beliefs (and the relevant cognitive faculties) in “debugging” them, at least some forms of religious reasoning can be saved as well. After all, it is not as though philosophical arguments about theism and atheism are based on radically different cognitive faculties than the ones that are meant to debug our beliefs, scientific, metaphysical, or otherwise. Indeed, the leading accounts of the evolution of religious beliefs explicitly assert that religious beliefs are based on normal cognition. (Jong & Visala 2014: 253)

It is important to be clear about the conclusion of Jong and Visala’s argument. They do not claim that religious beliefs are *in fact* justified by reflective reasoning and evidence. Instead, their



conclusion is that EDA's are powerless against religious beliefs if they have such support. Invoking scientific evidence for the biased nature of our cognitive systems does nothing to rule out the possibility of reflective "debugging" of religious ideas. Whether a rational, reflective case for some set of religious beliefs is available cannot be decided on the grounds of the cognitive and evolutionary study of religion. It is a task more suited to philosophy of religion, religious studies, and history. So, there seems to be nothing in the cognitive and evolutionary study of religion that clearly rules out the possibility of an indirect Milvian Bridge for religious beliefs.<sup>1</sup>

As we will soon see in detail, the critic of religion can push the argument further and ask: even if we grant that there is a decent evidential case for some religious beliefs (say, a set of philosophical arguments for God's existence and historical evidence for the resurrection of Jesus), the epistemic problem has not gone away. If the cognitive and evolutionary study of religion shows anything, it shows that most religious believers do not adopt their beliefs on reflective, evidential grounds. Rather, their beliefs are due to social learning. In most cases, they lack the access and interest even to acquire evidence for them. So, despite the very real possibility of an indirect Milvian Bridge, most religious people are *de facto* unjustified in their beliefs.

#### **4. Context Biases and Cultural Evolution: Milvian Bridge Reconstructed**

Since its inception in 1990, CSR scholarship has mostly focused on religious beliefs as evolutionary by-products of genetically inherited cognitive mechanisms. On the cognitive level, the human mind has been seen as biased toward the content of religious ideas. During the 2010s the focus shifted somewhat from genetic evolution to cultural evolution, and from content biases to context biases. This shift has not been reflected in the debate about EDAs until recently.

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<sup>1</sup> Joshua Thurow (2014) has also argued for a similar conclusion.

Taylor Davis (2020) has defended a more up-to-date version of Griffiths and Wilkins' argument. His basic complaint against their argument, as well as against the field of CSR in general, is that both put too much emphasis on the pan-human cognitive biases regarding the *content* of religious ideas. "Classical" CSR focused on individual agents and their cognitive systems (such as HADD), and on the curious features of religious ideas (such as their minimal counterintuitiveness). These were taken to explain why religious beliefs are widespread. However, religion is much more than widespread ideas. Already twenty years ago, Scott Atran (2002: 14) pointed out that by simply explaining the prevalence of religious ideas one has not explained why people so willingly commit to such ideas, form groups around them, engage in intense rituals, and so on. According to Davis, content bias theories are successful only in identifying "various genetically inherited cognitive capacities that are involved in forming theistic belief," but "it is a separate question whether these capacities actually *bias* individual minds toward such beliefs, as opposed to merely being *recruited* by cultural beliefs that require them" (Davis 2020: 197).

*Context biases* (or *model-based learning biases*) help answer questions such as why people devote themselves to the worship of gods instead of just believing such agents exist, and why they believe in particular gods while rejecting others (Gervais et al. 2011). For instance, conformity bias expresses itself so that we adopt beliefs and behaviors held not only by a few but by several people. Because of prestige bias, we favor beliefs and behaviors held by older, skilled, and successful people. We do not follow the example of others blindly, however. We also look for credibility enhancing displays (CREDs), that is, special actions, such as participation in costly religious rituals, that signal the sincerity of one's religious commitments (Henrich 2009). People who signal their devotion with CREDs seem trustworthy.

In explaining religion, the theoretical shift in the level of cognition is linked to a change on the level of evolutionary mechanism. Context biases play an important role in the so-called big gods account of the cultural evolution of religion. According to Ara Norenzayan et al. (2016), a shared belief in moralizing, punitive deities who monitor people's behavior gave rise to large-scale cooperation some twelve thousand years ago. Large-scale cooperation depends on prosocial behavior where people, despite being anonymous to one another, work together and hold back from exploiting the fruits of cooperation to their personal advantage. The emergence of large-scale cooperation has puzzled evolutionary theorists, since cooperation is constantly threatened by free riding, which is beneficial for the individual but detrimental for the group. According to Norenzayan et al, the fear of divine punishment solved the problem. Once belief in big gods spreads via social learning powered by context biases, everyone comes to believe that free riders will suffer divine punishment.<sup>2</sup> CREDS are especially important, since they help people trust each other as reliable cooperators. The function of religion, therefore, is to maintain prosocial behavior. And groups that cooperate effectively tend to outcompete other groups. Religion spreads because of the cultural selection of belief in big gods. Gods are not necessary, however: belief in karma can likewise foster prosocial behavior (White & Norenzayan 2019).

Davis builds his EDA on this account. Recall that, according to Griffiths and Wilkins, beliefs are truth sensitive only if their adaptive value is linked to their truth value. Davis agrees but denies that adaptive value should be defined in terms of benefit to individuals. The crucial question is why and how religious and scientific beliefs benefit groups. Belief and commitment to big gods provide a benefit to the whole group via enhancing the prosocial behavior of its individual members. Shared beliefs in moralizing deities foster cooperation and trust as well as

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<sup>2</sup> When it comes to explaining belief in supernatural agency, Norenzayan et al (2016) do not exclude the role of content biases. However, in their account context biases do more explanatory work.

preserve the group's resources. This evolutionary function clearly does not depend on religious beliefs being true. Science, however, is beneficial only if it is truth sensitive:

[T]he *cultural* fitness values of scientific beliefs *do* depend upon their truth values; scientific norms and methods ensure that false scientific theories are eventually rejected, and the empirical predictions of science getting increasingly more precise and accurate over time. Consequently, we observe convergence in science in a way that we do not in religion. Children in both India and the United States are taught that the earth revolves around the sun, and they are not taught that phlogiston is released in combustion. It is because of selection acting on cultural traits, not genetic traits, that a Milvian Bridge can be constructed for scientific beliefs but not religious beliefs. Religious beliefs are culturally inherited traits that have been selected for in virtue of their ability to promote prosocial behavior, regardless of whether they are true or false. By contrast, scientific beliefs are culturally inherited traits that have been selected for in virtue of their ability to produce true, accurate predictions. (Davis 2020: 206)

In the reconstructed Milvian Bridge, the process of belief selection is moved from the individual level to the group level. Now, Davis also agrees with Jong and Visala's (2014) response to Griffiths and Wilkins in that commonsense reasoning can perhaps "debug" the belief-forming process in the case of religious beliefs as in the case of scientific beliefs. Reasons and evidence may help one's belief-forming process to move beyond the constraints of cultural evolution. Davis points out, however, that few ordinary believers are aware of reasons or evidence for God.

Perhaps one could respond by saying that very few people are able to present evidence for the scientific beliefs they hold. Perhaps most of us believe in climate change because journalists and scientists say it's true (prestige bias) and almost everyone else seems to believe it as well (conformity bias). If context biases influence the adoption of religious and scientific beliefs, are not both domains epistemically in the same boat? No, says Davis, pointing to an important difference between science and religion:

[T]he particular beliefs [religious people] acquire tend to be the products of long histories of cultural selection for prosocial behavior, not truth. This is why beliefs about karma are much more common in India than in the United States, while Christian beliefs are much more common in the United States than in India. For I take it that commonsense, in this context, is something that people in both countries possess in equal measure. If so, and if the court of commonsense actually did play a role in determining which beliefs individuals possess, then we should observe a convergence across cultures that is independent from the history of cultural transmission. That is, assuming that Christian beliefs are true, we should observe that people in Europe and people in the Philippines converged upon Christian beliefs in a manner that was independent of cultural contact. Instead, what we observe is that Christianity became popular in the Philippines soon after Spanish colonization. And for the same reason, the convergence we observe in India is toward karmic beliefs, not Christian beliefs. Indeed, religion is infamous for being a domain in which reason and argument fail to produce convergence across cultures. And this points to an important difference between scientific and religious beliefs that both Jong and Visala and Wilkins and Griffiths overlook. (Davis 2020: 206)

The cross-cultural convergence of scientific beliefs is evidence that the cultural process via which they are selected is truth sensitive. The selection of religious beliefs, however, is sensitive to their ability to produce prosociality. Thus, Indians believe in karma while Americans believe in a big god. Most religious people are therefore unjustified in their belief, but not because it is produced by unreliable cognitive mechanisms such as HADD. Rather, the cultural process underlying religion is not sensitive to truth.

## **5. Expert Beliefs in Science and Religion**

In his article, Davis touches on many other issues as well and may not be attempting to offer a robust EDA against religion. However, we think his points deserve closer scrutiny. The following argument can be reconstructed on the basis of his discussions:

1. Cross-cultural divergence is good evidence that beliefs in a given domain have been favored by cultural selection in virtue of other factors except their truth sensitivity.
2. There is cross-cultural divergence regarding religious beliefs such as karma and big gods.
3. There is good evidence that religious beliefs about karma and big gods have been favored by cultural selection in virtue of other factors except their truth sensitivity.  
(From 1–2)
4. Religious beliefs about karma and big gods have been favored by cultural selection in virtue of their ability to produce prosocial behavior.

5. Beliefs that are favored by cultural selection in virtue of other factors than their truth sensitivity are not justified (unless one has independent evidence of their truth).
6. Therefore, religious beliefs in karma and big gods are not justified (unless one has independent evidence of their truth). (From 3–5)

We will divide our response into two parts. What makes Davis' argument stronger than that of Griffiths and Wilkins's is not only that it is scientifically up-to-date. It is also able to appeal to an uncontroversial fact (cross-cultural religious divergence) as evidence that religious beliefs are not truth sensitive.<sup>3</sup> In the first part, we will argue that Davis makes an unfair comparison between expert scientific beliefs and folk religious beliefs. We then compare the theistic and Christian beliefs of theologians to other expert beliefs of scholars working in academia. We argue that the difference between the convergence of theological beliefs and of other academic beliefs is more a matter of degree than of kind. After defending theology as a possibly truth sensitive cultural project, we argue that the epistemic fruits of commonsense reasoning (i.e., justification) cultivated at the expert level trickle down to the folk level. Thus, even when ordinary people are unaware of the evidence or arguments for either their scientific or religious beliefs, they can nevertheless be justified to some extent in holding them.

Like Griffiths and Wilkins, Davis invokes the very general categories of "science" and "religion" and draws a strict dichotomy between how beliefs in each domain are generated. However, in order to think carefully the role that commonsense reasoning plays in these cultural projects, as well as the evidential significance of convergence and divergence, we need to be more specific. For instance, are we talking about expert beliefs or folk beliefs? What do we mean

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<sup>3</sup> We agree with one anonymous reviewer of our paper that religious diversity seems to be doing most of the work in Davis' argument. In fact, Launonen has recently argued that debunking arguments against religion that invoke CSR predominantly rely on something else than the scientific theories they refer to (Launonen 2021).

by “science”: simply the natural sciences or also human sciences? Do all types of supernatural and magical beliefs constitute instances of “religion” or should we focus on a particular religious tradition?

Notice that Davis seems to compare the religious beliefs of ordinary people to the scientific beliefs taught in school. As evidence of the cross-cultural convergence of scientific beliefs he cites the fact that, “[c]hildren in both India and the United States are taught that the earth revolves around the sun, and they are not taught that phlogiston is released in combustion” (Davis 2020: 206). While teachers may not count as scientific experts, the scientific beliefs in question are clearly expert beliefs. But comparing the convergence that exists among the beliefs of natural scientists to the lack of convergence among the beliefs of ordinary religious people is unhelpful. The views of ordinary people are rarely epistemically on par with expert views on any topic. Experts typically study and think hard about their subjects for decades. For this reason, few people would view as highly the religious views of a random person on the street as they would those of the Pope or the Dalai Lama, or the scientific views of a random person as highly as those of an expert scientist. In comparing the level of convergence in different domains, it is therefore helpful to focus either on expert beliefs (as we do in this section) or folk beliefs (as we do on the following section).

Instead of focusing on religion and natural science only, consider the divergence of expert beliefs of various scholars working in academia. Let us call these “academic beliefs.” While expert theologians certainly disagree about a lot of things, even in the natural sciences such as physics there is some disagreement. Divergence increases significantly once we take into account all subjects taught in universities, such as psychology, sociology, history, philosophy, and ethics. Despite divergence between several different schools of thought, the methods applied



in most of these fields are usually viewed as truth sensitive – even if less so than the methods of natural sciences (this is why we differentiate between “hard” and “soft” sciences).<sup>4</sup> Also, it seems that most academic beliefs are not culturally selected “in virtue of their ability to produce true, accurate predictions.” The primary function of explanation in history or ethics, for instance, is not prediction. This also applies to many natural sciences, like evolutionary biology, for that matter. Many philosophers of science acknowledge that the primary purpose of the life sciences, for instance, is not to predict but create explanatory models of various systems (Craver & Darden 2013). Thus, the ability to predict cannot be a necessary criterion for a truth sensitive process. It is also unclear how much convergence we can require from such a process. Now, Davis may point out, while it is true that individual scientists working even in the same University might disagree with one another, what we should expect from a truth sensitive process is *cross-cultural* convergence over time. For example, within the time frame of a hundred years or so, Freudianism became first popular and then unpopular in Europe and in the United States. Darwinism, however, has remained popular all along, and it is rarely rejected for scientific reasons.

Such extensive cross-cultural convergence may indeed be hard to find among expert religious beliefs in general. However, instead of comparing academic beliefs to “religious beliefs,” we will discuss “theistic beliefs” and “core Christian beliefs,” since these are the only types of beliefs we are interested in defending here. Now, there is a good amount of cross-cultural convergence on theistic beliefs, that is, basic beliefs about God. The idea that there is

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<sup>4</sup> Obviously not everyone agrees that ethics and some other non-empirical academic disciplines actually track truth. However, perhaps most readers would view at least some parts of analytic philosophy as generally truth sensitive. Such readers might also allow that believing in God on the basis of philosophical arguments could be justified. Perhaps some of them would also allow that philosophy and history together could give one grounds to believe in the resurrection of Jesus. Nevertheless, we realize that the more skeptical one is regarding the truth sensitivity of various academic disciplines, the less convincing our case for theology as a truth tracking discipline will probably seem to them.

one ultimate reality that is the source of everything else is very common. Many religious traditions have, without having been in contact with one another, produced similar arguments invoking biological and cosmic design as evidence for the supernatural origin of the universe. In the West, these emerge in Greek philosophy and are later refined by Christian, Muslim, and Jewish authors. Hindu philosophers and theologians have developed similar arguments for supernatural design as well as arguments invoking beauty (Brown 2008). Importantly, such arguments are the result of truth sensitive commonsense practices. Theological guilds have applied and continue to apply methods of philosophical reflection, debate, and analysis to religious ideas that are at least analogous to those applied by other academic disciplines.<sup>5</sup> In other words, theology often resembles other academic pursuits to such an extent that it is impossible to debunk it without debunking a host of arts and humanities.

Few theologians, however, would be satisfied with the vindication of theistic beliefs only. Every religion includes more than belief in god. Core Christian beliefs would include beliefs such as that God has revealed himself in the historical person of Jesus Christ who died on the cross and was resurrected from the dead, and that human salvation somehow depends on this event. Of course, Muslim, Jewish, and Hindu theologians reject these claims. Is this divergence evidence that Christian theology is insensitive to truth? Not necessarily. From a theologian's point of view, one problem with Davis' argument (as with Griffiths and Wilkins's) is that he assumes a purely naturalistic framework in explaining how beliefs spread. A Christian theologian, however, first of all thinks that what people come to believe is also dependent on God's providence and grace, on the innate human resistance towards knowing and submitting to the only true God (Rom. 1:21), and so on. In fact, she probably agrees that the vast majority of

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<sup>5</sup> Frankly, we believe much of contemporary theology is nonsensical and some methods used by theologians are hardly truth tracking. However, the type of theology we are primarily defending here is what has come to be known as analytic theology. This field applies the methods of analytic philosophy to theological questions.

religious beliefs in the history of humankind have been more or less false, possibly resulting from the noetic effects of sin which manifest themselves as unreliable cognitive biases (De Cruz & De Smedt 2013).<sup>6</sup> The cognitive and cultural processes by which humans have come to believe in forest spirits and fertility gods seem to her to be largely insensitive to truth. Similarly, she likely believes that to the extent that Muslims, Jews, and Hindus reject core Christian claims, they are also misled. Assuming the theologian is justified in believing in God and the truth of core Christian beliefs, our point here is simply that she may be able to easily incorporate the phenomenon of religious divergence into her worldview. Even if divergence indicates that our faculties are rather unreliable in the domain of religion, this need not mean that core Christian beliefs are unreliably caused.

Moreover, a Christian theologian typically thinks that while theistic belief is accessible via general revelation (nature and conscience) to all people living in all places at all times (Demarest 1982), Christian belief is not. Christian belief can only be had via special revelation, by hearing or reading the Gospel story recorded in the Bible. And hearing or reading depends on the testimony of others, that is, on cultural transmission (Wahlberg 2014). Thus, she likely disagrees with Davis' claim that if Christian beliefs were true, "we should observe that people in Europe and people in the Philippines converged upon Christian beliefs in a manner that was independent of cultural contact."

Nevertheless, we want to make our case as acceptable to non-theists and non-Christians as possible. In what follows, we will bracket such theistic and theological presumptions. Davis argues that "religion is infamous for being a domain in which reason and argument fail to

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<sup>6</sup> However, we agree with Stephen Maitzen (2006) that the uneven distribution of theistic belief on earth is difficult to account for by reference to cognitive factors. For instance, why would people in Thailand, most of whom are non-theistic Buddhists, suffer from noetic effects of sin more than, say, people in Europe? This is a real problem we cannot address here.

produce convergence across cultures.” This is hard to deny. However, it seems that reason and argument can at least sometimes bring theologians of other religions to accept (or close to accepting, at least) core Christian beliefs. Consider the debate about the historical resurrection of Jesus. The question of whether Jesus’ tomb was found empty (with no obvious natural explanation) and whether the disciples experienced post-resurrection visions of Jesus has been the subject of extensive research since the 1800s. In his review of more than 1400 scholarly publications on the death, burial, and resurrection of Jesus, written from 1975 to 2005, Gary Habermas found that approximately 75 percent of them favor some of the few common arguments for the empty tomb (Habermas 2005). Jewish experts of the New Testament have also found the evidence appealing. In his study on the Jewish scholarship on the resurrection of Jesus, David Mishkin (2017) shows that several Jewish theologians have taken the claims about Jesus’ empty tomb and post-resurrection appearances very seriously. Some are open to the reality of the resurrection, despite the fact that Jews face cultural and religious incentives to deny distinctively Christian claims about Jesus because of the long history of anti-Semitism (Ruether 1996). For example, in his volume on Jesus’ resurrection, the Jewish New Testament scholar Pinchas Licide (1983) is commonly interpreted as viewing the event as a historical reality. Michael Kogan, a religious studies professor and an observant Jew, writes regarding the incarnation, the vicarious atonement, and the resurrection of Jesus, that

*while we cannot affirm the truth of these propositions, we need no longer insist on their falsity.* We cannot affirm their truth because that can only be done from the standpoint of Christian faith, a standpoint we do not share. (Kogan 2008: 115; italics in the original)

According to Mishkin (2017: 115), the question Kogan addresses here is “how can Jews reject these events and yet affirm them for their Christian friends and neighbors in a positive way?” What Kogan seems to be saying is that although there is some evidence of the truth of the resurrection, the event, in case it actually happened, has no implications on Jewish faith: “it neither speaks to us directly nor threatens us in any way” (Kogan 2008: 188). On the one hand, this may be taken to support Davis’ claim that reason and evidence rarely lead to people changing their religion. If one cannot explain away the evidence for this core Christian claim, another way to maintain Jewish faith must be found. On the other hand, the example suggests there exists evidence for the resurrection that an open-minded non-Christian scholar is forced to take seriously. Many of the Jewish theologians examined by Mishkin believe that something very extraordinary did take place, and that naturalistic explanations are unsatisfactory. Perhaps belief in the resurrection is not rejected because of the lack of evidence, but because of reasons related to one’s religious (or secular) identity and other such truth-insensitive factors. Arguments and evidence for Jesus’ resurrection have also convinced many Muslims, such as the late Pakistani-American apologist Nabeel Qureshi (Qureshi 2015). Of course, there are also many Christians converting to Islam and other non-Christian religions. For a robust argument, one would need to show that evidence and arguments play a more central role in conversions into the Christian faith than they in conversions from it.

Let us take stock. So far, we have argued that, in addition to theology, there is a good deal of divergence in many other academic fields as well. While this divergence is often not cross-cultural in nature, there exists also cross-cultural convergence among theologians regarding theistic beliefs and the ways of arriving at them. Also, the core Christian belief of Jesus’ resurrection can be defended by historical arguments which have convinced some non-

Christian scholars as well. Therefore, while expert theistic or Christian beliefs are clearly not epistemically on par with expert scientific beliefs, both can be placed, we argue, on the same “truth sensitivity continuum” of academic beliefs. In the upper end of the scale are the hard sciences characterized by methodological rigor, exactitude, and objectivity. Here it might make sense to speak of prediction as the function of science, as Davis does. Here we also find the most convergence. Somewhere in the middle we find history, psychology, and sociology. In the lower end are fields like ethics, philosophy, and theology. This is where there is most divergence, but where inquiry is still based on commonsense reasoning that can produce **true**, justified beliefs.

## **6. Folk Beliefs in Science and Religion**

According to Davis, even if “a few philosophers and theologians are epistemically justified in holding religious beliefs,” the problem is that “most religious believers acquire their beliefs through cultural inheritance” (Davis 2020: 205). The main challenge, then, is to defend the theistic and Christian beliefs of non-academics as truth sensitive. Remember that in Davis’ schema the central question is not whether the individual can offer reasons and evidence in support of her beliefs. Most people do not seem to adopt their religious or scientific beliefs because of a careful consideration of evidence, but because of the testimony of others, that is, cultural transmission aided by context biases. Not only a beliefs adopted on the basis of cultural transmission, they are also sustained by culturally upheld practices and institutions. Of course, in time, many believers go from adopting a belief on the basis of testimony to supporting that belief with evidence later on. Nevertheless, the question then is whether the cultural process which selects beliefs, through which one inherits them, and maintains them is truth-sensitive. Above we defended the truth sensitivity of the academic project of theology. In this section, we argue that

folk beliefs, whether Christian or scientific, are truth sensitive to the extent that they are constrained by expert beliefs.

Consider common sense “scientific” beliefs. Experts often bemoan how ignorant common folk are. When students are taught scientific ideas, they often misunderstand them. Because of cognitive biases and other non-rational influences, there is considerable divergence regarding folk scientific beliefs. For example, Klonoff and Landrine (1994) studied a group of American college students that included African-, Mexican-, and Asian-American minorities. The students were given a list of medical conditions including AIDS, the common cold, diabetes, hypertension, lung cancer, and headache. They were asked to what extent (on a 1–5 scale) they thought these resulted from emotional (e.g., anger), natural (e.g., germs, cold), punitive (e.g., sin), or mystical (e.g., bad blood) causes. Several false beliefs were found. Interestingly, cultural and gender differences also emerged. For instance, women were more likely than men to view an illness such as diabetes as the result of “bad blood.” Of course, no scientific expert claims diabetes results from bad blood. The students had not learned such ideas from their professors. In order to have more truth sensitivity to their scientific beliefs, people need to pay closer attention to what the experts are saying. Listening to your professors and reading popular-level books on scientific topics is a good start. However, people need not necessarily know or understand the evidence, say, for climate change, in order to justifiably believe in it.

Similarly, folk theistic and Christian beliefs are justified to the extent they are based on what Christian theologians are saying. Without theology constraining their beliefs, people easily produce all kinds of weird beliefs. Indeed, even Christians often entertain “theologically incorrect” beliefs (Slone 2004). For instance, most people seem to have a highly anthropomorphic view of God, perhaps because of cognitive biases and mechanisms such as

HADD (Jong, Visala & Kavanaugh 2016). However, the ordinary Christian believer has usually been subjected to some theological education through her local church. Priests and pastors have typically gone through several years of theological training and many continue to read theological literature. Of course, some ministers entertain wild ideas that are out of touch with serious academic theology. But, similarly, students may sometimes be subjected to scientific misinformation in schools or universities. There are also many Christian believers around the world who have received very little theological training and whose religious beliefs are far removed from the constraints of academic theology. But, likewise, many people around the world have received very little scientific training. Thus, it seems that many people have unjustified scientific and religious beliefs.

Nevertheless, an indirect Milvian Bridge can be constructed for at least some folk theistic and Christian beliefs given the truth of cultural evolution. So far, our response has assumed Davis' externalist schema of justification where the subject herself needs no reason or evidence for her beliefs. However, in order to extend Jong and Visala's account to cover Davis' EDA, consider the situation from an internalist perspective. Given the culturally widespread nature of many defeaters to Christian beliefs (arguments for the non-existence of God and historical arguments against the resurrection, for example), many believers have sought to educate themselves on these matters. Apologetics and philosophy of religion have become popular among ordinary believers in recent decades. As a result, many normal believers are aware of arguments for God's existence and for the resurrection of Jesus.

Even those who are unaware of such reasons and evidence are usually aware of where and how they could access the evidence in case they need it. Visala (2020) suggests that the internalist account of justification could include evidence that is *in principle* accessible to us.



Recent work in social epistemology has attempted to formulate a plausible account of the division of epistemic labor. In a classic paper on epistemic dependence, Hardwig (1985) argues that most of our beliefs have their origins in testimony of others. Moreover, the justifying evidence for most of our beliefs is not available to us directly: we either cannot remember it or it has never been in our memory. We also might not have understood the evidence even if we have heard it. For example, it seems that a significant amount of reflective work is needed to properly understand how evolution through natural selection works (McCauley 2011). The ability to assess the evidence for evolution and to deeply understand it, then, requires specialist training. Nevertheless, a non-expert can still justifiably believe in evolution simply because she knows there is evidence for it. Similarly, in order to believe in God and in the resurrection of Jesus, all a Christian believer might need is justified beliefs about the trustworthiness of certain experts, and knowledge that a specific source (say, a book) would be in possession of relevant evidence for these beliefs.

## **7. Conclusion**

According to the Milvian Bridge principle, beliefs are truth sensitive in case their truth-value is linked to their reproductive value. Griffiths and Wilkins argued that although scientific beliefs do not provide direct evolutionary benefits, they are based on commonsense reasoning that is beneficial for survival and reproduction. According to Jong and Visala, such an indirect Milvian Bridge can likewise be constructed for religious beliefs by way of commonsense reasoning (e.g., philosophical arguments for God's existence).

Taylor Davis has critiqued both sets of authors for basing their claims on outdated CSR theorization that focuses too much on how content biases influence the adoption of religious

beliefs. The real question is whether the cultural processes through which scientific and religious beliefs are selected are truth sensitive. According to Davis, the cultural function of science is to predict, while the function of religion is to promote prosocial behavior. This is why we see cross-cultural convergence in natural science, but not in religion.

We have argued that Davis sets the bar too high. In order to accept most academic beliefs as truth sensitive, we need to allow for forms of inquiry that provide no empirically testable hypotheses and that produce considerable amounts of divergence. As an academic discipline, the practice of Christian theology closely resembles other academic forms of inquiry. Thus, theology can be viewed to some extent as a truth sensitive cultural project. Since a robust argument for this claim would require a defense for the use of Christian Scriptures as a starting point for theological inquiry (something we have not done here), we have limited our case to the evolutionary vindication of theistic belief based on philosophical reasoning and belief in Jesus' resurrection based on historical evidence. According to Davis, however, ordinary believers do not base their beliefs on arguments and evidence. Our main argument has been that even in this case ordinary believers can have justified religious beliefs as long as their beliefs are constrained by the testimony of expert theologians.<sup>7</sup>

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