In this paper, I discuss what Cognitive Science of Religion is and what its implications are for theism and the veracity of religious belief. Findings in CSR, and its counterpart Evolutionary Psychology, aim to explain the origin of religious belief. Some critics of religion, however, brandish the findings of CSR in support of their agenda. Their arguments attempt to either argue against the truth of religion or the justification for religious belief. I will argue that neither of these two kinds of arguments accomplishes its goal. Using CSR to falsify religious belief commits the genetic fallacy. The evolutionary debunking argument for undermining justification for religious belief is a more sophisticated approach, but it fails on account of making too many unjustified assumptions. I outline three brief responses to the challenge of unjustified religious belief.

Keywords: religious belief, cognitive science of religion, evolutionary psychology.
CSR maintains that humans possess a natural propensity for belief in God or gods. Humans have a strong tendency, in particular, for attributing agency to unexplained phenomena. We like to ask, “Who did that? And why?” This tendency can result in false positives when we attribute agency to natural forces and inanimate objects. And it is precisely this super-sensitivity of our agency-attribution propensity that has served our ancestors well in the quest for survival:

“It pays to be trigger-happy with regard to animacy detection, because the cost of over-attributing animacy is low (if you turn your head when you hear the rustling in the bushes and it is just the wind, you’ve lost nothing) while the cost of under-attributing animacy can be high (if you fail to turn your head, and there is a lion there, you may get eaten)”\(^1\).

This innate, cognitive instrument is called the hypersensitive agency detention device (HADD for short)\(^2\). Proponents of HADD believe that humans, throughout evolutionary history, have benefitted from attributing agency to unknown forces and objects and this residual tendency remains as part of our cognitive equipment, today.

HADD can be seen as playing a crucial role in the formation of religious belief in that it explains why we posit supernatural agents behind certain phenomena in the world (thunderstorms, floods, rustling bushes, creaking floors, etc.). This has led some skeptics to conclude, then, that the objects of religious belief (God and gods) are simply the byproduct of our trigger-happy agency-attribution tendency. The HADD is only one of several mechanisms and tendencies that help in the formation of religious belief; others include prosocial proclivities, the capability for decoupled cognition, minimally counter-intuitive properties, etc., but I will not go into these as most debunking attempts stem from evolutionary explanations, in general, and do not rely on specifics in CSR.

The debunking attempts against religious belief fall into two broad categories:

1. CSR undermines the veracity of religious belief;
2. CSR undermines the justification for religious belief.

Those in the first category believe that because we now have evolutionary explanations for why humans hold religious beliefs, therefore, those beliefs are not true. These critics are found both at the popular level and in some of the CSR and Evolutionary Psychology literature:

“The irrationality of religion is a by-product of the built in irrationality mechanism in the brain”\(^3\).

“If the human species is “hard-wired” to believe in a spirit world, this could suggest that God doesn’t exist as something “out there”...but rather as the product of an inherited perception…this would imply that there is no actual spiritual reality, no God or gods, no soul, or afterlife...God must be viewed as a product of human cognition”\(^4\).

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“It is instinctive for us to seek a grand, moralistic mind that is not there. God is the default stance...we are now in a position to correct that wayward stance through an informed understanding of why we sense a mental presence that never was”¹.

“You are a hopeless pawn in one of natural selection’s most successful hoaxes ever...One can still enjoy the illusion of God, after all, without believing Him to be real”².

According to this line of argument, belief in God or gods as forces of agency behind the universe can be attributed to these inbuilt, seemingly vestigial, cognitive adaptations that are included in our cognitive faculties by way of natural selection. Thus, if CSR tells us that belief in God can be explained by our intuitive inclination towards agency attribution, then God does not really exist. We can spell out the argument as follows:

1. S’ belief that P, is brought about by mechanism X.
2. X is not a truth-tracking mechanism.
3. Therefore, it is not the case that P.

This argument fails on account of committing the genetic fallacy. Explaining how or why a belief originated has no bearing on the truth value of that belief, that is, whether or not the belief corresponds to reality. An argument commits the genetic fallacy when it attempts to show that a belief is false by explaining the mode of origin or how the belief came to be held. For example, if Frank holds the belief “smoking is bad for you” and it can be demonstrated that he came to hold that belief simply because his absent father had a bad smoking habit then that explanation does nothing whatsoever to show that his belief is wrong. Even if it is true that his belief came about solely because of his father’s negative impact, the belief “smoking is bad for you” can still be true wholly apart from any explanation for the mode of origin of that belief.

The conclusion “the belief that smoking is bad, is false” does not follow from “the belief that smoking is bad originated from the fact that Frank had a bad experience with his father”. In order to show that Frank’s belief is false, additional arguments need to be presented. Furthermore, we already know that smoking is bad for you! Thus, Frank holds a true belief (smoking is bad for you) even though his belief may have had dubious origins. This is a classic example of the genetic fallacy. Giving an explanation for how or why a belief comes to be held does only that: it tells you how or why that belief came to be held. It does nothing to prove or disprove that belief’s fidelity to truth.

It is for this reason that CSR cannot falsify religious belief. It is not the case that religious belief is false because CSR explains how and why religious belief arises for the obvious fact that there is no explicit connection between the origin of a belief and the truth of that belief. The existence of God has nothing to do with how religious persons believe in God, why they believe in God, how they came to believe in God, or why they came to believe in God. Concluding that that religious belief is false is the product of a prior metaphysical commitment rather than an inference from the empirical evidence from CSR. The existence of a force of agency behind the universe is a separate issue from the evolutionary mechanisms of cognition which have caused us to over-attribute agency or form beliefs of a religious nature. It seems clear that there is no connection between these two items.

Using CSR to argue against the veracity of religious belief essentially makes a
categorical error. Belief in entity X is different from the existence of entity X. Quest-
ions about belief in X pertain to epistemology and questions about the existence of X
turn to ontology. Those who commit the genetic fallacy when using CSR to falsify
theism confuse epistemology with ontology by attempting to draw a metaphysical
conclusion from epistemic premises. Epistemology does not recapitulate ontology.

Suppose Frank claims to see a bright, blue spot of light, about the size of a fist,
every night on his bedroom ceiling before he goes to bed. None of his friends believe
him and they recommend that he get professional help. After verifying with an oph-
thalmologist that he is not suffering from cornea or inner eye damage, he allows him-
to undergo examination by a psychiatrist. The psychiatrist then diagnoses Frank
as suffering from “minor hallucinatory experiences”. Now suppose that Frank disa-
grees with the psychiatrist’s diagnosis and convinces him to be present at his bed-
room that very night in order to witness the blue light, first-hand. Lo and behold, the
psychiatrist notices the blue light only appears when Frank turns off his bedroom
light. Its true origin comes from the faint light emanating from his alarm clock that
had fallen behind his nightstand and lodged itself there; the blue numbers of the LED
display end up in a blue spot of light on the ceiling. Thus, the psychiatrist’s diagnosis
did not, and indeed could not, falsify the existence of the blue light.

Even if it is true that Frank does experience hallucinations every now and then
due to a traumatic experience or drug withdrawal, that does not and cannot show
that the blue light does not exist. The psychiatrist’s diagnosis does not provide the
right kind of evidence to tell us whether or not Frank’s belief corresponds to reality.
There must be some additional evidence to show that the blue light does not exist.
The critic might raise an objection here and say that Frank’s experience with the blue
light is different from the religious person’s experience with God because Frank’s ex-
perience is both falsifiable and verifiable. We can easily know whether or not the blue
light truly exists simply by spending a night in Frank’s room and waiting to see if it
appears, whereas with God, we cannot conduct a simple experiment to falsify or veri-
fy God’s existence. This objection, while interesting, is irrelevant. Frank’s experience
does not have to be falsifiable or verifiable in order for the truth of the illogic of the
genetic fallacy to hold. Whether or not we can find a way to test out Frank’s expe-
rience has no bearing on the fact that arguing from the genetic fallacy is invalid. The
argument against the genetic fallacy is not contingent upon whether or not the exis-
tence of God is verifiable. Any argument which attempts to disprove the truth a belief
by showing that the belief arose due to dubious circumstances is logically fallacious.

However, one can argue that even though the psychiatrist’s diagnosis does not
disprove the existence of the blue light, it might undermine justification for Frank’s
belief in it. This leads to the more sophisticated, second kind of argument, where CSR
and other evolutionary explanations do not disprove the existence of the entities
which religious beliefs purport to exist, but rather religious beliefs are unjustified in
light of these evolutionary explanations. This kind of argument can best be articu-
lated by saying that our religious beliefs are unjustified because they are the products
of mechanisms which are not truth-seeking, in general. For example, the critic can
implicate HADD and our tendency for “over-attribution” in that this leads to the pro-
duction of many false-positives. Since we have this natural proclivity for attributing
agency, e.g. we assume that the rustle in the bush is a lion rather than a wisp of wind,
how can we be certain that our beliefs in supernatural agents are not the results of
HADD misfiring? Paul Griffiths and John Wilkins come to the conclusion that reli-
gious beliefs “are produced by cognitive adaptations which are not designed to track
truth”\(^1\). And Paul Bloom believes that religious beliefs are the result of “cognitive functioning gone awry” and “biological adaptations gone awry”\(^2\).

Here is where the traditional evolutionary debunking argument rears its head. Evolutionary debunking arguments have gained popularity in recent years. They attempt to undermine justification for certain beliefs by appealing to facts about evolutionary history that shed light on dubious links in the epistemological chains that lead to those beliefs. Two famous examples of the EDA are Plantinga’s argument against naturalism and Sharon Street’s Darwinian Dilemma \(^3\). The basic idea of the EDA is that humanity’s evolutionary history has conditioned our judgments, beliefs, and cognitive capacities in such a way as to make them unreliable when applied to certain modern human abilities and beliefs. The Evolutionary Debunking Argument, in the sense that I am using it, argues against the justification for a realist understanding of religious beliefs. The existence of supernatural entities is still a live option, but the EDA maintains that even if there are supernatural entities, we would not be justified in saying that our evolutionarily-conditioned cognitive faculties and capacities accurately reflect reality.

Richard Joyce sharply illustrates how an EDA undermines justification with his Napoleon pill analogy \(^4\). He uses this example with moral realism but it also works with religious belief. Suppose that someone had administered a pill to you when you were a child, and this pill caused you to believe that Napoleon lost at the Battle of Waterloo. Suppose, also, that this pill removed from your memory the fact that you ever took such a pill. Then one day, the man who gave you this pill tells you that you were given a pill that caused you to believe that Napoleon lost at Waterloo. Are you justified in continuing to believe that Napoleon lost at Waterloo considering that this belief was solely the product of a pill? It seems that you would not be justified.

However, let’s take this one step further: how about if the pill did not confer upon you the belief that Napoleon lost at Waterloo but simply produced in you a capacity for generating Napoleon-related beliefs? Let’s call this capacity the Napoleon Generator. Your capacity for forming Napoleon-related beliefs is the product of a pill and unless you have some external corroboration for whatever beliefs your Napoleon Generator caused you to have, your beliefs are still unjustified. In the same way, the knowledge that the selective forces of evolution have designated for you a set of tendencies and cognitive predispositions for the formation of religious belief also removes the justification for these beliefs. The EDA proponent can ask:

– Is there a proper causal connection between religious beliefs about entity X, and entity X, itself?
– Do we exert the right amount (and the right kind) of epistemic effort in the formation of our religious beliefs?

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\(^1\) Paul Griffiths and John Wilkins. "When do evolutionary explanations of belief debunk belief?" (2010).
Three Responses

These questions seemingly undercut justification for religious belief, but I do not believe the critic is justified in arguing that religious beliefs are unjustified. I will briefly sketch three kinds of responses to the difficulty of justification.

1. Unjustified Assumptions

The problem with the EDA against religious belief lies in the fact that the skeptic makes at least one of these three assumptions in arguing that religious belief is unjustified:

1. God does not exist.
2. If God exists, God did not plan for evolution to endow us with capacities for religious belief.
3. Human cognitive adaptations are the sole reason for the fact that humans hold religious belief.

If God does not exist, then of course religious beliefs are unjustified for the simple fact that they do not correspond to reality. And if we hold religious beliefs by virtue of nothing other than these cognitive adaptations, then they are unjustified as there is no reason to think that the mechanisms are truth-tracking and we, as religious adherents, have not exerted the right amount (or the right kind) of epistemic effort to make the beliefs justified. We hold these beliefs for the sole reason that our species evolved in this way. If the evolutionary clock was rewound and played over once more, we might have very different cognitive adaptations that have nothing to do with religion, at all.

Simply put, I contend that the skeptic cannot bear the weight of substantiating any of these assumptions. Disproving the existence of God is no easy task, and yet even if one was successful in doing so, then the conclusion “God does not exist” is arrived at without the help of CSR or any other evolutionary explanation. Thus, we realize that the question of God’s existence, once again, is a different matter, entirely. The other assumptions are equally difficult to demonstrate. One would need to show that religious belief is solely the product of cognitive adaptations, without input from genuine religious experience or indeed any other supernatural phenomena. As of yet, no one has done this. For indeed, if God does exist and if God does seek for humans to be in relationship with God, then it is not irrational to think that God purposed the evolutionary process to endow us with predispositions for religious belief.

2. Natural Theology and Substantiation

For the sake of argument, let us grant the third assumption. Let us assume that the origin of religious belief is solely due to cognitive adaptations and evolutionary tendencies. If this is the case, then an individual who believes in God, owes the initial formation of her belief to HADD or theory of mind. If she does nothing to fuel and maintain her belief in God, then she is unjustified in her belief that God exists. However, if she comes across natural theological arguments for the existence of God and becomes convinced that the arguments from morality or first-cause are successful, then she is arguably justified in her belief. Substantiating a belief, despite that belief’s dubious origins, can provide justification. Freidrich Kekule’ supposedly discovered the structure of the benzene molecule while day-dreaming about a snake biting its own tail. This was not enough to substantiate the fact that benzene is hexagon-

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1There is an argument to be made that even unreflective religious beliefs can be in some sense justified. See Justin Barrett. Why would anyone believe in God? Walnut Creek, CA: AltaMira Press, 2004.
al, but upon experimentation, he realized that benzene is indeed hexagonal. Solutions to scientific problems or general questions can come about in purely accidental ways, but that does not make them unjustified so long as the right steps are taken to substantiate them. In the same way, the suspicious origins of a belief can be superseded by evidences farther down along the epistemic timeline.

3. Religious Belief as Sui Generis

Lastly, the EDA for religious belief is unique in that the object which religious beliefs purport to exist is precisely the kind of entity, hypothetically, that could provide the right causal connection between religious belief and the object of religious belief, namely God. This is different from EDAs against moral realism or mathematics in that we cannot say that the realm of mind-independent moral facts has the power to guide the evolutionary process to ensure that we come to believe in moral realism and are justified in doing so. The same goes for mathematics. These objects of belief have no causal power of their own. But God, if anything, is the right sort of entity which could be responsible for ensuring that humans end up with belief in God. God, at least in the traditional sense, is causally active. And God, if God exists, has the ability to purpose the ends of evolution. I am not convinced that religious belief falls under the same category as the other objects of belief that are targeted by traditional evolutionary debunking arguments. Thus, it seems difficult to argue that religious beliefs are unjustified without first arguing against the existence of God or God’s causal power or against a particular view of God’s attributes and nature.

In conclusion, neither the truth of religious belief nor the justification for religious belief have been seriously challenged by evolutionary explanations. This is not to say that religious beliefs are justified prima facie but more work is needed in order to show that they are, indeed, unjustified.

References


Wilkins, John and Griffiths, Paul. "When do evolutionary explanations of belief debunk belief?" (2010).