

# Why Explaining Religion Is Not Sufficient to Explain Away Religion

An argumentative exploration of the leading evolutionary explanatory accounts of religion to demonstrate the inability of science to explain *away* religious belief

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## 1. Introduction

While science continues to make significant progressive strides, religion has yet to add to its historically established doctrines. Not only has the rapid expansion of science brought into question the validity and necessity of religion, part of scientific inquiry now focuses on how ‘counterintuitive’ notions of religion came to be. ‘Counterintuitive’ ideas of religion posit religious beliefs to go against or violate empirically verified facts or knowledge. Some argue that we can utilize the knowledge attained from advancements in science to explain away religion. One particular aspect of science that is used to explain away religion are evolutionary theories. In this paper, I will argue that while evolutionary accounts can explain our affinity towards religion, it has yet to explain *away* religion. I will explicate and refute the three different arguments for evolutionary accounts of religion, including the socio-evolutionary, bio-evolutionary and cultural-evolutionary, to demonstrate how science has not succeeded in explaining away religion.

## 2. Why Does Science Try to Explain Away Religion?

There is a prominent assumption in academia that science and religion are two separate and distinct fields which fundamentally do not, and (for some) cannot overlap. Both science and theism attempt to answer the central questions concerning the design and function of natural phenomena (i.e., evolution, questions of the universe, life etc). The answers posited by both disciplines are commonly thought to be extremely contrary to one another, leading to a vivid and polarizing divide between proponents of these two disciplines which over time has come to be referred to as the conflict model (De Cruz, 2017). In order to have knowledge of something or

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to truly know something, one must have a *true justified belief*. Religion, while based in belief, has not been demonstrated to be indefinitely true by empirical justification. To demonstrate that religious belief does not constitute as knowledge, science has attempted to explain *away* religion by appealing to evolutionary principles.

### 3. Why Does Religion Go Against the Theory of Evolution

Given the breadth of religion (and religious variety), it is important to define the exact conceptualization of ‘religion’ that I will be utilising for my argument. In this paper, I will be using the definition of ‘religion’ put forth by Scott Atran. His definition of ‘religion’ is widely applicable, generalizable and encompasses the aspects of religion that are claimed by most to go against evolutionary principles. He notes that religion is (1) the widespread *counterfactual and counterintuitive* beliefs in supernatural agents; (2) a community’s hard-to-fake expressions of *costly material* commitments to those agents; (3) engagements with those agents in ways that master people’s existential anxieties about death, disease etc.; and (4) ritualized rhythmic sensory coordination of (1)(2) and (3) in ways that enrich unity with the group (Atran, 2002). As per my analysis, (4) functions more so as a byproduct of religion. As such, I will not integrate (4) as a stand-alone function of religion in my paper. Further, to aid with the structure of my argument, I will be incorporating a general conception of religion which is sometimes referred to as theistic belief. By doing so, my arguments will focus on religion as a whole than attempting to argue under the doctrine of a particular religion.

While Atran’s definition of religion can be controversial to some, it is important to note that it was created to effectively demonstrate how religion is logically counterproductive from an evolutionary perspective. From an evolutionary perspective, religious practice is considered to be counterintuitive and counterproductive due to its ‘costly’ nature as mentioned in (2). The costly material sacrifices made by humans to pious agents have been noted throughout history. Some examples of materials that were sacrificed in the name of religion include goods, time, animals and even human life

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(Winzler, 2012). In ancient Mayan times, human life was often sacrificed to honour their respective religious deities (Owen, 2017). However, from an evolutionary lens, humans are programmed to behave in ways that enhance our fitness. As such, engaging in costly sacrificial practices would be counterproductive and go against our evolutionary programming. The Darwinian theory of evolution stipulates that characteristics evolve to propagate the frequency of an organism's genes in future successive generations (Murray & Goldberg, 2009). This propagation is maintained through the reproduction and survival of these organisms. In natural selection, advantageous traits are favoured and subsequently enhanced to increase the frequency of such traits through future generations allowing populations to become better adapted to flourish in their environment over time (Ratner, 2019). Costly evolutionary traits will only propagate in species through natural selection if the benefits of maintaining such a costly trait is greater than the potential costs of the maintenance of such a trait. Therefore, the natural affinity of humans to embrace religion seems to be contrary to the Darwinian theory of evolution as practicing religion does not seem to sufficiently enhance human fitness enough to explain its propagation as a costly trait.

### **4. Exposition - Evolutionary Accounts of Religion**

All evolutionary accounts adopt a *Standard Model* in which all accounts concur that the human mind contains certain cognitive structures that “collaborate in specific and predictable ways to perpetuate religious ideas pan-culturally” (Murray & Goldberg, 2009). The evolutionary accounts of religion used by science to explain away religion are presented through a socio-evolutionary lens, a bio-evolutionary analysis, and a cultural-evolutionary account.

#### ***Socio-evolutionary Account of Religion***

A socio-evolutionary explanation of religion argues that religion should be considered be a ‘spandrel’ trait since it is a non-adaptive by-product of other mechanisms that are adaptive (Murray & Goldberg, 2009). Evolutionary theorists argue that while religion is spandrel, it arose from group-based mechanisms that have been

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proven to be adaptive. According to the Darwinian theory of evolution, the preservation of costly beliefs should have an adaptive benefit towards increasing one's fitness, specifically one's reproductive success. It can be argued that engaging in religious practice could increase one's fitness as participating in cross-cultural religious practices helps promote group cohesiveness and allows us to benefit from such group dynamics (Murray & Goldberg, 2009). This type of group-cohesiveness increases the overall fitness of the group while deterring possible attempts of sabotage by members of the group. By engaging in overt religious practice, members of a community can demonstrate their commitment to the values of the group and the group as a whole (Murray & Goldberg, 2009). Further, religious practice can help predict the behaviors of group members which can allow for the cultivation of strategies to further group prosperity. Since certain strategies produced by religious practice enhance reciprocal cooperation between group members, it increases the likelihood of our cognitive structures to accept religious beliefs. As such, religion itself is not considered to be directly adaptive in this model since it is evidentially more costly to humans in terms of how expensive the maintenance of religious belief is (specifically concerning resource allocation of time, food, goods, etc.). However, science attempts to explain away religious belief as a non-adaptive by-product of fitness enhancing adaptive traits.

### ***Bio-evolutionary account of Religion and Characteristics of Religion***

The bio-evolutionary account of religion incorporates our understanding of our cognitive structures to explain away religion. Our cognitive structures contain the faculties of memory, perception, and intuition. The faculties help us derive and recognize truth while facilitating our ability to perceive connections among propositions (Plantinga, 2011). The bio-evolutionary account of religion states that we possess these cognitive structures, which are structured in way to support and perpetuate our affinity to accept religious ideas, due to the specific associated characteristics of religion. Religious characteristics are (1) counterintuitive and optimized for recall and transmission, (2) they must generate beliefs about agents and agency, (3) must be

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inference rich, and (4) represent religious entities as agents who aim to benefit us (Murray & Goldberg, 2009). Folk ontology finds that the design of our cognitive structures helps us attribute agency to objects/disturbances in our environment as a defense mechanism. The cognitive mechanisms that allow us to perform the aforementioned function are called ‘hypersensitive agency detection devices’ (HADD) (Jong, 2012; Murray & Goldberg, 2009). This highly sensitive defense mechanism enhances fitness by helping us classify objects in our immediate environment which in turn heightens our chances for survival. When our cognitive structures detect patterns in our environment that can hinder our survival but do not have any familiar or known causes, our HADD structures are triggered to designate unidentified agents to be the causes of these patterns. Since these mechanisms are highly sensitive, they tend to overly attribute agency to stimuli in our environment. It is argued that the hyper-sensitivity of our cognitive structures paired with our tendency to anthropomorphize concepts make us more likely to form strong beliefs of goal-oriented religious agents (Murray & Goldberg, 2009).

Our tendency to anthropomorphize phenomena allows us to create and perpetuate ideas of religious agents (i.e Gods), through communities and generations. Religious ideas are strange and minimally counterintuitive (MCI) making such ideas extremely memorable and consequently more likely to be transmissible to other members of a community (Murray & Goldberg, 2009). Since religious ideas are *minimally* counterintuitive (MCI), they must also be inference rich to maintain belief in such an idea. The inference rich nature of these ideas triggers the HADD mechanisms and makes us engage with these ideas to develop ritualistic commitments. Overtime, we begin to associate these ritualistic commitments as a form of interacting with these divine agents. Appeasement of these agents through such interactions, reduce our anxieties about life thus fulfilling a component of Atran’s account of religion. Since the characteristics of religion trigger our natural cognitive mechanisms, many argue that a bio-evolutionary account explains away religion (Murray & Goldberg, 2009).

### ***Cultural-evolutionary account of Religion and Mimetics***

The cultural-evolutionary account of religion attempts to explain away religion using *memes*. In the theory of cultural evolution as posited by Richard Dawkins, he uses mimetics to demonstrate the effects of inheriting culturally significant ideas (Ratcliffe, 2003). Memes are cultural units that, like genetic traits, are transmissible through generations due to their ability to make copies of themselves through mind-to-mind replication (Lewens, 2018). An idea can become a meme if it is culturally significant enough to aid in the evolution of said culture. While memes only live in the ‘mind’ of man, this theory of mimetics aims to show how ideas can be transmitted cross culturally and through generations thus aiding the societal organization of mankind (Ratcliffe, 2003). Religion is said to be a ‘meme’ since religious ideas have the ability and the necessary characteristics to be propagated through the mimetic theory of evolution. Since the transmission of memes are a product of our cognitive structures, costly religious ideas would have been propagated due to its ability to trigger our HADD structures. However, in this conceptualization of religion, religious ideas must be passed on through generations through imitation usually from parent to child. Often in this view of explaining away religion, religious ideas are compared to a parasite to explain away how religion has managed to exist for centuries. Similar to how a viral parasite ‘parasitizes’, religious ideas tend to take over once they are planted in one’s mind (Ratner, 2019).

### **5. Evaluation - Why Evolutionary Accounts Don’t Explain Away Religion**

The three forms of evolutionary accounts of religion can help explain our tendency to adopt religious belief and maintain such beliefs cross-culturally but it does not explain *away* religion. For science to explain *away* religion, it must do more than merely explaining the dynamics that make us more likely to embrace religion. It needs to remove the necessity of religion and disprove associated religious beliefs such as the existence of divine agents (Pargament, 2002). Moreover, for science to explain away religion, it has to posit a singular universally accepted explanation of religion. Having

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scientific explanations of religion that can be countered by similarly likely theistic explanations of religion does not constitute as explaining away. As such, I will demonstrate the gaps in the evolutionary accounts' attempt to 'explain away' religion, to show that while these reductive interpretations of religion in an evolutionary perspective can help *explain* religion, but it does not 'explain away' religion.

The socio-evolutionary account of religion claims that religion is a spandrel trait in that it is a non-adaptive by product of adaptive traits that make us more likely to promote group-cohesiveness for enhancing fitness. Such an account of religion is short-sighted as it is not proven that religion only emerges in communal groups. Some argue that the ability to develop ideas of a greater power, a designer, or other theistic ideals, can arise in a singular person. Furthermore, religious belief being evolutionary advantageous can be contested using Atheism. Atheism is the disbelief in the existence of any religious doctrines or divine beings (typically religious deities) (Oxford, 2020). Studies show that atheism can be noted throughout history similar to how religious belief can (Johnson, 2012). While the standard model attempts to explain religion using evolutionary models, the emergence and transmission of atheistic belief seems to counter all their posited explanations. For instance, if participating in religious belief increases fitness, then one could argue that a belief in atheism would have been selected out via evolution as it would have caused fitness to decline. However, we know that this is not the case. From an evolutionary angle, it would have made more sense to practice atheism as it would have been less costly and could have perpetuated the same group cohesiveness as members of a community could have been connected via their lack of belief. If members of religious societies can override their cognitive mechanisms that make them more likely to accept religion similar to atheists, then one could argue that costly religious beliefs should have been factored out to enhance fitness. As such, atheism demonstrates that religious belief cannot merely be explained away using an evolutionary account.

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As mentioned previously, the bio-evolutionary account attempts to explain away religion by appealing to the design of our cognitive mechanisms to adopt beliefs that will help enhance our survival. This conceptualization of religion is not incompatible with contrasting religious beliefs that attribute the designation of such cognitive structures as God's doing. Similar to Locke's famous argument, the function of our cognitive structures to conceptualize and appreciate God may have been God's design itself. Locke argued that our capacity to understand religious ideas and to utilize reason to arrive at such ideas were given to us by God (Uzgalis, 2018). The conceptualization of HADD structures as an evolutionary adaptation to increase fitness is compatible with such a theory as we could conceptualize this cognitive development was given by God to mankind to embrace religious activity. In fact, we might need hypersensitive structures for agent attribution to make us aware of the divinity of our existence. While our tendency to attribute agency to stimuli that may have been produced by other means, it does not follow that there is not an agent there at all times. Since a core component of religion are its associated 'agents' (aka Gods), for science to explain away religion, it must disprove the existence of divine entities. We know that the evolutionary account of religion as posited by science does not functionally disprove the existence of such agents. Moreover, this hypersensitivity does not imply that the mechanism is *always* faulty. It is likely that there may be a divine agent behind divine experiences and phenomena. As such the bio-evolutionary attempt to explain away religion fails as theists can argue that having such cognitive structures that able to lead us to ideas of religion and to embrace a divine being can have been designed and given to us by God.

The cultural-evolutionary account posits religion to follow a mimetic theory in which it is transmitted cross-culturally similar to a viral parasite. Such an account of religion attempts to explain away religion by reducing it to a contagious thought. I argue that this is false due to our ability reason and engage in critical thinking. The transmission of memes are dependent on having someone to teach future generations about these memes to propagate them. However, the cognitive structure of humans has the faculty for reason



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(Plantinga, 2011). Our ability to reason and rationalize beliefs would allow us to reason against unlikely ideas or beliefs that seemingly serve no beneficial purpose. This faculty to reason is rudimentary in children and there are conflicting studies regarding whether children are not born with any innate bias towards religious belief (Ambrosino, 2014). Those who state that children are not born with any innate bias for religion state that their adopted religious beliefs often taught by their parents. However, children's mental faculties are a lot more susceptible to believing falsities as demonstrated by the likelihood of small children to have imaginary friends. As the cognitive faculties of children begin to develop, they abandon these minimally counterintuitive ideas as they are more aware of their own personhood and do not have the same need to maintain such ideas (Volpe, 2019). However, religious ideas of divine agents are carried throughout adulthood. Since it has been established that children will abandon ideas that are contrary to reason, it does not make sense to view the transmission of religion as memes. While children may be indoctrinated by their parents to adopt religious beliefs, eventually they will be able to use their capacity for reason to develop their own ideas of religious truth (or lack thereof). In fact, many religious doctrines utilize doubt to encourage members of faith to confront the strength of their religious belief. If maintaining religious belief was important, such a practice would not logically be practiced as it would provide members of a community with a viable opportunity to abandon religion. There must be a greater reason that has perpetuated the transmission of such costly and 'counterintuitive' religious practices that science has yet to explain away. Moreover, note that for a meme to be transmitted pan-culturally, it must have high copying fidelity (Dennett, 2007) Even if small details of religious memes are wrongly transmitted, it is unlikely to attribute this error in copying fidelity to account for the emergence of such a vast variety of religions, each with their own unique practices and doctrines. As such, I argue that the inability of the cultural-evolutionary explanation of religion to account of our faculty of reason and the variety of religious belief shows that science has not succeeded in explaining away religion.

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### ***Conclusion***

Science can only utilize the evolutionary accounts of religion to evaluate how religious beliefs can contribute to our fitness to ultimately explain what gives us the ability to embrace religious belief. However, it is general knowledge that religion is significant part of historic and present-day human life. As such, religious belief must contribute more to humanity than just an evolutionary advantage. As such, science is unsuccessful in its attempt to utilize our cognitive structures through the standard model of evolutionary accounts of religion to explain away religion. Of the three main evolutionary accounts discussed in this paper, the bio-evolutionary model argues that we are susceptible to religious belief due to the design of our cognitive structures while the cultural-evolutionary finds religious belief to follow a mimetic theory of transmission. In the socio-evolutionary theory, religious belief is said to enhance group-cohesiveness which aids in our survival resulting in the evolution of our cognitive structures to embrace such beliefs in order to enhance fitness. However, science fails to explain *away* religion as the evolutionary accounts of religion seem to mirror theistic ideas of the acquisition of our cognitive structures. Moreover, the posited evolutionary accounts fail to explain the emergence and propagation of varieties of religious belief and atheism making it ultimately incompatible with our faculty of reason. Since explaining does not imply explaining away, the role and value religion is yet to successfully be disproven by science. Therefore, it is evident that science does not explain *away* religion but rather clarifies our predisposition towards embracing religious belief.

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