
Cognitive science of religion is sometimes portrayed as having no bearing on the theological doctrines of particular religious traditions, such as Christianity. In this paper, I argue that the naturalistic account of the etiology of religious beliefs offered by the cognitive science of religion undermines the important Christian doctrine of the grace of faith, which teaches that the special gift of divine grace is a necessary precondition for coming to faith. This has some far-reaching ramifications for Christian theology.

**Keywords:** Debunking arguments; Etiology of religious belief; Grace and nature; Cognitive science of religion; Aquinas; Calvin

1. Introduction

The cognitive science of religion (hereafter, CSR) seeks to provide naturalistic explanations for a variety of religious phenomena, incorporating insights from evolutionary anthropology, developmental and cognitive psychology, and neuroscience. One of the subjects addressed by CSR is the etiology of people’s religious beliefs. This paper argues that CSR accounts of how religious beliefs are formed presents a challenge to the classical Christian doctrine of the grace of faith (hereafter, GOF). Already present in an undeveloped form in the New Testament and substantially developed in later Christian theology, GOF states that humans are unable to form core Christian religious beliefs, such as belief in the Trinity or in the divinity of Christ, unless they receive the supernatural gift of God’s grace. Thus, there is a *prima facie* tension between naturalistic and theological accounts of the etiology of Christian religious beliefs: the latter postulates a supernatural explanans for the phenomenon of Christian faith, but the former deems this unnecessary.

The importance of this subject is evident when one considers the deep interconnections between GOF and other core tenets of Christian doctrine that concern human dependence upon God in the process of salvation and the privileged epistemic status of Christian faith. As the ensuing discussion will show, adopting a naturalistic challenge to GOF leads to these fundamental theological claims being undermined.

Previous discussions concerning the compatibility of CSR and theology have usually been confined to the issue of whether naturalistic explanations of religious beliefs negatively affect the justification of supernaturalism or theism in general.¹ Much less attention has been paid to the issue of whether they have a bearing on the justification of specifically Christian doctrines like GOF,² with some authors claiming that the scope of CSR is too narrow to tackle the content-specific claims of particular religious traditions.³ In presenting my challenge to GOF,
I will adopt a reasonably broad understanding of CSR in which cultural factors play an important role in explaining religious phenomena (see section 4 for more detail).

In what follows, after offering some preliminary terminological remarks (section 2), I expound the content of GOF, drawing on two important figures of Christian theology: Thomas Aquinas and John Calvin (3). I also elaborate on what is theologically at stake in challenging GOF. Then (4), I overview and discuss several theories from CSR which explain the role of natural cognitive mechanisms (content and context biases) in the formation of religious beliefs. Next, I apply these theories to the specific issue of how Christian religious beliefs are formed. In what is the core part of the paper (5), I present a challenge to GOF by arguing that the naturalistic theories expounded in the previous section make grace superfluous in explaining how Christian faith arises. I subsequently defend my argument against four objections (6). A brief conclusion draws the discussion to a close.

2. Preliminary remarks

Throughout this paper, my focus will be on the cognitive aspect of Christian faith, i.e., Christian religious beliefs. Following R. Nola, I take the word “belief” to mean the cognitive state of accepting a certain proposition as true. The “Christian religious” qualification is introduced to emphasize that the propositions in question are religious doctrines (I shall also speak of “truths” or “claims”) that are unique to mainstream orthodox Christianity (some examples of which are given below). By focusing on the cognitive aspect of faith, I do not want to deny that there is more to faith than believing: any thorough analysis of the concept will show that faith comprises various evaluative, affective and practical elements. However, as Alvin Plantinga puts it, “even if faith is more than cognitive, it is also and at least a cognitive activity. It is a matter of believing (“knowledge,” Calvin says) something or other.” Henceforth, when talking about “faith” or “Christian faith”, I shall use these terms in this narrower, cognitive sense.

In light of these remarks, questions such as the following are equivalent: “what is the etiology of Christian religious beliefs?”, “how are Christian religious beliefs formed?” and “how do people come to faith?” They all refer to the process by which an individual comes to accept certain theological doctrines as true. I shall now present two competing accounts of the nature of this process.

3. How do People Form Christian Religious Beliefs – Aquinas and Calvin

The doctrine of the grace of faith can be introduced by drawing attention to the distinction Christian theologians have traditionally made between the two types of truths that can be known about God. Truths of the first type can purportedly be established by studying the world that God created. As Paul put it, “his eternal power and divine nature, invisible though they are, have been
understood and seen through the things he has made.” These truths, such as God’s existence, oneness and moral perfection, are the subject of the discipline of natural theology. They can be discovered by means of “ordinary experience and reasoning.” Truths of the other type could not ever be discovered by scrutinizing the created world. However, God decided to reveal them by speaking through the prophets, inspiring the authors of the Bible and, most importantly, by assuming human nature in Jesus of Nazareth. These truths are the content of Christian religious beliefs. They include the core claims of mainstream Christianity: that Jesus is God, that he died and rose to save fallen humanity, or that God is triune, etc. In order to assent to these propositions, a crucial element of the theory I am describing here is that human beings need some form of special divine assistance (“grace”). In its rudimentary form, GOF can thus be understood as the counterfactual claim that without God’s special assistance there would be no Christian religious beliefs. In other words, one cannot explain how one comes to Christian faith without invoking supernatural divine activity.

The roots of GOF can be traced to the New Testament. In Ephesians, Paul discusses the mechanism of salvation of human beings: “For it is by grace you have been saved, through faith – and this is not from yourselves, it is the gift of God.” If salvation happens through faith and salvation is gratuitous (by grace), then faith should also be gratuitous – a gift of grace. According to the Gospel of John, Jesus said that “No one can come to me unless the Father who sent me draws them.” Augustine echoed those statements by arguing that faith is a gift which “is given to some, while to some it is not given.” Since his debate with the Pelagians, it has been the mainstream view in Western theology that humans cannot come to faith unless assisted by grace.

I will now introduce GOF in more detail by focusing on two important figures of Western theology: Thomas Aquinas and John Calvin. This will give us some idea as to the precise role of grace in the process of coming to Christian faith. Famously, Aquinas and Calvin are the main heroes of Alvin Plantinga’s two models of warranted Christian belief, the Aquinas/Calvin model and its extended version. I will follow Plantinga’s approach and treat those two theologians as sharing – despite some important differences – the same basic approach to the issue of how people come to Christian faith. I will then briefly address what I consider to be the biggest difference between the Reformed and the Catholic traditions: the given reasons for why grace is necessary for faith. I will end this section by describing two important implications of GOF: the human dependence upon God in the process of salvation, and the role of grace in the epistemology of faith.

In *Summa theologiae*, Aquinas approaches the issue of the role of grace in coming to Christian faith by asking why it is that of two people who find themselves in the same external circumstances, one believes while the other does not. Aquinas distinguishes between things which are of faith (i.e., propositions accepted as true by the believers, the contents of the Christian faith) and assent (acceptance of these propositions as true). He argues that simply being exposed to the contents of Christian faith is not enough for someone to become a believer:
As regards (...) man’s assent to the things which are of faith, we may observe a twofold cause, one of external inducement, such as seeing a miracle, or being persuaded by someone to embrace the faith: neither of which is a sufficient cause, since of those who see the same miracle, or who hear the same sermon, some believe, and some do not. Hence we must assert another internal cause, which moves man inwardly to assent to matters of faith.  

What a believer has and an unbeliever lacks is grace (“another internal cause”), which pushes (“moves”) an individual to form Christian religious belief. According to Aquinas, the revealed doctrines of faith surpass the reach of human reason. In other words, evidence never rationally compels one to form Christian religious belief. In the case of faith, belief comes by virtue of human will, which is moved by grace. Grace is what makes the content of Christian faith so attractive to an individual that they assent to it. Hence, there are three elements in Aquinas’ model of coming to faith. First, there is some sort of input, whether it is hearing a sermon or witnessing a miracle. Second, there is the influence of grace upon human will. Third, there is faith, which includes assent to certain propositions.

Calvin defines faith in his *Institutes of the Christian Religion* by stressing the role of the Holy Spirit in coming to believe the gospel (“the word of God”):

(...) the human mind, when blinded and darkened, is very far from being able to rise to a proper knowledge of the divine will; nor can the heart, fluctuating with perpetual doubt, rest secure in such knowledge. Hence, in order that the word of God may gain full credit, the mind must be enlightened, and the heart confirmed, from some other quarter. We shall now have a full definition of faith if we say that it is a firm and sure knowledge of the divine favor toward us, founded on the truth of a free promise in Christ, and revealed to our minds, and sealed on our hearts, by the Holy Spirit.

Here, grace consists of the activity of the Holy Spirit, who alleviates the weakness of an individual’s will and enlightens their mind so that they can see and cling to the truth of the gospel. Grace is what makes human beings capable of believing and appropriating the gospel’s message. Following Plantinga, we can again describe the process of coming to faith as consisting of three elements. First, there is the gospel message about Christ (preached or read), which demands a response from a human being. Second, there is the activity of the Holy Spirit, who influences the human mind, will and emotions, so that a person can see and accept the gospel as true. Third, there is faith, which includes the beliefs (“firm and sure knowledge”).

As we have seen, Aquinas and Calvin both agree that the process of coming to faith is initiated by some kind of inducement or stimulus (hearing a sermon, reading the gospel, witnessing a miracle). They agree that some sort of special divine assistance is necessary for the production of Christian religious beliefs. They agree that faith is the result of this process. Thus, they both treat grace as a necessary condition for the formation of Christian religious belief.
The important difference between these two thinkers and, more generally, between the Reformed and Catholic traditions, lies in the reasons they would give for the necessity of the grace of faith. Aquinas believed that the need for grace is due to the inherent limitations of human nature. These limitations should not be confused with the weakening of human nature caused by sin (including its noetic effects): even in paradise, human beings would need grace to believe in Christ. Calvin, on the other hand, explained the need for grace by focusing on the fallenness and sinfulness of human beings, not on the inherent limitations of their nature. As Michael Horton argues, on the Reformed view, “grace is not given to solve the problem of nature but sin.” If there had been no Fall, human beings would be able to come to faith by their own natural powers.

I shall end this section by stressing two important implications of GOF: 1) the doctrine makes God indispensable in the process of salvation, as grace is necessary for coming to salvific faith; 2) the fact that Christian religious belief is caused by the grace of a trustworthy God guarantees faith’s epistemic superiority over any sort of knowledge acquired in a natural way, which is always fallible and riddled with mistakes. We saw that faith for Calvin is “firm and sure knowledge.” When comparing faith to the natural virtues of wisdom, science and understanding, Aquinas writes that “faith is more certain than those three virtues, because it is founded on the Divine truth, whereas the aforesaid three virtues are based on human reason.” In this respect, grace functions both as a part of a causal explanation of how faith comes to be and as a factor that guarantees its truth and reliability. This is important for two reasons. First, for some Christians, this supernatural character of faith is the basis of their assurance (confidence) that they will be saved. Second, Christians who are convinced of the infallibility of the Scripture and/or the teachings of the Church rest these convictions on the assumption that the authors of the Scripture and later Christian theologians were supernaturally protected from errors. These authors and theologians were writing down and promulgating the content of their Christian religious beliefs. That these beliefs were caused by grace guarantees their correctness.

4. How do People Form Religious Beliefs – from the Perspective of the Cognitive Science of Religion

Recent decades have brought significant advances in the scientific understanding of religion. The cognitive science of religion has particularly contributed to an increase in our knowledge; it combines insights from various disciplines to explain the cross-cultural presence, prevalence and persistence of religious beliefs and behaviors, as well as the role of cultural factors in shaping these phenomena. Religious phenomena addressed by CSR include rituals, prayer, belief in supernatural agents (ghosts, demons, gods), body-soul dualism, and belief in an afterlife.

While diverse, CSR theories share some common commitments: 1) There are only certain forms that religious concepts, beliefs and behaviors can take because the human mind actively filters and processes information in particular ways. These cognitive tendencies can be
analyzed through the lenses of evolutionary theory (i.e., why our minds evolved to function in these ways), developmental psychology (how those tendencies emerge in an individual’s development) and neuroscience (what parts of the brain are responsible for the operation of these tendencies). 32 2) CSR authors deny that religion is something sui generis, proposing instead that it originates from normal human cognitive predispositions, perhaps as their by-product. 33 3) To fully understand religion, however, one also needs to pay attention to how cultural context modifies these natural cognitive tendencies, i.e., how mechanisms of cultural learning lead to the prevalence of certain ideas and beliefs over others. What we identify as religious ideas, beliefs or behaviors is thus a result of cognitive tendencies manifesting themselves in various ways in particular cultural contexts. 34 4) Finally, CSR adopts methodological naturalism, which involves a commitment to explaining religious phenomena without invoking any supernatural beings; instead, one should “posit only causes, effects, powers and entities that can be understood in terms of current theories of natural and behavioral sciences.” 35

The focus of my interest is how some CSR theories explain the etiology of religious beliefs. Two types of cognitive mechanisms are invoked for this purpose: content and context biases. Content biases are responsible for making certain religious ideas intuitively plausible because of the content of these ideas. Context biases favor certain religious ideas over others because of the context in which they are presented. 36 I shall now provide a brief overview of both types of biases so that I can use them later as building blocks with which to construct a naturalistic explanation of how people acquire distinctively Christian religious beliefs. 37

4.1. Content Biases in Acquiring Religious Beliefs

To explain why human beings find certain religious ideas intuitively plausible because of their content, CSR scholars posit various cognitive biases. One such bias is the tendency to over-attribute agency (“hyperactive agent detection device,” HADD). This predisposition is theorized as having an important adaptive function: oversensitivity to agents in our environment allows us to interpret cues in the environment as potentially dangerous (i.e., signaling the presence of predators) and act accordingly (i.e., flee or prepare to fight). As a by-product of HADD, human beings have evolved a tendency to believe in invisible agents (such as gods) which cause stimuli when there are no visible agents to ascribe them to. 38 Operating together with theory of mind (a mechanism for explaining actions by attributing to agents mental states such as intentions, desires and emotions), HADD yields a predisposition to view the world as populated by invisible agents with minds. 39

According to Jesse Bering’s “Existential Theory of Mind,” human beings are driven to view important and unexpected life events as being brought about by a disembodied force which uses them to communicate intentions. 40 For example, life tragedies are spontaneously interpreted as signs of divine punishment, and ironic coincidences are attributed to fate. Existential theory of mind can thus give rise to belief in gods whose intentions explain important life experiences. Kurt Gray and Daniel M. Wegner point to the special connection between moral cognition and
religious belief. They link belief in God with our propensity to think about morality in terms of a dyad consisting of an agent (author of the action) and a patient (someone who is harmed or benefited by the action).\textsuperscript{41} When people are struck by tragedies or experience salvation (e.g., they are victims of a hurricane or suddenly recover from an illness), they tend to view these events as having a moral dimension (involving harm or help). Given that such events cannot be reasonably explained by human moral agency, the dyadic approach motivates humans to ascribe these events to God as the ultimate moral agent (authors talk about “a hyperactive moral agent detection device, triggered by instances of help and harm”\textsuperscript{42}). Another cognitive mechanism, intuitive teleology, gives rise to the belief that gods are creators. As Deborah Kelemen argues, children are “intuitive theists,” i.e., they have a predisposition to perceive natural objects as designed by nonhuman agents; in a way, artifacts are perceived as designed by human agents, that is, as created for an intended purpose.\textsuperscript{43} De Cruz and De Smedt suggest that this intuitive teleology accounts for the universal and cross-cultural appeal of arguments from design for the existence of God.\textsuperscript{44} Some studies also seem to support a view (the “preparedness hypothesis”) that young children are cognitively predisposed to represent God as infallible (omniscient).\textsuperscript{45}

Focusing on the content of religious ideas can also help to understand why gods matter to people.\textsuperscript{46} According to P. Boyer, supernatural ideas which in some respects deviate from our intuitive expectations about the world while conforming to others are more interesting, memorable and transmittable than more mundane or more counterintuitive ideas.\textsuperscript{47} Gods in certain ways defy our innate ontological expectations about how a person will behave (which makes them attention catching), while in other ways they conform to these expectations (which makes them easy to represent and memorize). As Scott Atran put it, “gods and other supernatural beings are systematically unlike us in a few general ways – more powerful, longer lived, more knowledgeable (...) – and predictably like us in an enormously broader range of usual ways.”\textsuperscript{48} The predisposition to represent gods as very knowledgeable agents who can influence human lives in significant ways determines the inferences we make about them and how we tend to behave towards them (e.g., we try to communicate with them, fear them, placate them, or ask them for favors or protection). Gods are represented as social agents who are important to us because of what they know about us and what they are able to do to us.\textsuperscript{49} As such, gods are capable of evoking a strong affective commitment on the part of believers.\textsuperscript{50}

4.2. Context Biases in Acquiring Religious Beliefs

Content biases may thus explain why human beings find it easy to believe in minimally counterintuitive invisible supernatural agents who have minds, designed the natural world, orchestrate important live events to communicate their intentions, are causally responsible for human suffering and salvation, possess strategic information about humans, and are capable of evoking deep emotional commitments. In fact, some authors went so far as to link some of these natural cognitive mechanisms to sensus divinitatis, which, according to John Calvin and the later
Reformed tradition, is an innate God-given mechanism devoted to producing theistic beliefs in response to certain kinds of stimuli. However, as many scholars have observed, content biases are not sufficient to fully account for how humans acquire their religious beliefs. Konika Banerjee and Paul Bloom note that content-based “cognitive biases make humans “receptive” to religious ideas, but do not themselves generate them.” Tarzan would not acquire religious belief in isolation without cultural support. Will Gervais and Joseph Henrich argue that even though our cognitive architecture predisposes us towards some form of religious belief, it alone does not explain why people who are aware of different god concepts (e.g., Zeus and Jahwe) choose one over the other as the object of their belief. In a similar spirit, Leech and Visala point out that HADD and Theory of Mind (principal mechanisms explaining religious beliefs in what they consider to be the CSR “standard model”) do not sufficiently explain why a given individual has the particular religious beliefs she does, e.g., why is she a Muslim and not a Christian? At best, these mechanisms can be invoked to answer the general question of why humans have a tendency to hold supernatural beliefs. Finally, some widely believed religious doctrines such as the doctrine of the Trinity or the Buddhist doctrine of No-Self seem complex and very counterintuitive. Their acquisition cannot be thus explained by content factors alone. Any naturalistic explanation of how people come to believe that focuses solely on content biases would thus be incomplete.

This is why some scholars have proposed emphasizing the role of context biases in the acquisition of religious beliefs. Context biases are predispositions to accept ideas, beliefs and practices from other people in our environment (models) based on certain social cues, such as their prestige, success, skill age, sex, or ethnicity. As Claire White puts it, “some concepts are more readily endorsed than others because we understand the source of information.” Context biases are hypothesized to have evolutionary roots: they help human beings socialize by predisposing them towards information that would be most adaptive and allowing them to avoid deception.

Gervais et al. list three types of context biases: conformist learning bias (tendency to accept as true what the majority of people in our community believe); prestige-based bias (tendency to emulate models who have certain features such as a relevant skill or who are successful, older, prestigious, etc.); and bias towards accepting ideas supported by credibility-enhancing displays (CREDs). CREDs can be understood as behavioral expressions of one’s beliefs that signal to others that one is genuinely committed to these beliefs. In the case of religion, CREDs include praying, participating in rituals, and observing religion’s moral precepts; but they also include more subtle signals such as genuine expressions of religious emotions, including facial expressions and vocal inflections. In other words, CREDs are ways in which one’s religious beliefs are embodied in one’s actions. A meta-analysis of the data from the World Values Survey, conducted by Gervais and Najle, suggests that both religious upbringing and the fact that one’s compatriots are religious and regularly attend religious services are good predictors of individual differences in belief in gods. Studies carried out by Lanman and others have shown that individuals exposed to a high level of CREDs in their
upbringing are significantly more likely to report belief in God and a higher certainty that God exists, while those exposed to a low level of CREDs report no belief in God and greater certainty that there is no God. What is important for my present purposes is that CRED exposure predicts not only belief in God in general but also whether one belongs to a particular religious tradition and one’s level of commitment to this tradition. Consequently, “[w]itnessing actions attesting to religious claims is one of the most crucial variables determining whether an individual will explicitly believe such claims.”

Another reason for the importance of cultural context in religious belief acquisition concerns the role of religious ceremonies and rituals in accepting more complex and counterintuitive religious doctrines. De Cruz gives the example of repeating the Nicene Creed in the context of the Christian liturgy:

This Creed, like other statements of faith, propagates a highly counterintuitive concept of God. God is both three persons and of one substance, is eternal, yet born of a virgin and mortal; the relationship between the three persons of the Trinity is asymmetric (the Spirit proceeds from the Father and the Son). Such a puzzling jumble of features far exceeds the minimal counterintuitiveness that makes ordinary religious beliefs memorable. The repetition of the Nicene Creed during religious services, however, helps to heighten its familiarity and increases its salience.

Furthermore, rituals and ceremonies have the important role of connecting people’s religious beliefs to different aspects of their everyday existence. As “the belief in god becomes more intricately woven into the fabric of the believer’s life,” their faith is strengthened.

4.3. Acquiring Christian Religious Beliefs

The aim of the above overview was to provide building blocks for an explanation of how people acquire distinctively Christian religious beliefs. As White noted, “CSR scholars accept that religion is a product of the mind situated in its cultural environment.” This applies in equal measure to Christianity and other religious traditions. On this view, Christian religious belief is a result of panhuman cognitive mechanisms operating within a particular cultural milieu. Therefore, to explain how people come to Christian faith, both content and context biases have to be taken into account. The former explain that some people are receptive towards the idea of a deity and find it intuitive and plausible to represent it in certain ways, some of which agree with the way Christian theology has portrayed God: as an invisible, omniscient, personal moral agent who designed the natural world, communicates his intentions through significant life experiences, and who can enter into reciprocal social interactions with human beings. However, the deliverances of content-biased mechanisms seriously underdetermine the Christian idea of a triune god who spoke through the prophets, became human, and died and rose to save fallen humanity. Content biases do not explain why one would accept these very specific and often very counterintuitive doctrines as true and choose the Christian God over other gods as the object
That is where context factors come into play. A person raised in a Christian community would tend to accept the religious beliefs of the majority of the people around her. She would willingly accept as true what her parents and teachers believe. By participating regularly in religious services she would memorize and come to accept complex and counterintuitive theological doctrines, such as the Trinity. Her Christian faith would be strengthened by being constantly exposed to the signals of genuine religious commitment from people close to her: seeing her parents pray, noticing the tone of their voices when they talk about religious matters; witnessing their emotions when they participate in religious ceremonies. All these factors would play an important role in her becoming a believer. Thus, CSR provides what I believe is a plausible naturalistic outline of how many people come to the Christian faith.

5. How CSR’s explanation of the etiology of faith makes grace superfluous

I am now in a position to formulate a challenge to GOF by employing the naturalistic CSR account of the causal origins of Christian religious beliefs that was outlined in the previous section. My argument is that this account makes the grace of faith superfluous with regards to explaining these origins. To establish this conclusion, I will first present a more general form of reasoning that was proposed by Hans Van Eyghen; then, I will apply it to the specific issue of GOF.

As Van Eyghen observes, one can argue that the supernatural beings postulated by the religious explanation of some religious phenomena (e.g., experiences or beliefs) are made superfluous with regard to accounting for these phenomena once we arrive at a plausible naturalistic explanation. If we can identify the natural mechanisms that “do the job” of producing religious beliefs or experiences, there is simply no need to “move to a deeper level” and add supernatural beings to the equation. In this sense, our naturalistic theory explains away the supernatural causes. What is more, insofar as the reason for belief in the existence of these supernatural beings is that they explain the religious phenomena in question, by providing a plausible naturalistic explanation we provide a defeater for this belief (just as finding out that people who suffer from epilepsy are not possessed by demons but suffer from a neurological disorder provides a defeater for a belief in demons).

In the particular case of the etiology of Christian religious beliefs, we are offered a religious explanation (expounded in section 3) which postulates the supernatural element – the grace of faith – as an explanans: due to the inherent limitations of human nature and/or the noetic effects of sin, human beings are unable to assent to the contents of the Christian revelation without divine assistance in the form of the grace of faith. The problem is that, thanks to CSR, we have also arrived at a plausible naturalistic explanation (expounded in section 4) of the same phenomenon: Christian religious beliefs arise via evolved, panhuman, cognitive and cultural learning mechanisms working in an appropriate environment. There is no need for supernatural grace in this scenario. Thus, and here is the gist of my argument, the CSR explanation of how Christian religious beliefs arise renders the grace of faith superfluous in explaining this. Moreover, insofar as belief in the existence of the grace of faith rests on the fact that its existence explains the phenomenon of faith, CSR provides a defeater for such a belief.
This argument has two important implications. First, it undermines the theological anthropology presupposed by GOF. If coming to faith is a necessary condition of being saved, and the acquisition of faith is something which can be explained solely by natural means, this endangers human dependence upon God in the process of salvation. God’s causal role in the process of coming to faith is then limited to providing the contents of faith (e.g., by revealing the divine law to Moses or through the teachings of Jesus of Nazareth), but it is within natural human powers to accept these contents. This is the view that orthodox Christian authors ascribed to Pelagius and deemed heretical.

Second, this conclusion negatively affects the special epistemic status of faith. Grace guarantees that Christian religious beliefs are true, as God would not actively aid the formation of false beliefs about himself. However, if one’s Christian faith is a result of fallible, natural, belief-forming mechanisms, there is no reason to suppose that it is immune from error any more than human beliefs on other matters. Nothing guarantees that one’s faith adequately represents the contents of divine revelation. This, in turn, raises worries about the character of a god who would reveal himself to human beings but would not make sure that they interpret (represent) his revelation correctly. More importantly, insofar as one treats the Scripture and/or the teachings of the Church as the expressions of what Christians believed about God and Jesus, one has a reason to doubt the veracity of these beliefs as they are the products of fallible, natural, belief-forming mechanisms.

6. Reply to Objections

Before drawing my conclusions, I will discuss four potential responses to my argument.

The first response invokes the notion of levels of explanation. It goes like this: while theology is concerned with the ultimate explanation of how Christian religious beliefs arise, CSR can only deal with proximate or immediate explanations of this phenomenon. More specifically, theology speaks about God the Creator, who implanted certain natural cognitive mechanisms in human beings and overlooked their evolution, so that at some point they would produce Christian faith. While CSR may describe the proximate mechanisms which produce faith, it has nothing to say about the ultimate divine causality. The naturalistic account of how Christian faith arises cannot thus in any way endanger the theological account, simply because these two accounts describe two different types of causes which do not get in each other’s way.

While this type of response is certainly a promising way of addressing naturalistic arguments against theism in general, there are two reasons why it fares much worse in the specific case of GOF. First, it purports to solve the problem by pushing God further down the causal chain that eventually leads to the formation of faith. However, it seems to me that the grace of faith is portrayed as a much more proximate kind of divine activity (which is sometimes called “special divine action”). As indicated in passages from Aquinas and Calvin, grace heals,
restores, or perfects the cognitive powers of a particular person who finds themselves in particular circumstances (e.g., listens to a sermon or observes a miracle). It thus seems wrong to suggest that in this case the theological and the naturalistic explanations are on different levels. Secondly, this response seems to dispense with the need for the grace of faith altogether, as it implies that all religious beliefs held by Christians are products of natural cognitive mechanisms (with God relegated to being the ultimate cause and designer of these mechanisms). Yet, this is not at all consistent with the understanding of GOF introduced above: for Aquinas and Calvin, the difference between acquiring, say, the belief that God exists and acquiring the belief that God is triune lies precisely in the fact that, for the latter belief, natural human powers as we find them are not enough and have to be aided by grace.

It would be more faithful to the theological formulations of GOF to take a different approach by arguing that not only is God the ultimate cause of the natural mechanisms which produce faith, but he also transforms these mechanisms by means of his grace. Because human nature is inherently limited or because it is mired in sin, grace is needed to cognitively enable human beings to accept Christian doctrines. Appearances notwithstanding, the CSR picture of how people come to faith does not make the grace of faith superfluous; the fact that these cognitive biases are able to produce faith at all is possible only because they were first restored or perfected by grace.

While this response may score higher on theological orthodoxy, it forces one to adopt an overly skeptical position towards science. The point of my analysis in section 4 was to show that Christian religious beliefs arise in a way that is similar to the beliefs of other religious traditions: thanks to various cognitive biases operating in particular cultural contexts. From the cognitive scientific perspective, there is nothing about Christian religious beliefs that would force one to think differently about their origins. For example, there is no reason to suppose that the causal contribution of a conformist bias to the acquisition of religious beliefs would depend on whether an individual lives in a predominantly Muslim or predominantly Christian society. Yet, for reasons which are strictly theological, this response forces one to suppose precisely that. It forces one to deny – without good scientific evidence – that a general scientific theory of how religious beliefs are caused can be applied to one’s own religious beliefs. It seems to me that one does not have to treat science as “the final arbiter of all truth claims about reality”77 to realize that such theology-induced skepticism is not plausible.

According to the third response, the CSR explanation of how people come to faith leaves out many cases of unexpected religious conversion, such as the one of the apostle Paul, or some of the rapid, surprising conversions described by William James78. In these cases, individuals acquire beliefs which are not supported by context biases (e.g., they live in a non-Christian society and/or they were not exposed to relevant CREDs during their upbringing). Surely, grace is needed to explain these cases of coming to Christian faith? I would say two things in response. First of all, it may be true that CSR does not offer a complete account of such cases; however, this does not mean that no other naturalistic explanation is available (the CSR explanation being only one kind of naturalistic explanation).79 Second, even if my argument does not cover all
cases of Christian belief acquisition, it is still enough to topple GOF as the doctrine is put forward as encompassing every case of Christian religious belief acquisition. In fact, it would be enough to show that only one case of coming to faith can be explained without invoking the grace of faith.

Fourthly, one may argue that the epistemic status of the invoked CSR theories is dubious. This line of criticism can take several forms. One may point out that CSR theories are not sufficiently supported by empirical data; or that adaptationist explanations of religion are preferable to cognitive accounts; or that there are problems with the cognitive scientific and evolutionary theoretical frameworks that CSR hypotheses employ. Therefore, one cannot use CSR to successfully explain how Christian religious beliefs are formed. As limitations of space do not allow me to tackle all those charges in depth, I will only observe, in passing, that it is dubious whether the empirical support for CSR theories is indeed so insufficient as some suggest. What is more, adaptationist accounts and cognitive accounts are not necessarily mutually exclusive. More importantly, as Van Eyghen notes, most scholars who discuss the purported conflict between CSR and religious claims simply proceed as if there were no problems with the status of CSR theories. Here, I am following this approach. Someone more skeptical about the epistemic standing of CSR theories could take my challenge to consist of the conditional claim that if CSR explanations of religious faith are true, then GOF is false.

7. Conclusion

I have argued that the theological explanation of the acquisition of Christian religious beliefs that is encapsulated in the doctrine of the grace of faith is threatened by the naturalistic explanation offered by the cognitive science of religion. The naturalistic explanation makes the grace of faith superfluous with regard to explaining the etiology of faith. If true, this conclusion has some profound and troubling implications for Christian theology, especially beliefs in the authority of the Scripture and/or tradition and the gratuity of salvation. I have also explored some potential objections to my argument and found them wanting.

It seems to me that a theologically and scientifically satisfying answer to my argument would need to meet two conditions simultaneously. On the one hand (unlike the first response in the previous section), it should preserve the necessity of the grace of faith for Christian religious belief. It should thus allow one to distinguish between Christian religious beliefs, which come by way of grace, and beliefs of natural theology and of non-Christian religious traditions (assuming traditional Christian exclusivism), which do not. On the other hand (unlike the second response), a theologically satisfying answer should grant the validity of CSR explanations of how people acquire Christian religious beliefs, unless there are good scientific – and not purely theological – reasons not to do that. The problem is how to reconcile both conditions. It remains to be seen whether a successful solution to this conundrum could be offered or whether one is indeed forced to make a choice between grace and nature in this case.
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7 Romans 1: 20 (NRSV).


9 It should be noted that OOF as presented here assumes Christian particularism: the view that there is no salvation apart from Christ (see Acts 4:12). This view emphasizes the unique status of Christianity among other world religions as the one true religion. It follows that it is only Christians, and not adherents of other religions, who need grace to acquire their beliefs, as God would not support the formation of religious beliefs which are not true. For an explanation and a defense of Christian particularism, see William L. Craig and James P. Moreland, Philosophical Foundations for a Christian Worldview (IVP Academic: Downers Grove, 2003), 623–626.

10 Ephesians 2:8 (NRSV).

11 John 6: 44 (NRSV).


14 Plantinga, Warranted Christian Belief, 168.


17 Ibid., 280.

18 Plantinga, Warranted Christian Belief, 249.


20 Warranted Christian Belief, 251.

21 Ibidem, 249–250.

22 What these passages from Aquinas and Calvin clearly suggest is that the grace of faith is necessary for human beings to acquire faith, even if – as I do in this paper – we limit our attention only to its cognitive aspect. Calvin says that faith is "sure knowledge" that is "revealed to our minds" [emphasis mine] by the Holy Spirit, while Aquinas emphasizes the need for "another [supernatural] internal cause" that moves an individual to "assent" to Christian doctrines. In both examples, if there were no grace of faith, there would be no Christian religious beliefs. I am grateful to the Anonymous Reviewer for pressing me on this point.

23 ST II–II, q.6, a.1


26 Inst. I.15.8.

27 ST II–II, 4, 8.
Heidelberg Catechism calls faith “a deep-rooted assurance, created in me by the Holy Spirit through the gospel that, out of sheer grace earned for us by Christ, not only others, but I too, ... have been granted salvation.” As quoted in Plantinga, Warranted Christian Belief, 247.


Other than the cognitive mechanisms described by CSR which are the focus of this paper, one should mention further natural factors that come into play in explaining the acquisition of religious beliefs. Conditions of existential insecurity, such as exposure to death and suffering, social isolation, lack of control, are conducive in motivating one to commit to religious ideas. Differences in cognitive style also play a role, as analytical thinkers are more likely to overcome their intuitions that predispose them towards belief in gods. See Gervais and Norenzayan, “The origins,” for more details.

White, An Introduction, 195.


Ibid., 10.


De Cruz, De Smedt, A Natural History, 19–39.


Ibid., 10.


De Cruz, De Smedt, A Natural History, 61–84.


Tremlin, Minds and gods, 112–113.

Ibidem, 125–126.


Belief in Gods,\textsuperscript{57} intuitively more plausible than the physicalist conception which was popular in the beginnings of Christianity. Cruz ("Study of Theological Concepts," 492) argues that the mainstream orthodox view of resurrection of the body is plausible for Christians because it portrayed Jesus as an ancestor who could mediate between humans and God. Rapids: Eerdmans, 2019),\textsuperscript{125}.

Commitment people of faith have to the object of their religious belief. Due to the limitations of space, however, I cannot address this issue in detail here. The fact that my paper focuses on the cognitive aspect of Christian faith does not mean that other non-cognitive aspects of faith cannot be explained naturally in quite a similar manner. Not that content biases play no role whatsoever in the acceptance of some distinctively Christian doctrines. De Cruz ("Study of Theological Concepts," 492) argues that the mainstream orthodox view of resurrection of the body is intuitively more plausible than the physicalist conception which was popular in the beginnings of Christianity.\textsuperscript{67} István Czachesz ("The transmission of early Christian thought: Toward a cognitive psychological model," \textit{Studies in Religion/Sciences Religieuses} 36 (2007),76–77) believes that the early Christian view of Jesus was cognitively plausible for Christians because it portrayed Jesus as an ancestor who could mediate between humans and God.\textsuperscript{68} The fact that my paper focuses on the cognitive aspect of Christian faith does not mean that other non-cognitive aspects of faith cannot be explained naturally in quite a similar manner. What the above survey of CSR theories shows, I think, is that these theories at least have the potential to explain the deep emotional and behavioral commitment people of faith have to the object of their religious belief. Due to the limitations of space, however, I cannot address this issue in detail here.\textsuperscript{69}

Van Eyghen, "Two Types of 'Explaining Away' Arguments in the Cognitive Science of Religion," \textit{Zygon} 51 (2016), 977..\textsuperscript{70}

When discussing the relation between scientific theories and religious claims, Leech and Visala ("The Cognitive Science of Religion: Implications for Theism?" \textit{Zygon} 46 (2011): 47–64) introduce the notion of a "religiously relevant scientific theory." It relies on a distinction between two kinds of propositions which constitute a worldview (including a religious worldview): (A) consists of what is constitutive for a worldview as such; (B) consists of claims that can be modified without losing the identity of a worldview. As they define it, "a scientific discipline or a theory is religiously relevant for some particular religious view if its theories seem to require a modification or rejection of one or more propositions in the B subset of a given religious worldview." (Ibid., 50). I suggest that GOF is a claim belonging to the B subset of a Christian religious worldview, as it seems to me that one can remain a Christian even after abandoning GOF. If I am correct, then my argument shows that CSR is religiously relevant for Christianity: its theories require the abandonment or modification of GOF and some other propositions that GOF implies.\textsuperscript{71}

Ormerod, "The Grace–Nature Distinction."\textsuperscript{72} Anonymous Reviewer suggests that the epistemic status of faith could depend not only on God’s active role in causing faith but also on natural theology and testimony. I agree; however, both philosophical arguments and testimony are natural (and therefore fallible) means of establishing the truth of religious claims.\textsuperscript{73}


Nicholas Saunders (\textit{Divine Action and Modern Science} [New York: Cambridge University Press, 2002], 21) interprets the category of special divine action as referring to "[t]hose actions of God that pertain to a particular time and place in creation as distinct from another." Examples include God performing miracles or responding to prayers.\textsuperscript{77}


James, \textit{The Varieties of Religious Experience. A Study In Human Nature}, London: Routledge, 2008 [1901]).
81 Konrad Szocik, “Adaptationist accounts can tell us more about religion than cognitive accounts can,” in van Eyghen, Peels and van den Brink, *New Developments*: 93-108.
83 Van Eyghen, “Two types,” 968–969, 980. White (“What does the Cognitive Science,” 43–45) argues that, since its beginnings, CSR has significantly expanded our knowledge of the mechanisms behind a great variety of religious beliefs and behaviors.
86 As H. Kvandal aptly put it in his investigation of the relationship between CSR and religious claims, “The [CSR] theories currently available are in my view sufficiently plausible to make their implications, if true, worth investigating philosophically (…).” (Halvor Kvandal, *God Naturalized. Epistemological Reflections on Theistic Belief in light of the New Science of Religion* [Cham: Springer, 2022], 7).