# Cognitive Science and the Evolution of Religion: A Philosophical and Theological Appraisal

by Nancey Murphy CiS/ASA Joint Meeting Edinburgh August 4, 2007

#### 0. Introduction

When Denis Alexander invited me to give a paper here he suggested that I address the arguments of Pascal Boyer and others who provide cognitive-science accounts of the origin and persistence of religion. At that time I had not read much in the cognitive science of religion (from now on, I'll call it CSR). Most of my knowledge came from my doctoral student, James Van Slyke, who is writing a dissertation on the subject; I'll be indebted to him throughout this paper.

I had only read short reports on Boyer's work, and expected to find the real thing pretty boring. But quite the contrary! His book, titled *Religion Explained: The Evolutionary Origins of Religious Thought*, is actually a fascinating book and, for a Christian who dabbles in theology, very thought-provoking. As he is applying his theories to what Westerners often call primitive religions, I'm saying "yes, yes, this explains all of those strange beliefs and practices." But then, "wait a minute. This doesn't apply to us Christians!"

So one way a Christian can appropriate Boyer is to say that, insofar as his theories are correct, they explain other religions, but as Karl Barth claimed, *religion is* a human phenomenon, while Christianity is something different. I plan on taking a different tack, though. I'm going to try out the hypothesis that Boyer is giving an account of the *human* contributions to Christianity as well. However, his being a purely naturalistic account it is from a theological standpoint necessarily incomplete, since it leaves God out of the picture.

Here is how I shall proceed. In section 1 I'll give you an overview of some of Boyer's work. Next, I'll use Arthur Peacocke's conception of theology as the top science in the hierarchy of the sciences to think in abstract terms about how theology should be expected to relate to CSR. In section 3 I'll present Catholic Modernist George Tyrrell's theological account of the

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development of religion and then show how neatly Boyer's work can be adopted into it. In the final section I'll suggest some of the ways Christianity can benefit from this adoption, both theologically and practically.

#### 1. Pascal Boyer and the Cognitive Science of Religion

An important feature of Boyer's work is what he calls turning the question of the origin of religion upside down. We tend to seek for the one origin of the many religions. Instead, he says, we need to recognize the *vast* number of potential religious concepts, beliefs, and practices, and then explain why the ones that exist have survived. Is there something that religious concepts have in common that explains why they have been preserved and passed down to new generations?

The aspect of Boyer's work that seems most often to catch people's attention is his theory regarding religious concepts as "minimally counterintuitive." From cognitive science Boyer introduces the idea of a template that allows for quick development of more particular concepts. We have only a small number of templates: PERSON, ANIMAL, ARTIFACT, POLLUTING SUBSTANCE, NATURAL OBJECT. The template--for example, ANIMAL, specifies variables that need to be filled in to create a new concept, such as a *giraffe*: its general body shape, what it eats, where it lives, how it reproduces. But the template itself carries a great deal of tacit knowledge. For example, if one female giraffe bears live young, then all will be expected to do the same.

Boyer's thesis regarding religious concepts is that they are anomalous, in that they add a special tag that violates one or a few characteristics contributed by the template. Some examples, a spirit violates the PERSON template by adding to it that it has no body. A statue to which one prays uses the ARTIFACT template but adds anomalous cognitive powers. An omniscient God is created from the PERSON template with added special cognitive powers.

Boyer and others have done some research in several cultures with the goal of showing that concepts that are anomalous in these minimal ways are more likely to be recalled by the

subjects than either normal concepts or concepts that do not fit a template at all. So the claim is that from among an effectively infinite number of possible religious concepts, the ones we actually find in the world have survived and spread because they have this feature of minimal anomalousness. They are concepts that are easily formed by slight alteration of a template and they happen to be more memorable simply as a result of how the human mind or brain works.

In addition, we have inference systems that are turned on by different kinds of entities. These are sometimes called cognitive modules; some examples are an agency-detection system, closely related to a system for detecting goal-directed movement; a system for keeping track of who's who; systems dealing with the physics of solid objects, physical causation, and linking function to structure. To the extent, then, that religious concepts have enough in common with ordinary concepts, they set off these inference systems, and this makes some sets of beliefs about the relevant entities natural, and therefore likely to be understood, remembered, elaborated in specific ways, and passed on to others.

There are two further aspects of Boyer's work that I'll present here, regarding morality and religious practices. Boyer says that a typical assumption by and about religious believers is that belief in gods or spirits comes first, and then both religious practices and moral prescriptions follow. Boyer believes that morality and religious practices take priority, and both of these make religious belief more plausible. The most interesting of his discussions of religious practices is in a chapter dealing with the relation between religion and death. Corpses are highly anomalous because two different inference systems give conflicting answers to how we should deal with them. The system that detects animacy recognizes that they are no longer alive, but the personfile system cannot suddenly be shut off. The corpse is an object that needs to be disposed of, yet this is still uncle Joe. Religions incorporate assorted elaborate rituals to satisfy these conflicting needs and attitudes. Insofar as the rituals are related to concepts of gods or spirits, participation in them makes belief in the spirits or gods easier to acquire.

Regarding morality, Boyer cites studies showing that very small children, in different cultures, develop remarkably similar moral intuitions. By the age of three they can distinguish

among moral, conventional, and prudential rules. He goes on to claim that our evolution as a social species is sufficient to explain our shared morality. However, without an evolutionary explanation, humans through the ages have needed some other explanation. Spirits or gods who know what we are doing to whom, and who are interested parties in the transactions make for a highly credible explanation.

In short, human brains have evolved to work in ways that suited us for survival in our early environments. Religious concepts, belief systems, practices, and rituals are natural byproducts of these cognitive processes.

Now, as I pointed out at the beginning, our response to Boyer's work could be to consider the extent to which his claims seem adequate to some sorts of religion, but maybe not all, and especially not mine. Animism and totemism would seem to be explained rather easily: the NATURAL OBJECT and ARTIFACT templates, respectively, tagged with anomalous cognitive and agential powers. There is actually quite a lot in Christianity that can be *described* in Boyer's terms: angels and demons, some forms of sacramental beliefs and actions. But of course we will not take him in this case to have offered an *adequate* explanation.

#### 2. How To Relate Theology and Cognitive Science

I have found Arthur Peacocke's model for relating theology to the sciences to be the most useful. He has taken the widely accepted model of the hierarchy of the sciences, and then adapted it in two ways. First, the original use of the hierarchy was to argue for reductionism, ideally reduction of all knowledge to physics. We are in the midst of a significant worldview shift right now, as reductionism is being replaced by an understanding of the hierarchy that recognizes the emergence of more complex systems. Within these systems there often emerge new causal patterns that exercise "downward" constraints on the parts of the system. We can call this whole-part constraint, as Peacocke preferred, or downward causation, in recognition that the system represents a higher level in the hierarchy than its components.

Peacocke's second innovation was to argue that theology, being the science that studies the most complex of all systems, God in relation to the world, should be placed at the top of the hierarchy. George Ellis and I developed this idea, creating a branching hierarchy with the natural sciences above biology in one branch and the human sciences in the other. This allows me to represent the locations of cognitive science and theology in this way:

# theology

cosmology social sciences

psychology

astrophysics

cognitive science

ecology neuroscience

biology

chemistry

physics

## FIGURE 1

Our general (nonreductive) understanding of the relations among sciences in the hierarchy is that, first, the higher-level science must be consistent with the findings of the ones

below. Second, the higher level is underdetermined by the lower. Third, lower-level sciences often raise what Ian Barbour calls "boundary questions": questions that can be formulated at the level in question but cannot be answered without insights from a higher-level science.

On this account, theology needs to be consistent with CSR, at least with those claims within CSR that seem to be well-supported. However, obviously, from a theological perspective we should expect cognitive-science explanations of religion to be radically incomplete. Van Slyke's project is largely to show that CSR is unjustifiably reductionistic even from the point of view of the other sciences: he calls into question the over-dependence on cognitive modules, and notes that it does not take into account the downward effects of culture on the individual brain. My project here is to assume it is incomplete because it does not take divine action into account. But if we do take divine action into account, can we then reconcile a theological account of the origin and persistence of religion with the phenomena that CSR claims to explain?

In order to answer this I need to present a credible account of the role of divine action in the development of religion.

#### 3. George Tyrrell's Account of the Development of Religion

Tyrrell was born in Dublin in 1861. He was raised in the Church of Ireland but later converted to Catholicism and became a Jesuit. He was the most prolific theologian of the Catholic modernist movement, which lasted from approximately 1890 to 1910. This was an attempt, in general, to reconcile the Catholic heritage with the thought of the modern world, and more particularly to respond to the intellectual crisis created by biblical criticism and critical church history, and to replace a theological epistemology based on authority by one congruent with empiricism.

Tyrrell was excommunicated in 1907 and died in 1909.

Tyrrell began with the problem of theological epistemology and by the time of his death had elaborated a model of religion and its development with places for divine action and religious experience; scripture, narrative and historical data; morality, ritual, and sentiment;

metaphor and mystery; dogma and theology; first- and second-order language; and finally, church authority and tradition.<sup>1</sup>

I'm going to speak, as he does, of Catholicism until we come to points where it seems necessary to make a distinction between Catholicism and other religions. I'll present his views as they developed over time. His first move was to consider the relation between scripture and theology. The scholastic theologians of his day were treating scripture as a book of theology and attempting to deduce further conclusions from it. He explained the distinction he wished to draw between theology and the "deposit of faith" by means of an analogy. Just as scientific knowledge about nature is distinct from nature itself and different in kind from the nature-lover's direct experiential knowledge of it, so theology with its abstract categories is distinct from the life of the faithful, which it is its job to explain, and different in kind from the common beliefs of the faithful, expressed in "vulgar," "anthropomorphic" language. The Scriptures—the deposit of faith—partake of this common level of expression; they are not theological treatises or propositions. He wrote:

This "deposit of faith," this concrete, coloured, imaginative expression of Divine mysteries, as it lay in the mind of the first recipients, is both the lex orandi and the lex credendi; it is the rule and corrective, both of popular devotion and of rational theology . . . . Just as experience is the test and check of those scientific hypotheses, by which we try to classify, unite, and explain experience; so revelation is the test and check of all philosophical attempts to unify and elucidate its contents (pp. 95-6).

Next Tyrrell addressed the development of religious knowledge. The world, he asserts, is more than the natural world--the physical world is not self-explanatory. The non-physical part of reality constitutes a "higher plane"; it is the realm of freedom, will, and love--the "over-natural" or "spiritual" world. Human faculties are well suited for accumulating knowledge about

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<sup>&</sup>lt;sup>1</sup> The parenthetical references here are to George Tyrrell, *Through Scylla and Charybdis, or The Old Theology and the New* (London: Longmans, Green and Co., 1907).

nature and history, but we only grasp dimly the realities of the spiritual world. We do so by experiment: In building up knowledge of the spiritual world we find that

practical situations are first offered to our direct perception, as it were in their isolation, which our ignorance cannot interpret in all their connections and implications, or as to their ultimate bearings; that the Beyond to which they are felt to belong is as yet an absolute blank; that in the face of these isolated situations we determine ourselves, with prudent venture, to some kind of action or inaction, and record the observed consequences in our mind for future use; that gradually these recorded observations are systematised by the collective labour of society and pieced together into a mental construction of the spiritual world which is communicated by tradition to each member of society, to be received and modified . . . (p. 175).

The truth or reality of the scheme so constructed consists in its adequacy for the guidance of life, the prediction of the consequences of one's actions. The actions and experiences in question here are ethical and affective.

We have no language proper to the realities of the spiritual world and have to use the language of the natural world metaphorically. The inaptitude of language and the indirect manner of knowing combine to ensure that theories regarding the spiritual world will be less clear and adequate than those regarding the natural world. Thus such theories are called mysteries. In Tyrrell's words:

[I]t is evident that human life and progress involve an upward straining towards increasing self-adjustment with that over-natural whole of which the natural is felt to be only a part; and that this effort is futile except so far as some construction or plan of that strange country is possible; and that such a construction must necessarily be in terms of things clear and familiar, and therefore must be mysterious (pp. 187-8).

At this point in his work Tyrrell returned to the question of the nature of revelation.

What is the relation between the attempt to know the spiritual world experientially and what is taken to be revelation? He says that what is given from "beyond" and serves as the basis for all

religious knowledge is a drive or impulse to adjust oneself to the "whole" that transcends the natural world. This drive resembles an instinct, and allows for recognition of courses of action or thought that move one into closer harmony with the spiritual world. As society develops a code of behavior, sentiment, and piety on the basis of this instinct, its members reflect upon this mode of life and develop "some picture, idea, and history of the world to which this code strives to adjust our conduct" (p. 207). Thus religious belief grows up to account for the religious life; by providing an imagined view of the spiritual world it explains religious practices and sentiments. He says:

So far, then, revelation (considered objectively) is a knowledge derived from, as well as concerning, the "other world," the supernatural. But its derivation is decidedly indirect. What alone is directly given from above, or from beyond, is the spiritual craving or impulse with its specific determination, with its sympathetic and antipathetic responses to the suggestions, practical or explanatory, that are presented to it . . . . To find the object which shall explain this religious need and bring it to full self-consciousness is the end and purpose of the whole religious process (p. 207).

First-order expressions of these experiences of the spiritual world and of attempts to visualize it are in poetic or "prophetic" language, which is symbolic, imaginative, imprecise. Christian dogmas are of this order. It is to be expected that forms of expression will change since in grasping for language the prophet uses whatever categories, images, and concepts are available at the time.

Theological questions arise in the attempt to systematize and unify the first-order knowledge of religion and reconcile it with that from other aspects of life. As evidence accumulates categories change and theology suffers revolutions, as do all other sciences.

Of these three elements--revelation, dogmatic expression, and theological explication-only the revelatory experience itself is guaranteed truth. Furthermore, this truth is of a practical
kind--it is truth about how to live; it is approximative and preferential--it is not guaranteed to be
absolute or ultimate, but only to be the alternative that moves closer to ultimate truth.

Here is my picture, in diagrammatical form, of Tyrrell's model, as developed so far.

		dogmas	
yes/no impulses	worship sentiment morality	prophetic history (scripture)	theology
			other sciences, culture

#### FIGURE 2

The yes/no experiences are the impulses that form the basis of revelation. Over time and within a community they lead to the formation of patterns of worship, morality, and sentiment. They are also expressed in the first-order imagistic, metaphorical language of dogmas. The patterns of worship, sentiment, and morality need explanation: Why are these the correct way to feel, to worship, to act? Hypotheses (or models) are formed, again metaphorically, about the spiritual world and they are confirmed insofar as they meet the test of conforming the community experientially to that reality. Revelation (scripture) in the case of Christianity is the first-order language of those who knew Christ personally. Prophetic history is a kind of narrative that tells spiritual truths and may or may not also be objectively historical. Theology comes after the first-order language and is the attempt to formulate belief and practice into a consistent system. It needs to be informed by science and the rest of culture.

Of course some religions would have an oral tradition instead of written, and perhaps nothing comparable to theology, but Tyrrell would predict that these features would develop later.

## 4. Parallels with Current Cognitive Science

Despite the 100-year time gap, Tyrrell shared with contemporary cognitive science of religion the understanding of religion as a natural phenomenon, developing in history according to "natural laws of religious psychology." He recognized the tendency of religious representations to be distorted by these psychological laws, that Catholicism, at least, if not a "rational, purified religion" is an eclectic mixture, a jumble of levels, not all logically consistent.

So the integration of CSR into Tyrrell's theological account of religion turns out to be surprisingly easy. What CSR provides is the natural laws of religious psychology. Tyrrell's and Boyer's theories (along with many other contributions to CSR that I have not been able to include here) are complementary.

In addition to the complementarity, there is significant overlap between Tyrrell's and Boyer's descriptions of religion and its development. They agree that the only language we have for religion is drawn from the natural world and has to be adapted. Tyrrell says that religious language is being used metaphorically, and linguistic theorists point out that when a metaphor is uses there are always ways in which that which is being described is like the original application, but also in important ways *not* like it. So this is a more general theory of religious language than Boyer's but Boyer's provides dramatic instances that fit under Tyrrell's theory.

Both agree that practices and moral codes are prior to religious belief; religious beliefs are invented to explain and justify the codes and practices. A major point of difference, though, is in their accounts of the sources of moral codes. Boyer takes the sociobiologists' line and argues that our evolutionary past accounts for a universal set of moral intuitions. Tyrrell claims that we build moral codes slowly by trial and error. When faced with a choice, we take one of the options and then see what its consequences are for getting along in society. But, more

importantly, for Tyrrell, this is just the beginning of moral formation. The important developments are those that result from sensitive believers whose lives are shaped by the yes/no impulses that come from the Spirit.

And this brings us to the critical point where theology has to go beyond cognitive science: the issue of divine action. Boyer claims that his account explains how religions come to be and (implicitly) that this is *all* there is to it. The theologian may be grateful for the cognitive-science explanation of human cognition that explains the wild diversity of strange beliefs and practices in the world, but insists that there is another agent involved, although one clearly not entirely in control of the process.

Notice, though, the pressure that this claim puts on Christians to be able to give an account of God's special divine action. This has been a problem for Christians throughout the modern period--ever since it cam to appear that with a combination of natural laws and initial conditions, all natural events would have sufficient natural explanation. There have been only a limited number of strategies for meeting this problem. I have argued (elsewhere) that the choice among strategies provides the single most important explanation for the bifurcation between conservative Protestants, both fundamentalist and evangelical, on the one hand, and liberals on the other. Philosophers such as Baruch Spinoza argued that the concept of a God who first decrees the laws of nature and then proceeds to violate them by means of miracles or other special divine acts represents God as inconsistent; and this is utterly unacceptable. Liberal theologians, on the basis of arguments such as this, rejected miracles and special divine providence, and elaborated theories of God's immanence within the world's processes. The entire course of history, according to Gordon Kauffman, is the "master act" of God, but particular acts performed from time to time are "literally inconceivable." [BLF 73] Conservatives, in contrast, have maintained that special divine acts are not only conceivable, but necessary to explain our knowledge of God.

A number of participants in the theology-science dialogue over the past generation have attempted to find ways to understand special divine action that does not require intervention in

the sense of violation of laws of nature. Arthur Peacocke argued for a "panentheist" view of God, which is not, by the way, the same as that of process theologians, and means merely that while God is immanent in the whole of creation, the world is also, in some sense, *in* God. Thus, God communicates to humans in way analogous to whole-part constraint. John Polkinghorne has developed several arguments for special divine action based on chaotic systems. I have followed Robert Russell and others in arguing for quantum divine action. This is the view that God determines what would otherwise have been intrinsically indeterminate events at the quantum level. Quantum divine action has many critics, but as the discussion stands at the moment, none are taken to be definitive.

This brings me to mention a third strategy for understanding divine action. This has been to emphasize a dualist account of humans as body and soul or body and mind, and to postulate that God works in creation entirely by communication to souls or minds. Many of you know that I'm famous (or infamous) for rejecting dualism in favor of a nonreductive physicalist account of humans. Thus, however, crude or incongruous it may sound, I argue that God communicates with us by orchestrating events in our brains at the quantum level to produce subtle effects on our thoughts, imaginations, and emotions.

It is possible, in fact, to integrate my theory of religious experience with Tyrrell's. Let me quote Tyrrell once again on the role of God in the origin of religious representations, and then, since he was a body-soul dualist, I shall add my own physicalist interpretation. Tyrrell says: "So... revelation... is a knowledge derived from, as well as concerning, the "other world," the supernatural. But its derivation is decidedly indirect. What alone is directly given from above, or from beyond, is the spiritual craving or impulse with its specific determination, with its sympathetic and antipathetic responses to the suggestions, practical or explanatory, that are presented to it..." (p. 207). And furthermore, he says, "By his inward experiences of felt harmony or discord with the transcendent, man can test the value of his religious notions and of

the conduct they dictate. It is in those experiences that God guides him directly. There is no other language between the soul and God."<sup>2</sup>

Here is my physicalist translation of Tyrrell's account of communication with God.

Either by deliberate reflection or spontaneously--perhaps just as the cognitive scientists describe- an idea of God or spiritual things comes to mind, or a plan of action. This means that a
complex neural assembly has been activated. God's response is to affect the brain by means of
an orchestration of events at the quantum level so as to produce either a positive or negative
impulse.

This account of how God's action is felt is consistent with Tyrrell's Jesuit training. Ignatius Loyola, the founder of the Jesuits, spoke of discerning spirits, but his contemporary translator David Fleming says that 'spirits' as used in Ignatius' guidelines might be understood as movements of one's heart or spirit, motions affecting one's interior life, a certain impetus in one's life, or a feeling for or against some course of action (TASR 142).

Both Tyrrell and Ignatius recognized the possibility of deceptive experiences. So such experiences and their results needed to be tested by the community. Ignatius wrote that the practical signs to watch for are increased love of God and of others; sorrow for sin; increased faith, charity, and joy; quiet, peace, humility; and avoidance of sin.

Notice that this whole process is dependent on culture and language. The richer the religious culture, the more sophisticated and appropriate the images and symbols may be, and the more discerning the plans for action. With fewer resources, God's ability to communicate is proportionately decreased. Tyrrell says that this form of direction is *approximative and preferential* rather than direct.

This theory helps to explain the persisting variety of religions, and the fact that religious experiences are almost always consistent with the expectations and beliefs of the tradition to which the devotee belongs. God does not produce the experience; culture and imagination do-

<sup>&</sup>lt;sup>2</sup> George Tyrrell, *Christianity at the Cross-roads* (London: Longmans, Green and Co., 1910), 111.

and now we can add that they may well do so in the first instance as a consequence of the way human cognitive operators work. God merely ratifies or vetoes, and even then, only when the human subject is sensitive to the impulses.

So this is an account of the origin of at least some religious representations. If it has merit, this justifies my claim that there is a further level of analysis beyond the individual and the cultural, namely the theological, that needs to be taken into account in the development and persistence of religion. Yet this does not preclude any of the analyses that I am aware of that have been put forward by cognitive scientists. The spread, distortion, and maintenance of such representations are indeed matters open to scientific investigation, as Tyrrell, the theologian, recognized in his own day.

#### 5. Practical and Theological Benefits of CRS

There are a number of other issues in Boyer's writings that would have been worth mentioning here. In addition there are a number of other authors in the field with useful studies and theories for Christian scholars to consider. For example, Justin Barrett has developed a theory of theological incorrectness. He points out that the actual beliefs elicited from subjects on the spur of the moment tend to differ from their communities' orthodoxy, and this happens in rather predictable ways. For example, people tend to imagine God much more anthropomorphically than theologians do in their writings. There is research by Harvey Whitehouse that considers two basic types of rituals, and uses cognitive science to explain how they affect the participants. Boyer himself provides good advice, on the basis of his theories, to evangelists: "avoid bombarding people with cogent and coherent arguments for particular metaphysical claims and . . . provide them instead with many occasions where the claims in question can be used to produce relevant interpretations of particular situations" (317). So we could read this literature for practical advice likely to produce more effective ministries.

I want to mention two theological uses of these ways of thinking. First, it is often said that Jesus can be understood as purifying the Judaism of is day. Cognitive science theories of the sorts of religious beliefs that come naturally to people give us a perspective for evaluating this claim. Here are just two suggestions. First, Boyer has a chapter on how people come to attribute misfortune to God. While Christians do not reject the possibility that some human suffering is punishment for sin, notice that in the story of the man born blind, Jesus contradicts the assumption that his blindness must be a consequence of either his or his parents' sins.

Second, much of what scientists call religion, Christians would call magic. Cognitive scientists take it to be a feature of all religion that it is an attempt to control God or other spiritual beings. Jesus follows a long line of prophets in rejecting the view that ritual acts have direct causal effects on God. The sacrifices God requires are justice and mercy.

A second major use of CSR is to develop a theology of other religions. This is an important issue at Fuller Seminary. We have decided that no one with a masters-level education in theology should be ignorant of other religions. But we struggle with the question of how to include courses on religion that neither take a view, common in the past, that all other religions are demonic, nor present other religions as all somehow on a par with Christianity.

I believe that knowledge of humans' natural tendencies to create religious ideas and practices can be incorporated into such a study. But the study would include what we (claim) to know about how the Spirit works within our own fallible human minds. I think this would put us in position to look at another religion much as I've suggested Jesus did with his own Judaism, and ask whether we see signs of the Spirit of Jesus working similarly to purify that other religion.

Conservative Christians are divided over the question of whether God works at all in other religions. Liberal Christians seem to accept that God works in some other religions (mainly the ones that have professors to contribute to world religion courses). But I know of no liberal theologian who extends this openness to as broad a field as the anthropologists and cognitive scientists do. So it becomes something of an empirical question if we are able through discernment to distinguish *natural* human religious cognition from that influenced by the Spirit.

#### 6. Conclusion

What I have tried to do in this paper is not to critique current research in CSR, although surely a lot of it does need to be criticized. Rather I have tried to show that it is no threat to Christian belief, since it can handily be *complemented* by a theological account of the development of religion. This is despite CSR's unsurprising naturalist assumptions. The data can be taken without those assumptions. Furthermore, I hope I've convinced you that it's interesting material that Christians ought to know about, and that it is a potentially valuable source of insights for Christian scholars and practitioners.

This paper fits into a much larger work in progress for me. I just gave a paper a week ago at a conference in honor of John Hedley Brooke, which I titled "Naturalism and Theism as Competing Large-Scale Traditions." That paper was a schematic treatment of what I hope to do at book length. I begin with Alasdair MacIntyre's claim that the only way to understand the intellectual world is to see it as a competition of major traditions, embodying different worldviews, different forms of life, and even slightly different accounts of the nature of rationality. In this light, I argue that in today's intellectual world there is no reason to think that the question of God can be settled by means of short philosophical arguments for or against. The audience such arguments are intended to convince live in different worlds, and will only be convinced by being persuaded to abandon their entire intellectual traditions in favor of another.

So the apologetic task in our day is in part to address other world religions. However, my particular interest is to address what I call as the modern scientific naturalist tradition. One aspect of a competition between rival traditions is to see whether one can explain its rival's point of view better than the rival can itself. Since the beginning of the naturalist tradition with David Hume and Baron d'Holbach in the eighteenth century, it has claimed to be better able to explain the existence of Christianity and the other religions better than Christians can explain themselves. It has attempted to do so by means of a number of accounts of the natural causes of religious belief, and by classifying Christianity as but one instance.

My interest in writing this paper is due to the fact that CSR has replaced Freud, Marx, and others as the current best explanation of religion. So to defend the Christian tradition it is

necessary either to show that CSR's explanations fail or that we can happily accept a lot of them as partial explanations and incorporate them in a helpful way into our own theological worldview. So this is a brief account of what I see as the philosophical import of CSR.