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Religious Concepts and *Theological Correctness* in Cognitive Science of Religion

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Abstract: Over the past 30 years we have seen the growth of the various researches carried out in the field of Cognitive Science of Religion (hereinafter CCR), as well as its impact on other areas of knowledge such as Theology and Religious Thinking in general. Therefore, as a propaedeutic movement, we will make a brief introduction to the main discoveries in this field of studies, and after we will discuss the implications of these discoveries for the so-called "Theological Correctness" (Barrett, 1999), which consists in the use of different religious concepts in different contexts of cognitive demands and its influence on theological thinking as well.

Keywords: Theological Correctness. Cognitive Biases. Theological Concepts. Naturalness of Religion.

Resumo: Nos últimos 30 anos assistimos ao crescimento das diversas pesquisas realizadas no campo da Ciência Cognitiva da Religião (doravante CCR), bem como seu impacto em outras áreas do conhecimento como a teologia e o pensamento religioso em geral. Portanto, como movimento propedêutico, faremos uma breve introdução às principais descobertas neste campo de estudos, e depois discutiremos as implicações dessas descobertas para o assim chamado conceito de "Correção Teológica" (Barrett, 1999), que consiste no uso de diferentes conceitos religiosos em diferentes contextos de demandas cognitivas e sua influência no pensamento teológico.

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1. The Cognitive Revolution and Religion

One of the most significant discoveries in cognitive science in general has been about the way the human mind operates. The so-called cognitive revolution started around the 50s along with the development of computing, strongly contradicting in its results the notion of the modern lockean mind as a "tabula rasa". The results of cognitive science have shown that the human mind is not merely passive to information received, nor to the construction of its thinking but rather operates from innumerable faculties and cognitive biases that constrain or shape the content of the subject's beliefs and desires, as well as his mode of mental operation in several specific situations. According to Barrett (2015, p.3):

> [...]we process the sight of other people's faces differently than we do the sight of flowers or cows. Natural human languages are processed very differently than artificial languages such as binary code. We think differently about objects that are things that we might be about to interact with physically than we do other objects. All of this is to say that human minds are not passive absorbers of information; rather, they actively shape and transform information as it comes in.

Numerous surveys indicate that we all have certain unreflected dispositions to represent the world around us. As an example, we can mention the studies carried out with babies in their first 5 months of life (SPELKE and KINZLER, 2007), which indicate their dispositions to ascribe specific properties to physical objects, such as: only move through contact, not be crossed for other solid objects, in the absence of an obstacle, to have continuous movement through space, among others. Often these representative characteristics are known in this area as "naive physics", as they describe a certain ontology constructed through non-reflected faculties of representation. In addition to naive physics, we also have other intuitive ontologies such as naive biology, naive sociology and naive psychology (BARRETT, 2011). In the 70s, Cognitive Science started to apply its methods to explore various religious phenomena, but it was in the 90s that this enterprise gained its strength.

It is necessary to understand that CCR should not be characterized as a discipline that seeks to define what religion is, or even investigate the epistemology of religious beliefs at a normative level[2], rather it seeks to detail the basic cognitive structures at work in the action and thought considered religious. In this way, CCR seeks to answer questions such as: what explains the sharing of forms of religious expression across cultures?[3] How are such beliefs transmitted? Are there cognitive structures that contribute to the acquisition of these religious concepts? If so, what are they? To answer these questions, CCR relies on the work of several areas of knowledge, including philosophy, psychology and anthropology. This makes the field adopt a methodological pluralism, using various methods of investigation, such as historical, ethnographic, archaeological etc.

In relation to the researches, one of the most important mechanisms postulated to explain the results of several experiments carried out in the field of CCR, is the so-called hyperactive agent-detection device (HADD; Atran, 2002; GUTHRIE, 1995; BARRETT, 2004). It is the cognitive bias by which we tend to attribute intentional agency as the cause for daily events. For example, most of the time, when we hear a noise in the garage at dawn, we tend to immediately assign an intentional agency (an intruder, for example) as the cause of the noise. But why does our mind operate this way? From the perspective of Evolutionary Psychology, it is usual to explain this phenomenon by saying that our mind would have been shaped by selective pressures to apprehend agents in our pre-historic environment, such as predators and other humans, something that would be beneficial from the point of view of reproductive success. The fact that the mechanism is hypersensitive is explained by saying that, given the primitive environment with its threats, a detector that apprehends agency in a sensitive way would be more benefited than one that does not apprehend agency in some situations and is surprised by a predator (Guthrie, 2007).

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[2] For a discussion of the implications of CCR for the normative debate on the justification of religious belief, see J. Barret and J. Clark in “Reidian Religious Epistemology and the Cognitive Science of Religion”, 2011. In this article Barrett and Clark present the main critiques offered through CCR tools against the justification of belief in God’s existence and then try to rebut them from a Reformed Epistemology perspective.

[3] José Sant'Anna discusses this topic in “Por que a crença religiosa persiste na cultura? O conceito de epidemiologia de representação de Dan Sperber”, 2019.

Because it is hypersensitive, this mechanism (HADD) often generates false positives as a by-product[4], that is, it generates the detection of intentional agents where no such agency exists. HADD is often portrayed in CCR literature in conjunction with Theory of Mind (ToM), another cognitive faculty widely known in cognitive psychology, responsible for attributing feelings, desires, beliefs and purposes to other people and some non-human animals (RAKOCZY, 2017). Both cognitive mechanisms are used in CCR theories that seek to answer the question "why do we believe in god(s), angels, ghosts etc?". According to some authors (ATRAN, 2002; BOYER, 2001; BARRETT, 2002; GUTHRIE, 1999), these innate mechanisms have endowed us with some cognitive dispositions to embrace and even generate varied religious beliefs. The generation of these beliefs would not be a direct evolutionary product, but a by-product of such evolutionarily selected mechanisms[5]. Therefore, although religious belief is considered adaptive (Wilson, 2003), it would not be a direct adaptation of our evolutionary history. As Shermer says (2006):

> This “theory of mind” leads to a “Hyperactive Agent Detection Device” (HADD) that not only alerts us to real dangers, such as poisonous snakes, but also generates false positives, such as believing that rocks and trees are imbued with intentional minds or spirits .... This is animism that, in the well-known historical sequence, leads to polytheism, and, eventually, monotheism. In other words, God is a false positive generated by our HADD. (Science January 27, 2006)

Leaving aside Shermer's naturalistic ontological commitment in saying that “Gog is a false positive”, we can see how these mechanisms are generally used together in the field of CCR. The goal of these researchers is to show that these biases generate false positives in certain situations as they are hypersensitive, and because of that, make the belief in spirits, gods, angels etc., something susceptible to be embraced and even generated in

[4] To a discussion about by-products and the problem of the so-called just so stories for psychological evolutionary theories, see S. J. Gould and R. C. Lewontin in “The spandrels of San Marco and the Panglossian paradigm: a critique of the adaptationist programme”, 1979.

[5] This fact alone is by no means a problem for christian theists, as Alvin Plantinga well demonstrates in "Where the Conflict Really Lies: science, religion, and naturalism", 2011. According to Plantinga, the theory of evolution is not inconsistent with christianity, since God could have intentionally used evolutionary mechanisms as a creational tool to achieve his purposes. What would be inconsistent with christian theism is what he calls unguided evolution, a metaphysical inflation of the scientific theory of evolution into a naturalistic ontology.

some situations, since agency, feelings, beliefs and intentionality are attributed to such beings. For this reason, Barrett and Clark (2011) even call these faculties (HADD + ToM) "faculty of god"[6].

2. Minimal Counterintuitiveness

An important question would be the following: if religious beliefs are influenced by these mechanisms that generate false positives in different circumstances, why do they continue to be maintained by us? Why don't we eliminate these beliefs once we can see that they are counterintuitive, even violating our intuitive ontology of the world, like "naive physics"? In other words, it seems problematic for this approach to explain why religious beliefs are maintained after being produced by innate cognitive mechanisms, once those same beliefs would violate other cognitive biases that track instances of our environment. The answer to this problem is known in the CCR as Minimal Counterintuitiveness (BOYER, 2002). The idea is that religious concepts have their success of enduring in the culture due to being minimally counterintuitive, for contradicting few beliefs that we acquire in our intuitive ontologies. This character of religious belief being slightly counterintuitive would be what explains even its permanence in our general imagination, since we tend to remember unusual things rather than ordinary ones (NYHOF and BARRETT, 2001). Thus, the idea of a disembodied spirit that breaks our naive physics by walking through walls, but that has beliefs, purposes, desires and feelings (which conforms to our expectations given our ToM), is easier to be believed and kept in memory by an individual than the idea of a matchbox that usually has thoughts about prototype theories, hermeneutical injustice and cries at dusk. The difference is that the second violates our intuitive ontology in an extreme way, while the first only violates it minimally, giving it a prominent place in our memory. According to Barrett (2007, p. 4):

[6] Barrett and Clark, both christian theists, even believe that such mechanisms can be broadly identified with Calvin's "sensus divinitatis", concept used in Reformed Epistemology to ascribe to belief in God a properly basic status: "While many philosophers have been critical of Plantinga's god-faculty, contemporary anthropologists, psychologists, and cognitive scientists have amassed empirical evidence that we do, in a sense, have such a "faculty." (Barrett and Clark, 2011, p. 3).

> Compare the idea of a barking dog that is brown on the other side of the fence to a barking dog that is able to pass through solid objects on the other side of the fence. The first dog is wholly intuitive and excites little interest. The second dog is slightly or minimally counterintuitive and is, consequently, more attention demanding but without overloading on-line conceptual systems. The idea of a dog that passes through solid objects is made of metal parts, gives birth to chickens, experiences time backwards, can read minds, and vanishes whenever you look at it would amount to a massively counterintuitive concept - if it is a coherent concept at all. Boyer argues that it is the second dog and not the first or the third that will tend to be better remembered and more faithfully transmitted.

It is important to note that in this perspective something to be more or less intuitive is not based on the specificities or belief systems of a given culture, but on our natural cognitive dispositions for the representation of certain objects.

In addition to the role that cognitive mechanisms (HADD and ToM) play in the disposition to form and accept religious beliefs, as well as the explanatory idea of minimal counterintuitiveness as an explanation for the permanence of these beliefs in culture, we also have the idea of promiscuous teleology and intuitive dualism. According to the work carried out by Deborah Kelemen, independent research suggests that "children have a broad tendency to reason about natural phenomena in terms of purpose and an orientation toward intention-based accounts of the origins of natural entities" (KELEMEN, 2004, p . 295). Kelemen reports that children between 4 and 5 years of age, when offered natural and teleological explanations for the same natural phenomenon (a pointy rock, for example), tend to accept teleological explanations instead of natural ones (for example, the stone is pointy so that animals don't sit on it). This disposition contributes to the acquisition of religious beliefs about the purpose of history, the creation of the world and its components by an intentional agent (or agents) for predetermined functions. Paul Bloom also argues that we have innate dispositions to be intuitive dualists:

> naive physics is different from naive psychology. The claim explored here is considerably stronger. It is the idea that we think of bodies and souls as distinct; we implicitly endorse a strong substance dualism of the sort defended by philosophers like Plato and Descartes. Under one variant of this account, our dualism is a natural by-product of the fact that we have two distinct cognitive systems, one for dealing with material objects, the other for social entities. (Bloom, 2007, p. 149)

In short, we can characterize all of these discoveries as favorable to the "naturalness of religion" hypothesis. According to this hypothesis, we would have innate tendencies to

produce and embrace various religious beliefs, due to our natural cognitive mechanisms that were shaped in our evolutionary history[7]. We should not confuse the naturalness of religion with some kind of religious innatism, the idea that we are already born with beliefs in gods or in a certain religion. CCR doesn't say we are born with religious beliefs, rather it says we are born with cognitive dispositions that, once in operation, favor the creation of rudimentary religious beliefs and make us suitable to embracing more sophisticated religious beliefs offered by our own culture.

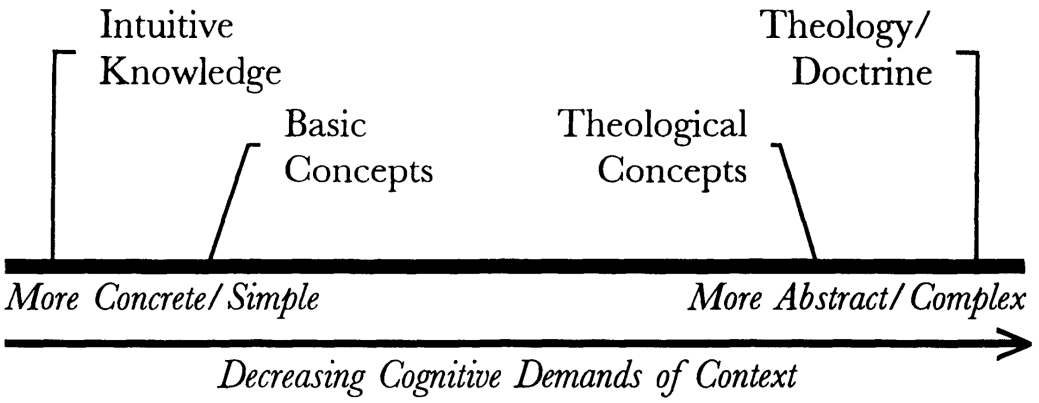
3. Theological Correctness

Research carried out by Barret and Keil (1996), suggests that we have cognitive biases that make some religious concepts and causal relations easier to be used in certain situations than others. In general, our mind operates in two ways: immediately and reflexively (Kahneman, 2011). Thus, cognitive religion scientists separate ordinary religious beliefs, which are products of immediate cognitive biases like HADD and ToM, from theological beliefs, which are religious beliefs formulated and often acquired in a reflexive way. Ordinary religious beliefs would be the previous beliefs exposed in the text like beliefs in supernatural agents, design in nature, souls, etc., and they are the object of study and attention of most cognitive scientists of religion, since they are generally the product of our natural inclinations. Theological beliefs are reflexively refined beliefs and tend to have more abstract properties such as triunity, transcendence, omniscience, among others, beliefs that are shaped by cultural and social factors in a slower period of time. As Barrett (2011) says, ‘‘While religious thought and action in general have largely natural cognitive bases, theology usually has nothing like the same naturalness ’’.

In 1996, when doing online tests with North American and Indian adults of different religions, Barrett and Keil demonstrated that in different situations, these adults have a tendency to use different religious concepts for the same deity adopted by them: ordinary religious concepts were used immediately in more intense cognitive demands and

[7] It is important to note that although evolutionary psychology contributes strongly to the field of CCR, it is not a component of it, but an autonomous discipline of evolutionary biology. For an introduction to CCR and its demarcations, read J. l. Barrett in “Cognitive Science of Religion: What is it and Why is it?”, 2007.

theological concepts were used in situations of low intensity of cognitive demands. As we can see in the following figure[8]:



Thus, religious concepts used in a context of intense cognitive demand tend to have a more concrete content, that is, they tend to be more aligned with our basic intuitions about the world around us (intuitive ontology). For this reason, Barrett and Kiel came up with results that show that the concept of divinity that research participants tended to use in this kind of situation, was a concept of a more anthropomorphized god[9]. As Barret (1996) remarks "In contexts that demand using a god concept for rapid generation of inferences or predictions, the abstract, theological properties of gods that characterize reflective discourse disappear" (p. 328).

One of the situations of intense cognitive demand presented by Barrett and Keil in the experiment was the following: the participant was first asked about his concept of divinity, and usually the participant presented an abstract theological concept such as omnipotent, omniscient and omnipresent god. Then, the following story was given to the participants:

[8] Figure extracted from "Theological Correction: Cognitive Restriction and study of religion "J. L. Barrett, 1996, p. 327.

[9] To see an evaluation via a prototype theory of concepts of how conceptualizations of Western adult's monotheistic God are structured, see Ross W. May & Frank D. Fincham in "Deity Representation: A Prototype Approach", 2018.

> A boy was swimming alone in a fast, rocky river. The boy had his left leg caught between two large gray stones and was unable to get out. Tree branches hit him as they ran by. He thought he was going to drown and then started fighting and praying. Although God was answering another prayer in another part of the world when the boy started to pray, God soon answered by pushing one of the stones so that the boy could take his leg off. The boy struggled to reach the river's edge and fell exhausted. (Barrett, 1999, p. 329).

After having received the story, participants were asked to remember the narrative and retell it in their own words. In the process of retelling the story, participants unconsciously distorted it to bring God's behavior and thoughts aligned with the intuitive expectations they had about normal people. For example, they were likely to remember the stories badly and report them in the sense that God could only have attended one event at a time or responded once at a time, thus stripping him of his attribute of omnipresence[10]. Such experiments suggest what Barrett calls “Theological Correctness”, which consists of the oscillation in the use of religious concepts given the specific cognitive demand. In other words, we could say that although religious people often confess a more abstract conceptual view of God from a specific religious doctrine context, these same people tend to use a different divine concept in situations of cognitive pressure that require little reflective thinking, so that in these cases their basic intuitions constrain the conceptual content of their religious beliefs. This is part of what is called “content bias” (De Cruz, 2014), and this is so because of the effect that this cognitive bias has in the content of the concept.

Despite this conceptual movement that happens between common religious beliefs and theological beliefs, little has been explored in CCR about other links between both. According to Helen de Cruz (2014), more has to be said about this, and despite cognitive scientists like Barrett and Kiel having treated folk religious beliefs extensively, they have overlooked the role of influence of content biases in theological thinking and philosophical religious thinking as well (such as Natural A/Theology), and also the role it plays in the transmission of theological dogmas in the culture. She says that “the cultural

[10] Peter Westh (2013) provides a harsh assessment of Barrett and Keil's experiment. According to Westh, the experiment is deficient because it builds a narrative with linguistic elements that skew the results, causing the participants' responses to be compromised. See Peter Westh in “Anthropomorphism in god concepts: the role of narrative”, 2013.

transmission of theological concepts is influenced by content biases that also underlie the reception of ordinary religious concepts" (De Cruz, 2014).

One of the content bies explored by De Cruz, is the well-known confirmation bias, which consists of the tendency to remember, interpret or search for information in order to confirm their own beliefs or initial hypotheses. De Cruz turns her attention to this specific bias in an attempt to detect its influence in accepting arguments from natural a/theology. Natural a/theology consists of rational arguments that seek to vindicate or refute the belief in the existence of God, generally performed by philosophers of religion. The general reasoning premises of these arguments are built on shared intuitions, for example, that "everything that begins to exist have a cause" (Kalam argument), or that "if a maximally necessary being exists in all worlds possible, therefore, this being must exist in the actual world "(ontological argument).

The problem with these arguments, according to De Cruz, is that they rarely persuade anyone to adopt the conclusion that God exists or does not exist. The reason for this would be the fact that usually the acceptance of the conclusion of the arguments for or against the existence of God would not be due to the logical aspects of the argument, i.e., its solidity, clarity and logical validity or even the probable veracity of its premises, but rather to how intuitive the conclusion seems to be to the evaluator. Thus, the evaluation of such arguments would be constrained by the previous religious commitments of the evaluator[11]. If this is true, then the confirmation bias would play a large role in the assessment and formulation of arguments in natural a/theology. To investigate whether this content bias does indeed influence in that way, De Cruz conducted an internet survey with 802 philosophers (40.5% theists, 40.4% atheists and 19.1% agnostics), in order to investigate the role that their religious commitments exercised in their acceptance of arguments from natural a/theology. Philosophers were asked how strong they consider a series of arguments from natural a/theology, classifying them from very weak to very strong on a scale of 1 to 5. The results were that:

[11] Such data fit quite naturally with the Christian Reformed tradition which tends to emphasize that the problem of unbelief is more than an intellectual problem, but a deeper one such as moral. See R.C. Sproul in "If There's a God, Why Are There Atheists?", 1988 [published recently in portuguese with the title "Se Deus existe, por que existem ateus?", 2021, by Vida Nova].

> Theists rated natural theological arguments that support theism much more positively than atheists. The mean rating for these arguments was 25.5 (SD = 5.7) for theists, and only 13.4 (SD = 5.8) for atheists. Conversely, atheists rated arguments against theism more strongly than theists: atheists gave them a total score of 25.6 (SD = 6.9), theists 17.7 (SD = 4.7). Agnostics occupy an intermediate position, with a mean of 16.6 (SD = 5.2) for arguments in favor of theism, and 21.5 (SD = 5.8) for arguments against theism. (De Cruz, 2014, p. 7).

These results are consistent with the hypothesis that the acceptance of the conclusions of the arguments of natural a/theology is influenced by the confirmation bias, which in this case seeks to reinforce our previously held religious beliefs before the analysis of rational arguments, determining which arguments seem plausible or not. But the problem that seems to immediately arise from this conclusion is that there is a possibility that the participants reached their religious conclusions prior to the experiment, precisely because they might have extracted them from the assessment of rational arguments in natural a/theology, and not vice versa. In other words, the direction of the arrow would be from the arguments to religious belief, and not the other way around, which would make the confirmation bias continue to operate, but De Cruz's hypothesis would be invalidated.

De Cruz considers this possible objection, and proposes two refutations to it. First, De Cruz points to a survey from Nichols and Draper (2013) that shows that both the great philosophers of religion such as Plantinga, Swinburne and Craig who are adepts of theism, as well as the philosophers of religion like Rowe, Schellenberg and Dennett, who advocate atheism, began their philosophical careers already committed to their religious beliefs, which by the way are still defended today. The point of the survey is to show that few philosophers (none of the above) have changed their metaphysical perspective over time while debating the same arguments as De Cruz's research proposes. Second, De Cruz points out to the fact that differences in appreciation of the arguments of natural a/theology persist even among professional philosophers of religion with extensive theological knowledge, which would show that prior religious commitment is in fact a better indicator of how strong philosophers consider the arguments of their philosophical specializations.

If these results from De Cruz are correct, we can say that the influence of cognitive biases on theological beliefs is much greater than Barrett and Keil initially proposed in their “Theological Correctness”, since such biases would include even the way we evaluate rational arguments for (dis)belief in God. This conclusion could lead us to think about the strange fact that there is less space than we generally think there is for the influence of rational reflection on our religious beliefs and show that we must be aware that we are not inerrant epistemic machines. This last fact poses the challenge of thinking about the need to build tools that help professionals involved in areas such as Philosophy of Religion, Philosophical Theology, and Theology in general to mitigate the effects of cognitive biases that negatively constrain the intellectual production in these areas, albeit in part, since discarding intellectual production does not seem to be the best way to solve the problem. But that's a work yet to be developed in another time.

Conclusion

As articulated in the present paper, as far as we can see, the results of researches in CCR support the thesis of “Naturalness of Religion", the thesis that holds we are born with some cognitive dispositions for the generation and acquisition of folk religious beliefs. We have seen the many biases which influence not only rudimentary religious concepts, but also theological concepts, in the phenomenon called Theological Correctness. Finally, going beyond the influences noted by Barrett and Keil (1996) in Theological Correctness, we were able to see how De Cruz (2014) demonstrates that the confirmation bias also plays an important role in the process of evaluation of rational arguments for the existence of God, showing that despite all of the discoveries in CCR, as it is still an area under development, there is much yet to be explore.

Bibliography

ATRAN, Scott. "In Gods We Trust". Oxford University Press, Dec 9, 2004.

BARRETT, Justin. “Cognitive Science of Religion: What Is It and Why Is It?”. In Religion Compass, volume I, November, 2007.

_____. “Theological Correctness: Cognitive Constraint and The Study of Religion”. Method & Theory in the Study of Religion, Vol. 11, No. 4 (1999), pp. 325-339.

_____. "Cognitive Science of Religion and Christian Faith: How May They Be Brought Together?". In Perspectives on Science and Christian Faith(Vol. 69, Issue 1), 2017.

_____. "Why Would Anyone Believe in God?". AltaMira Press, 2004.

BARRETT, J. & NYHOF, M. "Spreading Non-natural Concepts: The Role of Intuitive Conceptual Structures in Memory and Transmission of Cultural Materials". February, 2001, Journal of Cognition and Culture.

BARRETT, J. & CLARK, J. in “Reidian Religious Epistemology and the Cognitive Science of Religion”. In Journal of the American Academy of Religion 79(3):639-675, 2011.

BLOOM, Paul. “Descartes baby: How the science of child development explains what makes us human”. Basic Books, 2005.

_____. "Religion is natural". Developmental Science 10:1 (2007), pp 147–151.

BOYER, Pascal. "Religion Explained: The Evolutionary Origins of Religious Thought", Publisher Basic books, 2001.

DE CRUZ, Helen. "Cognitive Science of Religion and the Study of Theological Concepts". Topoi 33 (2):487-497, 2014.

GOULD. J. & LEWONTIN. R. C. “The spandrels of San Marco and the Panglossian paradigm: a critique of the adaptationist programme”, Published by: Royal Society Print ISSN:0080-46491979, 1979.

GUTHRIE, Stewart. "Faces in the Clouds: A New Theory of Religion". Oxford University Press, 6 de abr. de 1995.

_____. "Religion, anthropology, and cognitive science". In The Cambridge Companion to Atheism, 2007.

KAHNEMAN, D. "Thinking, Fast and Slow". Farrar, Straus and Giroux, ISBN: 9780141033570, 2011.

KEIL, F. & BARRETT, J. "Conceptualizing a Nonnatural Entity: Anthropomorphism in God Concepts". COGNITIVE PSYCHOLOGY 31, 219–247 (1996) ARTICLE NO. 0017.

KELEMEN, Deborah. "Are Children “Intuitive Theists”?: Reasoning About Purpose and Design in Nature". In Psychol Sci. 2004 May;15(5):295-301.

MAY, Ross, W. & FINCHAM, Frank, D. “Deity Representation: A Prototype Approach”, Archive for the Psychology of Religion 40, 258-286, 2018.

NICHOLS, R. DRAPER, P. “Diagnosing cognitive biases in philosophy of religion”. The Monist, 2013.

PLANTINGA, Alvin. "Where the Conflict Really Lies: science, religion, and naturalism", Oxford University Press, 2011.

RAKOCZY, Hannes. “Theory of Mind”. In The Cambridge Encyclopedia of Child Development, 2017.

SANT'ANNA, J. Carlos. "Por que a crença religiosa persiste na cultura? O conceito de epidemiologia de representação de Dan Sperber”, In Controvérsia, v. 15, n. 1, 2019.

SHERMER, Michael. "Believing in Belief". Science 27 Jan 2006: Vol. 311, Issue 5760, pp. 471-472.

SPELKE, E. & KINZLER, K. "Core Knowledge". Developmental Science 10:1, pp 89–96, 2007.

SPROUL, R. C. “If There's a God, Why Are There Atheists?”. by Tyndale House Publishers, 1988.

WESTH, Peter. “Anthropomorphism in god concepts: the role of narrative”. In “Origins of Religion, Cognition and Culture”, from Part II - COGNITIVE THEORIES Edited By Armin W. Geertz, 2013.