

New Approaches to the Scientific Study of Religion 2

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Ryan G. Hornbeck  
Justin L. Barrett  
Madeleine Kang *Editors*

# Religious Cognition in China

“Homo Religiosus” and the Dragon



Springer

# **New Approaches to the Scientific Study of Religion**

## **Volume 2**

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Ryan G. Hornbeck • Justin L. Barrett  
Madeleine Kang  
Editors

# Religious Cognition in China

“Homo Religiosus” and the Dragon

 Springer

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# Introduction: Homo Religiosus and the Dragon

Justin L. Barrett and Ryan G. Hornbeck

“God is dead. Religion is gone.” That was what we were taught in schools in China in the 1960s and 1970s. And it appeared to be true to me at the time. . . (Yang, 2014, p. 567).

The cover story from the February 7, 2009 issue of *New Scientist* was Michael Brooks’ “Born believers: How your brain creates God”—a story full of references to scientists studying the naturalness of religious beliefs, particularly in children. The article ends with this: “Would a group of children raised in isolation spontaneously create their own religious beliefs? ‘I think the answer is yes,’ says Bloom” (Brooks, 2009, p. 33). Paul Bloom, whom Brooks quotes, is no crank or marginal scholarly figure: he is the Brooks and Suzanne Ragen Professor of Psychology and Cognitive Science at Yale University, and the author of many books and over 100 articles, including his 2007 article in *Developmental Science*, “Religion is Natural.”

## Homo Religiosus

Bloom is not alone in his conviction that there is something deeply natural about belief in gods, spirits, souls, an afterlife, transcendent moral truths, the power of rituals, and the practices that relate to these beliefs – or *religious beliefs and practices*. In his article “Religion: Bound to Believe?” (2008), anthropologist and

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psychologist Pascal Boyer, author of *The Naturalness of Religious Beliefs* (1994) and *Religion Explained: The Evolutionary Origins of Religious Thought* (2001), wrote that “Some form of religious thinking seems to be the path of least resistance for our cognitive systems.” Philosopher of science Robert McCauley advanced a similar thesis in his book *Why Religion is Natural and Science is Not* (2011). Numerous other recent books and articles written primarily by scholars in the cognitive, developmental, and evolutionary sciences of religion, have considered and affirmed the general thesis that there is something very natural about the supernatural (e.g., Atran, 2002; Barrett, 2012; Bering, 2011; Guthrie, 1993; Norenzayan, 2013; Pyysiäinen, 2009). In fact, one scholar has, perhaps imprudently, resounded the idea that the species *Homo sapiens* may be equivalent to *Homo religiosus*, because the same cognitive tool kit that distinguished humans from ancestral species may be the one that encourages religious beliefs and practices (Barrett, 2011, see also Barrett and Jarvinen, 2015, and DuBose, 2014).<sup>1</sup>

The naturalness thesis of religion is an answer to the question “Why do people hold religious beliefs and engage in religious practices?” that has emerged in recent decades from the cognitive science of religion (CSR). The *naturalness thesis* can be summarized as thus:

People hold religious beliefs because, in general, ordinary human minds, developing and functioning in typical human environments, make some ways of thinking easier and more intuitive than others. More intuitive or “natural” ideas in this respect are more likely to become widespread and persist within and across groups, because of ordinary dynamics of human memory and social psychology. Among these relatively natural ideas are ideas about unseen superhuman beings that may account for features of the natural world and surprising instances of fortune or misfortune. That is, people tend to be religious because being religious is an easy extension of human psychological nature.

More details concerning the naturalness thesis appear in several of the chapters of this volume, particularly in Part II.

The naturalness thesis is an attempt to explain, in part, the broad cross-cultural recurrence of similar cultural forms that we recognize as religious beliefs and practices by appealing to factors that are not simply cultural. A common way to explain why people hold religious beliefs and engage in religious practices is enculturation: people believe and act as they do because powerful cultural forces mold human minds this way or that in conformity with cultural norms. While not denying the powerful role of social and cultural dynamics in shaping human thought and action, an appeal to enculturation alone has little to say about where beliefs and practices come from in the first place and why some change and some are resistant to change. In short, enculturation can be a viciously circular account.

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<sup>1</sup>As Todd Dubose points out in the *Encyclopedia of Psychology and Religion* (2014), a long list of scholars have proposed the idea that human existence is inherently religious, including Georg Wilhelm Friedrich Hegel (1770–1831), Søren Kierkegaard (1813–1855), William James (1842–1910), Mircea Eliade (1907–1986), Rudolf Otto (1884–1939), Friedrich Schleiermacher (1768–1834), Gerardus van der Leeuw (1890–1950), Karl Jaspers (1883–1969), Paul Tillich (1886–1995), Erich Fromm (1900–1980), Abraham Maslow (1908–1970), Erik Erikson (1902–1994), Langdon Gilkey (1919–2004), and David Tracy (1939–).

“Why does someone believe in a god?” “Because of powerful cultural forces.” “What are these cultural forces?” “They are the speech and actions of fellow members of that culture acting on the basis of their belief in that god.” “But why do those fellow members of that culture believe in the existence of that god?” “Presumably because of previous actions of others motivated by their beliefs in that god.” If one is not careful, “enculturation” becomes an elegant stand-in for teaching a group of people to think the way that they already think, or at least what their elders have thought. As such, “enculturation” does not really answer the question of why people have religious beliefs and engage in religious practices. At best, enculturation gestures toward the general cultural stabilizing and homogenizing influence of being surrounded by like-minded people.

Variants of the naturalness thesis avoid the problem of being narrowly and viciously circular, and avoid just pushing the question of religiousness back to a previous generation. The naturalness thesis manages to account for why certain beliefs and practices that are generally deemed religious are recurrent across cultures even though they appear (in many cases) to have no common historical origin. The naturalness thesis also helps explain why religious thinking is persistent in the face of persecution and counter-indoctrination attempts and why religious thought is so easy to transmit to children and is relatively stable in populations. Analogous to how the physical geography of a place enables and limits the surrounding flora and fauna, these CSR scholars are suggesting that features of human psychology that are partially or largely impervious to cultural variation inform and constrain cultural expression.

Much as how other species have characteristic ways of solving problems concerning survival and reproduction, humans, too, have characteristic ways of thinking and acting that develop in us by virtue of being a particular species living in characteristic physical and social environments (McCauley, 2011; Sperber, Premack, & Premack, 1995). Versions of the naturalness of religion thesis, therefore, draw heavily upon evolutionary research and studies of early childhood development (sometimes called an evo-devo approach for “evolutionary-developmental”) to identify the characteristic ways we humans think and act that might incline us toward religious expression. Though humans are remarkable for their flexibility and adaptability in thought and action, we are still animals with bodies—including brains—with naturally characteristic features that tether the modes of thought and the practices that are likely to become widespread enough to be cultural.

The naturalness thesis has had such explanatory power in CSR and in evolutionary studies of religion that much more energy is expended in trying to compare different versions of it and identify specific natural cognitive or social-psychological factors that might promote religious expression than in debating the general thesis. Factors that have received scholarly advocacy include the idea that humans have a natural tendency to perceive human-like agency in the natural world (Guthrie, 1993); that humans see design and purpose as good, intuitive accounts of natural states of affairs (Kelemen, 2004; Kelemen & Rosset, 2009; Kundert & Edman, this volume); that humans are strongly inclined to find patterns

and make meaning out of events and experiences (Bering, 2011); that the idea of some part of us continuing after death is largely if not entirely intuitive (Astuti & Harris, 2008; Bering, 2011; Huang, Cheng, & Zhu, 2013; Zhu, this volume); that the idea of super knowing and super perceiving invisible agents is largely intuitive for young minds (Barrett, 2012; Greenway et al., this volume); that some notion of a life-force is a natural product of early childhood cognitive development (Inagaki & Hatano, 2004; Roazzi, Nyhof, & Johnson, 2013; Nyhof, this volume); and that the idea of morally-interested superhuman watchers and punishers (gods) may promote human cooperation in large group living (Norenzayan, 2013; Nichols, this volume). These various cognitive/psychological factors may collaborate to make human groups very attracted to religious thought and action. In this sense, religion is natural.

## The Dragon

*What about China?* In preparing for the research project that yielded this volume, we had to address the problem of finding Chinese collaborators and consultants who could see the utility of scientifically studying the alleged naturalness of religion in a Chinese cultural context. A visiting group of Chinese psychologists once told us, “How could you study religion in China? The Chinese aren’t religious.” As the quote at the start of this introduction from Chinese sociologist of religion Fenggang Yang illustrates, many within and outside of China have remarked on its relative a-religiosity. It is, after all, an officially atheist nation with approximately twice as many “convinced atheists” by percentage than any other nation at 61% (WIN/Gallup, 2015).

In spite of its explanatory virtues, the naturalness thesis must still face China as an apparent problematic case. If religious thought is so natural, how can the largest nation of people on earth have relatively little belief in the existence of a cosmic god or in supernaturalism of any kind? If one wanted to argue that, say, music is a natural byproduct of human cognition, such a thesis would be able to withstand the odd and exceptional communities in which music was absent, but it would be harder to maintain if the majority of people in the largest nation on earth were non- or anti-musical. Similarly, it looks at though the alleged naturalness of religion has to deal with the Chinese challenge. The concept of *homo religiosus* must face the Dragon.

What would it mean for the naturalness of religion thesis to be tested in China? If a-religiosity is more common than religiousness in China, isn’t that the end of the story? Though variants of the naturalness thesis do presume that religious expression will be the normal state of affairs across cultures, cases in which religious expression does not develop or is successfully stifled are theoretically interesting. What factors lead to the subversion of this ancient mode of human cultural expression? Perhaps Chinese cultural factors have been powerful enough to change the “natural” course of religious expression or to tamp it down. If so, that

would tell us something important about the robustness of the factors that drive religious belief.

Additionally, it could be that the core cognitive mechanisms that CSR scholars cite as driving religious thought develop or function importantly differently in Chinese cultural contexts. Perhaps as many scholars have argued (and reviewed in Ji & Chan, this volume), Chinese thought is importantly different than Anglophone thought. If so, religious expression may be natural in some cultural settings but not in Chinese ones, or the naturalness thesis is just wrong. It could be that the apparent naturalness of religious belief only arises because essentially all people studied come from predominantly religious cultural settings. What happens when people grow up in a predominantly non-religious culture?

Science often proceeds best when scientists seek out evidence that challenges or disconfirms their favorite theories, and so, as cognitive scientists of religion who had supported the naturalness thesis, we wanted to put the thesis to a real test. To do so, what is required is a multi-level test of the naturalness of religion thesis in Chinese contexts, one that examines both the basic cognitive systems that are thought to give rise to religious expression as well as the cultural and historical factors that might bear upon their realization. To this end, we assembled a multi-disciplinary team of scholars to address the “Chinese Challenge” to the naturalness of religion thesis, and received funding from the Templeton World Charity Foundation, for which we are grateful. We were joined in this four-year research project by philosopher Kelly James Clark, anthropologist Justin Gregory, psychologist Gang Huangfu, psychologist Deborah Kelemen, philosopher Ryan Nichols, psychologist Melanie Nyhof, sinologist Edward Slingerland, sinologist Justin Winslett, and psychologist Liqi Zhu. Numerous research assistants and students (in China, Singapore, the United States, and Ecuador) contributed to the project. Studies have included cognitive experiments, developmental studies with children, quantitative textual analyses of ancient writings, ethnographic studies, and surveys. For this volume, much of the core project team is joined by psychologist Michael Bond, psychologist Emily Chan, psychologist Li-Jun Ji, psychologist Vivian Lun, and anthropologist/sociologist David Palmer.

As will become evident through reading this volume, the collective conclusion of the project team is that the naturalness of religion thesis has not merely survived its encounter with the Dragon, it is better for the experience. Many previous findings have now been largely replicated with Chinese participants, and claims about Chinese religious and psychological exceptionalism have been shown to be overstated. Nevertheless, different patterns in Chinese psychology and culture are indisputable. Facing Chinese thought and religious expression head-on has pushed CSR into new topical areas, prompted new discoveries, and forced us to better nuance some of the prominent theories in CSR. Is religion natural? Yes, but comparable to how a gardener can prune, train, water, and nourish a tree to dramatic effect, cultural factors and human creative agency will cultivate our natural propensities to richly diverse forms of expression.

## Volume Overview

This book is divided into three sections. Part I introduces and evaluates common claims about how Chinese thought and religion are radically different than that of “the West.” Part II presents the new psychological research findings born out of our attempt to replicate and extend previous CSR research into Chinese contexts, with an emphasis on what happens in childhood cognitive development. In Part III, the volume concludes with three chapters that present historical, ethnographic, and survey research that encourages new directions for thinking about the naturalness of religion inspired by Chinese experiences, past and present.

### *Part I – Reexamining Chinese Religious Exceptionalism*

Part I consists of three essays that directly address alleged Chinese exceptionalism. Are the Chinese radically different from much of the world, especially “the West,” when it comes to religious expression, and are those differences the product of underlying psychological differences? Perhaps instead, Chinese religion and philosophy has left its marks on the way that Chinese people often think. Maybe some of the alleged profound differences are shallower than we might have thought at first.

The University of Hong Kong’s David Palmer evaluates prominent depictions of Chinese religiosity as radically *other* in his chapter “[Is Chinese \(Lack of\) Religion Exceptional?](#)”. If some of these longstanding axioms (e.g., religion was marginal to ancient China, the Chinese possessed no high god concepts) were true they would indeed contradict several core naturalness assumptions, but Palmer rejects these axioms, arguing that there is nothing exceptional about Chinese religion *per se*. What is exceptional is that China’s political and religious institutional history has not led to a single religious institution dominating the entire society. Jesuit missionaries seized on this Chinese exception and Enlightenment philosophers exaggerated it to extremes to give them leverage against *l’Ancien regime*. Palmer argues that while modern anthropology and sociology are beginning to undo some these longstanding misconceptions, there is a need for research like the present volume that identifies baselines of similarities pertaining to religious constructs.

The authors of the chapter “[Chinese Thinking Styles and Religion](#)”, Li-Jun Ji of Queen’s University (Canada) and Emily Chan from Colorado College, show greater sympathy for Chinese-Western differences. They guide the reader through the research literatures on “analytic” and “holistic” reasoning and show how the demonstrated Chinese tendencies toward holistic reasoning have been connected to Chinese religious traditions discussed in Palmer’s chapter. They envision mutually supporting relationships between characteristic ways of thought and religious principles that have historically been common in China. Certain ways of thinking

and religious institutions may scaffold each other to develop distinctive cultural tendencies. They also suggest some particular challenges holistic reasoning may present to particular components of the naturalness theory.

In the chapter “[China as the Radical “Other”: Lessons for the Cognitive Science of Religion](#)”, Edward Slingerland, from the University of British Columbia, systematically marshals historic textual evidence to address the debate surrounding what *xin* (heart-mind) and its intended meanings in ancient Chinese texts can tell us about mind-body dualistic thinking in ancient Chinese populations. While “Western” thought is supposedly dualistic in nature, *xin* has been cited as evidence that early Chinese thought made no hard distinction between mental/spiritual and material domains. As Slingerland points out, arguments for the latter claim typically resort to “cherry picking” select *xin* quotes from ancient Chinese texts and extrapolating them to “the Chinese.” Yet, are a small handful of quotes sufficient evidence to characterize the intuitive thought processes of a population? Slingerland’s contribution to this debate has been to use quantitative data textual analysis to scan through thousands of ancient Chinese texts with search functions that characterize how *xin* is being used. His evidence shows that *xin* usages tend overwhelmingly towards dualistic thinking. He then contextualizes this finding within a broader discussion of the need for consilience and methodological pluralism in Chinese religious studies.

## ***Part II – Testing Naturalness Theory Hypotheses in China***

Part II presents a reexamination of the naturalness thesis through many empirical studies, primarily those conducted with children in China and elsewhere, and its ordering reflects an explanatory narrative. If humans, from childhood, naturally see mountains, rivers, plants, and animals as being the way they are to fulfill a design or purpose (see chapter “[Promiscuous Teleology: From Childhood through Adulthood and from West to East](#)”), who accounts for this alleged purpose? If it is one or more superhuman agents or gods, are these super properties easy for young children to understand and acquire (“[Dogs, Santa Claus, and Sun Wukong: Children’s Understanding of Nonhuman Minds](#)”? If belief in gods is relatively natural due to these dynamics, how do their unusual causal properties interact with ordinary human cognitive systems to conceptualize and motivate religious ritual systems (“[Ritual Imbalance in Contemporary China: A Ritual Form Theory Analysis](#)”? Religious rituals are performed to address long-standing human problems such as sickness and death. What are the natural reasoning systems that support religious thought about wellbeing and sickness (“[Intuitive Foundations of Conceptions of Vitality: The Case of Chinese Children’s Understanding of Illness Causation](#)”? Is the possibility that life extends beyond death radically counterintuitive or a minor development of intuitive thought (“[Do Chinese Children Believe in an Afterlife?](#)”) Even if belief in gods, the efficacy of rituals conducted for them, and religious thought about sickness and death all have foundations in natural, intuitive cognition



that develops in childhood, many religious beliefs are not so intuitive. Nevertheless, for a concept to be slightly unnatural for individual people or *counterintuitive* in particular ways may actually make them natural on a cultural group level (“[Religion is Kid’s Stuff: Minimally Counterintuitive Concepts are Better Remembered by Young People](#)”).

The chapter “[Promiscuous Teleology: From Childhood through Adulthood and from West to East](#)” by Northwestern College’s Corey Kundert and Laird Edman focuses on Deborah Kelemen’s research on design and purpose-based reasoning about the natural world. This chapter reviews her work with children and adults across cultures—including recent work in China—that demonstrates that teleological (purpose-based) reasoning is a conceptual default that all peoples share but that may be tamped down through formal education and other forms of enculturation. Kelemen argues that this teleological reasoning makes certain religious ideas about supernatural agents’ activity in creating or ordering the world largely intuitive.

Previous research on children’s acquisition of religious concepts has suggested that many divine attributes are relatively easy for preschool-aged children to acquire, an observation captured by the “preparedness hypothesis” and regarded as evidence against an “anthropomorphism hypothesis” of children’s conceptions of intentional agents. The chapter “[Dogs, Santa Claus, and Sun Wukong: Children’s Understanding of Nonhuman Minds](#)”, by Tyler Greenway, Gregory Foley, and Justin Barrett from Fuller’s Graduate School of Psychology, revisits this debate with new data from Chinese children considering culturally familiar superhuman beings such as the Jade Emperor and Sun Wukong.

E. Thomas Lawson and Robert McCauley’s ritual form theory appeals to a suite of ordinary cognitive mechanisms to make specific predictions concerning three classes of religious rituals. The chapter “[Ritual Imbalance in Contemporary China: A Ritual Form Theory Analysis](#)” presents our attempt to test their theory’s predictions in contemporary Chinese religious rituals. It led to two discoveries: a relative paucity of two classes of rituals and nearly perfect confirmation of the theory’s predictions in the third class of rituals. These findings partially support Lawson and McCauley’s theory but also suggest some possible fine-tuning. We are joined in writing this chapter by Brianna Bleeker (née Bentley) and Skylar Barrett from Fuller’s Graduate School of Psychology.

The chapter “[Intuitive Foundations of Conceptions of Vitality: The Case of Chinese Children’s Understanding of Illness Causation](#)” concerns how children understand life force and is written by Melanie Nyhof, from Northwestern College. Many of the findings discussed in this volume are extensions of previous work in the West concerning religious concepts that are largely familiar to Western audiences. This chapter represents an important exception. The Abrahamic faiths do little to develop the idea of a life force or *élan vital* permeating the universe, but Chinese and other Asian religions do. Nyhof argues that the natural psychological foundations of such thinking lie in intuitive reasoning underwritten by naïve biology about the life forces animating all living things. In Chinese cultural milieus,

these intuitions are culturally elaborated into *qi* but remain largely undeveloped in many Western contexts. Nyhof reports studies that focus on how children's ideas about *qi* develop and may relate to their understanding of disease and illness.

In the chapter “[Do Chinese Children Believe in an Afterlife?](#)”, Liqi Zhu, from the Chinese Academy of Sciences, shares new research concerning children's beliefs in an afterlife. Are not afterlife beliefs entirely culturally constructed? Zhu presents evidence and analysis that, somewhat like previously studied Western children, Chinese children show native sympathies to some kind of afterlife — sympathies that are enculturated out of them rather than encouraged and refined. Where do these native sympathies come from? While children seem to understand that death entails the *finis* of biological functioning, they do not necessarily assume the same for psychological functioning, and these inferences may be the foundations of afterlife beliefs.

The previous chapters in Part II give evidence for some natural conceptual foundations for religious thought that develop in many (or most) children. The final chapter of this section reveals that being natural or intuitive for a child is not the only factor that may promote groups of people to adopt religious beliefs. In “Religion is Kid's Stuff: Minimally Counterintuitive Concepts are Better Remembered by Young People” Justin Barrett summarizes our team's research concerning the generation and transmission of concepts that are not wholly intuitive. He focuses particularly on the theoretical work of Pascal Boyer and the empirical work of Justin Gregory. In a series of studies, Gregory provides new evidence that slightly or “minimally” counterintuitive concepts are better remembered than fully intuitive ones, but only in young people in both China and the United Kingdom. Further, adolescents and young adults are more likely to generate ideas that feature minimally counterintuitive concepts.

### ***Part III – Situating Naturalness Theory in Chinese and Global Contexts***

This concluding section moves out of the lab and back to the broader world with findings and themes that are foreshadowed in previous chapters. It consists of three chapters, each presenting from an importantly different disciplinary and methodological viewpoint.

As discussed in Part I, sinologists have long argued that—unlike high gods in the West—high gods in ancient China were uninterested in the moral concerns of humans and therefore serve as counter-evidence to the claims of cognitive science of religion authors such as Ara Norenzayan (2013), who have argued that a close coupling of moral interest and high gods in larger societies is a natural socio-cognitive default. Indeed, many analyses of Chinese texts (as noted by Slingerland

in chapter “China as the Radical “Other”: Lessons for the Cognitive Science of Religion”), deny high-gods altogether. In chapter “High Gods, Low Gods, and Morality in Ancient China: Developing New Methods, Answering Old Questions”, Ryan Nichols of Cal State Fullerton provides a systematic, quantitative analysis of Pre-Qin Dynasty texts that reveals a nuanced picture of how high and low gods were conceptualized. This picture supports the general naturalness thesis but challenges any simplistic universalizing.

From Nichols’ chapter to Ryan Hornbeck’s chapter “Moral Cognition Empowers Spiritual Experience in Chinese *World of Warcraft*” we shift from ancient texts to contemporary high-tech gaming. In his chapter, Hornbeck of Xiamen University introduces us to the possibility that when ordinary life does not provide sufficient opportunity for moral expression, people will find novel ways to let natural tendencies become actualized. Drawing upon ethnography and survey methodologies, Hornbeck draws upon moral psychology to answer a puzzling question: why do Chinese players of the massive multiplayer online game *World of Warcraft* attribute spiritual (*jingshen* 精神) significance to gameplay? Hornbeck reports that players are attracted to the game, at least in part, by its ability to exploit evolved cognitive subsystems in such a way as to elicit morally laden cooperative interactions. This analysis suggests another way in which natural psychology can underwrite cultural expression.

The volume concludes with “Examining Religion and Well-Being across Cultures: The Cognitive Science of Religion as Sextant” by Michael Harris Bond from Hong Kong Polytechnic University and Vivian Miu-Chi Lun from Lingnan University. If religiosity is indeed natural, then to what end for humankind? Their *World Values Survey* analysis, which makes use of over 55,000 respondents from 55 nations, shows an extraordinarily strong and complex connection between adherence to religious beliefs and increased subjective wellbeing. Is this connection, too, a natural one? The mechanisms facilitating the connection are multiple, poorly understood at the species-typical level, and certainly worth exploring.

## Cross-Epistemological Meeting Points

Any earnest attempt to harness the strengths of interdisciplinary research must address those points where one mode of scholarship might, when viewed through a lens of exclusionist disciplinary rhetoric, seem incompatible with another. Here we briefly outline two epistemological assumptions that unite the chapters of this volume and, we believe, CSR research in general.

## *Explaining Is Not “Explaining Away”*

One might wonder if the reductive nature of CSR research makes it incompatible with interpretive perspectives or antithetical to religious practice. After all, doesn't applying a causal perspective to a religious practice discount the richly complex and evolving meanings attributed to it by its practitioners? To illustrate why this need not necessarily or even generally be the case we should make a distinction between “methodological” and “eliminative” reductionism.

Methodological reductionism is the practice of analyzing and describing a complex phenomenon in terms of phenomena that are held to represent simpler levels. CSR research practices methodological reductionism through attempts to understand cultural/religious-level phenomena by looking “downstairs” at the foundational psychological dynamics. Eliminative reductionism, on the other hand, involves deducing the laws of one theory from those of another. Following such a reduction, one level of explanation is entirely reducible to another level and, hence, the reduced level is considered meaningless or “not real” and is thus eliminated. Robert McCauley, a philosopher and co-founder of CSR, has argued that actual theory reductions occur only within their respective particular sciences, as one theory succeeds another (e.g., Stahl's account of combustion is succeeded and fully eliminated by Lavoisier's; McCauley, 2013). Even in these eliminative circumstances, the succeeding theory is still just a *partial* explanation (there is no such thing as an exhaustive scientific explanation in the natural sciences). Where attempts at cross-scientific theory reduction occur, the reducing theory invariably fails to capture the full spectrum of inter-theoretic relations.

All this is to say that research in CSR is typically marked by an awareness that its very best explanations are very, very *partial* explanations. So far from seeking to eliminate theories in humanistic discourse, the mind sciences on which CSR draws are increasingly wary of generalizing about the properties of human minds solely from commonalities observed in W.E.I.R.D. (Western Educated Industrial Rich Democratic; Henrich, Heine, & Norenzayan, 2010) populations and articulating their need of perspectives that interrupt, challenge, and refine conclusions emanating from North American and European laboratories. Slingerland's chapter in this volume showcases the promise of research that can rise to this challenge. His willingness to see value on both sides of a disciplinary turf war—a war in which each side is content to simply reject any nonconforming data produced by the other side—leads him to reformat the research variable in such a way that would permit scholars from a diverse range of fields to assemble a more layered understanding how processes at various levels are incorporated into the variance so clearly evident in the empirical record.

## ***“Naturalness” Research Aims to Unveil, Not Reinforce, Causal Influence***

In some quarters of humanistic discourse attributing naturalness to human affairs is still metonymic with naïvety and hegemony. Herein such attributions are yet categorically dismissed as entrapments of Western knowledge or condemned as reifications of material ontologies that restrict our awareness of human potential (i.e., by falsely delimiting it to inevitable, unavoidable laws rooted in nature) and that justify exploitative power structures operant in social constructions of gender, caste, and so on. Though the hard disdain for material ontologies that underwrote such rejections in the *anti*- and *post*-ism schools of the late twentieth century is today somewhat rare, having been superseded in the twenty-first century by humanistic interest in critically reworked materialisms and *multi*- and *pluri*-approaches to ontology, the term “natural” still retains many of its negative associations with power. Hence any attempt to engage humanities scholars on the subject of naturalness should spell out what the term is meant to convey.

In our volume references to “natural cognition” typically assume the following: (a) human minds are comprised of many functionally specialized information processing programs (e.g., a program for recognizing faces, a program for detecting goal-oriented movement, etc.) that empower and constrain human thinking, imagining, remembering, feeling, dreaming, and deciding; (b) some of these information processing programs are manifest in similar forms—that is, they perform their tasks using similar inferential rules—in all human minds as a typical or *natural* course of ontological development; (c) these developmentally natural, functionally specialized information processing systems impart commonalities in how we select, parse, and communicate information; (d) these commonalities may in some cases structure cross-culturally recurrent themes in human behavior and cultural expression; (e) a deeper understanding of this structuration doesn’t delimit human potential to these behaviors and themes—rather, bringing these hidden powers to light, where we can witness and debate the merits of their influence, empowers us to create ourselves anew.

## **Conclusion**

I will not judge whether God is or is not present to the people I came to know. Yet I believe that if God speaks, God’s voice is heard through human minds constrained by their biology and shaped by their social community, and I believe that as a psychologically trained anthropologist, I can say something about those constraints and their shaping. (Luhman, 2012, p. 24)

Research in the cognitive science of religion (CSR) has converged on the thesis that tendencies toward religious and spiritual thought, feelings, and actions may be an extension of largely invariable human nature. This bold thesis may be challenged

by the fact that almost none of the developmental and experimental research supporting it was conducted using participants from predominantly secular cultural environments. Shouldn't the fact that the world's largest nation—China—is officially secular, allegedly has a long history of dominant non-religious philosophies, and reportedly has a large proportion of atheists make any broad claim of religion's psychological "naturalness" implausible? This volume draws upon a recent interdisciplinary and international research initiative to answer these questions. Our answer? The preponderance of evidence supports the naturalness of religion, but placing theories into direct contact with the data of Chinese psychological, cultural, and (a-)religious expression will motivate cognitive scientists of religion to continue developing and refining their accounts.

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