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Title

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Permalink

<https://escholarship.org/uc/item/39r3397f>

Journal

Religion, 44(4)

ISSN

0048-721X

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Publication Date

2014-10-02

DOI

10.1080/0048721x.2014.937072

Peer reviewed

Big Gods and other watcher mechanisms in the formation of large groups

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ABSTRACT: Norenzayan's effort to integrate genetic and cultural evolution is a welcome advance over previous efforts, as is the attention he devotes to different levels of analysis from cognitive mechanisms to large group interactions. The scope of Norenzayan's argument, however, is bound to leave many scholars of religion feeling uneasy. The content of his model, which is most likely over specified, will need further testing in light of historical evidence. Comparison of *Big Gods* with Robert Bellah's *Religion in Human Evolution* (2011) highlights some of the choices Norenzayan made in designing his model and suggests ways it could be elaborated. Historians of religion who would like to help test his model could keep an eye out for "watcher mechanisms" that might play more of a role than "moralizing Big Gods" in some traditions and, thus, potentially offer an alternative route to large, anonymous yet stable groups.

Keywords: genetic evolution, cultural evolution, Robert Bellah, watcher mechanisms

Norenzayan asks two broad questions: (1) How did human societies scale up from small, tight-knit groups of hunter-gatherers (*Gemeinschaft*) to the large, anonymous, cooperative societies (*Gesellschaft*) of today – even though anonymity is the enemy of cooperation? And (2) Why did religions with 'Big Gods' – "powerful, omniscient, interventionist, morally concerned gods" (p. 8) -- spread out to colonize most minds in the world? These two puzzles, he argues, are interrelated: "prosocial religions, with their Big Gods who watch, intervene, and demand hard-to-fake loyalty displays, facilitated the rise of cooperation in large groups of anonymous strangers" (p. 8). In making his case, he argues for the role of both genetic and cultural evolution in the emergence of prosocial religions. Evolved cognitive mechanisms gave rise to basic social intuitions that laid the foundation for belief in "supernatural watchers," which in turn led people to be nicer to one another and to trust each other more (ch 2-3). Outward signs of commitment to these supernatural watchers inspired more trust (ch. 4-5) and more extravagant signs of commitment (ch 6). These signs of commitment were cultural adaptations that in turn allowed prosocial religious groups to expand and spread at the expense of other social groups (ch. 7-9).

Norenzayan's effort to integrate genetic and cultural evolution is a welcome advance over previous efforts, as is the attention he devotes to different levels of analysis from cognitive mechanisms to large group interactions. The sheer scope of Norenzayan's

argument, coupled with the heavy reliance on psychological and macro-comparative ethnographic and sociological data, is bound to leave many scholars of religion feeling uneasy about the expansive reach of his argument. Comparison of *Big Gods* with Robert Bellah's *Religion in Human Evolution* (2011) suggests ways in which the range of cognitive mechanisms, cultural innovations, and ways of understanding the scaling up of groups might be expanded.

Norenzayan's argument tends to conflate "large groups" and "prosocial religions" since he views them as emerging in concert. His model makes the most sense if we following him in assuming that "moralizing Big Gods" are at the center of the most "successful" religions and that large, religiously pluralistic groups (empires) are a product of the modern era. This, however, raises all the usual questions about terms (religion, religions, and world religions), point of view (lay, elite), and the place of religion in complex ancient and modern societies. In this essay, I come at these problematic issues indirectly by highlighting the assumptions about religion presupposed by different evolutionary theorists. In my conclusion, I indicate how I think we could frame his question about large groups in a more open-ended fashion and investigate the role of whatever it is that we are studying under the rubric of "religion" in their formation.

Genetic versus Cultural Adaptations

Big Gods represents a major advance in discussions of the role of religion in human evolution, a topic that has been the subject of intense debate among scholars outside the field of religious studies for over a decade. I first became aware of these debates at a conference on the evolution of religion in Hawaii in 2007 (Bulbulia et al., 2008). There, I listened to heated exchanges between ardent proponents of the (then) seemingly irreconcilable "by-product" and "adaptationist" approaches. Proponents of the former, which at the time included Norenzayan and most researchers associated with the cognitive science of religion (see, for example, Atran and Norenzayan, 2004; Boyer, 2001; Kirkpatrick, 2005), argued that "religion" was an unintended consequence (i.e., a by-product) of the evolutionary process, much like "spandrels" in medieval cathedrals were a "by-product" of gothic arches. David Sloan Wilson (2002), the most outspoken supporter of the competing view, argued that "religion" played a direct role in human evolution, specifically, that it had some sort of "adaptive" value.

Half a dozen years and a few, more conciliatory, debates later, Norenzayan explicitly positions his argument as “a third way, which nevertheless retains key insights of [both] these distinctive views” (p. 10): the evolutionary by-product view, which has focused primarily on the cognitive mechanisms that predispose people to belief in unseen agents (ala Hume and Tylor) and the adaptationist view championed by Wilson, which builds on theories of religion (e.g., Durkheim, Victor Turner, and Roy Rappaport) that stress social bonding (pp. 9-10). Based largely on his own experimental work over the past decade on the interface between cognition and culture, Norenzayan has gradually come to view the by-product approach as insufficient to account for the complexity of “religion.” The argument of the book follows this “third path,” locating “the origins of prosocial religions in a powerful combination of genetic and cultural evolution” (p. 10).

He is able to combine these approaches, because, as proponents have gradually clarified (see Sosis, 2009; Kirkpatrick, 2011), the two camps were (mostly) talking past each other. The by-product theorists (mostly psychologists) have been focusing on the “evolved cognitive architecture” of individual brain/minds grounded in biological (genetic) evolution. These psychological mechanisms interact with various internal and external inputs – often very culture-specific inputs -- to generate behavior. Many adaptationists (mostly anthropologists, e.g. Sosis) have been focusing on the effects of complex collective behaviors at the group level and, thus, on cultural evolution. When the byproduct theorists argue that *the psychological mechanisms* they study are not religion specific and did not evolve to produce specifically religious beliefs or behaviors, they are making a point about the building blocks of religious systems.¹ When the (cultural) adaptationists argue that some *behaviors* benefit groups, they are evaluating the functional effects of complex behavioral systems at the group level. From the perspective of cultural evolution, the “by-products” of genetic evolution are reconceived as “cultural mutations” or “exaptations” that are selected for and reproduced, if and when they help a group to survive, grow, and flourish relative to its competitors. The debates

¹ To call something a “by-product” of biological evolution doesn’t mean it is trivial. Writing, for example, is another “by product” of biological evolution.

have become much less heated as researchers became more willing to specify whether they are claiming that something is a genetic or a cultural adaptation.²

In *Big Gods* Norenzayan argues that the two approaches can and should be integrated and, in keeping with much current evolutionary theory,³ assumes that genes and culture have co-evolved in our more recent evolutionary past. Norenzayan breaks new ground, not in adopting a gene-culture co-evolutionary framework, but in integrating the two primary approaches to understanding religion in the context of human evolution. To integrate them, he proposes a three-layered model. The first layer is the cognitive in which genetically evolved – and, thus, presumably pan-human -- “cognitive biases push human minds toward some recurrent templates that support supernatural beliefs.” Supernatural beliefs are “by-products” of these cognitive biases. The second layer combines these cognitive tendencies with cultural developments to generate “cultural mutants” (i.e. cultural innovations) that spread at the expense of “rival mutants.” Existing groups may adopt these innovations or they may inspire the formation of new groups. The third layer involves straight out cultural competition between groups. It is at this level that some “cultural mutants” give some groups an adaptive advantage over others and, thus, tend to be reproduced (p. 10).

These distinctions are crucial when it comes to understanding the difference between Norenzayan’s claim and the “supernatural punishment hypothesis” advanced by Jesse Bering and Dominic Johnson. When Norenzayan asks (p. 135) whether “supernatural policing is a naturally selected adaptation” as Bering and Johnson argue, his answer is “no.” But the key phrase is “naturally selected,” where “naturally” refers to genetic selection. While “the supernatural punishment hypothesis [advanced by Bering and Johnson] argues for an innate fear of divine retribution that is a *genetic adaptation*” (p. 136, italics in original), Norenzayan argues that “Big Gods were *culturally selected* for the advantages they afforded *social groups*” (p. 136, emphasis added). Bering and

² In a session at the 2010 IAHR meeting, which should have been recorded for posterity, Lee Kirkpatrick (a byproduct advocate) and David Sloan Wilson (an adaptationist) hashed out their disagreements in front of a live audience, concluding at the end that their views were largely compatible once they acknowledged they were discussing genetic (Kirkpatrick) and cultural (Wilson) adaptations.

³ For discussions, see Richerson and Boyd (2005), Mesoudi (2011).

Johnson are making an adaptationist claim at the level of psychological mechanisms grounded in natural (genetic) selection. Norenzayan (like the by-product theorists) does not think that there is a psychological mechanism that gives rise to a fear of divine retribution. In light of the evidence that small-scale societies do not have moralizing gods, he argues that supernatural punishment cannot be a human universal (pp. 136-37). This does not mean, however, that he rejects the idea that supernatural policing is an adaptation. For Norenzayan, it is a *cultural* adaptation, which offers a selective advantage as groups become larger and more anonymous. As a cultural adaptation, it is not encoded in our genes, but rather emerges in more recent evolutionary history as genes and culture interact. Supernatural policing for Norenzayan is a “cultural mutation” not a genetic mutation.

Watcher Gods or Watcher Mechanisms?

Although developing ways to relate these levels of analysis is crucial, the success of his specific claim regarding the role of moralizing Big Gods in facilitating cooperation in large anonymous groups depends on the range and adequacy of the research at each of the levels. Evaluating the research at each of these levels is a daunting task and one that scholars from a wide range of disciplines will need to tackle. We can get at some of the issues most relevant to scholars of religion if we compare Norenzayan’s *Big Gods* with Robert Bellah’s *Religion in Human Evolution* (2011 [RHE]). Both are interested in the role that religion plays in human evolution, but where Norenzayan is interested in the role of religion in the scaling up of groups, Bellah is interested in the role of religion in the evolution of human consciousness.

Bellah is aware of the two lines of research that Norenzayan integrates to form his third way, but dismisses the evolutionary by-product approach in a footnote as distinctly “unhelpful” and lacking “insight into religion as it is actually lived” (2011, p. 629, n.154).⁴ He views the adaptationist approach more positively, but considers most of the work too narrowly focused on western religious traditions (pp. 99-100). Rather than start with the extant schools of thought on the evolution of religion, Bellah starts fresh with another line of research in evolutionary psychology altogether, basing his analysis on

⁴ Bellah mentions these other approaches only in passing and his lack of engagement with them has been one of the major critiques of the book (see Stausberg, 2014).

Merlin Donald's distinctions between mimetic, mythic, and theoretic cultures, which presuppose the evolution of human *capacities* (Donald, 1991). The first or mimetic layer is primarily gestural but probably also included music, dance, and basic linguistic skills. Mythic culture developed with full grammatical language 250,000 to 100,000 years ago; mimesis and myth formed the basis of tribal religions. Theoretic culture, which emerged with writing, enabled people to question and reorganize the old mythic narratives with their mimetic bases; it emerged in the first millennium BCE, that is, during the axial age (RHE, xviii-xix). Donald's layered capacities, thus, provide a different model of the historical co-evolution of biology and culture than we get in Norenzayan.

While both Norenzayan and Bellah assume that biology and culture co-evolved, they focus on different critical points in the process. Norenzayan's claim that religion played a major role in the transition to large scale societies pivots on the transition from hunter-gather, where he found little evidence of moralizing Big Gods, to agricultural societies that arose at the start of the Holocene period about 12,000 years ago, in which moralizing Big Gods were increasingly common. Norenzayan draws on the archeological discoveries at Göbekli Tepe to support the thesis that agricultural societies arose with the support of Big Gods rather than the other way around (pp. 118-121). His argument seems to rest heavily on Jacques Cauvin's *The Birth of the Gods and the Origins of Agriculture* (Cambridge, 2007).

In contrast to Norenzayan, Bellah distinguishes between three different levels in the scaling up process -- tribal societies, archaic societies (early states or civilizations), and the large-scale societies of the axial age (Greece, India, and China) – each of which retains and builds upon what came before. Tribal religion in kin-based small-scale societies stressed myth and ritual. Archaic religion in larger socially differentiated societies ruled by a non-kin elites stressed links between god and king. The “great sages,” e.g. Jeremiah, Socrates, Confucius, Jesus, and the Buddha, introduced a dynamic of critique (critical reflexivity) that characterizes axial age religions and philosophies into the earlier formations.

The evidence Bellah draws on to support his argument is quite different from Norenzayan's. Where the latter draws from psychology (chapters 2-6) and broadly comparative ethnographic, historical, and sociological studies (chapters 7-10), Bellah

offers a close analysis of numerous carefully selected case studies including four chapters on axial age religions (ancient Israel, ancient Greece, first millennium BCE China, and ancient India). Bellah also charts an alternative path when it comes to defining religion, opting neither for religion as belief in unseen beings nor religion as social glue, but, building on Clifford Geertz and Alfred Schutz, defines religion in terms of practices that generate and provide entry into “other worlds” (Bellah, 2011, pp. xiv-xix). From an evolutionary point of view, religion, as Bellah defines it, is grounded in the psychological mechanisms that allow humans and many other animals to play. This approach to religion, like the emphases on spiritual beings and social solidarity, also has a venerable history going back to Huizinga (1950) and Caillois (1961) in the humanities and Winnicott (1971) in psychology.

Although Bellah is quick to disparage the evolutionary by-product accounts of religion, we could read Bellah as unwittingly offering an alternative by-product approach when he grounds religion in play, an undeniable biologically evolved capacity, even though evolutionary theorists are not sure what purpose it serves.⁵ These alternatives could be considered together and, most likely, integrated, since research on play in developmental psychology is intimately bound up with research on theory of mind and other developmentally natural processes. In focusing on the creation of alternative worlds, however, play tacitly downplays the stress on deities that has preoccupied CSR and highlights emphases that haven’t garnered as much attention (but see Geertz and Jensen [2011] for an exception). Integrating the psychological literature on play more fully into Norenzayan’s cognitive layer would then allow us to consider how the capacity for play is utilized both as a means of cultural learning and as a powerful generator of new “cultural mutants” that compete for cultural attention.

Bellah’s distinction between two kinds of mythic cultures (tribal and archaic), which arise before and after the transition to agriculture, also suggest ways that Norenzayan’s model could be refined. While BGs emerge in Norenzayan’s account around 12,000 BCE and become increasingly common with the emergence of larger and

⁵ Bellah’s resistance to viewing religion as either an adaptation or a spandrel is grounded in his understanding of play. Citing the ethologist Gordon Burghardt, he wants to suggest that primary play, for humans and other animals, *is just play* and that secondary play is adaptive in a variety of ways (RHE, xxii).

more complex societies (BG, 126-131), Bellah's discussion of the relationship between god and king in archaic societies (Hawaii, ancient Mesopotamia, ancient Egypt, and Shang and Western Zhou China) thus provides an important intermediate set of cases (RHE, 210-264) and highlight two potentially important issues. First, the scaling up to larger, more complex forms of social organization can occur at any time, as his comparison of the process in 19th century Hawaii and ancient societies demonstrates. Second, the rich description of the process that Bellah provides suggests that we may not have to choose between causal factors (e.g. Big Gods or agriculture) but might want to envision a boot-strapping or ratcheting up process in which a range of factors coalesce at different points in time to allow something new to emerge.

If, as both Bellah and Norenzayan assume, human evolution involves a layering of evolved capacities, then we ought to be able to see these same processes at work today in 21st century humans. Just as we can draw from developmental psychology to consider the role of play alongside other maturationally natural human capacities in the present, so too we can draw on research on new religious and social movements to develop a more precise understanding of the role of BGs in the emergence and spread of new religions. Norenzayan's references to Mormonism (pp. 1, 151) suggest that he would agree that new religions, broadly construed, do provide a context in which to test his theory.

Reflecting on the history of early Mormonism, two issues come to mind. First, Norenzayan's explanation of incentives to cooperate is heavily weighted toward what psychologists refer to as extrinsic motivations, e.g., moralizing high gods, credibility enhancing displays, and hard-to-fake signals. Recent sociological work on the development Mormonism would suggest the role of "commitment mechanisms" in generating intrinsically motivated desires to cooperate to realize a new vision. Thus, Shepherd and Shepherd (2012) provide a convincing analysis of the role of "patriarchal blessings," which were given to individuals by the "church patriarch," initially the father of Joseph Smith (p. 52). In claiming to reveal God's personalized intentions to the individual receiving the blessing, the blessings articulated personal aims and goals for the individual within the overarching context of collective, cooperative action.

Second, I think Norenzayan moves too quickly from "belief-ritual packages" to the forging of "anonymous strangers into moral communities tied together with sacred

bonds under a common supernatural jurisdiction.”⁶ When it comes to the emergence of new religions, it is one thing to claim a new revelation and collect a small group of followers and another to forge the initial followers into a stable small group that then expands into a still stable large group. Survival and expansion depend, I would argue, on the co-emergence of social roles, e.g., prophet, patriarch, and elder, and structures, e.g., conferences and councils, alongside and legitimated by the “belief-ritual packages.” Thus, Bellah argued that new belief-ritual packages emerged hand in hand with the king as a new type of non-clan based leader. In the Mormon case, which admittedly has a Big God, a strict focus on the BG allows us to overlook the emergence of an elaborate governance structure headed by a prophet-revelator. The new roles and structures emerged through a series of revelations given to the prophet, whose status as prophet and sole revelator was legitimated (circularly) by the pronouncements that followers construed as revelations from the BG. Norenzayan’s model doesn’t attend sufficiently, in other words, to the emergence of the Mormon Doctrine and Covenants, which defined and forged the “sacred bonds” that created the “moral community.”

If, as I am suggesting, roles and structures co-emerge with new belief-rituals in the formation of stable groups, then we might want to be on the lookout for the emergence of “watcher mechanisms” rather than “watcher-gods.” As Bryce Huebner pointed out with respect to Mormonism in an on-line discussion of Big Gods, it isn’t so much the Mormon God who watches but “local bishops and elders.”⁷ This “distributed watching,” as he called it, relies on what we might think of as specially sanctioned “watcher roles.” But we may need to expand beyond distributed watcher roles to more generically conceived “watcher mechanisms” that are legitimated by various sorts of special sanctions. In an on-line discussion with Norenzayan, Claire White suggested that karma might play a more important policing role in some traditions than BGs. Drawing on Obeyesekere (2002), she notes that the idea of karma may have emerged through the

⁶ Norenzayan uses this phrase in his précis of the book, available on-line at <http://www.cognitionandculture.net/workshops/big-gods/2568-a-precis-of-big-gods-how-religion-transformed-cooperation-and-conflict>.

⁷ Bruce Huebner, “A lingering question about Mormons,” a comment on Norenzayan’s précis at <http://www.cognitionandculture.net/workshops/big-gods/2568-a-precis-of-big-gods-how-religion-transformed-cooperation-and-conflict>.

blending of a moral component with “basic [amoral] ideas about rebirth” to generate “a system/principle that includes assumptions about surveillance” but is not itself a BG.⁸ Her observation alerts us to the possibility that there were multiple “cultural mutations” that aided in stabilizing large, anonymous groups in addition to moralizing BGs. Rather than force traditions, such as Buddhism, Hinduism, and Jainism, into the Big Gods model, I would join White in asking: “to what extent, [is] a supernatural agent/s (with powers of social surveillance) ... necessary to induce the purported effects (prosociality and rapid cultural evolution) or rather, can any (*religious*) system or principle that co-opts a moralizing component ... serve this function [of stabilizing groups]?”⁹

In conclusion, my primary suggestion for historians of religion who would like to further test Norenzayan’s model would be to focus on his first question, asking what role what we study under the rubric of “religion” has played in the emergence of large, anonymous yet stable groups. Formulated in this way we don’t need to worry about defining “large” or “stable”, but rather can focus on groups that view themselves as groups. Norenzayan model would predict that larger and more stable groups have moralizing BGs to police the group and maintain cooperation. We should test this idea, remaining open to the possibility that groups develop “watcher mechanisms” that do not rely on Big Gods. Nor need we assume that all “policing” is external. We should also look for “commitment mechanisms” that internalize policing, i.e., generate an inner sense of commitment to the group that operates whether people are being monitored or not. At the mid-level of analysis, we can track the emergence of new groups, looking to see if they are using familiar mechanisms to scale up in size or developing new ones. In analyzing the process of emergence at this level, we can be alert to the possibility that numerous factors may need to coalesce in order to bootstrap a new group into existence. Finally, at the lower level of analysis, we (or our psychological colleagues) can investigate the workings of a wider range of mechanisms that might inform commitment

⁸ Claire White, “A moralizing system by any other name?” a comment on Norenzayan’s précis at <http://www.cognitionandculture.net/workshops/big-gods/2568-a-precis-of-big-gods-how-religion-transformed-cooperation-and-conflict>. The exchange between Norenzayan and White about karmic religions that follows is also illuminating.

⁹ Claire White, “A moralizing system by any other name?” a comment on Norenzayan’s précis at <http://www.cognitionandculture.net/workshops/big-gods/2568-a-precis-of-big-gods-how-religion-transformed-cooperation-and-conflict>.

and/or watcher mechanisms, e.g., those that inform karmic processes and extraordinary seeming human abilities, in addition to those that inform deities and loyalties displays.

References

- Atran, S., Norenzayan, A., 2004. Religion's evolutionary landscape: Counterintuition, commitment, compassion, communion. *Behavioral and Brain Sciences* 27, 713-770. DOI: 10.1017/S0140525X04000172
- Bellah, R. 2011. *Religion in Human Evolution*. Harvard University Press, Cambridge, MA.
- Boyer, P., 2001. *Religion Explained: The evolutionary origins of religious thought*. Basic Books, New York.
- Bulbulia, J., Sosis, R., Harris, E., Genet, R., Genet, C, Wyman, K., 2008. *The Evolution of Religion: Studies, Theories, and Critiques*. Collins Foundation Press, Santa Margarita, CA.
- Callois, R., 1961. *Man, Play, and Games*. Trans. M. Barash. Free Press, New York.
- Donald, M., 1991. *Origins of the Modern Mind: Three states in the evolution of culture and cognition*. Harvard University Press, Cambridge, MA.
- Geertz, A., Jensen, J.S. (Eds.), 2011. *Religious Narrative, Cognition, and Culture*. Equinox Press, Sheffield, UK.
- Huizinga, J., 1955. *Homo Ludens: A study of the play element in culture*. Beacon Press, Boston.
- Kirkpatrick, L.A., 2005. *Attachment, Evolution, and the Psychology of Religion*. Guilford Press, New York.
- Kirkpatrick, L.A., 2011. The role of evolutionary psychology within an interdisciplinary science of religion. *Religion* 41(3), 329-339. DOI: 10.1080/0048721X.2011.604511
- Mesoudi, A., 2011. *Cultural Evolution: How Darwinian theory can explain human culture and synthesize the social sciences*. University of Chicago Press, Chicago.
- Obeyesekere, G., 2002. *Imagining Karma: Ethical transformation in Amerindian, Buddhist, and Greek rebirth*. University of California Press, Berkeley.
- Richerson, P. J., Boyd, R., 2005. *Not by Genes Alone: How culture transformed human evolution*. University of Chicago Press, Chicago.

- Sosis, R., 2009. The adaptationist-byproduct debate on the evolution of religion: Five misunderstandings of the adaptationist program. *Journal of Cognition and Culture* 9, 315-332. DOI: 10.1163/156770909X12518536414411
- Stausberg, M., 2014. Bellah's *Religion in Human Evolution*: A post-review. *Numen* 61, 281-299. DOI: 10.1163/15685276-12341320
- Wilson, D. S., 2002. *Darwin's Cathedral: Evolution, religion, and the nature of society*. University of Chicago Press, Chicago.
- Winnicott, D. W., 1971. *Playing and reality*. Tavistock Publications, London.