Why the Evolutionary Sociology of Religion Should Build on Rather than Reinvent Biological Models

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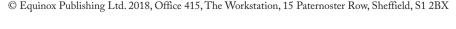
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In his article, "Using Neurosociology and Evolutionary Sociology to explain the Origin and Evolution of Religions," Jonathan Turner raises important questions regarding the evolution of religion. Specifically, he exposes the limitations of biological and cognitive explanations of religion, and offers evolutionarily inspired sociological perspectives that aim to address these limitations. Turner argues that while Darwinian natural selection played a role in the development of religious propensities, this alone does not account for the subsequent history and development of religious groups. He proposes additional forms of natural selection, which he terms Spencerian, Durkheimian, and Marxian selection, as mechanisms that sculpted these propensities into organized religions. Thereafter, organized religions competed amongst themselves for resources and followers.

The social evolution of religion is indeed a complex process, and it is correct to note that multiple selective forces may be at play. To begin with, the pressure upon individuals to navigate intricate and consequential social landscapes is hypothesized to be part of the reason why beliefs about supernatural agents (Boyer 2001) and afterlives (Hodge 2011) initially emerged as psychological by-products. However, once equipped with the ability to have supernatural conceptualizations, other selective forces may have become applicable that selected between different potential religious actions or beliefs, and perhaps even groups (Alcorta and Sosis 2005). Religion may have in at least some domains become an adaptation, whereby it (or some component of it) propagates due to its conferral of advantages to the relevant unit of selection. Turner aligns with this view when he claims that the rise of moral emotions in our species enabled religious beliefs that helped stabilize

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groups. It should be noted that there is considerable debate in the field regarding the relative influence of group- versus individual-level selection pressures, as well as the distinct roles of cultural and genetic processes in the evolution of religion. Turner proposes a group selectionist account of religious *superorganisms*—that is, the "organization of organisms in corporate units revealing divisions of labor" (p. 20). His proposal seems consistent with many cultural evolutionary models of religion (e.g., Richerson and Boyd 2005; Wilson 2002).

Unfortunately, many of Turner's arguments as summarized in the present article would benefit from further clarification. First, Turner is largely seeking to explain the *institutionalization* of religion among early humans. In other words, how ancestral humans went from being able to conceive of supernatural beings or forces to actually using those perceptions to construct social religious bodies. However, Turner does not stipulate what he precisely means by institutionalization, or in what specific ways he thinks institutional religion may differ from previously held religious beliefs and practices. His discussion of the development of emotional sophistication in our species and its facilitative role in the construction of potentially stronger social relationships is interesting, but as he himself notes, human evolution was not leading up to any final goal of religiosity. It is not clear that this elaboration upon the emotional history of our species either sufficiently explains the origins of religion, or adequately sets up the foundations for an argument about the alternative forms of selection that he then proceeds to discuss.

Turner argues that morally concerned religions made groups more stable and ultimately successful, referencing individual shame and guilt in face of the violation of sacred morality. We agree, but we suspect that Turner has simplified matters. His proposal is similar to supernatural punishment theories of religion (e.g., Johnson and Krüger 2004), which postulate that thoughts of supernatural retaliation against improper personal behavior ultimately decrease anti-sociality within a group (specifically, freeloader problems), and therefore contribute to its cooperative success (Hartberg et al. 2016). Beliefs about religious "punishments or rewards" are indeed widespread (Johnson 2015; Whitehouse 2008). Watts et al. (2015), for example, have shown that supernatural punishments for impiety are found in the vast majority of Austronesian societies. However, Turner's discussion of moralistic monitoring, and "codes mandated by the gods," implies a broad prevalence and extent of supernatural moral legality that may not necessarily be warranted. Often, supernatural agents or figures are not directly engaged in the moral affairs of humans. This is true, surprisingly, even when such agents are perceived as having moralization biases regarding their knowledge (Purzycki 2013). Gods that are blatantly moralistic are found in more complex societies, however (Roes and Raymond 2003); presumably a consequence of their more frightful and powerful nature effectively discouraging anti-social behavior.

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We appreciate Turner's sociological inclinations that led to his introduction of alternative selective frameworks (Spencerian, Durkheimian, and Marxian selection), and we understand his dissatisfaction with some traditional evolutionary approaches toward the emergence, development, and institutionalization of religion. Nonetheless, we are skeptical about the utility of his proposed types of selection and are concerned about the confusion it will introduce to the scientific study of religion. Evolutionary sociology, at least in its current early stages of development, would be better served by following the paths of their academic kin—evolutionary anthropology and psychology; that is, recognizing the continuity of evolutionary processes that impact all life forms, including humans and their complex cultural constructions.

Biologists themselves have been sympathetic to Spencer's superorganism concept and proposed alternative selective frameworks accordingly. The common thread in these writings is disaffection for reductionist evolutionary models and a search for more holistic evolutionary approaches. The history of what has been termed "emergent" or "holistic" evolution is beyond the scope of these brief comments, but Smuts (1926) and Wheeler (1927) offer early examples and Corning (1997) and Maynard Smith and Szathmary (1995) provide valuable syntheses. We believe that contemporary work in this lineage on complex adaptive systems offers a promising approach for understanding the evolution of religious and religious institutions (Kiper and Sosis 2014; Purzycki and Sosis 2009; Sosis 2009, 2016). We suggest building on this literature, as well as other attempts to understand the evolution of institutions (Boyer and Petersen 2012; Plotkin 2002), rather than introducing new terms and concepts into an already muddled conversation about the evolution of religion. Moreover, rather than inhibit conversation with the biological sciences, as often happens with the jargon-rich literatures of cultural anthropology and sociology, building upon the complex adaptive systems approach will continue to facilitate dialogue with evolutionary biologists and systems theorists.

Turner raises many important issues regarding the evolution of religion, and offers a valuable overview of religious development and institutionalization, especially in the contemporary context. Likewise, he is correct to be attentive to the subtleties of various selective pressures operating at not only the biological, but also the social and cultural level. However, we fear that many of his concerns have already been addressed by cultural evolutionists, as well as adaptationists who focus on religions as complex adaptive systems. To be clear, we are excited that sociologists of religion have begun to embrace selectionist thinking, and we appreciate the insights offered by sociological perspectives. Nevertheless, we feel that the metaphorical evolutionary vehicle needs to be test driven through the rigorous evaluation of hypotheses derived from conventional selective processes before we

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reinvent the very wheels that have advanced our understanding of human cognition and behavior.

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