Did Monotheistic Belief Evolve?

Kenneth J. Coughlan

August 9, 2020

Winfried Corduan lists nine criteria that make up a foundational monotheistic system, including belief in a personal god, reference to this god in masculine language, the god as creator and as the standard for morality, etc.[1] In the late 19th century, however, scholars assumed that religion had evolved through a step by step process, with the only disagreement being over which stage constituted the earliest stage.[2] Andrew Lang was such a scholar, until he reviewed anthropological reports on local cultures in Australia and found that even many tribes that held to animism (often believed to be the earliest or one of the earliest stages of evolutionary development) also held a belief in a single god.[3]

Wilhelm Schmidt then brought a refined methodology to interpret the type of data observed by Lang in order to determine which cultures were the oldest, and therefore which beliefs predated others.[4] For example, Schmidt examined the religious beliefs of various cultures and looked for which single culture had the most in common with all the rest. In all likelihood, that culture had the least change over time and most closely resembled the original. This is because it would require fewer changes for the beliefs in that culture to morph into those of all the others than it would for any other culture to serve as the basis.[5] He also evaluated the relative ages of neighboring cultures by looking for the presence of residual forms. In other words, if culture A overtook culture B, then we should expect to see residual elements of culture B (i.e, the

---

[1] Winfried Corduan, *Neighboring Faiths: A Christian Introduction to World Religions*, 2nd Ed. (Downers Grove, IL: InterVarsity Press, 2012), 40.

[2] Ibid, 42.

[3] Ibid.

[4] Ibid.

[5] Ibid, 42-43.

one that was originally populating the region) in the area. Thus, residual elements can tell us which cultures were older in a given region.[6]

Using this methodology, Schmidt was able to determine the relative ages of various cultures. While the oldest cultures were also those that were the least materially developed, contrary to the evolutionary assumptions of the time they also were the ones that supported original monotheism.[7] Thus, Schmidt's research strongly suggested that monotheism was the oldest form of religious belief and over time societies moved away from it.

A major advantage that original monotheism holds over evolutionary models of the origins of religion lies in Schmidt's methodology. Theoretically, the criteria Schmidt applied to evaluate cultures could have led to various different conclusions. In other words, the data input into the methodology would determine the outcome. If the data had supported the claim that monotheistic beliefs were a later development, then Schmidt's methodology would have allowed for that.

This is not true for the methodology employed by many evolutionary theorists. For example, in 2016 Hervey C. Peoples, Pavel Duda and Frank W. Marlowe conducted a study of hunter-gatherer tribes in order to determine the sequence by which forms of religious belief emerged in these cultures.[8] They evaluated a sample of 33 hunter-gatherer societies and coded for belief in animism, an afterlife, shamanism, ancestor worship and "high gods," which they defined as "single, all-powerful creator deities who may be active in human affairs and

---

[6] Ibid, 43.

[7] Ibid, 43-44.

[8] Hervey C. Peoples, et. al., "Hunter-Gatherers and the Origins of Religion," *Human Nature*, vol. 27. no. 3 (2016): 261-82.

supportive of human morality."[9] From their data, they then created a phylogenetic tree showing the alleged evolutionary development of the various beliefs.[10] Specifically, they utilized a methodology proposed by Mark Pagel to demonstrate correlated evolution amongst the beliefs.[11] Their use of this methodology however, while perhaps allowing the data to dictate the *order* of the alleged evolutionary relationships, still pre-supposed the *existence* of an evolutionary relationship of some form. In other words, it assumed the truth of some kind of evolutionary model for the origin of religious belief.

Pagel outlined his original method (and the one relied upon by Peoples, et. al.) in 1994.[12] Generally, he proposed a methodology that viewed character states[13] as "probability distributions" allowing the probability of their occurrence to be weighted.[14] He described his method as follows:

> The method tests the hypothesis of correlated evolution by comparing the fit of two different models to the observed data set. First, the method fits a model to the data in which the two characters are treated as evolving independently. The goodness of fit of this model to the data is then compared to that of a more complicated model in which the characters evolve in a correlated fashion.[15]

---

[9] Ibid, 266.

[10] Ibid, 268.

[11] Ibid, 272. "Correlated evolution" refers to the belief that rather than traits evolving independently of each other, they may evolve in a connected, correlated fashion. See, e.g., Mark Pagel, "Detecting correlated evolution on phylogenies: a general method for the comparative analysis of discrete characters," *Proceedings: Biological Sciences*, vol. 255. no. 1342 (1994): 37-45.

[12] Pagel, "Detecting correlated evolution on phylogenies," 37-45.

[13] As specifically applied to the origin of religions, "character states" would refer to the alleged stages of belief, although Pagel's model is applied in biological as well as anthropological contexts.

[14] Ibid, 37-38.

[15] Ibid, 38.

While this method attempts to see which model best fits the data, the only models it includes are competing evolutionary models. It presupposes a broad evolutionary framework and merely attempts to see which variation of evolutionary theory best fits the data. This method is incapable of testing for whether religious beliefs originated in a non-evolutionary fashion.

In 2006 Pagel and Andrew Meade developed a revised method which they described as "only partly" overlapping with Pagel's original.[16] This revised version utilized Bayes Theorem, but it still suffered from the same limitations. They stated, "This model attempts to discover the evolutionary pathways that held throughout the evolutionary history of the species and eventually gave rise to the observed data."[17] The authors further described their method by saying they were "[t]esting for correlated evolution and distinguishing among alternative evolutionary scenarios to explain the observed data."[18] If the only potential conclusions allowed into the evaluation are evolutionary conclusions, it is no surprise that evolutionary results obtain.

Returning to Peoples, et. al., because they relied upon Pagel's methodology in interpreting their data from hunter-gatherer tribes, their results were pre-determined to only permit an evolutionary conclusion. This stands in sharp contrast to the methodology designed and utilized by Wilhelm Schmidt which allowed the data to determine the conclusion. When non-evolutionary possibilities are permitted to enter into the equation, the data appears even

---

[16] Mark Pagel and Andrew Meade, "Bayesian Analysis of Correlated Evolution of Discrete Characters by Reversible-Jump Markov Chain Monte Carlo," *The American Naturalist*, vol. 167. no. 6 (2006): 808-25.

[17] Ibid, 809.

[18] Ibid, 811.

more consistent with an original monotheism than it does with any of the proposed evolutionary models.

Specifically, Schmidt was able to demonstrate that even as cultures moved away from their original monotheism, they continued to retain some elements of it, such as one or more of the nine criteria outlined by Corduan.[19] Further, even though Peoples, et. al. claimed to be able to demonstrate correlated evolution amongst four of the five traits included in their study, they were unable to find support for coevolution of the belief in a "high god."[20] The authors continued to remain confined to their evolutionary framework and, based on the assumption that monotheism must have been a later evolutionary development, concluded that "the presence of high gods and some other traits related to religion and ritual are influenced by more socioculturally oriented factors."[21] They reached this conclusion despite their study not testing for "socioculturally oriented factors." At no point do they consider the possibility that the independence they found in their data set for this lone criterium may be due to the fact that its origin does not fit within an evolutionary model. As Corduan so ably observed. "The idea that a materially undeveloped culture could worship a Creator God in heaven was intrinsically implausible to them because they had already a priori designated monotheism as an advanced form of belief."[22] The interpretation given to their data by Peoples, et. al., appears to bear Corduan's conclusion out.

---

[19] Corduan, *Neighboring Faiths*, 40, 44.

[20] Peoples, et. al., "Hunter-Gatherers and the Origins of Religion," 274.

[21] Ibid, 277.

[22] Corduan, *Neighboring Faiths*, 40, 44.