
Durkheim with Data: The Database of Religious History

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This article introduces a new online, quantitative encyclopedia of religious cultural history, the Database of Religious History (DRH). The DRH aims to systematically collect information on past religious groups from around the world in a standardized form, providing a novel digital humanities resource for the religious studies community, a forum for scholarly debates, a pedagogical aid, and a platform for testing hypotheses about religious change over space and time. We employ the DRH project as a lens through which to view some larger intellectual issues surrounding the comparative study of religion, the role of functionalism and “big data” in the study of religion, the challenges of large-scale collaborative projects, and the future of science-humanities integration.

IN AN EARLIER ISSUE OF THIS JOURNAL, former American Academy of Religion (AAR) president Ann Taves enjoined religious studies scholars to undertake more collaborative, interdisciplinary research, particularly research bridging the methodological divide between the sciences and the humanities. “Opening ourselves to the interplay between biology and culture at multiple levels,” she writes, “has the potential not only to enrich the study of religion but also to build bridges between the sciences and the humanities in ways that could enrich the

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university as a whole” (Taves 2011: 308).¹ Armin W. Geertz, in a piece that similarly argues for reestablishing the kind of interdisciplinary scope that characterized early work in religious studies, notes that what is additionally lacking is a method for organizing the results of such inquiry that harnesses the power of our digital age. “A crucial lacuna in our current state of knowledge,” he observes, “is systematic and easily searchable databases containing the cumulative empirical data that archaeologists, historians, linguists, ethnographers, sociologists, and many others have collected during the past few centuries” (A. W. Geertz 2014a: 266).²

The Database of Religious History (DRH), a quantitative and qualitative encyclopedia of religious cultural history based at the University of British Columbia, is one attempt to meet this challenge. The DRH is a Web-based database that aims to systematically collect information on past religious groups from around the world in a standardized form, providing a novel digital humanities resource for the religious studies community. Unlike a Web resource such as, for instance, Wikipedia, contributions are limited to vetted experts and peer reviewed by regional editors. Moreover, each expert’s opinion is preserved as a separate entry, rather than amalgamated into a consensus document, which allows users to view the full range of scholarly opinion on a particular topic.

Like Wikipedia, however, the DRH will allow both scholars and the general public to quickly and intuitively access continuously expanded and revised information about religious cultural history. Among many possible uses, the DRH can serve as a forum for scholarly debates, a means for quickly and accurately substantiating scholarly generalizations about the history of religion, a pedagogical aid (allowing powerful visualizations and other novel presentations of historical information), and a platform for testing hypotheses about religious change over space and time. Specific features of the DRH will be discussed in more detail below.

The DRH is a project of the Cultural Evolution of Religion Research Consortium (CERC; <http://www.hecc.ubc.ca/cerc/project-summary/>) at the University of British Columbia, one of the main networks of

¹Other scholars, including one of the present authors, have issued similar calls to arms (Slingerland 2008; Trigger 2003: 683).

²Also note that there have been similar calls from working archaeologists, among other students of human cultural history. Kintigh et al., for instance, note that “Although new archaeological field work will be needed, the greatest payoff will derive from exploiting the explosion in systematically collected archaeological data that has occurred since the mid-20th century, largely in response to laws protecting archaeological resources. Both the needed modeling and synthetic research will require far more comprehensive online access to thoroughly documented research data and to unpublished reports detailing the contextual information essential for the comparative analyses” (Kintigh et al. 2014: 879).

researchers from a wide variety of disciplines devoted to the growing field of cognitive science of religion. Including historians of religion, philologists, philosophers, anthropologists, psychologists, neuroscientists, biologists, and mathematicians, CERC is a genuinely interdisciplinary undertaking, with its members collaborating on large-scale group projects, as well as forming smaller research clusters to explore particular topics. The cognitive science of religion (sometimes referred to as CSR) refers loosely to approaches that study religious thought and behavior from the perspective of cognitive psychology, cognitive linguistics, neuroscience, or evolutionary theory or that grapple with specific religious phenomena—ritual, sacrifice, charismatic authority—by bringing to bear upon them the tools of empirical science. Although a relatively recent development in religious studies, the cognitive science of religion now constitutes its own group at AAR and supports several journals, and cognitive science of religion-related work is increasingly being featured in mainstream religious studies journals and conferences.

Despite worries about “scientism” and “reductionism” (see [Slingerland 2008](#) and the responses by Francisca Cho and Richard Squier in the same issue) and suggestions that it is still a new field desperate to assert itself ([McCutcheon 2010](#): 1183, n. 3), the reality is that one of the foundations of cognitive science of religion—functionalism—has roots that are decades or even millennia old. Functionalist theories of religion go back as least as far as the fourth century BCE Confucian thinker Xunzi, who argued that religious ritual functioned to mark social distinctions and instill attitudes to solidarity and obedience in the populace ([Campany 1992](#)). In religious studies, functionalist theories of religion have been identified most prominently with early pioneers such as [Bronislaw Malinowski \(1954 \[1925\]\)](#) or [Émile Durkheim \(1965 \[1915\]\)](#) and have also featured in historical sociology (e.g., Talcott Parsons, Shmuel N. Eisenstadt, Robert Bellah).³ Since the 1970s, however, the growing influence in the humanities of postmodernism or poststructuralism has led to a suspicion of grand explanatory narratives, and in religious studies and anthropology the “interpretative turn,” perhaps best exemplified by in the work of [Clifford Geertz \(1973\)](#), has portrayed thick description as the proper humanistic task.

³In his recent address as President of the Society of Biblical Literature, Jonathan Z. Smith explains approvingly that one of the founders of the academic study of religion, Max Müller, after much deliberation, settled on a functional definition of “sacred book” rather than a substantive one for his magnum opus, *The Sacred Books of the East* (J. Z. [Smith 2009](#), 20).

Scholars in cognitive science of religion often characterize Durkheim, in particular, as a sort of godfather for the field.⁴ Taves, for instance, suggests that Durkheim's "sacred things" can be correlated with the more general category of "special things" in her building block approach to the study of religion (Taves 2010: 176–178; Taves 2009: 26–35). The reason for such homage to Durkheim is not immediately obvious, given the fact that Durkheim is also identified with having explicitly disavowed psychological approaches to the study of religion.⁵ Durkheim's importance to the field is linked, however, to his fundamentally empirical approach to the study of religion, which he argued should be analyzed in terms of "concrete," observable data derived from ethnographic and historical research (1995: 3). Moreover, religion for Durkheim was intimately *social*, having always to do with the creation and maintenance of social groups (Durkheim 1995: 41). These approaches to the study of religion sit well with the psychologists and behavioral ecologists who join anthropologists and historians in the cognitive science of religion. Moreover, Durkheim's study of the *parts* or *components* of religion rather than "religion" in the abstract (a point made by Taves 2010: 175) makes the task of explaining religion a more tractable one.

The main problem with Durkheim's work, of course, was his reliance upon poor data. For instance, scholars have long pointed out that the late nineteenth-century ethnographies of Australian aborigines on which Durkheim depends do not necessarily support Durkheim's theory and, worse still, contain serious flaws and misunderstandings of those societies (Pals 2006: 112–113). Other explanations of religion in explicitly functionalist terms have seldom performed any better; the evidence they rely upon is necessarily anecdotal, cherry-picked, and very much lacking in both geographical breadth and historical depth, because religious studies

⁴See, for instance, the place of precedence given to Wilson 2002: 52; Sosis and Ruffe 2003: 713; Durkheim in Sosis, Kress, and Boster 2007: 234; Norenzayan and Shariff 2008: 58; Konvalinka et al. 2011: 8514.

⁵Bruce Trigger (2003: 680), for instance, attributes the insufficient attention to the role of psychological and biological factors in shaping human behavior and culture to the lasting influence of Durkheim's "dogmatic separation of the social and the psychological." Taves also recognizes this aspect of Durkheim. She writes, "Durkheim's argument was premised on the rejection of psychopathology as an explanation of the origins of religion. Thus, when he sought to identify the most elementary form of religion from among what he took to be the three basic contenders, he rejected animism and naturism because, in his view, they necessitated regarding 'religion as the product of a delirious imagination,' in short, as products of psychopathology. Because he equated origin and function, Durkheim identified what he took to be pathologically rooted phenomena (animism and naturism) as secondary elaborations on something more fundamental and primitive, i.e. totemism, which, according to Durkheim, was social rather than psychological in its origins" (1999: 277).

as a field lacks tools for making generalizations about religious history that are both comprehensive and accurate.

More recent attempts to revive functionalist accounts, particularly in the cognitive science of religion (see, e.g., Swanson 1960; Roes and Raymond 2003; Atkinson and Whitehouse 2011), have attempted to overcome these weaknesses by drawing upon existing anthropological databases, such as the Human Relations Area Files (HRAF) at Yale and George P. Murdock and Douglas R. White's Standard Cross-Cultural Sample (SCCS; 1969). The problems with such databases, however, are that they tend to be static, capturing only a single (and typically recent) moment in time,⁶ and are also dominated by stateless or minimal state societies. At present, supposedly rigorous claims about the relationship of social, political, and economic factors to features of religion or morality—for instance, that moralistic gods arise only during the so-called “Axial Age” (Baumard and Boyer 2013; Baumard et al. 2015)—are discouragingly vague, impressionistic, and based on assertion rather than empirical evidence.

175

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THE ORIGINAL CONTEXT OF THE DRH: BIG HISTORY APPROACHES TO THE STUDY OF RELIGION

Although, as will be explained below, the DRH has gradually evolved into a general resource for the scholarly community and general public, it has its origins in responding to the problem of how to rigorously evaluate large-scale theories about the dynamics of cultural development. In pushing for a more comprehensive and quantitative approach to identifying patterns in world religious history, the DRH is influenced by, and shares goals with, at least four other contemporary academic fields or approaches: cross-cultural archaeology, historical sociology, comparative religious studies, and “deep” history.

190

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One example of the first category, Bruce Trigger's *Understanding Early Civilizations*, is a magisterial example of a work in cross-cultural archaeology.⁷ The connections between Trigger's work and the DRH are

200

⁶Although the HRAF World Cultures does not provide date ranges for its entries, the newer HRAF Archaeology does, and also aims to provide diachronic ranges up to the beginnings of state-scale cultures. The SCCS “pinpoints” each society in space and time, but each society has only a single corresponding year, making diachronic analysis of the same group impossible. Moreover, all but 15 of the 186 societies in the SCCS are pinpointed to after the year 1700 CE, leaving the historian of religion with much to be desired.

205

⁷We would like to thank Katherine Young (McGill University) for bringing Trigger's work to our attention.

210

due not least to the fact that he was a student of George Murdock, who was the founder of HRAF and developer of the SCCS described above. Despite this pedigree, Trigger did not slavishly fall in with any particular methodological camp.⁸ Several of his works describe the influence that the present-day social context of scholars has on their archaeological research and portrayal of the past,⁹ suggesting that he shared many of the concerns espoused by postmodernists or others who insist we cannot be too careful about the portraits we paint of the Other. As Trigger himself writes, “the cyclical rather than unilinear nature of these fluctuations [between materialist and idealist theories of cultural change] suggests that these theories are deeply embedded in the competing values of Western society, especially those associated with rationalism and romanticism” (2003: 655). Thus, in writing *Understanding Early Civilizations*, an 800-page tome that utilizes most of the primary and secondary literature available on seven different early civilizations, he is careful to acknowledge the numerous differences that distinguished each of the civilizations in his study. 215 220 225

Notwithstanding his attention to differences and details, Trigger unambiguously argues that the challenge for the next generation of scholars is to explain the great deal of cross-cultural *regularity* that he presents in his book: 230

Subsistence patterns were concerned with adaptation to local conditions and necessarily displayed much variation. By contrast, early civilizations possessed one general form of class structure, only two main forms of sociopolitical organization, and one set of key religious beliefs. (2003: 684) 235

In short, Trigger’s work makes the case that cross-cultural regularities are real and pervasive and that these patterns deserve an explanation. Although Trigger ends his study by suggesting that the explanation to these regularities can be found in the shared architecture of the human brain, this is the point of departure for the DRH. 240

“Big history” approaches are also found in the work of historical sociologists, such as Shmuel Eisenstadt and Robert Bellah, who share a common concern with explaining cross-cultural regularities. Eisenstadt is perhaps most associated with the numerous conferences and volumes he organized on the “Axial Age”; Bellah’s *Religion in Human Evolution*: 245

⁸One reviewer of Trigger’s book refers to him as “something of a maverick” (M. E. Smith 2006: 6).

⁹Smith (2006: 6) directs us to Trigger (1978) and (1984).

From the Paleolithic to the Axial Age continues with this theme.¹⁰ Like Trigger's book, *Religion in Human Evolution* is the product of a single individual's long and arduous path to master numerous fields. Whereas Trigger's work necessitated "taking notes on as many as one hundred books and monographs dealing with each [of the seven] civilization[s] as well as reading a large number of recent papers," Bellah spent over a decade of his life learning and writing about the early history of four distinct world religions (Trigger 2003: 53; Bellah 2011: 567). Bellah was concerned primarily with explaining the origin of religion (2011: 99–100), which he located in our mammalian tendency toward play. "Play," for Bellah, is contrasted with "work," which is the struggle for existence and the confrontation with the exigencies of the world. At times he even equates play with religion, for instance when he calls ritual "the primordial form of serious play" (2011: 92). For Bellah, play, ritual, and religion open up a sort of "relaxed field" where one can reflect, experiment culturally, find meaning, and, in effect, become *human*.

There is a lot that our approach shares with Bellah, and it is striking that near the end of his life he, like Trigger before him, turned to humanity's evolutionary past and new research in cognitive science¹¹ to understand religion. However, at least in this last book of his, he was only secondarily concerned with religion's function (2011: 99–100). Despite his acknowledged debt to Durkheim (2011: xxvi), his description of the origin and development of religion in humanity's past is very much what Durkheim himself would have described as "philosophical," a method in which scholars "confine themselves to analyzing their idea of religion, and simply illustrate the results of this mental analysis with examples borrowed from religions that best embody their model" (2011: 6). Saying this does not devalue in any way the impressive scope of Bellah's work or its moving and evocative tone, but rather makes the point that Bellah's approach ultimately departs from our own. Moreover, Bellah expresses great

¹⁰"Axial Age," of course, is a term coined by the mid-twentieth century psychologist and philosopher Karl Jaspers to refer to a period between 800 and 200 BCE that marked, in essence, the birth of genuine morality, individuality, and interior spirituality out of previously despotic, collectivistic societies (Jaspers 1953). Since Jaspers, a common view of the historical record has been that there is a vast chasm between pre-Axial Age religions—which are thoroughly amoral, demanding mere external ritual observance from their adherents—and Axial Age moral religions, a view that has found its way into the cognitive science of religion literature (e.g., Baumard and Boyer, 2013). Despite its wide appeal, this interpretation is historically questionable on several fronts and has little traction in contemporary religious studies. In the view of the DRH architects, the period from 800 to 200 BCE represents merely one particular cross-section of a gradual ramping up of group size and the prosociality of religion.

¹¹Bellah (2011: 118) is particularly indebted, he tells us, to Merlin Donald's *Origins of the Modern Mind: Three Stages in the Evolution of Culture and Cognition*.

skepticism of most evolutionary approaches to the study of religion, apparently because they do not do enough to meet “the need for meaning” in the world (2011: 99–100).¹² Therefore, Bellah’s work, like Eisenstadt’s work on the Axial Age, although inspirational, departs in significant ways from the theoretical approaches embodied in the DRH. 295

Comparative religious studies is a field that is perhaps most associated with the mid-twentieth-century scholar Mircea Eliade and his successors at the University of Chicago, such as Wendy Doniger, Bruce Lincoln, and Jonathan Z. Smith. It is difficult to summarize the diverse array of theoretical issues and subject matters about which these scholars have written, but one could argue that identifying and improving upon the shortcomings of their predecessor, Eliade, is part of their common program. For Lincoln and Smith in particular, this has taken the form of an emphasis on the history of discourse and how language is employed in the service of ideology and politics.¹³ 300 305

This is what some have referred to as the “analytical turn” in religious studies (A. W. Geertz 2014b: 259). Armin Geertz, in a synoptic overview of the history of comparative religious studies, designates Smith’s *Map Is Not Territory* as the beginning of this turn. For Smith, “religion . . . is primarily an analytical construction used to interpret certain kinds of human behavior, and it is imperative that we distinguish between construct and empirical behavior” (2014b: 259). Geertz might here be thinking primarily of one of Smith’s more famous lines, that “religion is solely the creation of the scholar’s study” (J. Z. Smith 1988: xi). That is, the scholar must be forever vigilant not just of the rhetoric found in her historical texts and ethnographic observations but also of her own use of language in describing and defining religious phenomena. 310 315 320

Such a deep suspicion of language does not mean, however, that these scholars are exclusively interested in pushing a postmodernist agenda that merely deconstructs what our intellectual forebears had improperly built. To take Smith as representative of recent trends in comparative religious studies, he laments the retreat to historicism and particularism by religious studies scholars following the decline of interest in evolutionary models of religious and cultural change (J. Z. Smith 1993a: 263; see also A. W. Geertz 2014b: 257). While president of the Society of Biblical 325 330

¹²The footnotes of Bellah’s last monograph are peppered with critical comments illustrating his disdain for what he understood to be evolutionary psychology, a critical stance that showed hints of softening when the differences were pointed out between the gene-culture coevolutionary theory driving the DRH and earlier, culture-blind or crudely teleological versions of evolutionary theory (Slingerland 2013).

¹³See, for instance, Lincoln 1986: 1999. Smith makes very explicit comments about ritual and hierarchy (J. Z. Smith 1987: 109–110) and about taxonomies of the “other” (J. Z. Smith 2004a: 259). 335

Literature, Smith made it clear that he envisions the future of religious studies as comprising very *big* comparisons *across* fields and domains:

What [Max] Müller proposed, and I affirm, is not some division of labor between biblical scholars critically studying their chosen texts and making what Müller termed “limited comparisons” to antecedent and environing traditions, and students of religion undertaking more global interreligious comparisons. For Müller, the biblical scholar is a practitioner of what he termed the science of religion to the degree she sees her work as comparative. I would argue the same. (J. Z. Smith 2009: 19)

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Smith advocates a study of religions modeled on the sciences, particularly the devising of taxonomies based on careful scrutiny of the historical record (J. Z. Smith 1993 b: ix).¹⁴ “In almost no case, in this period,” writes Smith referring to the Hellenistic period and Late Antiquity,

350

do we study a new religion. Rather almost every religious tradition has had a two thousand year history. . . . To be able to trace the Eleusinian mysteries from their origin as a fourteenth century family cult to the gnosticization of their central myth in the *Naassene Sermon* in the third century (A.D.) is to be able to truly function as an historian of religions in contradistinction to the usual static comparison of isolated items . . . (J. Z. Smith 1993b, xi).

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This interest in creating phylogenies of religions and religious beliefs, practices, and institutions (e.g., “sacred texts” [J. Z. Smith 2009]) is one shared by the DRH. Such phylogenies, when juxtaposed with the data collected on the traits of religious groups, would allow scholars to explore the manner in which certain traits spread—for instance, via cultural diffusion (homology) rather than being an independent, co-occurrence of that trait (analogy). This is important for understanding how cultural information such as religious beliefs and practices have evolved over time and which information is more salient or otherwise likely to be transmitted.¹⁵

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We also share Smith’s (and Lincoln’s) interest in the relationship between religion and ideology and politics. In particular, one goal of the

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¹⁴Smith makes clear his interest in and profound knowledge of the sciences in his sketch of the history of parasitology (J. Z. Smith 2004a). He also suggests that the discipline of religious studies take notes from other disciplines such as library science and biology (J. Z. Smith 1993a, 240CI, n. 3). J. Z. Smith 2004b, 1DIN ZOTEROs his early interest in science, taxonomy, and especially botany.

375

¹⁵See for example Matthews 2012; Matthews et al. 2013.

DRH is to better understand exactly how discourse, ideology, and ritual¹⁶ act upon human cognition and influence the formation of social groups. For instance, certain aspects of ritual such as emotional regulation, goal demotion, and causal opaqueness may programmatically contribute to cognitive depletion, making participants in such a ritual more susceptible to authoritative, ideological narratives. This may help explain how communities form beyond the boundaries of kin and kith (Schjoedt et al. 2013).

Finally, one important lesson we have taken from the scholarship of Smith and Lincoln is an ongoing consciousness of the pitfalls of the first generation of religious studies scholars who applied evolutionary theory to the study of religion. As Smith has made clear, these scholars suffered from a confused and failed attempt to explain the development of entire religious traditions, from the primitive to the complex, while actually eschewing historical explanations (J. Z. Smith 1993a: 259–264). Many of this early generation of scholars held the mistaken view of “unilineal evolution,” which is the idea that all cultures go through the same stages of evolution (Trigger 2003: 22). Such views have long ago been discredited, and the grounding of the DRH in genetic and cultural evolutionary theory is not to be seen as endorsing any sort of naïve “evolutionism.”

One of the unfortunate side effects of the devaluing of broad comparative projects in religious studies has been that religion, as a human and cultural phenomenon, has been rather neglected in the last of the DRH-related fields we wish to mention, that of “deep” history, or historical approaches that attempt to identify broad patterns in the development of human societies by reaching back into human evolutionary origins. The coiner of the term “deep history,” the Harvard historian Daniel Lord Smail (2007), is a specialist in medieval European Christianity but portrays religious practices as merely one piece of a broader “pursuit of psychotropy”—a drive for more effective means for mood alteration—that has driven human cultural history. With few exceptions,¹⁷ in most of the major contemporary deep history analyses—especially those written for a popular audience, such as those of Peter Turchin (2005), Ian Morris (2010), or Jared Diamond (1997)—religion is almost completely ignored or dismissed as causally irrelevant.

¹⁶Smith (1987: especially chapter 2) explains that ritual and myth are so effective in building and sustaining religious and/or political structures because they fabricate *loci* of memorialization, concealing the historical variation and the work of discourse that went into that process. Scholars of religion have attempted to find the meaning in myth or have criticized ritual for its meaninglessness and have not bothered to look at how myth and ritual are employed in the service of religious and political structures.

¹⁷In addition to the works discussed above (Trigger 2003; Bellah 2011), see also David Sloan Wilson (2002).

As more and more scholars in the discipline of history make what has been called the “biological or cognitive turn” in their work,¹⁸ scholars of religious history should be considering the same. Arguably, one premise of religious studies as a field of academic inquiry—indeed arguably our central founding premise, because religious studies employs such a wide range of methodologies—is that religion *matters*. Whereas other fields might portray religious belief and behavior as a side effect of other, more basic human motivations or as a smokescreen for supposedly more fundamental political or economic drives, religious studies as a field is premised on the assumption that a particular subset of human beliefs, motivations, and cultural forms can be usefully distinguished as “religious” and that the study of the cultural history of such phenomena across space and time is a worthwhile endeavor. This may prove not to be the case! One motivation behind the DRH, though, is to ensure that religion as an independent causal factor is no longer to be discounted by scholars of world history as peripheral to the development of civilization—or, if it is to be discounted, it is done so with good reason and not because of a lack of knowledge or understanding.

THE DRH: PRACTICALITIES AND METHODOLOGICAL STRATEGIES

As mentioned above, the original conception of the DRH was very much indebted to existing cross-cultural databases such as the SCCS. Although it is not the first attempt to create a database of cultural characteristics across the globe, the SCCS is perhaps the best one to date.¹⁹ Since its inception in 1969, its list of different, coded variables has grown to more than fourteen hundred.²⁰ These include four dozen or more variables directly related to religion or ritual, which have been employed by scholars interested in issues such as the role of high gods, reincarnation, religious specialists,²¹ and so on. Another useful database for religious

¹⁸Smail 2007. For a captivating discussion of “big history” and world history, see Aslanian et al. 2013.

¹⁹Trigger (2003: 16–28) provides a useful overview of the history of cross-cultural anthropology. The SCCS has expansive geographic coverage while being particularly attentive to the need to eliminate the possibility of historical influence between societies (i.e., Galton’s problem, about which see below). Each society is also pinpointed in time and space, something earlier datasets had not done.

²⁰See Douglas White’s (University of California-Irvine) Web site at <http://eclectic.ss.uci.edu/~drwhite/worldcul/sccs.html>. Accessed 21 September, 2014.

²¹For instance, Sanderson and Roberts (2008) created a new “Stage of Religious Evolution” measure for the SCCS societies; White and Wynn (2013) have coded the societies for belief in reincarnation; Winkelmann and White (1986) have coded for types of religious specialists.

studies scholars is the HRAF, founded at Yale by Murdock and Mark A. May. HRAF (now eHRAF, the online version) has topically indexed nearly 600,000 pages of ethnographies treating 281 cultures around the world.²² This database provides a standardized classification system and comprehensive, easily accessed ethnographies of different world cultures, which can then be extracted and coded by scholars interested in cross-cultural comparisons.²³ For instance, “Scars for War” by Richard Sosis et al. (2007) uses HRAF to analyze connections between male participation in painful or costly rituals and social cooperation for engaging in frequent and intense warfare, with a cross-cultural scope difficult for a solitary researcher to assemble on his or her own.

The DRH departs from these earlier databases in three principal ways: its unit of analysis is not a “culture” but a “religious group”; it is focused on religious groups from the past, particularly the premodern period; and, it does not code or mark up monographs or articles but rather works directly with historians who describe the attributes of a given religious group.

With regard to this first distinguishing feature, refining the unit of analysis is a crucial and difficult step in cross-cultural analysis. Ian Morris, in his *The Measure of Civilization*, writes:

The “societies” that sociologists analyze are often very different from the “cultures” that anthropologists study, and neither seems very like the clusters of artifact types that archaeologists commonly call “cultures” (in the classic definition, “polythetic set[s] of specific and comprehensive artifact types which consistently recur together in assemblages within a limited geographic area”²⁴). . . . If the unit of analysis is really so slippery, then the long-term, large-scale comparisons that are the staple of social evolutionism seem doomed to failure (Morris 2013: 53; emphasis in original).

As readers of this journal are clearly aware, our own unit of analysis, the “religious group,” is equally troublesome. However, it is important to keep in mind that we are not so much interested in defining “religion” in the abstract as we are in locating the *components* of a particular religious group. In this case, these components are the particular attributes, beliefs, or practices shared by a group of people—the precise definition of

²²<http://hraf.yale.edu/online-databases/ehraf-world-cultures/features-benefits-uses/>. Accessed 21 September, 2014.

²³In this regard, the DRH resembles HRAF in linking “coded,” standardized data to the rich qualitative sources from which it was extracted.

²⁴Morris is here citing Clarke 1978: 247.

“group” being left to the judgment of the expert contributor—located in space and time. This frees us to look at traits of a variety of past groups regardless of whether one wishes to see the group as “belonging” to a religion.

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Second, unlike previous databases, the DRH is focused on collecting information on religious groups from the archaeological and historical past up to approximately 1700 CE,²⁵ when western colonialism began to rapidly escalate the level of global interactions and mixing of religious groups around the world. The importance of this focus on the past lies not just in the deeper pool of data that becomes available for scientific analysis but also in the possibility of studying cultural change diachronically.

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Finally, the DRH collects its data directly from historians, who are either actively recruited by our team of regional editors or volunteer their services through our Web site. Historians log into the database interface and complete as much of the questionnaire concerning the attributes of a given religious group as they can or are inclined to do. They are encouraged to do so by consulting their own scholarly intuitions, treating the questionnaire as if it were an encyclopedia article.²⁶ That is, contributors refrain from doing any original research and instead answer the questions based on their own best judgment concerning the current state of the scholarship in their field. Moreover, the contributor herself is the expert and source of the information she provides, and so citations are not required, although they are encouraged, especially when the expert is aware that there is controversy concerning the answer to a given question. Experts are also encouraged to enhance their entries with links to existing scholarship, primary texts, image archives, and so on, such that the set of binary answers in the questionnaire comes to form a quantitative core to which rich qualitative information can be anchored. Once answers are finalized—a step that can be left until the contributor is completely satisfied with his or her answers—they are published in the database and made available to other users of the DRH. Contributors can, however, return to modify their answers at any time.

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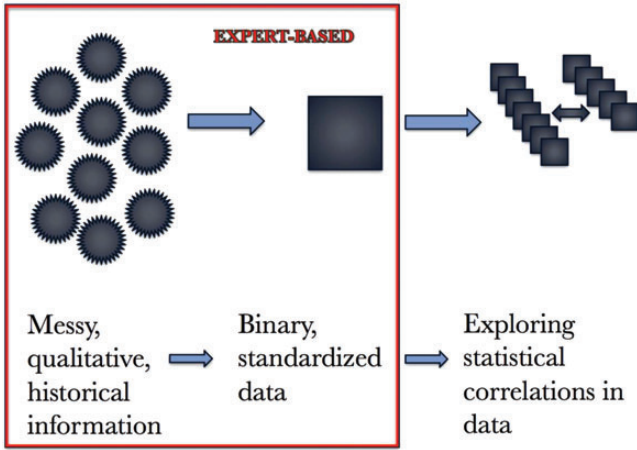
In our view, the most challenging aspect of creating a standardized database or quantitative encyclopedia of religion is the process of converting complex, qualitative data (texts and artifacts from the past) into binary, quantitative data (“feature X is present/absent/field doesn’t

540

²⁵For regions of the world without extensive archeological or textual remains we are obviously forced to rely on more recent ethnographic records.

²⁶Indeed, a DRH entry *is* essentially an online, quantitative, and qualitative encyclopedia article, and contributors are encouraged to list it as such on their CVs.

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FIGURE 1. THE “EXPERT-BASED” APPROACH SEES THE CENTRAL CHALLENGE OF BUILDING A HISTORICAL DATABASE TO BE THE CONVERSION OF THICK, QUALITATIVE DATA TO BINARY, STANDARDIZED DATA.

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know”) (Figure 1). This particular process—broad synthesis, the perception of patterns of meaning across vast swaths of complexity—is one of the many tasks that the human mind is astonishingly well designed to perform and remains a uniquely human ability. One design feature of the DRH is to rely on expert human intuition for solving the central challenge at the heart of any standardized reference source: the extraction of meaningful order from apparently bewildering complexity.

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Another advantage of having historians of religion directly involved in the creation of the database is the ability to capture scholarly disagreement. Many DRH variables are the subject of scholarly controversy. Did the Shang Dynasty worship a moralistic high god? Does it make sense of speak of the early Chinese classics as “scriptures” or to see them as in any way divinely inspired? Rather than forcing consensus in cases such as these, the DRH is designed to allow multiple encodings for the same variables, with each scholar recording his or her own considered opinion (with ample room to include qualitative comments and references) and also having the ability to “challenge” specific individual answers provided by other colleagues. Over time, this will allow us to identify areas of particularly intense scholarly disagreement, which should prove valuable in identifying priorities for future research. In any quantitative analysis, various weights can be given to the multiple values for the same variable, depending upon the needs and methods of the analyzer.

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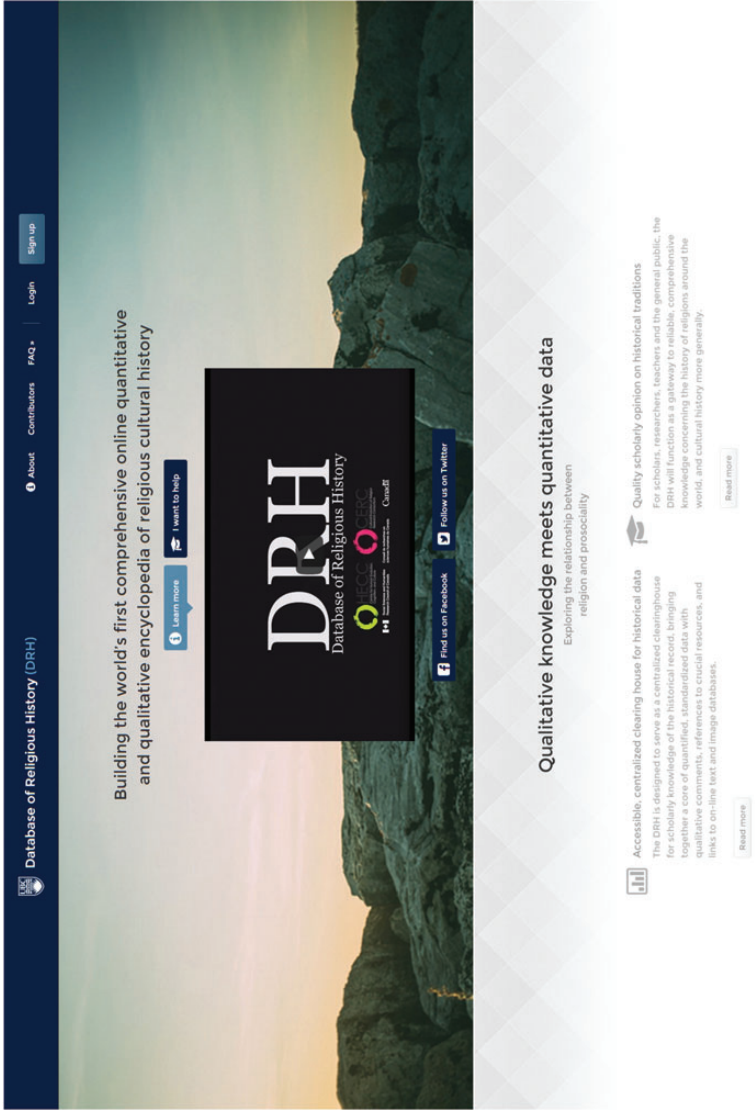
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This placing of expert respondents at the heart of the project has proven the most challenging aspect of the DRH to date. Scholars in the

humanities are not accustomed to participating in large-scale group projects, and the potential long-term payoffs of the project often appear to individuals as rather vague and unconvincing compared to the immediate demands of publishing, teaching, and administration. In its earliest stages, the DRH directors developed a variety of strategies for dealing with this central challenge, including making the interface as easy to use and appealing as possible (Figure 2), emphasizing the DRH's flexibility of future uses, organizing workshops that combine qualitative discussions of the challenges involved and actual questionnaire-answering workshops, and offering modest honoraria for completed questionnaires. Unfortunately, these measures enjoyed only modest success. Most recently—and most significantly for the future of the DRH as a general religious studies resource—our basic conception of what the DRH is, and whose interests it should serve, has been fundamentally transformed, as we will explain below.

Many currently existing databases, as well as some new databases in progress, are able to sidestep the expert recruitment challenge by employing teams of research assistants (RAs) to gather and code data by relying upon secondary sources, bypassing entirely the need for direct engagement with scholars and historians. There are many advantages to this strategy, including reliable progress in data collection and enhanced uniformity in coding, and when done well (the database of Austronesian religions compiled by Watts et al. [Watts et al. 2015] or data extracted from HRAF by Atkinson and Whitehouse [2011], come immediately to mind), it can be a powerful and very useful technique. A potential weakness of this approach, however, is that it hinges entirely upon the quality of the RAs. A potential fear is that a project could end up recruiting RAs, especially if they are undergraduates, who have little or no formal training in the traditions that they are coding and no knowledge at all of the relevant languages. In such cases, these RAs would be forced to plunge somewhat randomly into what is often a very complex secondary literature, completely ignorant of the basic outlines of scholarly disagreement and therefore prone to being misled by nonrepresentative or outdated work. A database is only as useful as the quality of its data, and the most sophisticated statistical analyses in the world will reveal nothing interesting about the historical record if the data-gathering method is flawed in some fundamental way. Moreover, the expert-based approach of the DRH avoids another potential pitfall of the RA-based approach: the bottleneck. Coding data with RAs is contingent upon having enough of them and adequate finances to pay them. The DRH, meanwhile, provides a platform where, assuming the recruitment challenge can be met, as many scholars as possible can log in and answer questionnaires at their leisure.



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FIGURE 2. THE DRH INTERFACE.

Neither the expert-based nor RA-based strategy is obviously and incontrovertibly superior, each being characterized by its own particular strengths and weaknesses. Indeed, the DRH has already begun to work in a hybrid model, introducing a new class of contributor called an “expert source.” This sort of contribution involves having a graduate student RA who specializes in the appropriate field go through an expert’s published works on a given religious group and answer the online questionnaire on their behalf. A follow-up interview with the expert is then conducted, where the expert reviews the RA’s coding (either online or in printed form) and suggests changes or additions. We have already successfully employed this method to code Shang Dynasty religion based on the work of [David Keightley \(2012\)](#) and [Robert Eno \(2009\)](#), and it will likely continue to prove useful in the future with experts who are either uncomfortable with computers or disinclined to answer the questionnaire themselves.

CURRENT AND PROJECTED USES

The DRH’s 230 priority variables and 220 nonpriority variables²⁷ were devised by members of our research network with a central, CERC-related hypothesis in mind, although there is nothing preventing a group of historians interested in other hypotheses or variables to recruit like-minded experts to code their preferred variables. We will also soon implement a feature where variables not present in the database can be recommended for addition.

At present, the central hypothesis driving our selection of priority variables is the following: Although certain forms of religious cognition appear to have arisen universally among human populations as simple by-products of human cognitive architecture, in certain areas of the world cultural groups have succeeded in elaborating and integrating certain beliefs and practices into especially effective cultural packages that have extended and galvanized the human sphere of cooperation, trust, and exchange ([Wilson 2002](#); [Sosis and Alcorta 2003](#); [Norenzayan and Shariff 2008](#); [Norenzayan et al. forthcoming](#)). These include, but are not limited to, supernatural monitoring, rewards, and punishment ([Norenzayan and Shariff 2008](#)), moral realism ([Taylor 1989](#); [Haidt and Kesebir 2010](#)), and hard-to-fake commitment displays ([Sosis and Alcorta 2003](#); [Joseph Henrich 2009](#)). More specifically, the DRH will allow us to test this group cultural selection hypothesis against competing hypotheses for the origin and maintenance of

²⁷Scholars contributing to the DRH are not prompted with these nonpriority variables, although contributors can open them within the questionnaire and provide relevant data as they wish.

religion, including pure by-product (Boyer 2001), individual genetic selection (D. Johnson and Bering 2006), and group genetic selection (Haidt 2012), as well as competing hypotheses concerning the rise of large-scale societies, such as “bottom up,” resource-based accounts (for recent examples, see Diamond 1997; A. Johnson and Earle 2000; Morris 2010; Kennett et al. 2012). Of course, correlation does not necessary mean causation, but the pattern and timing of historical developments can strongly favor certain hypothesized causal pathways or rule out others. This is especially the case when correlational data from the historical record can be combined with controlled, experimental evidence derived from contemporary populations, as CERC is endeavoring to do.

To see concretely how the DRH may be used in this manner, consider the pure by-product or “spandrel” account. By-product theorists argue that religious cognition and behavior are unintended by-products of cognitive and behavioral capacities that originally evolved for other purposes. For instance, our tendency to project intentionality onto others—to see other agents as moved by beliefs, desires, and goals rather than blind physical forces—evolved because of the pressures of living in social groups and the need to predict the movement of predators and prey. In human beings, however, this tendency is “hyperactive,” accidentally giving rise to the perception of invisible, supernatural agents (Barrett 2000). To take another example, by-product theorists see religious ritual as serving no distinct cultural function of its own but rather as an extension of the same basic cognitive tendencies that give rise to obsessive-compulsive disorders (Boyer and Lienard 2006). If the by-product view is correct, we should see no coherent patterns in the development of religious thought and behavior over time, nor any consistent correlations between forms of religious culture and other socio-economic factors, such as group size or social complexity.

An alternative to the by-product account has been produced by gene-culture coevolutionary theory (Richerson and Boyd 2005), sometimes referred to as “dual inheritance theory” (Joseph Henrich and McElreath 2007). Gene-culture coevolution sees human cognition and behavior as the product of two interdependent chains of inheritance—genetic and cultural—that feed back upon one another. The classic example of gene-culture coevolution is the independent development of lactose tolerance in Africa, the Arabian peninsula, and northern Europe, where the development of a new cultural technology (livestock raising and the consumption of dairy products) put pressures on the human genome that resulted in the evolution of genes to digest lactose in adulthood (Gerbault et al. 2011). The power of the gene-culture coevolution model is that, unlike “classic” evolutionary psychology (e.g., E. O. Wilson 2000 [1975]; Tooby

and Cosmides 1992; Pinker 2002), it takes seriously the causal role of culture in human cognition and behavior and thus possesses an inherent historical dimension. Whereas early evolutionary psychology tended to portray the human mind as something more or less fixed in the Pleistocene and cultural forms as mere epiphenomena kicked off by the human genome, gene-culture coevolution takes seriously the idea—obvious to most humanists—that culture has a powerful impact on human thought, behavior, motivation, and even basic perception.²⁸

Unlike the by-product account, gene-culture coevolutionary theory would predict distinctive patterns in the development of religious culture over time, as well as specific relationships between religious culture and other socioeconomic variables. For instance, an increase in group size and complexity might correlate with an increase in power and moral concern on the part of the culture's supernatural agents. Although our qualitative intuitions suggest that the gene-culture coevolutionary hypothesis better fits the historical record than the by-product account, this remains to be demonstrated (or not) in a more rigorous, quantitative manner. Once the DRH reaches a sufficient size, analyses that would favor one of these hypotheses over another can be run quickly and easily, while simultaneously being grounded in the best, expert-sourced data available.

With this sort of hypothesis-testing in mind, the DRH questionnaire includes a wide range of variables documenting the presence or absence of certain practices or beliefs associated with membership in a religious group—such as religious celibacy, burial practices, monotheism, and afterlife beliefs—as well as information concerning religious institutional structures, worked out over several years in collaboration with both religious studies experts and cognitive scientists of religion.²⁹ The ultimate goal is to have deep (temporally) and comprehensive (geographically) coverage of as many different religious groups as possible, focusing on specific variables relevant to questions concerning the relationship between religion and in-group cooperation. Because the project is digital (and, moreover, makes use of the best practices for the longevity of such a digital project), its coverage is potentially infinitely expandable. However, the project is currently focused on ancient societies, especially those that existed before the beginning of relatively large-scale trade and cultural interchange in the early centuries of the Common Era.

The first step for a contributor to the database is, after setting up a profile, to define her religious group by providing it with a name(s), a time range, geographic range, and status of participants (e.g., elites only,

²⁸For a discussion of how this impacts contemporary academic psychology, see [Henrich, Heine, and Norenzayan 2010](#).

²⁹See <http://religiondatabase.org/about/questionnaire> for a full list of DRH variables.

religious specialists only, common people only, or some combination of the three). These “default parameters” are associated with each variable in the questionnaire unless the contributor manually adjusts them for particular questions (Figures 3 and 4). 800

The name(s) of the group simply provides metadata for cataloging the religious group, and the “status of participants” question gives the contributor the ability to efficiently answer the questionnaire for all members of the group or for certain segments of the group. Meanwhile, the temporal and geographic parameters are what provide precision to the collected data, since what is being measured is not, for instance, “in general, does being a Buddhist require celibacy,” but rather “does being a member of this specific group in *this specific time and place* entail celibacy.” This information is what also makes possible the visualization of particular religious traits through time or across space (Figure 5). 805

Ultimately, the goal is to create an interface that would allow this religious, cultural data to be easily and intuitively coordinated with other geo-referenced data concerning population, local ecological conditions, economic and political organization, and cultural technologies such as writing, monetary systems, and warfare to raise new questions about the role of religion in the rise and development of large-scale societies. 810

DRH for the 98% of Historians Who Could Not Care Less about Big History 820

As mentioned previously, the DRH’s expert-centered approach creates a variety of challenges, paramount among them being the problem of getting historians of religion interested enough in the project to want to contribute. The DRH began in the context of a project devoted to studying the cultural evolution of religion and as a tool for scholars interested in quantitatively analyzing the historical record. As the project has evolved, however, we have come to realize that the DRH can play an important—indeed crucial—role for historians of religion in general, especially if its quantitative core can be enhanced with qualitative content from various sources. The need for a tool such as the DRH, moreover, has only recently emerged, related to the dramatic changes that have occurred in both academia and the globalizing world more broadly. 825

As scholars of religion, we often find ourselves in either our research or our teaching making use of generalizations about the historical record (“The gods in early Greek and Roman religion were generally unconcerned with human morality, focusing primarily on proper performance of their own ritual cults”; “early Chinese religion was uniquely concerned with ancestor worship”). Such generalizations typically go 830

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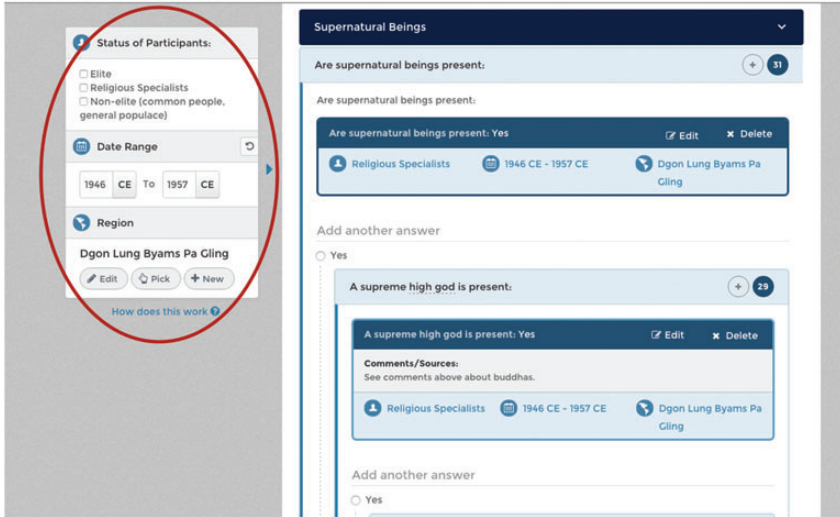
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FIGURE 4. QUESTIONNAIRE, WITH PARAMETER ADJUSTMENT BAR CIRCLED.

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unreferenced or refer only to very general resources such as standard textbooks or encyclopedias. This is, we believe, a holdover from an age, not so long ago, when a well-trained expert could hold in his or her (but usually his) own mind the collective scholarly consensus of a given field. Two generations ago, fields were relatively small, and a single person could reasonably expect to keep up with the literature and new scholarly developments in that field. Even a generation ago, scholarly fields were still moving slowly enough that relatively static, centralized resources such as textbooks or handbooks were sufficient to keep people up to date.

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What has changed radically in the past ten to fifteen years is that the pace and scope of scholarly production have risen exponentially. In our own field of East Asian religious studies, dozens of new journals, both online and print, have arisen in English and other European languages alone, not to mention scores of new high-quality journals in mainland China and elsewhere in East Asia. Significant scholarship is also disseminated and discussed through specialized online discussion groups. Given the sheer volume of new scholarship that is produced every year, no single person could hope to remain completely current. This means that especially when we are making claims about areas outside of our own very narrow areas of expertise, we need new types of scholarly resources to ensure that our generalizations about the historical record are accurate and fair.

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The DRH can serve as precisely this sort of resource. Its quantitative core—providing “present”/“absent”/“field doesn’t know” answers—allows

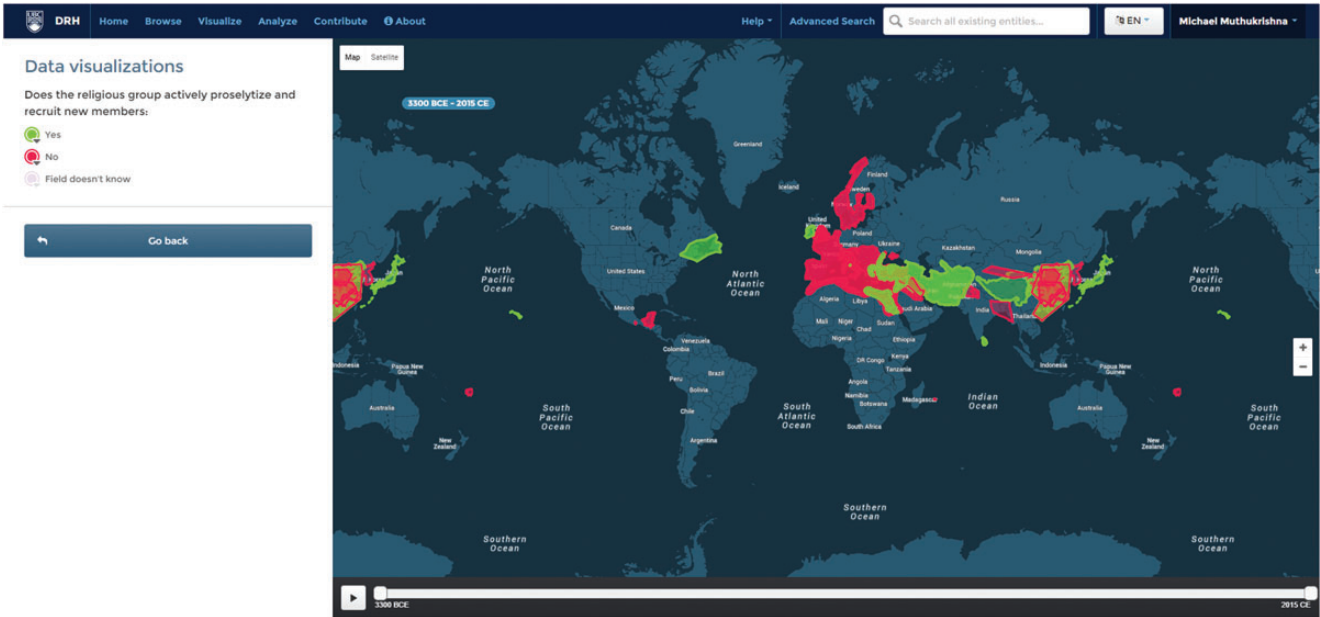


FIGURE 5. EXAMPLE VISUALIZATION. This is merely a design template not using actual data, but it gives a sense of how the DRH will eventually allow the instant and intuitive visualization of historical data across time.

one to gain an instantaneous and comprehensive view of the state of scholarly opinion on specific aspects of the history of religious behavior and belief. As an open-access, online resource, it will be constantly updated and expanded. A textbook, handbook, or more traditional encyclopedia is shaped by a handful of gatekeepers (editors) whose collective knowledge defines the limits of the source's usefulness and scope. If you are not known to the editors, your voice will not be heard. Contributors to the DRH, on the other hand, volunteer themselves, from anywhere in the world, subject only to the loose gate-keeping requirement that they are accredited scholars in a relevant field. This will help correct the current overrepresentation of voices from Europe and North America in defining scholarly consensus and fill in blindspots in the scholarly record. Contributors will eventually be able to interact with the DRH in a variety of languages (Chinese and French are currently in the works, with Spanish, Japanese, and Russian to follow soon). The quantitative nature of the DRH's core will ensure that their answers are as language-neutral as the English-based nature of the database can allow, while the ability to contribute and link to qualitative material in any language, ancient or modern, will maintain the richness and diversity of individual scholars' insights.

To serve this broader function, the questionnaire that defines the quantitative core of the DRH needs to be expanded and fleshed out in a variety of ways. First of all, individual quantitative answers need to be linked to deeper qualitative information. Comment boxes and spaces for references currently serve this function in a limited fashion, and we plan to soon introduce more powerful and flexible bibliographical tools. We are, in addition, designing features to make it easier to link individual answers directly to primary texts, secondary sources, archeological images, and so on. Individual entries can then serve as a means for a scholar to organize and disseminate their own archived qualitative information, utilizing database tools built into the DRH. In this way, the DRH could serve as a kind of clearinghouse for the massive quantity of qualitative data on religious history available online or on individual scholar's hard drives, but which until now has tended to be scattered, inaccessible, unindexed, and difficult to integrate with other types of information.

Furthermore, mechanisms need to be put into place to refine existing questions, add new questions, or even introduce entirely new subquestionnaires. Given the flexible architecture of the DRH, these functions are technically quite easy to implement. The precise procedure for doing so, however, has yet to be defined and should be defined with input from our contributors and users. Looking considerably down the line, the DRH could expand into a generalist database of cultural history. We plan to soon reintroduce a "polity" poll, which used political entities as the unit

of analysis and included questions related to institutions, laws, economics, technology, warfare, and agriculture. Polls on any other aspect of the historical record, from weather to coinage, could easily be introduced and integrated into the existing system. 1010

Although it originated as tool for exploring functionalist accounts of religion in human cultural history, the DRH has, in response to the needs of its contributors and users, evolved into a general purpose quantitative *and* qualitative resource for the religious studies community, as well as the general public. Essentially a massive, open-source, constantly updated and standardized encyclopedia of religious history, it can serve as a one-stop, centralized resource for understanding religious history, substantiating generalizations, and pin-pointing areas of scholarly disagreement. 1015
With its powerful, built-in visualization and analytic tools, the potential for enhancing classroom teaching and disseminating scholarly knowledge to the general public is also considerable. 1020

We also hope that humanists who find “big history” approaches unappealing or wrong-headed will nonetheless come to see some potential uses for quantified historical data. One potential use of the DRH, for instance, is to allow scholars to get a better sense of the structure and usefulness of analytical categories in the study of religion. The built-in query functions of the DRH will eventually allow a scholar to ask the system: 1025
what are the five features of a religious group that best predict it being labeled by a contributor as “Buddhism” or “shamanism”? The cluster of traits that emerge might surprise us. One of the great advantages of “big data” approaches to humanistic topics is that they often pick up patterns and underlying assumptions invisible to our own scholarly intuitions. This category analyzer function is not at all something that we envisioned 1030
when we started the project but is a good example of the sort of unforeseen, novel uses of the DRH that remain to be discovered and that should be appealing to scholars with a wide variety of research agendas. 1035

CONCLUSION 1040

The DRH project originated out of the fundamental conviction that it would be helpful for religious studies as a field to get back into the business of exploring large patterns of cultural change across time and space, as well as potentially advancing explanations for these patterns. No one would deny that thick, qualitative description is at the core of humanistic inquiry, nor that something is lost when we abstract away from the particulars of a given religious text or community to make broader, explanatory generalizations. Something is also gained, however, and it is hard to know what the point of our professional endeavors as scholars of religion might 1045
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be if we abandon at least the prospect of relating our thick interpretative work to broader trends in human experience.

Intellectual considerations aside, most academics are now faced with an economic climate that makes unaffordable the luxury of dismissing as “philistine” questions about the practical import of our work, or how our research might matter to anyone other than our most immediate colleagues. What might be called the “high humanist” disdain for justifying our work to nonspecialists (Slingerland 2008: 2–3) is self-destructive—or at least a dereliction of our duty to our students and younger colleagues—in the face of a provost asking why religious studies should not come under the chopping block in the next round of departmental consolidations.

We see the DRH as a medium—shared, ever-growing, open to scholars and eventually to the general public—for connecting thick, qualitative knowledge concerning the history of religions with broader, comparative concerns, while also making historical knowledge more amenable to large-scale, quantitative analysis. We have found that the only way for the DRH to succeed is if historians of religion take ownership of the project, seeing it as a public resource for the scholarly community or potential teaching aid, imagining novel uses for it, and demanding new features.

The project has already evolved considerably since its first conception in 2012 and will no doubt continue to do so over the coming years. Our original goal remains: namely, to help to facilitate communication among scholars of religion and between religious studies and other areas of the humanities and also to serve as a model for mutually productive “consilience” (E. O. Wilson 1998; Slingerland and Collard 2012) between the humanities and natural sciences. In addition, however, we have come to see that the DRH can also serve as precisely the sort of novel, open-source digital humanities resource that historians of religion need to respond to the challenges of information overload in our increasingly globalized, fast-paced world. With its quantitative core, anchoring and organizing an increasingly large and complex ecosystem of qualitative textual and visual knowledge, the DRH will eventually represent an enormously useful, general-purpose resource for anyone interested in the history of religion.

POSTSCRIPT: THEORETICAL AND PRACTICAL PROBLEMS AND CONCERNS

The DRH project raises many potential theoretical and practical problems and concerns. Some of these appear readily resolvable, while others require further work and reflection. Here we conclude by addressing some commonly raised questions about the goals and methods of the DRH.

Incomplete Nature of the Historical Record Requires Large Jumps of Inference

We encourage precision by reducing our unit of analysis to a specific time and place. Moreover, all human knowledge is based on inference. Contributors to the DRH are asked to answer questions only when there is good reason (some historical evidence, direct or circumstantial) to believe the answer is true. Otherwise, scholars answer “unknown to the field.” Finally, the DRH has the stated goal of collecting multiple datasets for the same religious group, so that analysts can better gauge the scholarly consensus and the reliability of the data.

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Historians Become Obsolete as Scientists Take over the Study of Religion

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This was a concern raised in a recent issue of the *American Historical Review* when one scholar wrote that “one of the risks inherent in super-sizing our scales or optics when it comes to historical work is that we will eclipse philology, if not totally remove it from the historian’s craft.”³⁰ Such reservations notwithstanding, we are still far, far away from having read through, interpreted, and reinterpreted every historical document available to us as historians. Moreover, as explained above, the historian’s knowledge and intuitions about both the arc of history and its details are the foundation of our expert-based approach to collecting data. As Ann Taves has written, “Knowledge of particular languages, cultures, and traditions of reflection on what matters most” is the “bread and butter of religious studies” that we would give up only at our own peril (Taves 2011: 308), and it is upon precisely this sort of qualitative depth that the DRH, expert-based approach rests.

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In fact, aside from the central project hypothesis regarding the relationship between religion and complex society, the questions to be asked of the DRH are best proposed by religious studies scholars themselves. For instance, as Sinologists, we would be interested in seeing how the introduction of Buddhism to China in the early centuries of the Common Era may have affected attitudes toward the afterlife or the manner in which group membership was patrolled and maintained. Finally, any conclusions that one draws from the DRH data would inevitably be checked by historians’ own intuitions and knowledge, resulting in a virtuous cycle of cooperation and new discoveries between humanists and scientists.

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³⁰Aslanian et al. 2013: 1444.

Thick Cultural Knowledge Can Never Be Reduced to Binary Checkboxes

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It is important to note that any attempt to standardize scholarly knowledge runs into definitional issues: whether or not a given religious group possessed a “supreme high god” or “a spirit/body distinction,” of course, can depend very much on how these terms are understood. We attempt to partially deal with this by providing glosses of potentially problematic terms. For instance, below the “Is a spirit/body distinction present,” we advise scholars: “Answer No only if personhood (or consciousness) is extinguished with death of the physical body. Answering Yes does not necessarily imply the existence of Cartesian mind/body dualism, merely that some element of personhood (or consciousness) survives the death of the body.” This sort of glossing does not, of course, completely eliminate the problem of definitional ambiguity, but helps keep it to a minimum by establishing common terms of reference. As the DRH becomes available in an increasing number of languages, we also face the charge of being English-centric in terms of how we formulate questions, as well as in the basic categories and assumptions that inform the question sets. This is an unavoidable problem, but we hope that this shortcoming will be mitigated as an increasing number of scholars from a variety of linguistic and cultural backgrounds suggest changes, modifications, and additions to the questionnaire.

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Reformulated, this concern regards the challenge of reducing one’s thick knowledge of a given society to quantitative data. The worry is that a standard set of questions cannot possibly be attuned to the nuances of a given field and may include questions that are irrelevant or ethnocentric. Although this is a legitimate concern, one must remember that providing such data is a process of translating one’s knowledge into another idiom. Most of us do it all the time, whenever we translate a foreign or historic text into academic English. We are not seeking to capture every detail of a given society but rather those that interest us for our given hypotheses. Scholars can add important, qualitative detail as comments to their answers, which analysts use to interpret answers. Moreover, the questionnaire has gone through multiple bouts of revision and improvement to incorporate the concerns of religious historians studying a wide range of time periods and traditions.³¹

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³¹Most recently, in fall 2014, historians of ancient Mesopotamia and the ancient Near East, the ancient Mediterranean, South Asia, and early and medieval China participated in a workshop sponsored by the Peter Wall Institute for Advanced Studies at the University of British Columbia entitled “Prosociality in History and Historiography: Can Big Gods Tip the Balance in World

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Assigning Specific Answers Ignores Scholarly Disagreement

On the contrary, as explained above, the ability to capture scholarly disagreement is built directly into the DRH. We also hope that disagreement with a peer who has answered a particular question will serve as a source of motivation for experts to contribute. The DRH now incorporates a “Challenge this Answer” function specifically to make it easy and convenient for scholars browsing others’ contributions to disagree or add qualifications.

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Galton’s Problem

This refers to the charge made against Edward B. Tylor by Francis Galton concerning the conclusion Tylor had drawn about the relationship between subsistence patterns and marriage practices across several hundred societies. Galton pointed out that Tylor’s conclusion could just as easily be explained by cultural diffusion of those traits (homology) as by their parallel occurrence and development (analogy).³² This is a problem that every cross-cultural approach since that time has had to address, and it is something that must be borne in mind at the analysis stage. The DRH is currently focused on ancient societies where one finds a diverse array of subsistence patterns and socio-political organizations, as well as more recent societies in the Americas and Oceania that can serve as relatively culturally isolated controls, so that we can end up with a core set of data where the risk of historical connections and cultural influence is minimal. Moreover, the ultimate goal of the DRH is to collect enough comprehensive data that the question of cultural diffusion versus parallel development can be resolved statistically.

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Experts Are the Ultimate Source of Data, But Who Is Deemed an Expert?

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A similar charge has been leveled against the nonscholarly, public encyclopedia known as Wikipedia. So far, the DRH has not had to confront this issue directly, because the great majority of its contributions have been solicited by the DRH editors (the present authors). However, the DRH is different from Wikipedia in that it does have gatekeepers who grant permission to new contributor accounts and who control which data get published. In addition, as the DRH grows in scope, each cultural

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History?” The conversations and feedback that emerged from workshops such as this are essential to the success of the DRH and to the future of interdisciplinary research in general.

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³²Trigger (2003: 19) provides a brief summary of the exchange between Tylor and Galton and its consequences.

region will be assigned its own field editor who will have similar oversight of his or her respective field.³³ Finally, the new Web interface of the DRH gives the contributor the option to be notified when entries related to her field are added. Ideally this will create a system of vigilant editorship similar to that found at Wikipedia, but with a greater degree of scholarly gate-keeping.³⁴ Our current rule-of-thumb for approving new contributor requests is that the prospective expert must be an academic specialist (faculty member or ABD Ph.D. student) in the relevant area of study.

Data on Religious Groups Cannot Be Coordinated with Other Data Sets That Have Different Units of Analysis

This concern bears on the correlation of the DRH data on religious groups with other datasets on political institutions, social customs, military practices, and so forth, as well as on the relationship across time between a religious group in a certain place and a later religious group in that same place. The issue is whether the occurrence of two variables in space alone is enough to posit correlation or even causation. In their article initially presenting the Standard Cross Cultural Sample to the scholarly world, Murdock and White (2002 [1969]: 329) state that “elements occurring in the same society at different time periods, or in culturally variant sub-groups, cannot be assumed to be functionally related, even though in some cases they may still reflect an earlier functional congruence.” Or, more to the point, “cultural elements can be considered functionally interrelated only if they occur together at the same time *among the same culture-bearing group*” (2002 [1969] 320; emphasis added). For example, the co-occurrence in space and time of moralizing, high gods within a particular religious group and a complex, bureaucratic administration of a different group of people tells us nothing about the possible influence of moralizing, high gods on the development of complex social organizations.

This is perhaps the most troubling concern facing the DRH, and this is primarily because of the fact that no other cross-cultural study exists that attempts to correlate such a broad array of data. One step we have taken to address this concern is to include in the questionnaire on religious groups items about welfare, education, public works, taxation, punishment, and so forth that are provided to or imposed upon members of the religious group. In other words, the diverse data being collected all

³³The DRH currently has field editors for East Asia, Ancient Mediterranean, South Asia, the Americas, Northern Europe, Central Europe, Mesopotamia and Prehistoric Europe, and Southwest Asia.

³⁴To clarify, each contributor provides new answers to the questionnaire or modifies his own answers. He or she does not have the ability to modify or delete the answers given by other experts.

pertain to “the same culture-bearing group,” which allows for the correlational analyses in which we are interested without the need to bring in outside datasets. This is only a short-term solution, however, because the goals of DRH still include conducting diachronic analysis as well as integrating this novel dataset on religious groups with other, outside datasets. We believe that Murdock and White are correct in stating that one cannot *assume* a functional relationship between two variables that do not belong to a single culture-bearing group located in one point in time; however, the claim that they *cannot* be related is an assertion and not a statement of fact. If a statistically significant signal can be detected in the data, then ongoing analysis may indeed discover important and previously unimaginable relationships between cultural traits that are divided by social group or by time.

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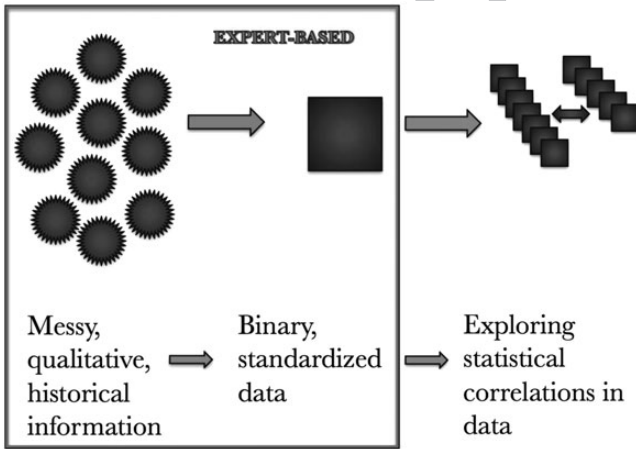
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- 1595

Figure 1.



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1605

1610

1615

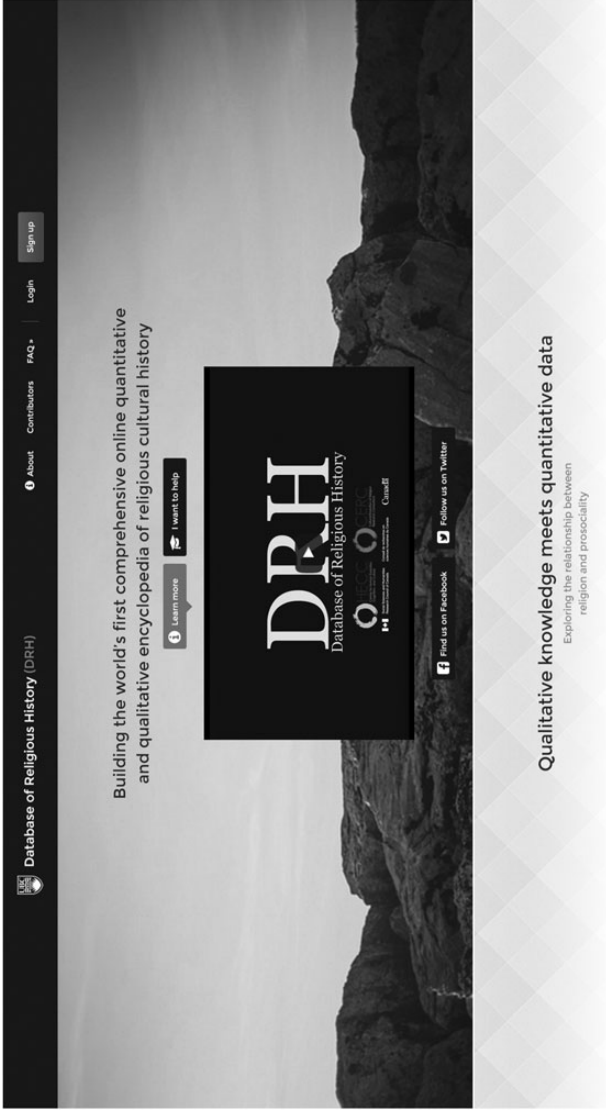
1620

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Figure 2.



1640

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Figure 3.

DBP Home Browse Visualize Analyze Contribute About

Advanced Search

Search for anything...


10/10/2018

Michael Mathias

Pauline Christianity (ca. 45-60 CE)

ca. 45 CE - 60 CE
Region

Pauline Christianity (Undispersed letters) / Final



Italy / Middle East / Christian Traditions / Religion / Christian Traditions / Roman Religious Traditions / Ancient Christianity in Rome / Italy / Europe / Mediterranean / Rome

General Religion Variables

- Non-elite (common people, general population)
- Elite
- Social structures
- Non-elite (common people, general population)
- Elite
- Non-elite (common people, general population)
- Elite
- Non-elite (common people, general population)
- Elite

Beliefs

- Non-elite (common people, general population)
- Elite
- Non-elite (common people, general population)
- Elite
- Supernatural/Religious
- Non-elite (common people, general population)
- Elite

Showing artifacts for:

By: **Final Deposition**

3 items located for understanding this subject.

Source 1: [Early 20th-century publication of Pauline epistles, Colossians, Galatians, Timothy, Philemon, and Titus](#)
Source 2: [Secondary Source: C. S. Lewis, Paul, Ecclesiastical Studies Series \(1971\), Harper Menckens, The First United Christian Church \(U.S.\), Town, Eugene, Oregon, Copyright and sold in the Seattle Post Book, 2006.](#)

Critique sources for understanding this subject.

Source 1 (1811): [Source 1 Description: Source 1 \(1811\): An early 19th-century edition of the Pauline epistles, Colossians, Galatians, Timothy, Philemon, and Titus.](#)
Source 2 (1971): [Source 2 Description: Source 2 \(1971\): A secondary source, likely a book or article, discussing Pauline Christianity and its historical context.](#)
Source 3 (2006): [Source 3 Description: Source 3 \(2006\): A secondary source, likely a book or article, discussing Pauline Christianity and its historical context.](#)

Advanced criteria primary textual corpus (original languages and/or translations)

Source 1 (1811): [Source 1 Description: Source 1 \(1811\): Source 1 Description](#)
Source 2 (1971): [Source 2 Description: Source 2 \(1971\): Source 2 Description](#)
Source 3 (2006): [Source 3 Description: Source 3 \(2006\): Source 3 Description](#)

General Religion Variables (Non-elite (common people, general populace))

Membership/Group Interactions

Are other religious groups in cultural contact with target religion?

Yes No

→ Is the cultural contact competitive?

1685

1690

1695

1700

1705

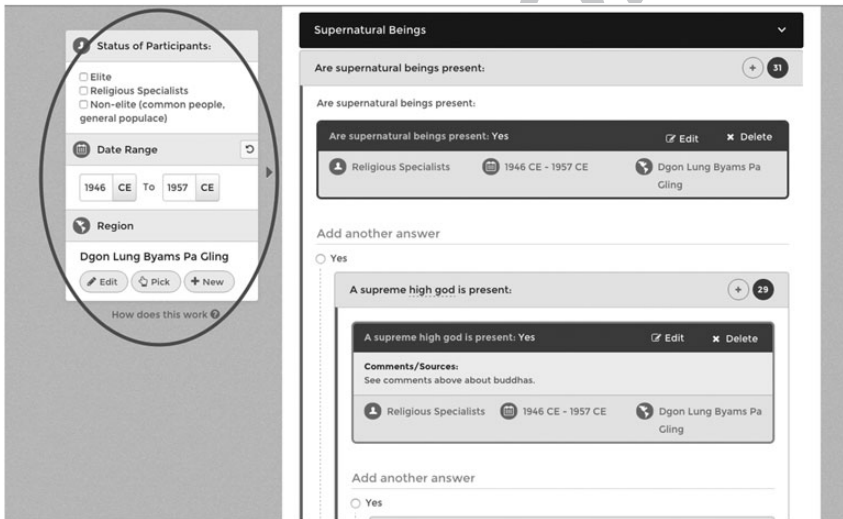
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Figure 4.



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Figure 5.

DRH Home Browse Visualize Analyze Contribute About

Map Search 3000 BCE - 2015 CE

Help - Advanced Search Search all existing entities... EN - Michael Muthukrishna

Data visualizations

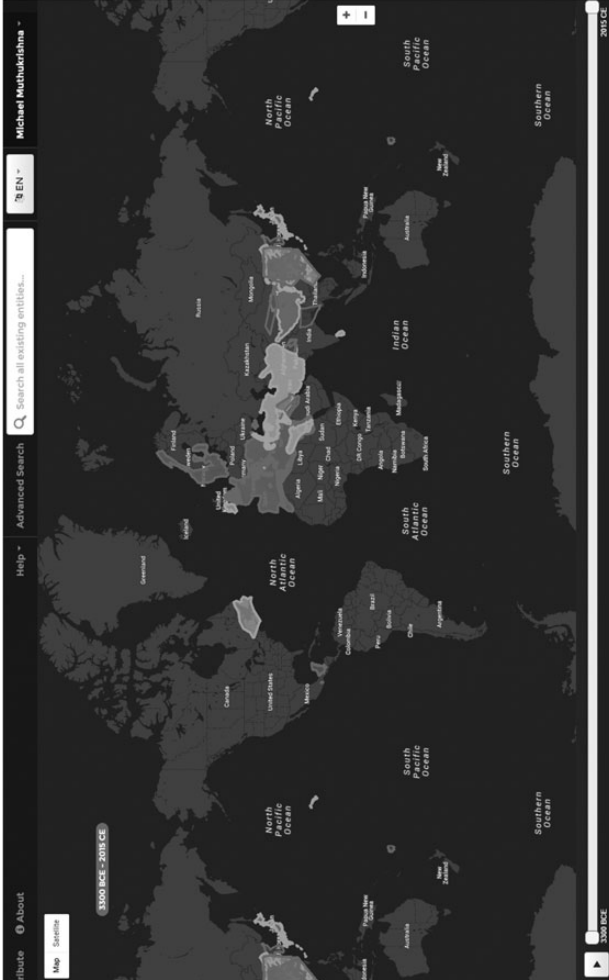
Does the religious group actively proselytize and recruit new members?

Yes

No

Field doesn't know

Go back



World map showing data visualizations for religious groups. The map is dark-themed with various countries and oceans labeled. The data points are represented by light-colored shapes on the map, primarily concentrated in the Americas, Europe, and parts of Asia. The map includes a search bar, navigation controls, and a scale bar.

1765

1770

1775

1780

1785

1790

1795

1800

1805