Towards a Cognitive History of Religions[1]

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Abstract

The nineteenth-century founders of the academic study of religion envisioned that this study would be scientific (*wissenschaftliche*). One of the early attempts to formulate such a study was by the Cambridge classicist Jane Harrison, who concluded that a scientific study of religion could be based on "the history of man's mental evolution", i.e., on "the necessary acquirement of each mental capacity by evolution". This proposal is currently reflected in the neo-Darwinian researches of contemporary cognitive scientists of religion whose researches offer historians a scientifically based method not only for explaining their religious data but for filling in the inevitable gaps of the historical record.

Resumo

Os fundadores das ciências da religião no século dezenove imaginaram que este campo seria científico (*wissenschaftliche*). Uma das primeiras tentativas de formular tal estudo foi a de Jane Harrison, classicista de Cambridge, que concluiu que um estudo científico da religião pode se basear "na história da evolução mental do homem", isto é, "na aquisição, pela evolução, de cada capacidade mental". Esta proposta é refletida atualmente nas pesquisas neo-Darwinianos dos cientistas cognitivos da religião. Tais pesquisas oferecem a historiadores um método cientificamente fundado não só para explicar os seus dados religiosos, mas para preencher umas das lacunas inevitáveis do registro histórico.

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A scientific (*wissenschaftliche*) study of religion was first envisioned from the end of the nineteenth through the early twentieth century. One of the early proponents of such scientific study was the Cambridge classicist, Jane E. Harrison.[2] Harrison's argument that the study of religion could well be "scientific", i.e., free of confessional interests,[3] was based on the growing influence of Darwinism in all but "the two most conservative subjects", as she put it, "Religion and Classics".[4] Harrison's comments, made on occasion of the centenary commemoration of the birth of Charles Darwin and the fiftieth anniversary of the publication of his *Origin of the Species*, were based on the Darwinian principle characterized by Harrison as "the continuity of [all] life",[5] including the religious life of man. In the more recent summary of John Tooby, Darwin "showed how selection united the nonliving and the living, the nonhuman and the human, and the physical and the mental into a single fabric of intelligible material causation".[6] This principle of continuity is based, of course, on evolution and, Harrison concluded that a scientific study of religion could be based on "the history of man's mental evolution", i.e., on "the necessary acquirement of each mental capacity by evolution".[7] The latter phraseology is from a letter by Darwin to the anthropologist Edward Burnett Tylor with whom Harrison generally shared the then pervasive view of cultural evolution.[8] For the contemporary cognitive scientist, however, the Darwinian advance translates into questions about how the human brain was shaped through natural selection to deal with challenges presented by Pleistocene ecology,[9] how environmental input, both perceptual and conceptual, is processed through and represented by the mental mechanisms of that brain, and how these mental representations become related, both intra- and intersubjectively. How do some of these mental representations come to be considered in some way "religious"?

2　J.E HARRISON, The Influence of Darwinism on the Study of Religions. In: *Darwin and Modern Science*.

3　J.E HARRISON, *The Influence...*, pp. 494-495.

4　J.E HARRISON, *The Influence...*, pp. 494, 497. Harrison did note some progress in the study of religion with reference to the 1908 Congress of Religions in Oxford (Harrison, *The Influence...*, p. 494).

5　J.E HARRISON, The Influence..., p. 497.

6　J. TOOBY, Review of Janet Browne,, in *The New York Times Book Review*, p. 12.

7　J.E HARRISON, *The Influence...*, p. 497.

8　F. DARWIN, ed., *The Life and Letters of Charles Darwin* , p. 151.

9　See, e.g., S. MITHEN, *The Prehistory of the Mind*.

how and why do such representations become selected for? and how and why are they transmitted from one mind to another in such a way that a structurally enduring set of their relationships is distributed among a given population to be identified, consequently, as a discrete religious tradition? What, in other words, is the nature of the relationship between brain and mind, and of that between cognition and culture? These are questions which cannot be neglected by students of culture and history and, more pertinent to the case at hand, by historians of religion.[10]

Characterizations from a cognitive perspective of those representations that may be considered "religious" and of the practices to which they give rise are increasingly familiar.[11] Cognitive scholars of religion have generally adopted a "Tylorian" approach whereby "religious" practices, events, beliefs, etc. are stipulated to be those legitimated or authorized by claims to some notion of "superhuman" or "counterintuitive" agency.[12] A few of these scholars, while accepting that claims to superhuman or counterintuitive agents are necessary for religion, nevertheless adopt a more "Durkheimian" orientation by insisting that religions also involve costly social commitments to certain practices or sets of ideas.[13] All of these scholars show how concepts of the "non-natural", which seem to be characteristic of all

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10 D. SPERBER, *Explaining Culture*, pp. 101: "[Such] Darwinian considerations have a central role to play in the explanations of human culture by helping us to answer the fundamental question: what biological and, in particular, what brain mechanisms make humans cultural animals with the kinds of culture they have."

11 E.T. LAWSON and R.N. MCCAULEY, *Rethinking Religion*; R.N. MCCAULEY and E.T. LAWSON, *Bringing Ritual to Mind*; S. GUTHRIE, *Faces in the Clouds*; P. BOYER, *The Naturalness of Religious Ideas*; P. BOYER, *Religion Explained*; H. WHITEHOUSE, *Arguments and Icons*; H. WHITEHOUSE, *Modes of Religiosity*; I. PYYSIÄINEN, *How Religion Works*; S. ATRAN, *In Gods We Trust*.

12 Tylor's well-known "minimum definition of Religion" is "the Belief in Spiritual Beings" (E.B.TYLOR, *Primitive Culture*, p. 8). For Guthrie, "religion may best be understood as systematic anthropomorphism: the attribution of human characteristics to nonhuman things or events" (GUTHRIE, *Faces...*, p. 3). "[W]hat is unique to religious ritual systems is", according to Lawson and McCauley, "their...culturally postulated superhuman beings" (LAWSON-MCCAULEY, *Rethinking...*, p. 5) and, "[religious rituals] turn precisely...on their commitment to the existence of superhuman agents" (LAWSON-MCCAULEY, *Rethinking...*, p. 61). For Boyer, "concepts of gods and spirits are mostly organized by our intuitive notions of agency" (BOYER, *Religion...*, p. 144). And for Atran, "[s]upernatural agents are critical components of all religions" (ATRAN, *In Gods...*, p. 15). While all of these scholars agree that a concept of "agency" is central to religion, Pyysiäinen suggests, on the basis of Boyer's work, that the concept of "counterintuitive" is more precise than those of anthropomorphic, superhuman, or supernatural agent (PYYSIÄINEN, *How Religion...*, p. 23).

13 For Durkheim, religion "always presupposes that the worshipper gives some of his substance or his goods to the gods" (E. DURKHEIM, *The Elementary Forms of the Religious Life*, p. 385). In the summary of Atran, religion is "a community's costly and hard-to-fake commitment...to a counterfactual and counterintuitive world of supernatural agents" (ATRAN, *In Gods...*, pp. 4, 264) while for Whitehouse, religion is a community's "set of revelations" reproduced by costly processes of ritualization" (WHITEHOUSE, *Modes...*,).

"religion", arise from ordinary mental processes of cognition,[14] although those with the more Durkheimian orientation further emphasize the social commitment of resources that are characteristic of particular religions. Culturally postulated claims to the legitimating authority of "superhuman" agency differentiates religion from ideologies such as Marxism or Freudianism; the costliness borne by religious claims differentiates them from those postulated of such popular "counterintuitive" agents as Superman or Mickey Mouse. In this way, the "religious" is clearly differentiated from a larger domain of "culturally" distributed representations without in any way denying the mutual contingency of these distributed representations nor affirming for either of them any *sui generis* autonomy. Writing a history of "religion" so characterized represents an advance in the field in that it at least allows the object of that history to be defined in a clear, consistent, and empirically established manner that is cross-culturally applicable.

Methodologically more venturesome is the question of the utility of cognitive science, or of any science for that matter, for the historiographical task, in this case, for a history of religions?[15] A suggestion as to how it might be may be found in the lectures on historical methodology delivered at Oxford University by John Lewis Gaddis.[16]

Rejecting the trendy idiosyncratic relativism of postmodernism,[17] Gaddis argues that historiographical researches must at least "approach the standards for verification that exist within the social, physical, and biological sciences".[18] Specifically, Gaddis cites those natural sciences which don't "easily fit within the confines of laboratories" but whose explanations are nevertheless reproducible, namely the "historical" sciences like astronomy, geology, paleontology, evolutionary biology.[19] Like geologists or paleontologists, Gaddis avers:

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14 E.g. LAWSON-MCCAULEY, *Rethinking...*, p. 7; BOYER, *The Naturalness..;* PYYSIÄINEN, *How Religion...*, p. vii.

15 On the relationship of historiography to the history of religions, see *Historical Reflections/Réflexions Historiques* (special issue on History, Historiography and the History of Religions, ed. L.H. Martin) 20.3 (1994).

16 J.L. GADDIS, *The Landscape of History*.

17 J.L. GADDIS, *The Landscape...*, pp. 9-10, 142-143.

18 J.L. GADDIS, *The Landscape...*, p. 17.

19 J.L. GADDIS, *The Landscape...*, p. 17, 39-40, 43.

> historians too start with surviving structures, whether they be archives, artifacts, or even memories. They then deduce the processes the produced them....allow [ing] for the fact that most sources from the past don't survive, and that most daily events don't even generate a survivable record in the first place.[20]

In his call for a theoretical "consilience",[21] or a "conceptual integration",[22] between the human and the natural sciences, a proposal made possible by Darwin's insight into the continuity of the living and the non-living, the significance of which Harrison had already grasped at the beginning of the century, Gaddis returns to the concerns of an earlier generation of historians. In 1963, for example, the University of Chicago historian, Louis Gottschalk, wrote that the:

> validation of any interpretation that the theoretical historian may advance requires that his imaginative fill-in of the gaps in his data at least conform to all the known facts so that if it does not present definitive truth it should at any rate constitute the least inconvenient form of tentative error. That means that it must be subject to certain general tests--of human behavior, of logical antecedents and consequences, of statistical or mass trends.... Hence the theoretical historian needs to have some knowledge of... [the] other disciplines that deal with the interrelations of human beings with social events and natural forces.[23]

The question, in other words, is can the broadly interdisciplinary cognitive sciences offer a scientifically plausible theory for "filling in the gaps" of the historical record? Given the incomplete data that are characteristic of the historical record generally, from both literate as well as nonliterate societies, social scientists at least since Marx have suggested that social scientific models might, if well articulated, be employed to "fill in the blanks" of those data.[24] The sociologist Rodney Stark has included among the possibilities of such well-articulated social-scientific models: "formal rational choice theory, [economic] theories of the firm, the

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20 J.L. GADDIS, *The Landscape...*, p. 41.

21 J.L. GADDIS, *The Landscape...*, pp. 49-50, 61, citing E.O. WILSON, *Consilience*.

22 L. COSMIDES, JO. TOOBY, and J.H. BARKOW, Introduction. In: *The Adapted Mind*, pp. 3-15.

23 L. GOTTSCHALK, ed., *Generalization in the Writing of History*, p. vi.

24 R. STARK, *The Rise of Christianity*, p. xii.

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role of social networks and interpersonal attachments in conversion, dynamic population models, social epidemiology, and modes of religious economics".[25] The question, of course—and it is raised by Stark of his own proposals as well as by his critics—[26] is to what extent "it is possible... to apply propositions developed in one time and place to other eras and cultures".[27] As this problem has been summarized by one historian of the Western antiquity:

> The perceptions and attitudes about change which we take for granted in modern industrial societies are in almost every case inappropriate to the conditions of Greco-Roman society. Neither the extreme individualism that is the presupposition of the lore and practice of personal advancement in industrial democracies [upon which Stark has based his own theories] nor the class structure essential to conventional Marxist analysis has a place [in the study of ancient history].[28]

The appealing feature of cognitive models, however, is that they go behind the familiar metaphors, typologies or sets of concepts developed on the basis of modern historical assumptions or contemporary sociological descriptions to advance theoretical explanations for historical formations that are grounded in common features of human cognition.[29]

From a cognitive perspective, there is no such "thing" as "history" apart from both historical and historiographical agents. Historical agents are those human agents from the past who, like all human agents, represent their environment—to themselves and to others—and who leave behind some relic of those representations, whether intentionally (e.g., in texts) or unintentionally (e.g., in the material remains of everyday life). Historical "facts" are inferences

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25 R. STARK, *The Rise...*, p. 23.

26 R.F. HOCK, Response to Rodney Stark, cited and responded to by R. STARK, *The Rise...*, pp. 21-22; see also R.T. MCCUTCHEON, W. BRAUN, B. MACK, and R. COLLINS, A Symposium, In: *Religious Studies Review*, pp. 127-139.

27 R. STARK, *The Rise...*, p. 21.

28 W.A. MEEKS, *The First Urban Christians*, p. 20.

29 H. WHITEHOUSE, *Inside the Cult*, pp. 203-217; H. WHITEHOUSE, *Arguments...*, pp. 3-4; see R. STARK, *The Rise...*, pp. 25-26.

drawn from such relics by historians,[30] themselves historical agents who seek to represent those inferences systematically,[31] usually in the form of narrative.[32]

Representations of the past are shaped, in the view of Gaddis, by "ecological" constraints, on the one hand, and by cognitive constraints, on the other. Good historiography has traditionally emphasized the former by describing the complex interdependency of historical variables that are constitutive of "the social", "the economic", "the political", "the cultural", etc.,[33] while neglecting the explanatory "micro-processes", or "microscopic insights into human nature", of the latter, especially as these have been proposed by cognitive scientists.[34] Although Gaddis argues that "all of our bases for evaluating behavior are themselves artifacts of behavior",[35] he too, has little specific to say about cognitive constraints upon historians beyond his acknowledgement that "pattern recognition...[is] the primary form of human perception",[36] that any representation of reality involves such perception,[37] and that "all history...draws upon the recognition of...patterns".[38] As the eighteenth-century Italian philosopher of history, Giambattista Vico, already surmised:

> There must in the nature of human institutions be a mental language common to
> all nations, which uniformly grasps the substance of things feasible in human
> social life and expresses it with as many diverse modifications as these same
> things may have diverse aspects....This common mental language is proper to

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30 J.L. GADDIS, *The Landscape...*, p. 36, citing J.H. GOLDTHORPE, The Uses of History in Sociology, In: *British Journal of Sociology*, pp. 213-214.

31 J.L. GADDIS, *The Landscape...*, p. 9.

32 J.L. GADDIS, *The Landscape...*, p. 15; on the cognitive salience of narrative, see M. TURNER, *The Literary Mind*.

33 J.L. GADDIS, *The Landscape...*, p. 53.

34 J.L. GADDIS, *The Landscape...*, p. 25.

35 J.L. GADDIS, *The Landscape...*, p. 123.

36 J.L. GADDIS, *The Landscape...*, p. 33.

37 J.L. GADDIS, *The Landscape...*, p. 7.

38 J.L. GADDIS, *The Landscape...*, p. 33.

our Science, by whose light...scholars will be enabled to construct a mental vocabulary common to all.[39]

We might suggest that the cognitive endeavor to write the grammar of this "common mental language" promises to produce a broader model for "filling in the blanks" of the diverse historical record than intimated by Gaddis and a more fundamental one than those indexed by Stark. I have, for example, explored the predictions of Harvey Whitehouse's cognitive explanation for differential modes of religiosity in a historical reassessment of the Roman cult of Mithraism.[40]

The Roman cult of Mithraism flourished throughout the Roman Empire from the end of the first until the end of the fourth century A.D. Although a profusion of architectural and iconographic remains have been discovered from numerous sites documenting this widely distributed religion, its character has proved opaque to historians since no texts survive from this cult, and few that report on it. Given the textual bias of historians, consequently, the study of Mithraism has been largely characterized by historiographic attempts to imagine a corpus of Mithraic doctrine on the basis of its material remains. Such endeavors can be tested against Whitehouse's prediction that there are groups which encode and transmit their cultural information largely if not exclusively in commemoration and representation rather than through catechism and teachings, and that the cultural retention characteristic of such groups has an explanatory basis in certain universal dynamics of human memory, related more to participatory affect than to pedagogical affectation. If Whitehouse's theory proves instrumental for enhancing or for revising our understanding of such historical enigmas as Mithraism—and my researches, and that of a prominent Mithraic scholar, suggest that it does —[41] we can conclude that such cognitive models indeed offer a fruitful form of inquiry for historians to explore.[42]

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39 G. VICO, *The New Science of Giambattista Vico*, p. 161.

40 L.H. MARTIN, Performativity, Narrativity, and Cognition. In: *Persuasion and Performance, Rhetoric and Reality in Early Christian Discourses*, pp. 187-217.

41 R. BECK, Four Men, Two Sticks, and a Whip. In: *Theorizing Religions Past*, pp. 87-103; R. BECK, Exaltation/Humiliation, presented to the SBL.

42 An international conference of archaeologists, classicists, historians, and historians of religion was held at the University of Vermont, August 2002, precisely to explore and assess the utility of Whitehouse's "modes" theory in historical research. The results of this conference are published as H. WHITEHOUSE and L. MARTIN, Eds., *Theorizing Religions Past*, as special issues of *Method and Theory in the Study of Religion* on

With few exceptions, historical and comparative studies of religion have proved to be disappointingly unproductive, especially in any scientific sense envisioned by the nineteenth-century proponents of this study. No theory or set of theories has emerged over the last century that has proved capable of sustaining any common discourse, any reproducible basis for explanation, or any shared paradigm for research for this field of study. Even when individual students of religion have attempted to operate from a theoretical base, their study has been parasitic, drawing upon advances in fields of study presumed to be cognate but contributing, in turn, little or nothing to knowledge in that field. Perhaps the cognitive sciences can remedy this dearth of scientific theorizing in the study of religion by providing historians of religion with an object for their studies that is theoretically stipulated and by providing explanatory models for historical processes that constrain the realm of historical possibility to one of probability. And perhaps historians of religion can finally join with scholars from other areas of research in making contributions to a growing interdisciplinary field of knowledge, not only by providing historical examples for an assessment of its models but by contributing to and helping shape the theoretical predictions of the cognitive sciences about the beliefs and practices of human religiosity.

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Cognitive Science and the Study of Religion (16.3, 2004). and of *Historical Reflections/ Réflexions Historique* on Memory, Cognition and Historiography (31.2, 2005). Further a volume based on the 2005 IAHR panel on Imagistic Traditions in the Graeco-Roman World is forthcoming. In addition, the utility of cognitive theories of other scholars are beginning to be explored by historians of religion, e.g., the cognitive theory of ritual by LAWSON and MCCAULEY, *Rethinking...* and MCCAULEY and LAWSON, *Bringing...;* see, T. VIAL, Opposites Attract, In: *Numen*, pp. 21-145 and L.H. MARTIN, Ritual Competence and Mithraic Ritual In: *Religion as a Human Capacity*, pp. 245-263. For a sustained history of religions study from a cognitive perspective, see T. SJÖBLOM, *Early Irish Taboos*.

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