

UC Santa Barbara

UC Santa Barbara Previously Published Works

Title

Past Minds: Studies in Cognitive Historiography, written by Luther H. Martin and Jesper Sørensen

Permalink

<https://escholarship.org/uc/item/75c263m9>

Journal

Numen, 62(4)

ISSN

0029-5973

Authors

Taves, Ann
Barlev, Michael

Publication Date

2015

DOI

10.1163/15685276-12341384

Peer reviewed

Luther H. Martin and Jesper Sørensen (eds.)

Past Minds: Studies in Cognitive Historiography (Religion, Cognition, and Culture). London: Equinox, 2011. xiii + 206 pp. ISBN 9781845537418 (pbk.)

This is the second volume in the Religion, Cognition, and Culture series edited by Jeppe Sinding Jensen and Armin W. Geertz. As noted in the preface, this volume, edited by Luther H. Martin and Jesper Sørensen, emerged from an international symposium on the theme of “Past Minds: Evolution, Cognition, and History,” which was held at the Institute of Cognition and Culture, Queen’s University Belfast in May 2007. The volume is comprised of four sections with four theoretical papers on cognitive historiography in the introductory and concluding sections and nine case studies, drawn from ancient religions, in two sections devoted respectively to the Roman world and various other ancient civilizations. The papers are linked by an overarching interest in the transmission of tradition and the cognitive mechanisms that underwrite that process. Overall, the volume makes a case for the value of cognitive and evolutionary theories for explaining history at different levels of historical analysis.

In the first of the four theoretical chapters, Luther Martin provides a historical overview of the relationship between historiography and evolutionary theorizing in the wake of Darwin’s *On the Origin of the Species*, and of the search for generalizable explanations of historical events. In the second, Christophe Heintz discusses the importance of cultural epidemiology as a theoretical framework that allows historians to analyze and explain the distribution of cultural representations and material cultural forms. In the penultimate chapter, Don Wiebe worries that the Integrated Causal Model advanced in *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (1992), the edited volume by Jerome H. Barkow, Leda Cosmides, and John Tooby, may not leave room for complementary approaches and makes a case for explanatory pluralism. Sørensen’s concluding essay provides an analysis, first, of three potential ways of conceiving the relationship between history (the attempt to understand the relations between particular events), socio-cultural systems (the modeling of stable modes of social organization and public symbolic representations), and psychology (understood as the modeling of individuals’ neurocognitive systems) and, second, of the role of cognitive theorizing at three different levels of historical inquiry, which he refers to as micro, macro, and meso.

Tooby and Cosmides’s widely-read chapter on “The Psychological Foundations of Culture” (1992); Dan Sperber’s *Explaining Culture* (1996); and to a lesser but still significant extent, Robert Boyd and Peter J. Richerson’s *Culture and the Evolutionary Process* (1985) figure prominently in all four theoretical chapters, which provide a convenient point of entry into the case studies included in this volume. Our review, therefore, primarily focuses on theoretical issues pertaining to the underlying discussions of evolutionary psychology, cultural epidemiology, and gene-culture co-evolution in the theoretical chapters and more briefly with the individual case studies.

Throughout the volume, we note a lack of clarity with respect to the meaning of the term “culture.” Without that clarity, we think it is virtually impossible to understand the points of agreement and disagreement between Tooby and Cosmides, Sperber, or Boyd and Richerson. For this reason, we begin with Wiebe’s critique of Tooby and Cosmides (1992), which seems to miss their three-fold definition of culture. Thus, although Wiebe acknowledges that “Barlow plainly asserts in his writing (and Tooby and Cosmides come close to that at a variety of points in their major essay on the topic) that his aim is not to replace the social sciences, but only to have them submit to what we might call the boundary conditions that knowledge in the natural sciences sets for knowledge claims in other fields” (p. 169), he does not seem to take them at their word on this point and winds up — in our view — misreading them. The root of the problem lies in a lack of attention to Tooby and Cosmides’s general definition of culture as “any mental, behavioral, or material commonalities shared across individuals, from those that are shared across the entire species down to the limiting case of those shared only by a dyad, regardless of why those commonalities exist” (1992:117) and their threefold distinction between meta-culture, evoked culture, and reconstructed (also termed “transmitted”) culture. Both meta-culture and evoked culture are thought to be expressions of our universal psychological architecture, which have evolved as responses to recurrent social and non-social past environments. They differ in that the modern-day environmental conditions that give rise to meta-culture are universal, whereas the conditions that give rise to evoked culture are variable and may therefore be present for some groups but not others. In criticizing the Standard Social Science Model (SSSM), Tooby and Cosmides were eager to highlight the universal and local environmental conditions that give rise to meta-culture and evoked culture, respectively; however, they see no contradiction between their approach and that of Sperber and others who have focused on the causal representational chains constituting reconstructed (transmitted) culture (1992:117–122).

Martin indicates that most of the contributors to the volume acknowledge the significance of evolutionary psychology and of cultural epidemiology. Martin, in our view correctly, considers Sperber’s theory of cultural epidemiology as elaborating on the evolutionary psychology of Tooby and Cosmides as well as providing an alternative to the gene-culture co-evolution model of Boyd and Richerson. We would add, however, that both cultural epidemiology and gene-culture co-evolution are commonly used to explain historical and socio-cultural phenomena. Historians and social scientists should endeavor to understand the theories which exist in the cognitive and evolutionary sciences, and, rather than deciding which theory is better a priori, should try to apply different theories and evaluate the explanatory value of each. With Martin we view this volume and the case studies contained therein as a step in the right direction; that is, toward illuminating not only historical events but the cognitive and evolutionary approaches that are used to explain them as well.

Heintz outlines the implications of Sperber’s cultural epidemiological approach for historians in a detailed and sophisticated discussion. At the same

time, one consequence of what we view as his oversimplified presentation of Tooby and Cosmides and Boyd and Richerson is to underestimate the importance of their theories for the framework he is presenting. Rather than posit false dichotomies we propose an approach where the unique contributions of different theoretical perspectives are acknowledged. A universal cognitive architecture enables the existence of cultural attractors and this architecture can only be discovered by the sorts of evolutionary analyses advocated by Tooby and Cosmides. These cultural attractors vary in strength and the weaker the attractors the stronger the transmission biases in accounting for cultural stability (this pertains to the chapter by Martin as well).

Sørensen's concluding essay goes a long way toward sorting out the different cognitive and evolutionary approaches to historiography presented in the volume. Still, again we think that the three models Sørensen offers for relating psychology, socio-cultural systems, and history in the first part of his analysis — social determinism, psychological determinism, and a more interactive dual inheritance model — overly simplify the position of evolutionary psychologists, such as Tooby and Cosmides, giving the impression that dual inheritance theorists such as Boyd and Richerson offer the only dynamic approach.

Sørensen also raises the important issue of explanatory goals, noting that when inquiring into particular historical events historians can and should make use of all available explanatory tools, both psychological and social scientific. He questions, however, whether particular historical events can serve as test cases for predictions made by social and/or cognitive theories. More often, he suggests, they simply function as illustrations of theoretical claims and evidence of their fruitfulness or lack thereof in illuminating historical data. Rather than attempt to test claims — something he thinks is better done under more controlled conditions — he argues that the crucial question is how cognitive science can inform historical inquiries. Although we agree that this may often be the case, we think that the question of what history can contribute to the cognitive and evolutionary sciences is still open. We would like to see more explicit consideration of this issue in the future with an eye toward clarifying the kinds of problems historians can (help) solve, if any.

We are particularly impressed, however, with his discussion of explanatory goals as they relate to three scales of historical analysis and the kind of theorizing employed at each level. Thus, micro-history focuses on “individuals' processing of information in concrete, pragmatically defined situations” (p. 188), specifying the relation between cognitive constraints and the relevance of environmental information along the lines described by Heintz in chapter 2. Macro-history focuses on the very *longue durée*, traversing ground that historians traditionally left to paleontologists and archeologists. This is the ground on which evolutionary psychologists and co-evolutionary theorists are arguing the case for their approaches. Meso-history analyzes long periods of apparent stability — *the longue durée* of the Annales school rather than the paleontologists — and raises all kinds of interesting questions regarding how various formations get entrenched and the various mechanisms, including cultural attractors, that are

involved. The latter half of this essay, taken together with Heintz's essay on cultural epidemiology to which it repeatedly refers, in our view constitutes the theoretical backbone of the volume for working historians.

If we turn to the nine chapters in the two middle sections of the book, which are devoted respectively to "Minds and Ancient Civilizations" and "Roman Minds," we find a number of different goals and levels of historical analysis. Working at the meso-level, Gabriel Levy, Ales Chalupa, and Anders Lisdorf use cognitive science to try to solve unresolved historical questions. Levy uses gene-culture co-evolution and niche construction to explain why Jews on average score highly on verbal and reasoning IQ tests, by arguing for the role of top-down cultural processes, such as a traditional emphasis on education among Jews. However, we think this explanation should be weighed against plausible alternatives that do not presuppose gene-culture co-evolution, such as the capacity of humans to adapt to different environments (humans are a generalist species) by acquiring through reconstructive processes a variety of competences including novel skills. In the case of Jews, it is plausible that competences acquired in one kind of environment happened to be particularly advantageous in the environment of twentieth-century Europe and North America. Focusing on transmission, Chalupa uses cognitive science to weigh various theories that try to account for the origin and spread of Mithraism throughout the Roman Empire during the first several centuries of the Common Era. He argues that what was transmitted was not Mithraism (as an idea or doctrine) but Mithraic "cells," i.e., small groups into which new individuals were initiated, and is able to evaluate the plausibility of various explanations in light of this. Lisdorf offers a sophisticated and complex analysis of Roman omens, focusing on the subset of prodigies, i.e., omens to the Roman state accepted by the senate. He analyzes the acceptance procedure, asking what fueled the circulation and report of prodigies. Through a careful plotting of crisis and prodigies, he discounts the crisis-fueled fear hypothesis embraced by most historians. Instead, he argues that prodigies were micro-narratives that circulated widely due to their incorporation of counter-intuitive and bizarre concepts, but that only a minority were accepted, based on criteria of relevance.

Working at the micro-level, Peter Westh provides a detailed analysis of the difficulties that arise when applying Pascal Boyer's "cognitive optimum theory" to historical texts, using divine epithets in Assyro-Babylonian texts as a case study. In addition to offering a proposal for a more principled way of working with historical texts, he suggests in conclusion that textual traditions may allow concepts to veer off the cognitive optimum to become more intuitive as well as less so. Although Dirk Johannsen applies Boyer's theory to Norwegian folk-tales and Anders Lisdorf applies it to Roman prodigies, neither apparently experienced — or at any rate perceived — the difficulties in applying the approach that Westh encountered. For practical purposes, it would have been helpful to cluster these three articles and have the authors reflect on these differences. Did Westh's material present greater difficulties than the others? Or was he simply more cognizant of problems inherent in applying Boyer's theory? Reflection on these issues would help historians figure out whether they can actually make consistent

use of this line of research in their work. We would also note that Boyer's theory primarily pertains to verbally transmitted beliefs and to "on-the-ground" beliefs rather than to beliefs that are more highly elaborated through conscious reflection — especially in written form — which bypass the memory constraints that are at the core of the theory. Historical texts, then, to the extent that they contain reflective and elaborated beliefs, may be less amenable to an application of Boyer's theory.

Douglas Gragg tests E. Thomas Lawson and Robert N. McCauley's ritual form hypothesis on the accounts of Lucius' initiations in Apuleius's *Metamorphoses* and concludes that, although it initially looks as if it undercuts it, it actually provides support when examined more closely. Ulrich Berner focuses on Lucius' critical approach to superstition — what modern scholars refer to as anthropomorphism — in religion, arguing for a broader definition of "religion" in the cognitive scientific study of religion. We agree that it is necessary to move beyond the early focus on supernatural agents in early cognitivist theories of religion. At the same time, we think it is important to distinguish reflective religious beliefs, such as Lucius', from intuitive religious beliefs ("on-the-ground" beliefs); only the latter are constrained by the cognitive and evolutionary principles advanced by Tooby and Cosmides and Sperber. Christian Prager takes an epidemiological approach to tree symbolism, arguing that its widespread and stable cultural representation can be linked to a variety of evolved cultural mechanisms. Finally, in a substantial theoretical essay, István Czachesz tackles the perennial problem of "explaining magic," building off the understanding of magic in the Greco-Roman world. He defines "magic" as "the illusory manipulation of visible or invisible realities" (p. 147), where illusory refers to manipulations that the scholar knows effect no change. This definition, thus, excludes placebo effects (and other phenomena). Czachesz provides an interesting and plausible account of what occurs in such cases, which we think should be evaluated on its own merits apart from his attempt to assert a definition of magic. Rather than continue to advance competing definitions of complex cultural concepts, such as "magic" and "religion," historians, social scientists, and psychologists are far better off stipulating the specific real-world phenomena they would like to explain.

In terms of practical take-away points for historians, we would highlight the following:

1. The cultural epidemiological approach proposed by Sperber, discussed in this volume by Heintz and Sørensen, has considerable promise in relation to historical work at the micro- and meso-levels of historical analysis.
2. Cognitive and evolutionary theories add value to historiography in so far as they constrain the hypothetical space of possibilities that historians otherwise need to consider in answering their questions. As Tooby and Cosmides argue, psychologists, social scientists, and humanists all study vertically interdependent phenomena, such that to achieve meaningful progress in understanding these phenomena theoretical assumptions

- must be consistent across the different disciplines. At the same time, when more than one cognitive and evolutionary explanation is consistent with socio-cultural or historical phenomena, it is important to point out and evaluate plausible alternatives.
3. In our view, the extent to which specific historical developments, e.g., the rise of axial age religions, can contribute to refining evolutionary and cognitive theories is an open question. Martin appears to assume history can contribute; Sørensen appears skeptical. We believe this issue deserves more sustained thought, so that historians apply their energy at points and in ways that will be most productive both for them and for researchers in other disciplines.

Ann Taves

Department of Religious Studies
University of California at Santa Barbara

Michael Barlev

Department of Psychological & Brain Sciences
University of California at Santa Barbara