

## Teaching Evolution as a Historian

John Hendrix Hinshaw

Department of History and Political Science, Lebanon Valley College

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### ABSTRACT

This paper describes the problems and possibilities of incorporating evolution into a history course, as well as the prospects for incorporating historical perspectives into an evolutionary paradigm or course.

### KEYWORDS

History, Teaching, Evolution, Darwin

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### INTRODUCTION

If ever there was a scientific theory that is fundamentally historical, that purports to explain change over time, it is evolution through natural selection and its corollary, humankind's dual inheritance. Yet I have to admit that my fellow historians, teaching in history departments and professing to study that process of change, have been highly resistant to evolutionary theory. Donald Worster, 2010.

#### PART ONE: HISTORY AND EVOLUTION: A NATURAL FIT.

Since the fall of 2010, I have taught a version of "Evolution for Everyone" through the Department of History and Political Science at Lebanon Valley College (LVC). The course draws from biology, evolutionary psychology, anthropology, ethology, as well as history. There are a small number of guild historians who have written books and articles using theory or evidence from evolutionary science to help frame or understand human history. There are a larger number of historians who situate Charles Darwin and evolutionary scholars within the history of science or intellectual history. However, as far as I know, this is the first history course that treats evolution as part of the discipline of history.

As the eminent historian Donald Worster observed, evolution and history are a natural fit. Evolution is fundamentally a theory of change over time, a concept near and dear to the disciples of Clío. Evolutionists, like historians, are empiricists;

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AUTHOR NOTE: Please direct correspondence to Joen Hendrix Hinshaw, Department of History and Political Science, Lebanon Valley College, Annville, PA 17003. E-mail: [hinshaw@lvc.edu](mailto:hinshaw@lvc.edu)

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both are sensitive to the ways that people are produced by and also transform their physical and social environments. Evolution provides historians with theories, findings, and tools that help us connect the study the past and present. In the next section, I'll discuss why this natural fit seems so unnatural to historians, and what could be done about it. In the third part of this essay, I'll provide an overview of the work done by Darwinian historians. This field has much to offer other evolutionists, notably modeling how to use evolutionary approaches to analyze the modern world of international commerce, nation states, and industrialized agriculture. But before I get ahead of myself, let me describe how a historian teaches evolution.

My course (HIS 303, Evolution for Everyone) is designed to allow students to understand Darwin's dangerous idea and the approaches of several disciplines, biology, evolutionary psychology, behavioral economics, and primatology. The class establishes the necessary theoretical and evidentiary background to explain why humanity exhibits enormous plasticity and contradictory impulses. We are incredibly socially-minded as well as so individualistic, adept at both cooperation and competition, and exhibit such extremes of compassion and empathy as well as aggression and exploitation. In short, evolution provides numerous tools that historians can use to understand the range of human behavior and motivations. The history department, and ultimately the college, was persuaded that this was a history course because evolutionary theory was, at its root, a theory of change over time. Evolution could provide students with a new set of methodological and theoretical tools that would complement their training in other courses.<sup>1</sup>

Before I taught the class, I was concerned that my course would attract academic martyrs from the religious right. This happens regularly at LVC, especially in the Religion Department. LVC is a regional liberal arts college; the region is somewhat less conservative and religious than Southern Utah. Thus far, my fears have proven unfounded. Indeed, I have had a couple of evangelical students who incorporated their own faith with the evidence that religious thinking is itself a product of the evolution of the human brain. It helps that we read DS Wilson on religion and not Richard Dawkins.

Another fear I had failed to materialize: neither colleagues nor students thought I was a Social Darwinist. Instead, students from the humanities and sciences found it to be an engaging way of understanding past and present. Often enough, they found the topic to be fairly addictive; students reported evidence of evolution everywhere they looked. This level of engagement is not typical in upper division courses as around eighty percent the students in any given history class are non-majors. Evolution provided students with a common interest and language to bridge their training in diverse disciplines.

If my deepest fears failed to materialize, so too, did my wildest dreams. When designing the class, I hoped that students would form their own hypotheses and test them through original research as DS Wilson reported in *Evolution for Everyone* (Wilson, 2007). My class allows students to choose to do research on their own or in small groups. Of the sixty or so students who have taken the class, not one has taken up the challenge of original data collection and research. Of

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<sup>1</sup> Historians make all manner of assumptions about human nature and psychology, but those are grounded in the historian's conventional wisdom, rather than in psychological science.

course I prefer to think this is because LVC is a regional liberal arts college, not a research university such as SUNY Binghamton. (Equally possible, of course, is that student timidity reflects the limitations of their instructor). LVC students are typically academically diligent rather than intellectually ambitious. However, several students have subsequently worked with me on collaborative research projects. I've found a background in evolution is solid grounding for engaging in social science research where students can dedicate themselves to a semester of supervised research.<sup>2</sup>

Most students in the class choose to keep an analytical journal. This is a two-step process. First students complete an abbreviated literature review.<sup>3</sup> Students take a book chapter or article they've read for class and identify its thesis, major arguments and evidence, and show how it relates to other articles or chapters from class. About a third of the class cannot demonstrate competency in this skill, and so repeat this assignment, using different articles, twice more so that they can master it.

Most students move on to the second step: their analytical journal. Each week, students look for articles in newspapers or journals and then they analyze that information in light of relevant readings from the class. Students have taken up themes as varied as politics, religion, violence, economic inequality, artistic taste, women's fashion, and gene-culture coevolution. The journal allows students to consolidate what they've learned and hopefully evolution is part of their skill set for the rest of their life.

This assignment, like so much in nature, is a compromise. I want students to understand evolution and how it applies to their lives. I prefer that students do original research, but most are not ready for it, or willing to allocate time for it. So I let them keep a journal, which is in some ways easier than writing a longer analytical paper but it is harder to engage in academic dishonesty.

My real pedagogical innovation lies in placing evolutionary theory and evidence firmly within the discipline of history. I find it useful to start students off with some classics of social psychology, such as Solomon Asch on conformity and Stanley Milgram on obedience. Students invariably find these readings compelling, and more relevant to their lives than the typical historical article. This foray through social psychology is designed to help undermine the notion that people are rational individuals, an assumption that pervades the social sciences. Obviously people are capable of rational thought, but more fundamentally, we are emotional member of a tribe. To introduce the tribal dimension of social life, I use a chapter from David Berreby's *Us and Them* (Berreby, 2005). As EO Wilson observed recently in *Newsweek*, within tribes, individuals of our species happily conform to various norms and mores, defer to its authority figures, or compete with each other to improve their standing in its social hierarchies (Wilson, 2012). Tribal loyalty and conflict takes many forms: fans of the Steelers versus Eagles, Republicans versus Democrats, or practitioners of Evolutionary Psychology versus Standard Social Science. Tribalism is, to paraphrase the war journalist Chris Hedges, a "force that

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<sup>2</sup> Collaborative research in the humanities is new at LVC, and we are hopeful that the administration will provide the necessary support, for instance, release time for faculty.

<sup>3</sup> The history department has identified literature reviews as something that our majors struggle to do well.

gives us meaning” (Hedges, 2003). Students can readily identify aspects of tribalism in their own lunchroom cliques, sports, fashion choices, and (with some prodding) in politics and nationalism.

Social psychology establishes that human nature is anything but logical, but none establish that it was evolution that made it so. However, all that is needed is to ask students to consider is **why** humans everywhere are so social? Why is our worst punishment, short of death, social isolation? Why is it that belonging to a group, even a newly formed one, is so important it can override individual rationality and morality? Is what Philip Zimbardo terms the “power of the situation” the result of a tragic mis-wiring of our brains? (Zimbardo, n.d.). Invariably a student suggests that group membership probably conferred advantages to people in the past. Guided discussions sketch out how our species would have derived advantages in forming groups so quickly and so well. Students see that there an adaptive logic in being a species that is so prone to follow the direction of leaders, and so responsive to changing contexts. After these discussions it is a very rare student who resists the premise of the class, because, ironically enough, to do so would be to resist the consensus of their classmates.

## **PART TWO: HISTORY AND EVOLUTION: WHY DOES THIS NATURAL FIT SEEM SO UNNATURAL?**

Those of us...who read the Origin of Species felt the violent impulse which Darwin gave to the study of natural laws, never doubted that historians would follow until they had exhausted every possible hypothesis is to create a science of history. Year after year passed, and little progress has been made... Yet almost every successful historian has been busy with it, adding here a new analysis, a new generalization there; a clear and definite connection extending the field of study until it shall include all races, all countries, and all times. Henry Adams, President of the American Historical Association, 1894.

My course has a simple premise. Understanding human behavior and motivation, so central to the job of the historian, requires understanding the human brain. The brain has a history, which is best explained through evolution. Consequently, evolutionary theory and evidence provides an essential background for historical analysis. As Daniel Worster observed, history and evolution are a natural fit; why then, do most many historians see it differently?

Historians are a bit schizophrenic about Darwin. The vast majority accept that evolution through natural selection explains the origins and history of life on earth.<sup>4</sup> Many courses on intellectual history or the history of science teach about the development of evolutionary science without controversy. Historians accept that humans evolved from ape-like ancestors, however, we tend to believe that human

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<sup>4</sup> There is no polling data on historians, however, in 2009, 74% of Americans with postgraduate degrees believe in evolution. See <http://www.gallup.com/poll/114544/darwin-birthday-believe-evolution.aspx>.

evolution ended long ago. Consequently evolution is a subject matter best left to our colleagues in physical anthropology, paleontology, or natural history.

Moreover, historians consider that discussing contemporary humanity in light of evolution inevitably raises the specter of Social Darwinism. History textbooks routinely include a section about the Social Darwinists of the late nineteenth and early twentieth century. For instance, the textbook I use in my US History survey, written by a top scholar, correctly summarizes the impact of Charles Darwin's *Origin of Species*. However, much more space is devoted to the idea that "what came to be called Social Darwinism, evolution was as natural a process in human society as in nature, and government must not interfere...the poor were essentially responsible for their own fate" (Foner, 2009, p. 586). This textbook passage suggests that historians connect the social uses of evolution with defenses of laissez-faire capitalism, white supremacy and colonization of the "less fit."

Consequently, historians with little working knowledge of the work of evolutionists are well aware of how American Social Darwinists promulgated eugenics laws and encouraged the criminalization of miscegenation in the Nineteenth and Twentieth Centuries.<sup>5</sup> So it is understandable that many historians conflate Sociobiology or Evolutionary Psychology with Herbert Spencer (or worse). Most historians are unaware of the research done by evolutionists in a variety of disciplines over the last thirty years. For instance, *Missing the Revolution: Darwinism for Social Scientists* doesn't have a single entry by a historian (Barkow, 2005). Historians would find it intriguing that the implications of evolutionary research support liberal or even socialist public policy perspectives as well as conservative ones. But the lack of dialogue between the humanities and evolutionists contributes to the unfortunate state of affairs where both are denied the evidence, tools and frameworks that each has to offer.

Yet this was not always the case. In 1894, Henry Adams, the president of the American Historical Association, suggested that most historians had spent years trying to adapt Darwin to the study of history. Most abandoned the effort, like Adams, for reasons that are not clear. One reason is almost certainly that the source materials historians use to analyze are rarely conducive to the scientific method. Carl Degler provides some additional clues in his thorough history of how social scientists responded to Darwin. Degler suggests that by the early twentieth century social scientists (and one imagines historians) who favored social reform abandoned organic evolution in favor of quasi-Lamarckian cultural change. For instance, a 1927 study by a social scientist who later became a historian opposed the so-called "mulatto hypothesis" which held that those African Americans who succeeded in Chicago were those with white ancestors (Degler, 1992, pp. 92-4; 191-2; 198). Degler observes that the embrace of culture became universal after World War II, as the Final Solution became indelibly linked to Social Darwinism.

The historian Daniel Smail suggests that historians' antipathy to evolution has a different cause. Smail observes that historians have made a distinction between recorded history and prehistory as long as there have been historians. The ancient Greeks thought of the era before recorded history as a Golden Age. Later Christian historians named the place that preceded the fall Eden and estimated it

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<sup>5</sup> There were left-wing Social Darwinists, but their views typically do not make it into the textbooks.

existed seven thousand years ago. Later historians secularized that timeline and began their analysis with the written sources that emerged when people lived in cities. Smail argues that inertia keeps that artificial division between history and prehistory (Smail, 2007, pp. 12-40). Smail's account is intriguing, but it doesn't explain why historians in the nineteenth century did attempt to link history and prehistory in what Adams (and many others) termed a science of history.

I would suggest that another contributing factor to historians' hostility to evolution is that the textbook narrative of Social Darwinism (discussed above) that continues to function as a disciplinary taboo. Textbooks remind students and professors that evolution belongs to the distant past, and those that tried to use Darwin to connect history with prehistory led to disastrous results. The Social Darwinist taboo allows historians to both believe in evolution but also to keep it safely on the disciplinary and ideological divide of prehistory. Upholding the taboo may be intellectually contradictory, but poses little risk to the individual. After all, one can publish monographs and get tenure without incorporating evolution into your analysis. Doing the reverse risks raising the wrath of your colleagues. The justified abhorrence of pseudo-scientific racism in the early twentieth century has been carried over to any application of evolution to social matters, even by historians of science. For instance Daniel Bender is a historian who is keenly aware that there were liberal and socialist Social Darwinists before World War I. Bender argues that the discovery of genetics and its role in natural life undermined reformers and gave rise to the application of eugenics as a solution to social problems. Thus it was the linking of genetics to evolution (and its social applications) that gave rise to racism and the Final Solution. For Bender, there the matter stays: Sociobiology or Evolutionary Psychology is by implication also tainted with that original sin (Bender, 2009; Hinshaw, 2010).

If that is the dominant strain of thinking among historians, there is evidence that this state of affairs is changing. There are more and more historians who are working with evolutionists from anthropology, psychology and biology. (For your information, I've included a short list of historical works in the appendix). Historians' reflexive hostility to such approaches is weakening. For instance, the historian John Carter Woods incorporated evolutionary approaches to the study of European violence. His approach was novel enough to warrant two other historians to comment upon his article. While both had criticisms, Wood observes that "both respondents advocate a significant role for biological perspectives on history... Indeed, both ... have argued that the evolutionary psychology about which I mainly wrote does not go far enough in the analysis of biological influences on human behaviour" (Woods, 2007a, p. 563). Evolutionists may find historians more receptive to their overtures than in the past.

### PART THREE: WHAT CAN EVOLUTIONARY HISTORY OFFER?

"...a synthetic field called **evolutionary history** can help us to understand the past better than history or biology alone. (Edmund Russell, 2011, p. 4).

A small but growing number of historians see the desirability of placing history within an evolutionary framework. A short review of evolutionary history writing might be useful for those teaching evolution. If evolutionists seek to work with

humanists, or to incorporate history into their evolutionary classes, it would be worthwhile to understand historians on their own terms. For this reason, I am chiefly discussing “guild” historians, which is why you will not see familiar scholars such as Jared Diamond. Where relevant, I discuss books and articles that I have taught.

Historians have a great deal to offer. Their topics are as varied as Carl Degler’s detailed analysis of the fall and rise of evolutionary approaches in American social thought over the course of the twentieth century to John Carter Wood’s analysis to the ways European violence has experienced a 20 to 50 fold drop over the last half millennia (Degler, 1992; Woods, 2007a; Woods, 2007b, pp. 561-2). Those teaching evolution today should see the relevance of how and why social scientists in the past adopted or rejected evolution in the past. Moreover, Wood’s analysis suggests the enormous degree of importance that changing the social environment has on human behavior. (The respondents to his article also reveal much about the ways historians critique each other’s work).

Darwinian historians often incorporate a particular branch of evolutionary thought to the past. For instance, Greg Hanlon used evolutionary psychology and ethology to frame his analysis organization of daily life in rural Tuscany in the Renaissance (Hanlon, 2007). Walter Scheidel worked with, and within, the frameworks of anthropologist Laura Betzig the sexual politics and reproductive strategies of emperors and despots (Betzig, 2008; Scheidel, 2009). Scheidel’s and Betzig’s works would make a fascinating addition to course readings dealing with the strategies of men and women in attracting and retaining sexual partners.

Those teaching about violence and tribalism would do well to pay attention to the work of Albert Albes, who borrowed heavily from ethology to explain the religious and martial organization of sixteenth century Aztec and Spanish societies. Albes argued against the idea, advanced by some historians, that Aztec and Spanish societies were so unlike to inhibit mutual understanding. Instead, both the Spanish and Aztecs organized religious, martial, and political authority along broadly similar lines. For instance, in both societies, kings were representatives of the empire, and their immoral actions could bring supernatural punishment upon their polities (albeit from differing gods) (Alves, 1996). In my class, I use a chapter from Albes’ monograph, who has the inherent advantage of analyzing one of the most dramatic encounters in human history. I have used Albes to show students how historians might incorporate the perspectives of Dale Peterson and Richard Wrangham (*Demonic Males*), Frans DeWaal (*Chimpanzee Politics*), and Sarah Hrdy (*Mothers and Others*). (de Waal, 1982; Hrdy, 2009; Peterson, 1996).

Environmental history is sub-field where biological or ecological perspectives are most deeply rooted. Here the links between history and biology were never completely severed as historians needed a firm understanding of science so they could analyze how humanity interacted with the natural world. Because environmental history tends to look at the last few hundred years, historians tend to examine how humans affected their natural environment rather than adapted to it. For instance, John MacNeil has written a masterful account of the co-evolution between European colonization of the Caribbean and urbanized yellow fever and malaria in the countryside. The survivors of those diseases passed their greater resistance to their descendants. Consequently, while the Spanish empire in the Eighteenth Century possessed a lackluster military, relative to the English and

Dutch, Northern European soldiers had little resistance to endemic tropical diseases. Consequently, the English regularly raided Spanish shipping, but rarely captured lightly-garrisoned forts. The dynamics of those diseases played a major role the wars of independence of Haiti, the United States, and others. When Creole populations desired independence, their resistance to local diseases provided them with their most important military asset. Histories like this underscore the importance of co-evolution to traditional political and military histories of empires and nations.

Donald Worster's body of work also reveals the importance of the interactions between humanity and the natural world. His award-winning *Dust Bowl* reveals how capitalist farming reduced soil and water to mere commodities, producing both abundant production and ecological disasters. The advent of the gasoline powered tractor in the 1920s allowed farmers to plough up the deep roots of buffalo grass throughout the Great Plains in favor of more profitable wheat. But when drought inevitably revisited the region a decade later, the wheat withered and the wind carried much of the soil away. Worster reminds us that industrialization gave Americans the tools to dominate nature, and capitalism the ideology that encouraged farmers to essentially mine the soil. Worster's analysis of American agricultural practice is as relevant as the current drought gripping the agricultural heartland or the ongoing catastrophe of global climate change.

In 2011, Edmund Russell, a respected environmental historian, published *Evolutionary History: Uniting Biology and History to Understand Life on Earth*. Evolutionary history would involve studying "the ways populations of human beings and other species shaped each other's traits over time and the significance of these changes for all those populations" (Russell, 2009, p. 5). Central to his perspective is going back to Darwin's vision of evolution by placing human activity firmly within the evolutionary process (Russell, 2009, pp.10-11.) Hunting and fishing over the millennia has eradicated some species (such as giant sloths and long-horned bisons (*Bison priscus*) and created new ones (such as North American Bison, or *Bison bison*). Russell emphasizes the role of governments, both weak and strong ways, as an instrument of anthropogenic change. Russell argues that an evolutionary history would change the ways that historians, biologists, and policy makers would look at issues. Evolutionary analyses would suggest that humanity's widespread use of antibiotics (from liquid soaps to industrial farming) is rapidly bringing into existence superbugs. Likewise, an evolutionary approach to fisheries would change standard practice, which is breeding smaller commercial fishes. Russell's work would make a useful contribution to any evolution class that deals with applied evolutionary approaches, or simply seeks to connect the realms of biology with society.

## CONCLUSIONS

Evolutionary histories are studies of people in their natural habitats rather than the lab. Consequently, Darwinian historians give considerable attention to the interaction of people with social, political or economic institutions as well as their physical environment. That is a critical contribution for evolutionists, given the importance that institutions such as government, corporations, or markets play in



modern social life.<sup>6</sup> Moreover, historians' attention to the messy and concrete ways people lived in the past is likely to be the most useful contribution, and/or corrective, to the tendency of many scientists to generalize from data gathered in the lab, generally from undergraduates, to the species as a whole. Historical evidence is as messy as humans can make it; it is typically derived from subjective sources such as letters, diaries, government reports, or newspapers. Consequently, historians tend to compensate for this by relying on an omnivore strategy: drawing on as much different kinds of evidence as possible, and from as many different perspectives as possible (Aztecs and Spaniards, etc). Thus far, evolutionary historians have tended to collaborate with anthropologists, who are familiar with the problems of subjective data and also attentive to the political and economic details of societies separated from our own (in the case of anthropologists, by space, in the case of historians, by space and time)<sup>7</sup> (Shyrock & Smail, 2011).

Evolutionary psychologists and biologists can find in historical research new types of evidence, approaches, and/or questions. Historians could become collaborators in research projects or the classroom. In any event, understanding the literature of that evolutionary historians have developed is a necessary first step to increasing the ranks of evolutionists in the humanities.

### APPENDIX: RELEVANT WORKS BY GUILD HISTORIANS

#### Intellectual history and Theory.

Philip Pomper and David Gary Shaw. *The return of science: Evolution, history and theory*. New York: Rowman and Littlefield, 2002.

Daniel Lord Smail. *On deep history and the brain*. Berkeley: University of California Press, 2008.

Edmund Russell. *Evolutionary history: Uniting biology and history to understand life on earth*. New York: Cambridge University Press, 2011.

Andrew Shyrock and Daniel Lord Smail. *Deep history: The architecture of past and present*. Berkeley: University of California Press, 2011.

Carl Degler. *In search of human nature: The decline and revival of Darwinism in American social thought*. New York: Oxford University Press, 1992.

#### World History

Fernand Braudel. *Civilization and capitalism, 15-18<sup>th</sup> century, volume 1: The structure of everyday life*. Berkeley: University of California Press, 1992. (1949).

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<sup>6</sup> Guild historians have written fewer accounts on the different ways that men and women view sexual attractiveness, approach mate-guarding techniques, or other related topics that preoccupy evolutionary psychologists.

<sup>7</sup> For instance, see the recent book edited by Smail and Andrew Shyrock, which chiefly consists of articles by historians and anthropologists.

Gregory Hanlon. *Human nature in rural Tuscany: An early modern history*. New York: Palgrave Macmillan, 2007.

### Environmental History

Alfred W. Cosby. *Ecological imperialism: The biological expansion of Europe, 900-1900*. New York: Cambridge University Press, 2004.

John Robert MacNeil. *Mosquito empires: Ecology and warfare in the greater Caribbean, 1620-1914*. New York: Cambridge University Press, 2010.

Edmund Russell. *War and nature: Fighting humans and insects with chemicals from World War One to Silent Spring*. New York: Cambridge University Press, 2001.

Donald Worster. "Historians and nature." *American Scholar*. Spring, 2010.

Donald Worster. *Dust bowl: The southern plains in the 1930s*. New York: Oxford University Press, 1979.

### Aggression

Albert Albes. *Brutality and benevolence: Human ethology, culture, and the birth of Mexico*. Westport, CT: Praeger Press, 1996

Randolph Roth. "Biology and the deep history of homicide." *British Journal of Criminology*. 2011. 51. 535-555.

John Carter Woods. "The limits of culture? Society, evolutionary psychology, and the history of violence." *Cultural and Social History*. 2007. V. 4, no 1, 95-114.

### Reproductive Strategies

Walter Scheidel. "Monogamy and polygyny in Greece, Rome, and world history." *History of the Family*, v. 14. 2009. 280-291.

### Economic Histories

Gregory Clark. *Farewell to alms: A brief economic history of the world*. Princeton: Princeton University Press, 2008.

John Hinshaw. "Karl Marx and Charles Darwin: Towards an evolutionary history of labor." *Journal of Social, Evolutionary and Cultural Psychology*. 2008. Proceedings of the 2nd Annual Meeting of the North Eastern Evolutionary Psychology Society. Online.

## Meta History

Robert S. McElvaine *Eve's seed: Biology, the sexes, and the course of history*. Darby, PA: Diane Publishing Company, 2003.

## REFERENCES

- Adams, H. (1894). *The tendency of history*. Retrieved October 15, 2011, from American Historical Association: [http://www.historians.org/info/aha\\_history/hbadams.htm](http://www.historians.org/info/aha_history/hbadams.htm)
- Alves, A. (1996). *Brutality and benevolence: Human ethology, culture, and the birth of Mexico*. Westport, CT: Praeger.
- Barkow, J. H. (2005). *Missing the revolution: Darwinism for social scientists*. New York: Oxford University Press.
- Bender, D. E. (2009). *American abyss: Savagery and civilization in the age of industry*. Ithaca: Cornell University Press.
- Berreby, D. (2005). *Us and them: Understanding your tribal mind*. New York: Little, Brown.
- Betzig, L. (2008). *Despotism and differential reproduction: A Darwinian view of history*. Hawthorne, NY: Aldine.
- Degler, C. N. (1992). *In search of human nature: The decline and revival of Darwinism in American social life*. New York: Oxford University press.
- Foner, E. (2009). *Give me liberty! An American history* (Seagull Edition ed., Vol. 2). New York: WW Norton.
- Hanlon, G. (2007). *Human nature in rural Tuscany: An early modern history*. New York: Palgrave Macmillan.
- Harpending, G. C. (2009). *The 10,000 year explosion: How civilization accelerated human evolution*. New York City: Basic Books.
- Hedges, C. (2003). *War is a force that gives us meaning*. New York: Anchor.
- Hinshaw, J. (2011). Darwinian evolution and social history. *Journal of Social History*, 45(1), 261-73.
- Hinshaw, J. H. (2010, June). Review: Daniel E. Bender. American abyss: Savagery and civilization in the age of industry. *The American Historical Review*, 115(3), 848-849.
- Hrdy, S. B. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge: Harvard University Press.
- Marx, K. (1852). 18th Brumaire of Louis Napoleon. Retrieved April 17, 2012, from Marxists.org: <http://www.marxists.org/archive/marx/works/1852/18th-brumaire/ch01.htm>
- Peterson, R. W. (1996). *Demonic males: Apes and the origins of human violence*. New York City: Houghton Mifflin.
- Scheidel, W. (2009). A peculiar institution? Greco-Roman monogamy in World context. *The History of the Family*, 14(3), 280-291.
- Shyrock, A. & Smail, D. L. (2011). *Deep history: The architecture of past and present*. Berkeley: University of California Press.

- Smail, D. L. (2007). *On deep history and the brain*. Berkeley: University of California Press.
- Waal, F. D. (1982). *Chimpanzee politics: Power and sex among apes*. Baltimore: The John Hopkins University Press.
- Wade, N. (2006). *Before the dawn: Recovering the lost history of our ancestors*. New York City: Penguin Press.
- Wilson, D. S. (2007). *Evolution for everyone: How Darwin's theory can change the way we think about lives*. New York: Delta.
- Wilson, E. (2012). *The social conquest of earth*. New York: Liverlight.
- Wilson, E. (2012, April 2). Why humans, like ants, need a tribe. Retrieved April 11, 2012, from *Newsweek*:  
<http://www.thedailybeast.com/newsweek/2012/04/01/biologist-e-o-wilson-on-why-humans-like-ants-need-a-tribe.html>
- Woods, J. C. (2007a). Evolution, civilization and history: A response to Wiener and Rosenwein. *Cultural and Social History*, 4(4), 559-565.
- Woods, J. C. (2007b). The limits of culture? Society, evolutionary psychology, and the history of violence. *Cultural and Social History*, 4(1), 95-114.
- Worster, D. (2010). Retrieved April 11, 2011, from *American Scholar*.  
<http://theamericanscholar.org/historians-and-nature/>
- Zimbardo, P. (n.d.). Power of the Situation. Retrieved April 12, 2012, from *Discovering Psychology*:  
<http://www.learner.org/discoveringpsychology/19/e19expand.html>

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