Permitted, or excluded: 'Scientific' archaeology and the maintenance of legitimating myths

Permitido o excluido: la arqueología científica y el mantenimiento de los mitos de legitimación

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Recibido: 04-12-2013 Aceptado: 12-08-2013

ABSTRACT

'Scientific' archaeology advocated by mainstream American archaeologists since the 1960s has tended to narrow 'science' to what Kuhn termed normal science, that is, research constrained by a ruling paradigm. This paradigm is based on the Myth of Columbus legitimating European invasions, conquests, and dispossessions of American nations by asserting that until October 1492, the Americas were a wilderness inhabited by savages. European international law held that Christians had the right to invade non-Christian nations and convert them by force if necessary. American schools teach that American Indians lacked the arts of civilization, and this early socialization persists in archaeologists' models of pre-contact American nations. The paper looks at the "Core system" of the discipline, a recent interest in 'historicizing' the pre-contact American past, and the issue of transoceanic contacts before Columbus.

Key words: Myth of Columbus. Historicizing archaeology. Transoceanic pre-Columbian contacts.

RESUMEN

La arqueología 'científica' defendida por los principales arqueólogos americanos desde los años sesenta ha tendido a limitar su definición de ciencia a lo que Kuhn denomina 'ciencia normal', es decir, a la investigación realizada bajo el paradigma dominante. Dicho paradigma está basado en 'el mito de Colón', un mito que legitima las invasiones europeas y el expolio de las naciones americanas asegurando que, hasta 1492, América era un territorio inhóspito habitado por salvajes. Dicho mito tiene su origen en la legislación europea internacional que establecía que los cristianos tenían el derecho de invadir las naciones no cristianas y convertirlas por la fuerza. Las escuelas americanas han contribuido a perpetuar el 'mito de Colón' al insistir en que los 'indios' americanos carecían de civilización. Dicha mito ha persistido también en los modelos desarrollados por los arqueólogos a propósito del periodo de pre-contacto con las naciones americanas. Este artículo examina las convicciones fundamentales de la disciplina, el reciente interés por historizar la fase del 'pre-contacto' y la cuestión de los contactos transoceánicos antes de Colón.

PALABRAS CLAVE: Mito de Colón. Historiar la arqueología. Contactos transoceánicos antes de Colón.

1. Introduction

As I was going up the stair, I met a man who wasn't there. He wasn't there again today. I wish that man would go away!

Daniel Wilson constructed a science of prehistoric archaeology in Edinburgh, and then in Toronto, in the 1850s (Kehoe 1998). His Edinburgh fostered empirical observational research logically grounding theory, like James Hutton's recognition of volcanic intrusions into sedimentary rock on Arthur's Seat (see, e.g., Baxter 2003, Repcheck 2003). It also was a sophisticated city boasting a coterie of leading philosophers including David Hume, Adam Ferguson, Henry Home (Lord Kames), and Adam Smith, a salon set led by Walter Scott collecting ballads and folklore, and a group of reformists advocating a meritocracy government. Wilson and his mentor, Robert Chambers, were members of this group. Toronto, in contrast, was a raw town in a colony. Lack of prospects for suitable employment in Edinburgh prompted Wilson to accept a professorship at University College in Toronto, literally a-building when he arrived on campus.

Canada provided Wilson more than a living: its forests resembled prehistoric Scotland, its native inhabitants still included small communities using lithic technologies like the those of ancient Scotland. Wilson canoed and camped along the Great Lakes with Indian guides, making ethnographic analogies to the archaeology of Scotland. His American Indians were intelligent, creative people, not savages. 'Miscegenation', intermarriage between colonists and Indians, he argued, could produce strong, hardworking, capable Canadians. Imperial Britain did not want to hear, or read, such meritocratic opinions. Instead, its Royal Society favored a knock-off to Wilson's Prehistoric Man: Pre-historic Times, written by one of its titled members, Sir John Lubbock. Lubbock described American Indians as Hobbesian savages, nasty, brutish, short-lived (Kehoe 2013).

Lubbock upheld the Myth of Columbus legitimating European claims upon American territories. International law's doctrine of First Discovery had to be twisted for European imperialists to affirm a moral right, or even a duty, to take over inhabited lands (Robertson 2005). The twist goes back to the failure of the medieval Crusades to recover the Holy Land from Islam. Conjoined with rising mercantile interests in the thirteenth and fourteenth centuries, crusading for Christ shifted toward conquering any people who did not already profess Christ (Williams 1990:72-77). Papal bulls, stimulated by Portugal's efforts to exploit Africa, authorized Christian rulers (i.e., European Catholic monarchs) to "bring the sheep divinely committed to him into the one fold of the Lord" (*Romanus Pontifex*, 1453-1454).

Protestant imperialists could not appeal to Popes to authorize conquests. John Locke, spinmeister extraordinaire, manufactured philosophy treatises calmly asserting individuals' private property in land "improved" by labor to be the foundation of civil society (Kehoe 2009). Himself a shrewd businessman who held his American property unimproved until he could sell it at a profit (Arneil 1996:69), Locke and his employer, the Earl of Shaftesbury, led the political party in England that demanded a constitutional monarchy constrained by Parliament, at that time effectively the House of Lords. Their interest was in maintaining the class structure privileging inherited landed wealth. Locke justified English take-over of American lands by describing their inhabitants as savages who failed to cultivate. His agrarian capitalism was, in his argument, as divinely mandated as the fifteenth-century popes' delegation of Christianizing the world to European monarchs (Kehoe 1998:68). Catholic or Protestant, European imperialists legitimated their invasions and exploitation by the chartering myth that Columbus had opened to Europe a never-before-seen New World as primeval as the Garden of Eden¹.

Two centuries later, a baronet such as Sir John Lubbock might be descended from plebian roots through successful bankers. Lesser pedigree did not lessen, indeed it would strengthen Victorian leaders' support of imperial outreach, initially developed under mercantilist policies (Ahmed 2012:26, 84). Clothing exploitation of colonies in the cloak of the White man's burden to Christianize and civilize, Britain in Lubbock's and Wilson's time exalted its own dominant class of educated propertied White men. Unilinear cultural evolution from bestial savages through agrarian barbarians to urban Europe was its legitimating myth. The Three-Age system in archaeology, although created to counteract Denmark's humiliation after Napoleon's victory (Kristiansen 1981:24-25)--Johnny-come-lately, he, compared to Denmark's millennia of roots in her own country-placed Britain's colonies lower in the scale of Progress. Lewis Henry Morgan and his admirer John Wesley Powell identified with their British forebears. Morgan made it look logical in his triads of Savagery and Barbarism, capped by Civilization (Morgan 1877:12). Those

dispossessed American savages had no real relevance to the Anglo nation carrying Civilization into the wilderness, hence America, in contrast to Europe's nations, has had no patrimony (Kehoe 2012, Trigger 1984).

There were two consequences of the legitimating Myth of Columbus for American archaeology. First, the overpowered and dispossessed nations of North America were ranked lower than the empires of Mexico and Peru from which Spain extracted immense wealth. Second, they were said to have been cut off from sharing the rise of civilization once their remote ancestors crossed the Bering Land Bridge. Morgan had tried to push the legitimating myth to the extreme of denying the Aztecs had cities or other signs of civilization (Morgan 1877:187). He could not persuade his public that Cortés' conquest of Mexico was less than a great crusade against a fabled barbarian state, but he did reinforce the idea that North America's savages and lower barbarians had been isolated from the archaic empires to the south. The legitimating myth, in order to claim First Discovery for modern Europeans had to assert the Americas had been totally isolated from Eurasia for all the millennia of history. Teaching that all the American native nations, even the empires of Latin America, had never ventured upon the seas fortified the model of impenetrable isolation up to 1492. Neither voyages to the Americas, nor voyages from the Americas, could be recognized without challenging the accepted foundation of European colonization (Stone and Mackenzie 1989; Leone and Silberman 1995:36; Patterson 1995:19).

2. Evidence-based practice

In contrast to archaeologists who accept, usually unwittingly², the Myth of Columbus they've heard since kindergarten, there have been a series of scientists recognizing evidence of long-distance contacts within the Americas and between the Americas and other continents (Fingerhut 1994). These include polymaths Alexander von Humboldt (1814) and Joseph Needham (1971, 1985), geographer Carl Sauer and a lineage of his students (Sauer 1952, Rowntree 1996, Gade 2004), anthropologist Kaj Birket-Smith (1967), and respected archaeologists such as Roger Green (1998), and Gordon Ekholm (1953, 1955, 1964). Eminence as a scientist and leadership in a research field seem insufficient to give credibility, or even circulation, to a scholar's work on long-distance contacts.

Medical personnel are urged to follow scientific method through Evidence-Based Practice, outlined as follows:

> Evidence-Based Practice includes five fundamental steps.

[Preliminary: Empirical observation]

Step 1: Formulating a well-built question Step 2: Identifying [research] articles and other evidence-based resources that answer the question

Step 3: Critically appraising the evidence to assess its validity

Step 4: Applying the evidence

Step 5: Re-evaluating the application of evidence and areas for improvement (University of Minnesota Libraries, http://hsl.lib.umn.edu/ learn/ebp/mod01/index.html, accessed 3/8/13).

Step 4, for archaeologists, could be phrased as constructing an explanation for the syntagm³ of observed data. Explanations generally fit into paradigms, in which concepts are related through similarity, as analogies or metaphors. "Paradigm" derives from Greek *para deiknumi*, "shows beyond." Ideally, the world of ethnograpic and historical accounts would be searched, several alternative explanations articulated, each tested against the syntagm for encompassing the most data and for closeness of fit. Lacking infinite time for this work, we employ paradigms we were taught, or what is currently esteemed. Here is where archaeologists' explanations can stray from evidencebased practice.

Pre-Columbian contacts between the Americas and the rest of the world are evidenced by organisms evolved in one hemisphere and associated with humans there, found in the other hemisphere (Sorenson and Johannessen 2013, Jones et al. 2011). Complicated technologies with longer history in one hemisphere, found in the other without evidence of developmental steps, are another type of evidence. Fantastical creatures and systems, such as astrology, evidence contacts (e.g., Kelley 1962). Art styles such as the Pacific Rim style and its associated dance-drama masks. Myths, in collections such as Stith-Thompson's motif index (1955-58), or in David Kelley's dissertation (1957). Artifacts, perhaps particularly the considerable number with similarities between Asian Hindu-Buddhist architecture and art and Mesoamerican (Heine-Geldern and Ekholm 1951, Ekholm 1953, 1955, 1964). There is, in short, a mountain, or should we say a pyramid, of data for evidence-based practice.

Historian David Quinn said of Harvard's Samuel Eliot Morison, biographer of the Admiral of the Ocean Sea: The rejection of any pre-Columbian movement across the Atlantic apart from the Norse voyages leaves the ocean peculiarly empty for many centuries, but it is a justifiable reaction in an outstanding historian whose great merit is that he sees sharply in black-andwhite terms and is therefore uniquely qualified to expound what is already known. He is perhaps too impatient to study the nuances of pre-Columbian enterprise (Quinn 1974:22-23).

"Peculiarly empty," considering evidence for open-sea fishing in cod and swordfish bones in North Atlantic archaeological sites (Bourque 2012, Pickard and Bonsall 2004).

3. Empty science

To exclude abundant data ranging from humans colonizing Australia and the island of Flores some 50,000 years ago (Webb 2006), through tobacco leaves in Rameses II's mummy and cocaine in others (Balabanova et al. 1992), global sea trade of Romans, Phoenicians, China, the Indian Ocean and Spice Islands (Pearce and Pearce 2010), Polynesian colonization of the Pacific and cultivation of sweet potatoes from northwestern South America (Roullier et al. 2013), to chickens in Chile's Araucanian peninsula site El Arenal (Storev et al. 2007), requires constructing an allegedly scientific method that rules out all data related to oceanic voyaging. Science by definition excludes metaphysics; the Myth of Columbus pushes earlier transoceanic contacts into its own excluded realm.

Scientific method begins with observations that can be replicated by other observers. The litany of firstrate observers describing striking similarities between American and transoceanic cultural materials indicates that this first feature of scientific method is upheld. An interesting perspective on historical sciences (paleontology and archaeology) by the philosopher Derek Turner (2007:24) points out that unlike in physics or chemistry, historical sciences' data cannot be manipulated by the researcher, i.e., experiments cannot be set up deliberately to test hypotheses. Instead, in historical sciences, inference to the best explanation (IBE) is the proper method (Kelley and Hanen 1988:252, 276, 325).

Inference from what? the syntagm of observations, of course. Traditionally, the researcher in historical sciences collects observations, classifies them, seeks analogies in richly detailed descriptions, and proposes an explanation that seems best to match the data and to be fruitful of further understanding (Simpson 1970). Traditionally, the logic could be either inductive, as Simpson outlined, or deductive, which he censured, as would Derek Turner, as unsuited to historical sciences constrained to data in the narrower etymological sense, "givens." Charles Peirce argued there is a third way, "abduction," that he recommended for what he called surprising facts, that is, anomalies (Carettini 1983 summarizes Peirce's argument). Thomas Kuhn likewise seized upon anomalies as stimuli for scientific change. Abduction begins with formulating a hypothesis as a provisional *rule* for which one then considers a range of possible instances, and concludes whether the case in hand is compatible with any of them. In the case of transoceanic contact data, the provisional rule may be "Humans engage in long-distance voyaging," for which there is a vast abundance of wellattested instances, therefore the IBE conclusion would be that the case in hand is reasonably probable to have resulted from long-distance voyaging. The contrary, a provisional rule "Humans seldom engage in long-distance voyaging," is historically untrue. From the position of these philosophers, evidence for pre-Columbian transoceanic contacts is particularly significant for scientific study precisely because they are anomalous in terms of archaeological "normal science."

Table I lays out the Myth of Columbus issues militating against scientific evaluations of data indicating transoceanic contacts.

Another exclusionary tactic used to support the Myth of Columbus is accusation of racism against scholars suggesting transoceanic contacts (Jett 2012). Believing that contacts with travelers from other continents or Oceania would have overwhelmed American societies, opponents of contacts claim that lack of evidence of revolutionary replacements of indigenous with foreign culture is proof that contacts did not occur. This notion of First Nations' weakness is racist. Colonial historical archaeology has been increasingly documenting persistence of indigenous nations through centuries of selective incorporation of foreign material, sometime but not invariable discard of native equivalents (Lightfoot 2012); ethnohistories record dynamic interplay, plus revitalization or rejection or adaptation movements within societies. The very existence today of hundreds of recognizable American First Nations proves the probability that pre-Columbian contacts would not have the envisioned radical impact upon American societies. Instead, as has been historically true for most societies, foreign contacts could have materially and intellectually enriched recipient groups

Myth	Science - Empirical Data
Boats not capable of crossing oceans until European caravels developed, late 15 th century	Doran 1973: 3 major ocean-going ship-building technologies (Mediterranean, Chinese, Polynesian); Campbell 1996; plus hide-covered frame boats (umiaks, curraghs)
Foreigners killed upon landing	Foreigners welcomed for trade, as novelty
American Indians seldom traveled beyond "foraging" radius	 <i>I</i>- Indians—as merchants, or youths, or women in marriage alliances or as captives–traveled thousands of miles. <i>2</i>- No historic humans have been foragers.Term refers to herbivores and fodder (Kehoe 1993, Politis 2007).
American Indians did not sail, or canoe, except close to shore	Columbus and other Europeans (e.g, Ruíz 1526) met large cargo + passengers sailing rafts in middle Caribbean & off Peru; Peruvian artifacts in Galápagos.
Asians, Polynesians, or Norse contacting Americans would have brought epidemics	Norse did bring TB at AD 1000 to St. Lawrence-Great Lakes. <i>Note</i> : other contacts esp. without colonization efforts not necessarily including carriers of disease.
Contacts would have overwhelmed native cultures	Recent historic archaeology reveals centuries of bit-by-bit acceptances of introduced artifacts and practices (e.g., Oland, Hart, Frink 2012).

Table I. Myth versus Science. Led by Jane Buikstra, bioarchaeologists insist that pre-Columbian tuberculosis in the Americas appeared independently of Eurasian or Oceanic contacts. This is improbable because its bacillum is not indigenous to the Americas, and it is unlikely that bovine tuberculosis in bison would have been transmitted to humans. Paleopathologist Arthur C. Aufderheide, M.D., wrote me, 5/20/2005: "I consider your hypothesis [that early eleventh century TB in Upper Midwest came from Vinland Norse] scientifically valid and supremely eligible for testing when the appropriate technology becomes available".

as they assimilated cultigens, technologies, religious ideas, art styles, and symbols into their cultural patterns. To deny that American Indians could have done so is both racist and unscientific.

4. Invisible colleges

Sociologists of science Robert Merton (1970[1938]) and Derek de Solla Price (1963) popularized the term "invisible college," sets of scientists who work on common research problems, communicating among themselves both research methods and results, and evaluations of one another, their productions, and those deemed not acceptable. Robert Boyle and the formation of the Royal Society in 1660 are the model of this "invisible college," although the Royal Society was a highly selected exclusive group of elite gentlemen (Shapin 2010, Shapin and Schaffer 1985). Price's concept of collegial sets of scientists was empirically tested by Crane (1969, 1976), choosing scientists working on diffusion of agricultural innovations. She found that while a set could be delineated, ranging from highly engaged to occasional contributors, that field of research was dominated by a few leaders not only frequently cited but also in the center of informal communication networks and collaborations (Crane 1969:344). Jane Holden Kelley drew this for archaeology in the form of concentric circles in a Core System, the center held by acclaimed leaders while collaborators, followers, and more independent researchers occupy increasingly distant circles, and completely unaccepted ideas and investigators, ignored, are outside the System (Kelley and Hanen 1988:111-120)⁴.

Invisible colleges, or Core Systems, appear as sets of researchers working from shared premises and methodology. A set will insist, and believe, that their premises and methodology are truly scientific (and objective [Novick 1988]). Excluded researchers are, ipso facto, not acceptable scientists. They do not appear in quoting circles (Cribb 1980, on archaeology; Garfield and Welljams-Dorof 1992). Anomalies do not challenge the core, they are ignored (the core researchers being very busy conducting their properly scientific projects) or declared erroneous. 'Errors' may be declared for rejected premises such as that the oceans were not empty, or on a second level, for including in the symtagm data from two sides of an ocean, or because a researcher had become known previously for unacceptable conclusions (e.g., geographer George F. Carter, whose pre-radiocarbon estimate of Pleistocene occupation at an eroding alluvial shore at La Jolla. California, is ridiculed and his work on chickens therefore tossed out). Invisible colleges or Core Systems are not benign; completion of graduate degrees, postdocs and research grants, jobs, and tenure depend upon leaders' evaluation of candidates. Publication is similarly jeopardized, thanks to peer review-at best, an editor may consider it unwise to give journal space to a questioned paper when already there is a backlog of conventional, clearly acceptable submissions.

Here, I would like to deepen the concept of invisible colleges by adding their capacity to uphold legitimating myths. Through peer review of publications and grant proposals, recommendations, awarding jobs and promotions, and gossip, a collegial group can continuously legitimate premises such as isolation of First Nations. These invisible colleges distort histories of archaeology (a point made by Cribb 1980:353), creating Whig histories from which dissenting workers such as Daniel Wilson, and anomalous data, are excluded or denigrated. An Indonesian Studies scholar, Robert Cribb⁵, remarked that quoting circles "tend to share a sense of the political implications of their work... not... overtly political, but rather that they tend to share a sense of comfort with particular political views" (Cribb 2005:291-292). Postcolonial challenges to the Myth of Columbus' picture of a hidden continent of savages in wilderness discomfitted mainsteam American archaeologists. How many, as fiveyear-old boys, had played the half-naked Indians in school Thanksgiving enactments of the First Feast?

5. Whither the voyagers?

It happens that, due to the shock of participating in a "debate" with a team from Bob Jones University, I have studied the militant Christian Right (Kehoe 2012b). The fervor shown by these Fundamentalist evangelicals rises from indoctrination in childhood reinforced continuously by church activities and teaching that Satan hovers implacably near. They don't want to read Darwin or other evolutionists, or John Maynard Keynes, or Elaine Pagels; they have been taught the Truth. The tenacity with which mainstream American archaeologists cling to nineteenth-century racist cultural evolutionism (sequence of bands, tribes, chiefdoms, á là Morgan) is not unlike the Christian Right's uncompromising faith.

Since the turn of the millennium, I have seen a shift away from the Core paradigm derived from the Myth of Columbus. One factor has been NAG-PRA, the 1990 Native American Graves Protection and Repatriation Act, which forced archaeologists to talk with members of First Nations. Many American tribes and Canadian First Nations have themselves hired archaeologists, including trained members of their nations. Under this aegis, archaeologists have been listening to First Nations' histories and tying sites to them, even bridging the line between pre-contact and colonization periods (Mitchell 2013). Indians are now recognized stakeholders in the archaeology of their homelands. They reject the idea that their forebears were initially savages, with some slowly evolved through stages into barbarians. They know that their people traveled widely, were sophisticated traders, agriculturalists, and engineers. They reject John Locke's dictum that America in 1492 represented the primeval beginning of human development (Locke 2003[1689]: Chapter 5, 49).

Another factor shifting the Core is development of genetics demonstrating organic linkages among populations, animal and botanical as well as human, and genetic identifications of organisms that, as Carl Sauer and his students long argued, definitely attest human transportation between continents. Archaeologists have been strangely uninterested in geographers' fieldwork and analyses, not only in lists of organisms that did not evolve on the continents where they were symbiotic with humans at 1492, but also in Sauer's initiation of studies of cultural landscapes—a term he introduced. Part of this lack of citation likely arises from the conflict between the Sauer legacy identifying human agents' major impacts upon landscapes and human economic practices, against New Archaeology's ecological determinism seeing environment as agent, and humans, especially in the Americas, as its pawns. Exceptions to this neglect of Sauer and later geographers are the few archaeologists who studied with these researchers, notably Clark Erickson and Carole Crumley.

"Historicizing" archaeological pasts is a recent trend that logically will lead to concern with oceanic and other long-distance contacts. Kenneth Sassaman, currently (2013) editor of *American Antiquity*, and Timothy Pauketat actively agitate for recognizing that American First Nations had politics and ideologies as well as lithics and ceramics (e.g., Sassaman 2010, Pauketat 2001). Truly historicizing

will scientifically evaluate, as alternate working hypotheses, whether apparent new elements in a site or region can be linked to similar ones elsewhere, or seem to be local innovations. Just as Peirce identified abduction as a third way in analysis, so stimulus diffusion is a third way, or hypothesis, in evaluating intersocietal contacts versus local invention (Kroeber 1952[1940]). Nuances, not black-and-white, nor statistical tables, are important. On Stela B at Copán, Maudslay in 1885 photographed elephant heads flanking a ruler. Mesoamericanist archaeologists insist that the elephants are macaws and their eyes are the sign for macaw; look carefully. and the macaw sign is next to the elephants' eyes-elephants' eves are quite small in their large heads, have you noticed? These are elephant heads on the Copán stela⁶ and on a temple at Kabah. How could they be carved in Maya-land? Historicize: throughout Southeast Asia and Island Southeast Asia during the first millennium CE, the "Hindu-Buddhist" art style diffused elephants in conjunction with Hindu deities, including Ganesha, and Buddhas. It seems to have been attenuated by the time it crossed the Pacific, yet still there is the suite of symbols and art style to which Heine-Geldern and Ekholm drew attention. Accepting the reasonable probability of transpacific crossings, both ways, in the heyday of diffusion of Hindu-Buddhist art disperses the fog breathed by the Myth of Columbus over an ocean that was not peculiarly empty.

6. The judgment of history

Historicizing archaeological data and historicizing archaeology can go hand-in-hand (Tainter and Bagley 2005, Stout 2008). For both endeavours, arbitrary exclusions of data or points of view constitute bias. When exclusion links to nationalist myths taught to schoolchildren, we could call that our habitus in Bourdieu's sense, it works as unquestioned. Relaxing it is simply unthinkable. "The mere existence of a clear truth that appears to contradict a theory will not lead the theorists to change their minds; rather, the fact itself will be bent to fit the theory. Empiricists have difficulty in handling this behavior... vast fields of empirical information become irrelevant" (Cribb 2005:299). This is not a simple business of add-women-andstir, as could be done with Willey and Sabloff's exclusively masculine history of American archaeology. Dislodging the Myth of Columbus from American archaeology is akin to persuading creationists that Darwin was right. Adjusting histories of archaeology to take cognizance of excluded data and of knee-jerk refusals to discuss "vast fields of empirical information" is feasible, once consciousness is raised among observers of our discipline. Let us not be the drunk who looks under the streetlight for a lost object because that is where the lamp has been installed.



Figure 1. Poster in Havana, Cuba, photographed March 2013 by T. David Kehoe⁷.

POSTSCRIPT

When I was a graduate student at Harvard, Stuart Piggott was a visiting professor for a semester. Eager to learn from this outstanding archaeologist, I signed up for his seminar in European Neolithic-Bronze Age archaeology in spite of no experience in that field. Professor Piggott suggested that for a seminar paper, I follow up an interest he had in curraghs and the possibility that the first pottery in northeastern America may have been introduced from his home area of northwestern Europe, via curraghs. He showed my paper to Gordon Willey. On my way to class, Professor Willey called me into his office. Since Willey openly refused women students, several classmates waited in the hall to hear why I was called. Willey advised me to publish my seminar paper, I told them. One of the men remarked, "You could do that. You have a husband to support you." His reading of the Core System was correct: regardless of substantial published primary research in archaeology and ethnography of the northwestern Plains, I was never considered for positions in departments with graduate archaeology programs.

Notes

1. Malinowski (1954[1926]: 145) explained how myths act as social charters, legitimating actions by reference to alleged historical events.

2. Stoczkowski (2002) writes of a similar phenomenon in anthropological narratives of human evolution.

3. Syntagm (from the Greek *syntaxis*, layout or arrangement) is the array of data as it lies before the observer, a relationship of contiguity.

4. Kelley is an archaeologist, co-author Marsha Hanen a philosopher of science.

5. I found Robert Cribb's excellent article while Googling for Roger Cribb on quoting circles.

6. The Copán stela has been damaged but Maudslay had a cast made in the field, and it is in the British Museum should anyone wish to examine it. The elephant heads have little mahouts riding them. The Kabah temple is intact with its elephant heads along the corners.

7. Battle of ideas "We can call it, as a very simple term, the battle of truth against lies; the battle of humanism against dehumanization; the battle of brotherhood and fraternity against the grossest egotism; the battle of liberty against tyranny; the battle of culture against ignorance; the battle of equality against the most infamous inequalities; the battle of justice against the most brutal injustice; the battle for our people and the battle for other peoples, because if we go to its essence it is the battle of our little country and of our heroic people for humanity" (Fidel Castro at the Third Congress of OPM, July 10, 2001). "The battle of ideas doesn't mean only principles, theory, knowledge, culture, arguments, replica and counter-replica, to destroy lies and show truth; it signifies actions and concrete accomplishments." (Fidel Castro at the 40th and 41st anniversaries, respectively, of UJC and OPM, April 4, 2002). "Pudiéramos llamala de una forma más sencillo, la batalla de la verdad contra la mentira; la batalla del humanismo contra la deshumanización; la batalla de la hermandad y la fraternidad contra el más grosero egoísmo; la batalla de la libertad contra la tiranía; la batalla de la cultura contra la ignorancia; la batalla de la igualdad contra la más infame desigualdad; la batalla de la justicía contra las más brutal injusticía; la batalla por nuestro pueblo y la batalla por otros pueblos, porque si vamos a su esencía es la batalla de nuestro pequeño país y de nuestro heroíco pueblo por la humanidad." (Fidel Castro en el III Congreso de la OPM el 10 de julio del 2001). "Batalla de ideas no significa solo príncipios, teoria, conocimientos, cultura, argumentos, réplica y contraréplica, destruir mentiras y sembrar verdades; significa hechos y realizaciones concretas" (Fidel Castro Ruz en el acto por el 40 y 41 Aniversario de la UJC y la OPMJ respectivamente el 4 de abril del 2002).

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