

NAGPRA, Science, and the Demon-Haunted World

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The Native American Graves Protection and Repatriation Act (NAGPRA) has ramifications that extend far beyond how archaeology is conducted in the United States. It throws into sharp relief the conflict between science-like views of the world, and those of the various anti- and pseudo-science constituencies arrayed against them.

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In 1990, after two decades of lobbying by Indian activists critical of the practice of archaeology as a science-like endeavor, Congress passed into law the Native American Graves Protection and Repatriation Act (Public Law 101-601), commonly known as NAGPRA. NAGPRA changed how archaeology is done in the United States in ways that were only dimly perceived at the time by its backers (some Indian political activists, federal and contract archaeologists) and its opponents (mostly archaeologists in academic and museum settings). I believe that NAGPRA is basically "anti-science" in terms of the biases, preconceptions, and assumptions that underlie the law and that it proceeds from an antievolutionary perspective grounded in fundamentalist

religious belief. As such, it favors the religious beliefs of Native Americans over those of other Americans, and stands in violation of the First Amendment to the Constitution.

I am a paleoanthropologist and Old World prehistorian interested in epistemology—how we know what we think we know about the remote human past (Clark 1992, 1993). More precisely, I am interested in the logic of inference in what I call “deep time”—the Plio-Pleistocene archaeopaleontological records of Africa and western Eurasia (Clark 1997a). I am a different kind of archaeologist from most of the people involved with NAGPRA on a daily basis. I mention this because I think the kind of archaeology one practices has implications for how NAGPRA is regarded, and whether or not one is disposed to be sympathetic to it as a mechanism for redressing historical wrongs. In terms of my biases, I am a committed evolutionist and, like most evolutionists, a materialist to the core. These philosophical considerations in turn affect how I view archaeology, and my vision of archaeology's place within the broader context of Western science (Clark and Barton 1997).

While I readily acknowledge its defects, I am a staunch and unapologetic admirer of science. Like it or not, the modern world is almost entirely a product of science. Despite unparalleled success, however, science is currently under assault by various pseudo- and anti-science constituencies that attack the materialism that is the central ontological bias of the scientific world view. Usually considered a “science-like” endeavor, archaeology is caught up in this controversy. Laws like NAGPRA strike at the heart of a scientific archaeology because they elevate Indian cultural traditions and religious beliefs to the level of science as a paradigm for describing or explaining reality. Political considerations thus take precedence over disinterested evaluation of knowledge claims, with tragic and irreversible results (Clark 1996).

Because of my preconceptions about the place of humans in the natural world, I think archaeology is, or should be, a “science-like” endeavor—as opposed to a political enterprise, a business (e.g., the “heritage industry”), a platform for promoting a social agenda, or an exercise in public relations. And I think that most American archaeologists, whether or not they acknowledge it publicly, subscribe to exactly the same kinds of assumptions about the nature of the world, and the place of humans in it, that underlie all of Western science. The problem is that they are forced to compromise their beliefs (or keep silent about them) for the sake of political expediency.

Science and Religion

Science can be defined as a collection of methods for evaluating the credibility of knowledge claims about the experiential world. Science does not pretend to certainty; it only seeks bet-

ter and better approximations of it. Scientific conclusions are continuously subjected to critical scrutiny. Science is, therefore, self-correcting. No topic or question is off-limits to science. The only thing that is antithetical to the scientific world view is dogma. Dogma is the stuff of religious belief. From the

standpoint of science, the illusion of absolute, unchanging truth is the most pernicious of vanities.

Physicist Edgar Pearlstein (1997) points out that the essential disagreement between science and religion is not in the conclusions (e.g., evolution, the heliocentric solar system, the origin of disease), but rather in the way of arriving at conclusions. Religion relies upon authority (from a book, a person, or tradition) and its truth is claimed to be universal, unchanging, and eternal. In science, authority lies in evidence and reason, which are always open to challenge, so its truth is always relative and tentative. Scientific investigation starts with a question, and tries to find an answer through strong inference founded on evidence and reason. A theological investigation,

on the other hand, starts with a conclusion, and tries to wiggle around any impediments of logic and reason in order to warrant, or justify, that conclusion (Pearlstein 1997).

Evolution and Materialism

There are, of course, many views of humans and their place in the natural world. I argue, however, that there is only one scientific view—that of neo-Darwinian evolutionary theory. As the most powerful explanatory framework that humans have ever devised to account for the origins and diversity of life on Earth, evolution is central to Western science, extends far beyond the life sciences in which it arose, and subscribes to the same materialist biases and assumptions that underlie all of science.

Materialism is the idea that only matter exists, and that what we regard as “mind” or “spirit” consists exclusively of matter arranged in complex ways (Gould 1994). More precisely, “mind” is a consequence of brain evolution, and, because our brains have evolved over the 5 million years for which we can document the existence of the Hominidae, what constitutes “mind” has also evolved. From this perspective, humans are only animals (albeit highly intelligent, technologically sophisticated, socially complex ones). Religious views of humans and their place in nature, dependent as they are on concepts that have no reality outside the mind, are epiphe-



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nomena (and—for a materialist—absurd). Despite our very considerable capacity for compartmentalization (see, for example, Estling 1998), one cannot simultaneously understand and accept evolution and its philosophical underpinnings, and sustain a belief in the nonmaterial. From the standpoint of science, religious beliefs are curious survivals of earlier cognitive evolution (e.g., Mithen 1997a,b). As our cognitive capacities expanded slowly over the long millennia of the Pleistocene, we came to imagine more and more complex realities, and populated them with the gods, demons, and spirits that are the stuff of conventional religious belief. Religious tenets and precepts (especially those dealing with morality and ethics) are *ex post facto* rationalizations for existing social conditions. To the extent that they converge cross-culturally and through time, it is because they reflect universal aspects of human social life.

To recapitulate, (1) philosophical and methodological materialism underlies the scientific world view, (2) the scientific world view regarding humans is grounded in Darwinian evolutionary theory (Scott 1997), (3) archaeology is "science-like" in terms of the preconceptions that underlie its logic of inference and its knowledge claims, and (4) this world view puts those archaeologists who worry about such things at odds with the antimaterialist belief systems of Indians (and those of Americans in general). NAGPRA is, therefore, only a very small part of a much larger controversy that extends to many aspects of modern American life. That controversy turns on the conflict between the world views of science and religion. Carl Sagan summarized the issues underlying this debate in *The Demon-Haunted World*—recommended reading for scholars of all persuasions, regardless of their views on NAGPRA (1996; see also Sagan and Druyan 1992).

What Is NAGPRA About?

NAGPRA is basically about the repatriation to Native American claimants of human remains and funerary objects from museum or federal agency collections, and those recovered from Indian lands (Ferguson 1996). These remains, in the United States and elsewhere, are viewed by science to pertain to a generalized human past, to be part of a universal heritage not circumscribed by ethnic or cultural boundaries. However, legislation enacted in recent years has given the cultural traditions and religious beliefs of Indians greater weight under the law than the universalist perspective that underlies scientific inquiry. Motivated by political expediency, and the kind of anti-science sentiment to which I have just alluded, NAGPRA requires the consultation in archaeological excavation of very broadly defined Native American constituencies. It also mandates the repatriation and reburial, if so desired by native claimants, of human remains and funerary objects, sometimes including those not affiliated with any known or recognized Native American group.

The (Mostly) Rotten Fruits of NAGPRA

NAGPRA creates both short-term opportunities and long-term problems for archaeologists, bioarchaeologists, and for those

branches of physical anthropology concerned with the study of human skeletal remains. It creates opportunities (1) because the NAGPRA-mandated inventories employ many archaeologists and physical anthropologists (albeit temporarily); (2) because it has forced the profession to clean up its act regarding curation and record keeping, and (3) because minimum descriptive standards are being applied to the human skeletal collections (Rose et al. 1996). It creates problems because NAGPRA puts ethnicity and religious belief on an equal footing with science, and thus provides a mandate for claims of affiliation by virtually any interested party. As is true of any ethnic or racial category, however, "Native Americanness" has only a political definition. Anthropologists acknowledge the statistical, clinal character of race and ethnicity; the government does not (Clark 1998a). Federal agencies and state legislatures, which have often gone far beyond NAGPRA in their zeal to be politically correct, don't want to be bothered with such subtleties (after all, anthropologists are an even weaker political constituency than Indians). The result is that claims for the repatriation of human remains and "objects of cultural patrimony" can be extended to include just about anything identified as "affiliated" by a claimant. The process thus becomes entirely political, with science, represented by archaeology, the inevitable loser.

Physics Envy and Archaeology's Many Anxieties

Archaeology is admittedly a "small science," only weakly developed conceptually and characterized by few of the powerful law-like generalizations that underlie the spectacular progress of mainstream, experimental "big science" disciplines like physics. Despite its many shortcomings, however, archaeology in the United States has always been a "science-like" endeavor in the sense that it subscribes to the same collection of materialist biases and assumptions that underlie all of science. Moreover, its achievements have been substantial. We are all the losers if, for reasons of political expediency, Indians rebury their past. One of the many ironies in the situation provoked by NAGPRA is that many Native American groups who favor the preservation of archaeological and skeletal collections are being co-opted by the actions of small, but vocal, activist minorities in cahoots with ignorant legislators willing to sell the profession down the pike for the sake of short-term political gains.

Operationalizing NAGPRA Provisions

In addition to the conceptual problems, there are also problems with operationalizing NAGPRA. These are thrown into sharp focus by the ridiculous situation surrounding Kennewick Man, a 9,300-year-old human skeleton with allegedly "non-Indian" affinities found eroding out of a cutbank on the Columbia River near the town of Kennewick, Washington, in 1996 (see, for example, Morell 1994, 1998). Kennewick Man is the focus of a bitter controversy that pits Native American religious beliefs against archaeologists' still-evolving theories about human colonization of the New World, and clearly has considerable scientific importance. But,

under their construal of NAGPRA, the U.S. Army Corps of Engineers, which has jurisdiction over the site, wants to turn the skeleton over to the Umatilla Tribe of northeastern Oregon for reburial, with no scientific evaluation of its significance—in fact, no study at all. This effort has been blocked—temporarily, at least—by a lawsuit by eight prominent anthropologists. The case is still in court.

Although by no means unique, Kennewick Man underscores a fatal flaw in NAGPRA, which is predicated on the assumption that anthropologists can in fact identify prehistoric antecedents to extant identity-conscious social groups. However, anyone reasonably familiar with evolutionary biology would recognize immediately that they cannot do that reliably or consistently. Race and ethnicity are fleeting, transient things. They are written on the wind. They do not partake of the timeless “essences” the public, in its lack of understanding of biology and culture, would impart to them (Clark 1997b,c). There is no basis in science for thinking that present-day ethnic groups *even existed* as recently as 400 or 500 years ago, much less in more remote time ranges. The notion of fixed, enduring, bounded ethnicity is positively quaint from the perspective of modern population biology (see, for example, Wolpoff and Caspari 1997, Molnar 1998). Nevertheless, it is endorsed and reified by the type of thinking institutionalized in public policy by our own government. If you are inclined to be skeptical, look sometime at the absurd racial and ethnic categories concocted by the U.S. census and replicated on application forms throughout the land (Clark 1997c, 1998b). Indian claims for ancient skeletal remains based on assertions of ethnic relationship, geographical proximity, or historical connection grounded in “pan-Indianness” are without foundation. Popular conceptions of race and ethnicity as discrete or bounded entities have no basis in modern science (AAA 1998). Consequently, efforts by anthropologists to trace them back very far into the past are likely to be doomed to failure.

Anthropologists have been, and will continue to be, allied with Indians in their quest for social justice and in efforts to improve the socioeconomic conditions of their existence. From the liberal philosophical standpoint to which I—and most anthropologists—subscribe, this is as it should be. However, obstacles to this alliance are created by a simple-minded essentialism that pervades the whole discussion of race and ethnicity in the U.S.—an essentialism that permeates the NAGPRA debate and that has, or should have, no place in the scientific world view. While I am sympathetic to the socioeconomic concerns of Native Americans, I have little patience with, nor sympathy for, the contention that races and ethnic groups are somehow “fixed” and immutable, bounded in space and time. The fact that “the oppressed” (i.e., Indians) subscribe to the same essentialist notions of ethnicity as “the oppressors” (i.e., the government, or Americans in general) doesn’t mean that these notions are scientifically credible (Clark 1997b,c; 1998a). The justification for NAGPRA is ulti-

mately a religious one (for example, Hopi origin myths are invoked to claim control over human remains from roughly 20 percent of the continental United States). That intelligent, well-educated people cannot see the problems with this is due, in my opinion, to ignorance of evolutionary biology (archaeologists usually have little or no exposure to this field), and, more generally, to the human tendency to compartmentalize

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thinking. We shift referential and conceptual formats when we’re talking or writing about science, religion, politics, economics, etc., with little cross-linkage amongst these intellectual domains (Clark 1987).

Wreaking Vengeance on History

NAGPRA is an attempt to redress historical wrongs by giving Indians a voice in the disposition of the remains of their ancient forbearers. However well-intentioned, the law was quickly co-opted by what might be called Indian creationists who have invoked, often successfully, a revealed wisdom in respect of their origins that is not to be challenged, questioned or investigated in any way (Egan 1996, Meighan 1996). These claims do not differ in kind or in detail from those embodied in the Judaeo-Christian origin myth (i.e., the Book of Genesis).

No one disputes that Indians have suffered mightily at the hands of the European colonists who came to dominate American society. No one is arguing that scientists have always acted responsibly in respect of human skeletal material under their curation. No one is suggesting that if we can just somehow “decode” nature correctly, that moral truth will be revealed. Yet the loss of prehistoric skeletal material to science is incalculable, and that consideration should take precedence, in my view, over the religious concerns of Native Americans. *The world views of science and religion are fundamentally incommensurate.* They cannot be reconciled. Science is not about religion, however. Science is not about moral truth, although it can sometimes help us in our struggle to reach moral decisions (Gould 1994).

Clearly, humans did not evolve in this hemisphere. Indians haven’t “always been here,” haven’t always been where they are found today, regardless of what their origin myths might say. I am curious as to how they came to be here, and what happened to them subsequent to their arrival. The best way (in fact, the only way) to get at these questions is through the analysis of prehistoric human skeletal material. The idea that we should spend a bundle of money now to study it like crazy—before we give it back—is ridiculous on the face of it, since it presupposes that science will not advance, and that new avenues of inquiry will not be opened to us. It also assumes that data exist independent of the conceptual frame-

works that define and contextualize them, which, from an epistemological standpoint, is terminally naive (Clark 1991). Most of what passes for intelligent discourse about NAGPRA consists of what I would call "psychodrama," and betrays a near-total ignorance of evolutionary biology on the part of nearly all concerned. Psychodrama is the stuff of religious belief (and politics), and has no place in science. A direct consequence of the national paroxysm of guilt surrounding the quincentenary, NAGPRA is bad law. It is in the interests of Indians and Anglos alike that it be repealed.

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BITTER HARVEST

from page 39

urban legends. The term for the phenomenon is "source amnesia." It occurs because factual information is apparently stored in a different part of the brain than the source of that information. So while the information itself is retained, the source may be misremembered or lost, and of course the source is essential for determining the credibility of the information.

2. Some of the body parts mentioned here, such as corneas and fat, are not organs. The distinction is important because corneas, as nonvascular tissue, need not be implanted in a recipient immediately. They remain viable for between one and two weeks, while a kidney must be implanted within approximately two days. Because of this, claims that kidneys are taken from rural areas in Latin America and shipped to Europe, for example, are highly suspect; the kidneys would likely be unusable when they arrived. In the case of fat theft, the usual reason for the harvesting is not transplanting, so such considerations are not applicable.

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