

An Anthropological Perspective on Magistrate Jelderks' Kennewick Man Decision

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Abstract:

The "Kennewick Man" controversy is an extremely important case in the history of American anthropology. As anthropologists with backgrounds in American Indian studies and American archaeology, we have a particular interest in this case. In this paper we present our perspective on the Kennewick Man case as anthropologists with expertise in archaeology, Pacific Northwest precontact history, Plateau ethnology, and cultural resource law. In general we find that the August 30, 2000, decision of Magistrate John Jelderks of the United States District Court for the district of Oregon to be incorrect and without anthropological foundation. Based on an analysis of the evidence reviewed by the Department of the Interior and Magistrate Jelderks we conclude that the Department of the Interior made a reasonable decision in determining that a preponderance of the evidence supports repatriation of the Kennewick Man to the defendants.

Introduction

In 1996 on the banks of the Columbia River a 9,300-year-old skeleton was found which would become the impetus for the first legal assault on the Native American Graves Protection and Repatriation Act (NAGPRA). After the Army Corps of Engineers (Corps) took possession of Kennewick Man, as he came to be known, they announced their intentions to repatriate the remains to 4 federally recognized tribes and a non-federally recognized band which had historically and prehistorically inhabited the region where the remains were found. At this point 8 prominent scientists filed suit in the federal district court of Oregon to prevent the repatriation, demanding to be allowed to study the remains under NAGPRA, the Archaeological Resources Protection Act (ARPA), and their alleged Constitutional right to do so. The lawsuit resulted in several hearings which reversed the Corps' decision to repatriate the remains and imposed de facto court oversight of the NAGPRA process. The Corps delegated its responsibility to determine whether the remains were Native American and, if so, whether they were culturally affiliated to any modern-day tribe to the Department of the Interior (DOI).

The DOI then commissioned a series of studies as it attempted to determine cultural affiliation (NPS 2003). These studies were then used by the Secretary of the Interior to make his September 2001 determination in which he found the remains to be culturally affiliated with the tribal coalition.

In their filing, the plaintiffs brought 7 claims for relief:

- The first claim, brought pursuant to the Administrative Procedures Act (APA), 5 USC §§ 701-706, sought judicial review of Defendants' (Department of Interior) decision on remand.

- The second claim alleged several specific violations of NAGPRA.
- The third claim alleged that the Defendants (Army Corps of Engineers) violated the National Historic Preservation Act (NHPA), 16 USC § 470 *et seq.*, by burying the site where the remains of the Kennewick Man were found.
- The fourth claim alleged that the Defendants violated the Archaeological Resources Protection Act (ARPA), 16 USC § 470aa *et seq.* by failing to maintain the Kennewick Man remains "for the benefit of the American people, failing to make the remains of the Kennewick Man available for scientific and educational purposes, and failing to properly curate the remains to ensure their long-term preservation as required by an earlier Order of the District Court for the District of Oregon."
- The fifth claim alleged that the Defendants violated the Freedom of Information Act (FOIA), 5 USC § 552, by failing to respond to Plaintiffs' requests for information.
- The sixth claim, brought pursuant to the Declaratory Judgment Act, 28 USC § 2201, set out Plaintiffs' demand for declaratory and injunctive relief based upon violations alleged in other claims.
- The seventh claim, brought pursuant to 28 USC § 1361, sought mandamus relief in the form of an order compelling Defendants to allow Plaintiffs access to the remains of the Kennewick Man "for purposes of study, publication, teaching, and scholarly debate."

After almost 5 years of legal wrangling, on June 19-20, 2001, Magistrate Jelderks heard oral arguments on the scientists' assertion that they have rights to study the remains. Fourteen months after oral argument, Magistrate Jelderks ruled:

- the 9,300-year-old remains were not Native American for the purposes of NAGPRA;
- the remains were not culturally affiliated to the claimant tribes;
- DOI failed to define the “Identifiable Earlier Group” as required by NAGPRA;
- the evidence reviewed by DOI was inadequate to show a shared group identity under NAGPRA;
- coalition claims were inconsistent with NAGPRA.

This paper looks specifically at the anthropology relied upon by the court to throw out the determination that the remains were Native American under NAGPRA and culturally affiliated to the claimant tribes.

Magistrate Jelderks’ 2002 Decision

On August 30, 2002, Magistrate Jelderks announced his decisions in the Kennewick Man case. His 73-page decision does not neatly correspond with the claims outlined above but are reviewed below as presented in his decisional document.

Magistrate Jelderks’ decision was that the Secretary of the Interior had not properly demonstrated that the remains were Native American in origin as required under NAGPRA; therefore, NAGPRA did not apply. This determination paved the way for the plaintiff’s request to study the remains, which the Magistrate granted using authorities found in the Archaeological Resource Protection Act (ARPA) of 1978.

Given the Magistrate’s determination that the remains were not Native American, he deemed it unnecessary to pursue the question of cultural affiliation. However, citing judicial economy (given that he had already reviewed all of the relevant data), Magistrate Jelderks chose to pursue the question concerning cultural affiliation. On this question, Magistrate Jelderks found that the Secretary of the Interior’s decision was “arbitrary and capricious” and not made by a neutral and unbiased decision-maker (Jelderks 2002, 23).

Normally, when a court determines that an agency has made an arbitrary and capricious decision, the Magistrate remands the decision back to the agency to try again (Jelderks 2002, 69). For example, in a similar case concerning Enola Hill, a sacred site in Oregon, the court’s decision made this point clear:

Courts review agency action under the arbitrary and capricious standard “based on the record the agency presents to the reviewing court.” Under this standard, courts do not subject the agency decision to de novo review. Instead, courts “must consider whether the decision was based

on a consideration of the relevant factors and whether there has been a clear error of judgment.” When an agency decision is based upon expert opinion, the agency has discretion to rely on the reasonable opinions of its own qualified experts, even if the court might otherwise find different views more persuasive. A plaintiff challenging an agency decision on procedural grounds bears the burden of establishing that certain procedures were required under the circumstances, and that those procedures have not been followed (*Native Americans for Enola v. U.S. Forest Service* 832 F.Supp. 297, 299-300 (D. Or. 1993); [internal citations omitted]).

In this case, however, Magistrate Jelderks believed that sending the case back to the Department of the Interior would serve “No useful purpose . . .” (Jelderks 2002, 25). He then took it upon himself to determine whether or not the Kennewick Man remains were culturally affiliated with the tribal coalition, in a fashion acting as a qualified anthropologist. Magistrate Jelderks conducted a review of the information presented to the court and decided that there was not enough data to support a determination of cultural affiliation. He also found that coalitions of tribal claimants violated NAGPRA except in specific cases and determined that the Indian Claims Commission related disposition course as detailed in NAGPRA could not be used.

Was the Decision Arbitrary and Capricious?

We do not believe that the decision to assign cultural affiliation to the coalition of tribes was arbitrary and capricious. The Secretary of the Interior based his decision primarily on four lengthy cultural affiliation reports prepared by recognized scholars. One could question the selection of the experts and the approach each took, but each provided enough information to assist in the decision-making process. Moreover, the National Park Service (NPS) obtained additional radiocarbon dates to confirm the age, and attempted to get DNA information despite its own consultants’ report that stated that it was not possible to obtain uncontaminated DNA from the remains.

The NPS followed its procedure for determining cultural affiliation and did so in a methodical manner. Following the direction from Congress to use a vast range of data to make a determination, the Secretary considered archaeological, ethnological, biological, oral tradition, and linguistic evidence. Of all the research conducted for the cultural affiliation determination, no evidence was found to directly contradict the proposition that there is a shared group relationship between Kennewick Man and the tribal coalition. Had

the archaeological, oral tradition, or linguistic evidence indicated a cultural hiatus or cultural replacement in the region, cultural affiliation would have been hard to support, but no such hiatus has ever been proposed and no evidence for it was found for the Kennewick Man analyses. Linguistic evidence suggested a possible link, as did evidence from oral tradition.

Magistrate Jelderks concluded that the DOI's decision regarding cultural affiliation was not reasonably supportable by the data analyzed. However, from an anthropological understanding of the literature analyzed by the DOI, we believe that the DOI's cultural affiliation decision is reasonably supportable from the data analyzed. Under Section 3 of NAGPRA and its implementing regulations the standard of proof is the "preponderance of the evidence." As Secretary Babbitt described in his letter (2000, 4):

this is a threshold that many scholars hesitate to use for interpretations based upon archaeological, anthropological, and historical evidence. The determination to be made here is informed by, but not controlled by, the evidence as a scholar would weigh it. Instead, the determination for the Secretary of the Interior to make is the one that, on the evidence, would best carry out the purpose of NAGPRA as enacted by Congress.

He further stated that the "DOI construes the statute as Indian legislation. Therefore, any ambiguities in the language of the statute must be resolved liberally in favor of Indian interests" (2000, 2). Although the literature cited in the DOI decision is not exhaustive, it does cover the majority of studies, especially those that are comprehensive in structure.

Under 25 USC 3002(a)(2)(b) geographical, kinship, biological, archaeological, anthropological, linguistic, folklore, oral tradition, historical, and other relevant information and expert opinion must be weighed equally. What this means is that of the ten categories of possible information, each contributes equally to the decision-making process, and if one category is inconclusive it should be interpreted as so and not as supporting or not supporting affiliation. In general the DOI found that kinship (direct ancestry) and folklore were not applicable because of the age of the remains. Instead, the DOI found in favor of the tribes on geographical, historical, anthropological (ethnographic), and evidence from oral tradition. The DOI concluded that linguistic and archaeological evidence is insufficient to support either affiliation or non-affiliation. Biological (morphologically based – no DNA could be extracted from the remains) evidence was found to not favor the tribes. Thus the

"preponderance of the evidence" (43 CFR 10.14(e)) would support cultural affiliation of the Kennewick human remains to present-day tribes of the Interior Columbia Basin.

However, Magistrate Jelderks concluded that the DOI's cultural affiliation determination could not be sustained because it:

- a) did not adequately determine 'an identifiable earlier group' to which the Kennewick Man allegedly belonged, or even establish that he belonged to a particular group, b) did not adequately address the requirement of a 'shared group identity,' c) did not articulate a reasoned basis for the decision in light of the record, and d) reached a conclusion that is not supported by the reasonable conclusions of the Secretary's experts or the record as a whole" (Jelderks 2002, 38).

In forming his conclusion Magistrate Jelderks relied heavily on the numerous gaps in both the archaeological and biological record in making his claim that the DOI's decision was "arbitrary and capricious" as well as in his own interpretation of the prehistory of the Columbia Plateau (2002: 40, 42, 47, 48). However, as is noted in NAGPRA, the criteria for determining cultural affiliation "should not be precluded solely because of some gaps in the record" 43 CFR § 10.14(d).

Magistrate Jelderks demonstrated a clear lack of understanding of both anthropological theory and American Indian prehistory in the Plateau in his interpretation of what "cultural affiliation" and "identifiable earlier group[s]" are as set out in the NAGPRA guidelines. These guidelines are as follows:

- c) Criteria for determining cultural affiliation. Cultural affiliation means a relationship of shared group identity that may be reasonably traced historically or prehistorically between a present-day Indian tribe or Native Hawaiian organization and an identifiable earlier group. All of the following requirements must be met to determine cultural affiliation between a present-day Indian tribe . . . and the human remains, funerary objects, sacred objects, or objects of cultural patrimony of an earlier group:

- 1) Existence of an identifiable present-day Indian tribe... with standing under these regulations and the Act; and
- 2) Evidence of the existence of an identifiable earlier group. Support for this requirement may include, but is not necessarily limited to evidence sufficient to:
 - i) Establish the identity and cultural characteristics of the earlier group,

- ii) Document distinct patterns of material culture manufacture and distribution methods for the earlier group, or
 - iii) Establish the existence of the earlier group as a biologically distinct people; and
- 3) Evidence of the existence of a shared group identity that can be reasonably traced between the present-day Indian tribe... and the earlier group. Evidence to support this requirement must establish that a present-day Indian tribe... has been identified from prehistoric or historic times to the present as descending from the earlier group. 43 CFR § 10.14

This is confusing language; several anthropologically based ideas are interchanged with the legal mandates of determining cultural affiliation. However, it can be reasonably comprehended if we understand the word “group” to be a subset of “culture.” This is the most parsimonious understanding because it is well known in Plateau ethnography that numerous groups shared a similar cultural identity and epistemology. Taking the NAGPRA statute, Magistrate Jelderks identified the need to define the “earlier group” of which Kennewick Man was a member. Unfortunately, Magistrate Jelderks seemed to be confused by the differences between “group” and “culture.” He stated that the Secretary of the Interior acted “as if there were only one group in this large area during that time. However, the record clearly indicates that as many as 20 highly mobile groups anywhere from 175 to 500 members, may have resided in the region.”

Magistrate Jelderks did not understand that these groups composed the Windust/Cascade *culture*. It is that culture that NAGPRA must mean when it uses the term “group.” How do we know this? Quite simply, when dealing with prehistoric time-periods cultures, not groups, become the scale that can be studied. It would not be reasonable to assume that Congress wanted to require proof at Magistrate Jelderks’ “group” scale, because groups can seldom be identified archaeologically. The result would mean that rarely would precontact human remains ever be returned under NAGPRA. To agree with Magistrate Jelderks would again require us to assume that Congress had intended to create “odd or absurd results.”

Furthermore, it is also well known from Plateau ethnography that the present-day reservation tribes are a fabricated construction of the federal government; prior to the construction of the reservations the tribes of the Columbia Plateau were split up into many groups who shared a similar cultural identity and epistemology (Walker 1998). Therefore, we can interpret the

language above as requiring the existence of an earlier “tribe” (or specific “group”) that shared a particular cultural identity which can be reasonably traced to the present-day Indian tribe(s) who also share this particular cultural identity, or what may be reasonably attributed to them given cultural change and evolution. NAGPRA states that this must be done by looking at geographical, kinship, biological, archaeological, anthropological, linguistic, folklore, oral tradition, historical, and other relevant information and expert opinion in determining cultural affiliation and identity.

We have conducted a comprehensive review from an anthropological perspective of the documents used in both the DOI’s and Magistrate Jelderks’ decisions. The review shows that the DOI’s decision was not “arbitrary and capricious” in its findings that Kennewick Man is “Native American” and that cultural affiliation with the defendants can be demonstrated based on a “preponderance of the evidence.” The review also demonstrates that Magistrate Jelderks lacked understanding of relevant anthropological knowledge of the Plateau area.

Are the Remains “Native American?”

Magistrate Jelderks, following the logic of the plaintiffs, focused initially on the question of whether or not the remains were Native American. He asked for the NPS’s definition of “Native American” and dissected the statute language in an attempt to discover what Congress intended. While determining whether or not human remains are Native American is a precursor to invoking NAGPRA, we note that this question has never been, nor is it even today, an issue when confronted with human remains that are thousands of years old found in North America. On this matter we find that Magistrate Jelderks expended entirely too much energy and, in the end, developed a convoluted logic and unsubstantiated intent of Congress to justify his position that the NPS failed to prove that Kennewick Man was Native American.

Implementation of NAGPRA is by the authority of the NPS. The NPS provided a definition of Native American consistent with current archaeological and anthropological thought. Magistrate Jelderks expressed dissatisfaction over the matter of the 1492 date used in the definition (“any remains dating prior to 1492 are ‘Native American’ cannot be fairly characterized as ‘longstanding’” [Jelderks 2002, 27]) – again, a misunderstanding of the anthropological data.

The 1492 date has no relevance when it comes to dispositioning the remains of an 9,300-year-old man. Nevertheless, Jelderks fixated on the hypothesis of a person from Africa or Scandinavia finding his way to

North America and his remains being assigned as Native American simply because they were found in North America and predate 1492. In the remote case that such an event occurred – and we note that Magistrate Jelderks does not cite any cases where this has occurred (because there are no examples) – we can assure Magistrate Jelderks that justice will be served. The remains and associated context would result in their being assigned as culturally unaffiliated, and they would be treated in an appropriate manner.

Magistrate Jelderks also spent a great deal of time trying to establish what Congress intended. He might have saved time had he consulted anthropologists rather than dissecting sentences and attempting to determine what Congress meant by terms such as “is.” Quite simply, Congress’s use of the term “Native American” was intended to mean any cultural group living in North America before the settlement of North America by European groups (pre-1492). We know this because that is what virtually all anthropological and archaeological professionals believed in the 1980s; it is what the professional community portrayed to the public and would have portrayed to legislators, and it is still the accepted understanding.

For example, consider a quote from a leading textbook from 1978 by famed archaeologist Jesse D. Jennings. He begins the discussion by talking about how the earliest humans found in the New World were long-headed people and goes through various theories at that time and then concludes, “Lacking better data, it is therefore taken as a given that the founding New World population was, in fact, Asiatic Homo Sapiens of Caucasoid-Mongoloid mixture and that the American Indian evolved in the New World in response to a variety of environmental and evolutionary processes” (Jennings 1978, 18).

In short, the NPS defined “Native American” appropriately and its definition is consistent with current anthropological theory. Magistrate Jelderks invented the requirement that a prehistoric skeleton be “proven” Native American, a requirement without foundation. There is no reason to assume that Congress intended that there be such a requirement; institutionalizing such a requirement would result in costly and questionable research that would harm the very remains that Congress passed NAGPRA to protect. As Magistrate Jelderks himself stated (2002, 27), “When interpreting statutes, courts do not assume that Congress intended to create odd or absurd results” (*United States v. X-Citement Video, Inc.* 513 U.S. 64, 69-70 [1994] citing *Public Citizen v. United States Department of Justice* 491 U.S. 440, 453-455

[1989]). It would be odd or absurd to assume that Congress wanted all prehistoric burials to be subjected to costly, destructive, and lengthy analyses before being placed under the purview of NAGPRA.

Magistrate Jelderks’ conclusions surrounding the “Native American question” indicate that he lacked the anthropological understanding to perform this level of analysis. He stated, “The record would not support a finding that the ancestors of the American Indians were the only people here in prehistoric times, or that only one culture existed throughout prehistoric times. Congress did not create a presumption that items of a particular age are ‘Native American’” (Jelderks 2002, 31). In reality, the ancestors of American Indians are the only documented groups known in prehistoric North America; no one suggests there was only one culture, at least not after the Clovis people, ca. 1,200 years ago, and Congress did create a presumption that items of a particular age are Native American.

Are the Remains Culturally Affiliated with the Tribal Coalition?

In determining that the Secretary of the Interior’s decision was arbitrary and capricious, Magistrate Jelderks found that the Secretary did not:

- adequately determine “an identifiable earlier group”;
- adequately address the requirement of “shared group identity”;
- articulate a reasoned basis for the decision in light of the record;
- reach a conclusion that is supported by the reasonable conclusions of the Secretary’s experts or record as a whole (Jelderks 2002, 38).

Geographical and Kinship Evidence

Geographical and kinship evidence are not applicable in the Kennewick Man case. It is well established that the defendants have resided in the Columbia Plateau for as long as recorded history. Geographical evidence is only used in cases where the claimants no longer reside in the area of provenance for the item(s) being requested for repatriation under NAGPRA. Similarly, kinship evidence is only used when it is necessary to trace direct lineal descent between a NAGPRA claimed item and a particular group of individuals. For example, in cases for repatriation of various sacred objects, kinship evidence may need to be demonstrated between the object and the group of individual(s) requesting repatriation.

Biological Evidence

The biological reports cited by the DOI's decision, and analyzed by Magistrate Jelderks, do not deal with the Plateau specifically but are primarily concerned with the peopling of the Americas and the original populations from whom American Indians are hypothetically derived. These reports conclude that American Indians came from one of 3 possible geographic regions in Asia (see below). Three subcategories exist within the biological evidence: 1) dental studies; 2) craniometric studies (morphological analyses); and 3) genetic studies.

Dental Studies

There are 2 basic, discrete dental types in Asia: the Sundadont and the Sinodonts. The Sundadonts are believed to have arisen sometime between 30,000-17,000 years ago in Southern Asia. A branch group of the Sundadonts migrated to northeastern Asia and gave rise to the Sinodonts. Turner (1985, 1989) believes that small Sinodont populations migrated to the Americas, most likely in 3 waves (Greenberg et al. 1986; Greenberg 1987). Powell and Rose (1999) conducted an osteological assessment of Kennewick Man for the DOI and found that "Although it is tempting to try to assign Kennewick to either the Sinodont or Sundadont (Turner 1990) patterns, it is simply not possible to attribute the Kennewick individual's dental discrete traits to either the Sinodont or Sundadont groups based on gross morphological observations" (1999, 6). This is because Turner's dental patterns are based on relative frequencies of 8 key traits based on a large Asian sample, and selecting any individual drawn at random from either the Sinodont or Sundadont groups may exhibit none, some, or all of the characteristics associated with that group. Powell and Rose also conducted a discrete trait analysis on Kennewick Man's dentition, finding that "Kennewick had a probability of 0.48460 for membership in the Sinodont group, 0.93769 for membership in the Sundadont group" (1999, 18). This is in congruence with most of the genetic studies that suggest that American Indians began migrating to the Americas between 40,000 and 25,000 years ago. As the Sundadonts moved to northeastern Asia and gave rise to the Sinodonts it is very likely that many of these Sundadonts/Sinodonts were some of the groups that made their way to the Americas at this time. Thus, the dental evidence, although somewhat inconclusive as to Kennewick Man's cultural affiliation, does support the hypothesis that he is Native American.

Craniometric Studies

Cranial morphology is a method used by biological anthropologists to measure similarities among crania. Because of the limited sample size (n=25) of skeletons prior to 8,500 BP, craniometric morphological measurements are of very limited scientific value. Although most of these studies claim that Paleoindian skeletons are most similar to south Asian and Polynesian populations, they also note many of the limitations in reaching such conclusions. Steele and Powell (1992, 319-320) note "that braincase shape alone cannot be used as a diagnostic character to differentiate all world populations and that dolichocrancy can occur in all geographic populations." They also state:

we still face the most difficult task of all. Are these distinctive structural features a reflection of subtle differences in the genomes of these earlier populations, or do the differences reflect an adaptational difference, an adaptation accomplished by the plasticity of human growth and development? At present, we cannot accurately answer this question (Steele and Powell 1992, 312-313).

Although the reports cited in the DOI's decision conclude that Paleoindian skeletons are more similar to those of Polynesian and South Asian populations, some found that Paleoindians, "both male and female samples, did not differ significantly from the majority of the samples with which they were compared" (Steele and Powell 1999, 110). Others found that their skulls "fall outside the range of any modern population represented by currently available samples" (Jantz and Owsley 1997, 79). Finally, as Hackenberger (2000, 4) notes, "however, as of yet, no other comparisons with early Northwest specimens have been published with similar statistical techniques."

The human skeleton is one of the most "plastic" morphological aspects of our species. The human skeleton responds to a wide array of environmental, dietary, genetic, life course, and cultural forces to which it is exposed. As Swedlund and Anderson state, "we have volumes of data on how the cranium responds to nutritional, dietary (they are not the same), and environmental forces within the life span, particularly during growth and development" (2003, 163). Similarly, and of particular importance to Kennewick Man, comparing crania(um) from one 8,000+ year-old individual to those of modern populations is inherently misleading:

This is problematic, because a specimen that might date approximately 8,000 years older than its closest reference sample is not only separated by geographic distance but also by considerable temporal distance. We can translate this into very approximate generation times (e.g., 8,000 years/20) and quickly discover that we are talking about a “distance” of approximately 400 generations in which gene flow, drift, mutation, and natural selection have had an opportunity to operate between the specimen and its referents. Add to this environmental plasticity and it is not at all surprising to us that some early Archaic American specimens might plot more closely to Asian, Eurasian, and even European samples (Swedlund and Anderson 2003, 163).

Because of the time span involved in the Kennewick Man situation, the DOI noted that although the Kennewick crania falls outside any modern group, because of the lack of the number of specimens “the analyses are not particularly robust,” and that “Although the Kennewick remains do not have a close affinity to any modern group, metric data do suggest an association with the small number of early Holocene human remains” (DOI 2000, 21). Therefore, although the evidence is inconclusive as to morphological heritage, it is reasonable to conclude that Kennewick Man and other similar early Holocene human remains such as the Spirit Cave mummy, Gordon Creek woman, and the Marmes burials, are Native American.

This conclusion allowed the DOI to proceed with their analysis under NAGPRA. However, because Magistrate Jelderks lacked a background in general physical anthropological understanding, he misinterpreted this evidence. Magistrate Jelderks concluded that because Kennewick Man’s morphological characteristics fall outside of the range of any known population, including contemporary American Indians, the remains must not be Native American as required under NAGPRA. This finding allowed Magistrate Jelderks to dismiss much of the NAGPRA claim and to state that the remains fall under ARPA.

Genetic Studies

Because of the failure to extract, amplify, and analyze any genetic material from the Kennewick remains, only a few genetic reports were cited by the DOI. Most genetic studies done to date locate the ancestral population of American Indians somewhere in Northern Asia or Siberia in either a single wave of migration (Bianchi et al. 1997; Easton et al. 1996;

Merriwether et al. 1995) or several waves (Karafet et al. 1997). It should be noted that these genetic studies have many limitations which have been discussed elsewhere (Jones 2002). However, because no genetic material was recovered from the Kennewick remains, this line of evidence is not directly applicable.

Current biological anthropology attributes the origins of Paleoindians to one of 3 geographic locations in Asia. Dental characteristics show that Paleoindians arose in Northern Asia sometime around 20,000 years ago (Turner 1985, 1989). Craniometric analyses tend to show Paleoindian populations are most similar to Polynesian and South Asian populations morphologically, although some Paleoindian skulls either reside on the extreme of the American Indian range or are not similar to any modern population (Jantz and Owsley 1997, 1998; Owsley and Jantz 1999; Powell and Rose 1999; Steele and Powell 1992, 1994, 1999). Finally, genetic studies presently conclude that the ancestors of modern American Indians were from Northern Asia or Siberia (Merriwether et al. 1995; Schurr and Wallace 1999). Thus, the current database in biological anthropology tells us that Paleoindians (the ancestors of Kennewick Man as well as present-day American Indians) arose in Asia between 35,000-20,000 years ago and made their way to the Americas. However, there is no evidence to support the idea that Kennewick Man and other early Holocene remains found in the Americas are not Native American; in fact, it would seem to support this conclusion.

Archaeological Evidence

Like the biological evidence, the archaeological evidence contains numerous gaps in its database. The DOI and Magistrate Jelderks both recognized this fact, although they came to very different conclusions based on it. The DOI noted that although there are “gaps” in the archaeological record, these may not be used solely to construe a lack of cultural affiliation based on NAGPRA guidelines. Furthermore, these “gaps” are evidence of a lack of knowledge, not of cultural displacement or migration. Magistrate Jelderks, however, interpreted these “gaps” differently. He concluded that because there are various “gaps” in the archaeological record, like those in the biological record, there is no evidence of cultural continuity and that cultural displacement or migration may have occurred, even though anthropological theory and current understanding does not support this.

Much archaeological research in the Columbia Basin did not begin until after World War II:

While fieldwork on the Plateau began well before World War II, its real impetus was post-war dam construction, and the resulting River Basin Surveys of the 1950s. The great majority of projects since the 1950s have been related to dams and reservoirs. Within the last 25 years work has expanded out of the canyons and river bottoms. Virtually all of this work is also CRM related in the form of Forest Service projects, pipeline projects, etc. An impressive body of evidence has built up, but it has significant limitations. Excavations in the canyons, for example, focus on pithouse sites, and on the house pits themselves. We have, therefore, far more information about the contents of the structures than we do for exterior activity areas (Ames 2000, 2).

The nature and basis of CRM (Cultural Resource Management) work is speed and superficiality. Most CRM excavations do not include extensive screening for microbotanical and microzoological remains or other customary methods of site excavation. For example, it is doubtful that if a site contains numerous fish bones, that CRM excavations would identify them as to species. Furthermore, many smaller, less structurally based sites, such as lithic scatters, pit houses, and temporary campsites that we would expect to find associated with early and middle Holocene time periods, are not usually excavated by CRM work.

Despite a relative lack of thorough, scientific excavations in the Columbia Plateau, regional archaeologists have established an agreed-upon cultural chronology that is relatively consistent across the Plateau. Nevertheless, some time sequences used by a few archaeologists can be vary confusing and of a microregional nature. The basic time periods used by Ames (2000), Ames et al. (1998), and the U.S. Department of the Interior (2000) are following:

Period IA (11,500-5000/4400 BC) – includes Clovis type points (many archaeologists term these points Western Fluted [Grayson 1993; Beck and Jones 1997; Dixon 1999]) and is weakly represented. This subperiod is only distinguishable from Period IB by the types of points found; subsistence and mobility patterns are considered the same between these 2 subperiods.

Period IB (11,500-5000/4400 BC) – includes Windust and Cascade type points. These are the types of points found at a majority of sites during this time; one was found embedded in Kennewick Man. Subsistence orientation emphasizes riverine environments with exploitation of salmon, other fish species, large mammals (including bison), medium

mammals (i.e., rabbits), and a wide variety of plant life including camas bulbs and berries (Ames 2000; Ames et al. 1998; Campbell 1985; Cressman 1977; Dixon 1999; Erickson 1990; Galm 1994; Hicks 2000; Jaehnig 2000; Uebelacker 2000). It should be noted that the original report on the Marmes burial by G.S. Krantz (1979) concluded that the skeletons from this site did not differ in any determinable way from modern American Indians. This assertion has never been questioned; the Marmes skeletons have not been used, to our knowledge, in any of the biological studies that claim Paleoindians are not related to modern American Indians.

Period II (5000/4400-1900 BC) – includes the Tucannon phase. There are no major differences between Period II and Period I. The differences that can be seen in the archaeological record are the result more of cultural adaptation and technological changes than of cultural population displacement (Ames et al. 1998; Cressman 1977; Dixon 1999; Erickson 1990; Hess 1997; Hicks 2000; Jaehnig 2000; Uebelacker 2000). Subsistence orientation continues with an intensification of uses of salmon and other anadromous fish, but medium size mammals (rabbits) are not well represented and seem to fall out of use. Ames (2000, 6) construes this as evidence for subsistence patterns being “significantly different than during previous periods,” although in Ames et al. (1998) he sees little change between Period I and Period II (Ames fails to define his use of “significantly”). Pithouses are found in the southeastern and south-central areas of the Columbia Plateau by 4000 BC, and some areas exhibit evidence of long periods of occupation. It should be noted that these pithouses occur both in riverine canyons and on the southern uplands, an occupation pattern that is similar to the ethnographic record.

Period III (1900 BC-AD 1720) – According to Ames (2000) this period shows the most change between preceding Periods I and II. There is an intensification of camas and other root exploitation, more exploitation of fish, increased population, evidence of storage pits, and an increase in number and sizes of pithouses (Ames 2000). However, many archaeologists (Hicks 2000; Jaehnig 2000) attribute most of these changes to the changing climatic patterns during this time when there were cooler, wetter springs and summers early in the period and then warmer, more modern climate environments toward the end. Although Period II showed some signs of the modern Plateau cultural pattern, such as long periods of occupation of particular riverine and

upland sites, this is the period during which most archaeologists believe that the modern Plateau cultural patterns emerged.

Modern Period (AD 1720-Present) – This period is covered by the ethnographic literature and continues the patterns established in Period III.

As most archaeologists have noted, as well as Ames himself (1998, 2000), there is no evidence in the archaeological record of displacement or migration of any Columbia Basin peoples throughout prehistory. There are various “gaps” in the archaeological literature because of the nature of CRM work which makes it difficult to locate Plateau research reports (Lyman 1985, 1997; Ames 2000), and because of the relative lack of deeply stratified sites that span all time periods, but none of these “gaps” can be looked at as evidence of cultural displacement or of migration into or out of the Columbia Plateau. Furthermore, there is a preponderance of evidence to support continuing cultural adaptation and technological change. This evidence of continuity includes:

- The exploitation of salmon and other fish species dating back 11,000 BP and extending to the present (Ames et al. 1998; Cressman 1977; Dixon 1999; Hicks 2000; Jaehnig 2000; Roll et al. 1998; Schalk et al. 1998);
- Continued exploitation of camas bulbs, berries, and other plant species dating back 11,000BP and extending to the present (Ames et al. 1998; Chatters et al. 1998; Cressman 1977; Green et al. 1998; Gustafson 1972; Hicks 2000; Jaehnig 2000; Roll et al. 1998);
- Occupation of a central locality around which various groups or bands would move throughout the seasons exploiting various subsistence resources (Ames et al. 1998; Chatters et al. 1998; Cressman 1977; Dixon 1999; Hicks 2000; Jaehnig 2000; Lohse et al. 1986; Roll et al. 1998; Uebelacker 2000);
- A progression in lithic technology from stemmed and shouldered lanceolate and notched projectile points during Period IB to stemmed, corner, and side-notched projectile points during Period II to Period III's containing smaller notched projectile points, although stemmed and corner varieties continue (Hicks 2000; Jaehnig 2000; Leonhardy and Rice 1970; Uebelacker 2000). This progression can be seen as a logical development of projectile points used with atlatls and spears during Period I and Period II to the development/adaptation of the bow and arrow at the end of Period II and Period III (Dixon 1999).

It should also be noted that all projectile point types overlap in time (Hicks 2000);

- Continuing evidence of trade and exchange from 11,000 BP to the present (Erickson 1990; Galm 1994; Hayden et al. 1997). This includes the trade and exchange of obsidian from southern Oregon, central Idaho, and British Columbia around Mount Edziza and Anahim (Galm 1994; Fladmark 1985) and Newberry Crater (Connolly 1999), and the use of saltwater shells including *Olivella biplicata*, *Dentalium pretiosum*, and fourteen other genera (Erickson 1990). This pattern of trade and exchange increases through time, culminating in the famous trading centers described in the ethnographic literature at such places as the Dalles and Celilo Falls (Hayden et al. 1997; Stern 1998)

In our view, and for the reasons given above, the evidentiary gaps in Ames' archaeological study are primarily a result of lack of data and sites and are not necessarily indicative of cultural discontinuity. We have shown above that current understanding of the prehistory of the Plateau supports cultural continuity and continuing adaptation, not discontinuity and/or displacement. As Ames et al. (1998, 111) note:

if there is a cultural manifestation represented during this interval, then, it is clearly transitional in its stylistic elements between the better represented Period IB, and the vastly better represented Period IIIA. Any such entity must also have continued the subsistence orientation of the earlier time and continued a pattern of living that involved ephemeral and shifting, rather than stable, settlements [We doubt that these settlements were all that ephemeral or shifting.].

Linguistic Evidence

Gaps in the linguistic data are primarily the result of the difficulty in reconstructing languages beyond 4000-5000 years ago. Because of this fact, Magistrate Jelderks dismissed linguistic evidence as supporting neither cultural affiliation nor the designation of Kennewick Man as “Native American” under NAGPRA. However, anthropological understanding comes to a much different conclusion. Joseph Greenberg (1987) relied on the technique of glottochronology, which examines the rate of retention of a specific list of 200 words, and has determined that slightly more than 80 percent of this list is retained over 1,000 years. Although Greenberg's designation of 3 primary language families (Amerind, Na-Dene, and Aleut Eskimo) as ancestral to all contemporary

American Indian languages has been contested, many linguists have agreed on his designations of subphylums, including Penutian. Sahaptian (the modern language family of the Nez Perce, Yakama, and other Interior Columbia Basin Tribes) is a Penutian language; Ruhlen (1994), Swadesh (1954), and Hunn (2000) believe that Penutian's ancestral homeland is in southern Oregon and northern California. Likewise, Hunn (2000) and Rigsby (1969) believe that Proto-Penutian was spoken in the Columbia Plateau dating back to as early as 8,000-9,000 years ago. One of the primary arguments against linguistic affiliation in the plaintiffs' documents is that even if Kennewick Man did speak a Penutian language, it would be unintelligible to modern-day American Indian peoples of the Plateau. This is true for all languages over time, but this does not logically lead to the conclusion that modern American Indian peoples of the Plateau are not linguistically affiliated or descended from Kennewick Man. All languages evolve over time; it can only be reasonably concluded that 2 peoples are not linguistically affiliated if they speak languages from different phylums. This is not the case in the Plateau, as noted by Hunn (2000), Rigsby (1969), and Ruhlen (1994). Therefore, the preponderance of evidence suggests that the Plateau is the location where Penutian, and subsequently Sahaptian, developed; it can be concluded that prehistoric American Indian peoples of the Columbia Basin spoke an earlier version of either Penutian or Sahaptian.

As we have noted, although there is a lack of evidence for Sahaptian language usage before 2000-4000 years BP, it does not make it improbable that this language, or a proto version of it, was not spoken on the Plateau prior to this time. In fact, several linguists and other researchers support the idea that Penutian (the language family encompassing Sahaptian) originated in southern Oregon and that there is no evidence that any other language has ever been spoken in the Plateau (Hunn 2000; Ruhlen 1994; Swadesh 1954). Anthropologically, then, there is no evidence that any other language has ever been spoken on the Plateau, and that an early form of Penutian was, therefore, most probably spoken by Kennewick Man and his descendents.

Evidence from Oral Tradition

Magistrate Jelderks asserted that the DOI inappropriately weighed evidence from oral tradition. We believe this is a misunderstanding of the complexity involved in using oral tradition as evidence (Echo-Hawk 2000; Mason 2000). Because of this difficulty, the DOI covered several pages discussing

the merits and drawbacks of using oral tradition in this case. Magistrate Jelderks interpreted this as a "weighing" of the evidence from oral tradition. As we will explain below, evidence from oral tradition is very complex and necessitates a fair amount of coverage to arrive at an appropriate conclusion.

A large body of oral tradition (and mythology) exists throughout the Plateau tribes sharing common creation stories describing a time when the Columbia River was dammed by Monster and how Coyote killed Monster and broke the fish dam to allow salmon to swim up the Columbia River (Clark 1953; Ramsey 1977; Walker and Mathews 1994). Similarly, such oral traditions as "Blood Red Lake" (Clark 1953, 72), "How Coyote made the Columbia River" (Clark 1953, 88), "Legends of Steamboat Rock" (Clark 1953, 112), "Origin of the Palouse Falls" (Clark 1953, 117; Colville 2000, Part 2c), "The Serpent Monster and Rock Lake" (Colville 2000, Part 2c), and "The Animal People's Race and the Palouse Hills" (Colville 2000, Part 2c) all have been interpreted as describing the immense glacial floods, lakes, and river channels of the Late Pleistocene and Early Holocene.

We believe that the oral traditions (myths) referring to "nomadic people" and "Stick people," as well as "rains," do not diminish the weight of the evidence from oral tradition. In the documents cited in the DOI decision there is no mention of nomadic people or other groups coming into the Plateau, or of any groups prior to the modern-day Columbia Basin peoples. There is mention of "Stick people" or "Stick Indians" in the myths but we believe that the plaintiffs' interpretations of these myths are quite misleading. In *Coyote Was Going There: Indian Literature of the Oregon Country*, compiled by Jarold Ramsey, there is a tale of "Stick Indians." As it is explained in this tale the Stick Indians were not another group of people but "spirits who live in high gloomy places, like Grizzly Flats (south of Mount Jefferson) and upper Shitike Creek (southwest of Warm Springs Agency)" (Ramsey 1977, 85). The mention of "rain" in the plaintiffs document can be reasonably bound to the time the Plateau experienced a wetter, cooler climate, around 1900-1000 BC. A large body of oral tradition reasonably describes the late Pleistocene and the major cataclysmic floods that took place during this time. Oral traditions and myths that may describe this time are "Coyote and the Swallowing Monster" (Ramsey 1977), "Creation of the Animal People," "How Coyote Made the Columbia River," "The Origin of Palouse Falls" (Clark 1953), and many others not cited by the plaintiffs or in the DOI's decision.

Summary of the Cultural Affiliation Question

The NPS followed its procedure for determining cultural affiliation and did so in a methodical manner. Following the direction from Congress to use a vast range of data in making a determination, the Secretary considered archaeological, ethnological, biological, oral tradition, and linguistic evidence. Of all the research conducted for the cultural affiliation determination, no evidence was found to directly contradict the proposition that there is a shared group relationship between Kennewick Man and the tribal coalition (Fig. 1). Had the archaeological, oral tradition, or linguistic

evidence indicated a cultural hiatus or cultural replacement in the region, cultural affiliation would have been hard to support. But no such hiatus has ever been proposed and no evidence for it was found for the Kennewick Man analyses. Linguistic evidence suggested a possible link, as does oral traditions.

In short, the Secretary of the Interior did not make an “arbitrary and capricious” decision. Magistrate Jelderks may not have liked the decision; he may not have understood the decision, but that is no basis for ruling that the decision was “arbitrary and capricious.”

Knowledge Base	Supporting	Defeating	Neutral
Archaeology			X
Ethnology	X		
Bioanthropology		X (possibly neutral)	
Linguistics			X
Oral Tradition	X		

Figure 1. Evidence for Determination of Cultural Affiliation.

Appropriateness of Joint Claims

Magistrate Jelderks took exception to the idea that 2 or more tribes banded together to file a joint claim, except in the most specific of cases. He supported his position by quoting “present-day tribe” language in the law and regulations. This is another example of his lack of anthropological understanding forcing him to attempt to interpret language and the intent of lawmakers. While we refer today to groups such as the Yakama Nation, Nez Perce, and CTUIR as “tribes,” in reality they are assemblies of smaller groups that the U.S. Government organized through the treaty or executive order process. In the past, and still today, these groups intermarried on a regular basis (Anastasio 1972). Likewise, they traveled to places to trade and socialize together. In a very real sense, all of the Plateau tribes are related; therefore, all have a shared group identity with prehistoric Native Americans. Furthermore, it is their shared group way for those tribes with ties to places where remains are found to take the responsibility to care for the remains. Likewise, it is noted that the Palus and Joseph Bands of Nez Perce reside on the Colville Reservation, and some Palus reside on the Yakama Reservation, continuing to share a larger “group identity.” In the Kennewick case the coalition comprises those tribal governments representing people who share culturally

continuous links to the area where the Ancient One was laid to rest. This fact may not fit the world as Magistrate Jelderks wants but it’s the way it is.

Use of the Indian Claims Commission

Magistrate Jelderks reasoned that the DOI was incorrect in relying on Section 3(a)(2)(c) of NAGPRA (25 U.S.C. 3002(a)(2)(c)) as part of its decision-making process. This section of NAGPRA states that, “If the cultural affiliation of the objects cannot be reasonably ascertained and if the objects were discovered on Federal land that is recognized by a final judgment of the Indian Claims Commission or the United States Court of Claims as the aboriginal land of some Indian tribe . . .” the objects can be repatriated using the ICC or U.S. Court of Claims decision as a basis of evidence. As Magistrate Jelderks correctly noted, the defendants acknowledged that the location of the discovery of Kennewick Man has never been subject of a final judgment of the ICC or the U.S. Court of Claims. Because of this acknowledgement by the defendants, Magistrate Jelderks found that the DOI was incorrect in relying on this section of NAGPRA in part of its decision-making process. However, because of Magistrate Jelderks’ lack of anthropological understanding concerning the Plateau, he misconstrued the DOI’s reasoning behind citing this line of evidence. The DOI likewise noted that the

location of the remains have never been subject to a final judgment of the ICC or the U.S. Court of Claims, but it also noted that the reason for this is because of the importance of the Columbia River for Plateau tribes and their shared use of the river's cultural and natural resources. As Stern (1998), Walker (1998), and many others have noted, the Columbia River was an important shared resource for the Yakama, Nez Perce, Umatilla, Colville, and other tribes. Because all of these tribes shared the Columbia River and its natural and cultural resources, an ICC or U.S. Court of Claims final judgment could never be rendered. It is also for this reason that the DOI mentions this line of evidence. All of these tribes share a cultural affiliation with the area where Kennewick Man was discovered. It is partly for this reason that they filed a joint claim.

Conclusion

It is clear to us that Magistrate Jelderks exceeded his authority legally and intellectually. This is not the first time that Magistrate Jelderks has confused his role in hearing a cultural resource related case. In the Enola Hill case from Oregon, the U.S. Forest Service refused to accept Enola Hill as a Native American Traditional Cultural Property (TCP) and was sued. Magistrate Jelderks heard what is considered the fourth Enola Hill case (*Native Americans for Enola et al v. U.S. Forest Service* 1992), as explained below:

Oral arguments for this case were heard in December of 1992. After a short hearing, Magistrate John Jelderks would eventually rule that the Forest Service was in compliance with the law. More importantly, Magistrate Jelderks refused to grant a temporary restraining order preserving the site until the case could be heard on appeal. Issues regarding the validity of Enola Hill as a TCP brought up in the hearings, however, did not escape the Magistrate's attention. Magistrate Jelderks also rules that Enola Hill was not eligible for listing on the National Register as a TCP in his summary judgment released in June 1993. The eligibility of historic properties is not determined in the courts but is solely the responsibility of the Keeper of the National Register, thus it was inappropriate for Jelderks to make such a ruling. Consequently, that point was later vacated on appeal in what could be characterized as the fourth Enola Hill Court case (Occhipinti 2002, 21).

As we have discussed throughout this paper, Magistrate Jelderks overstepped his legal and intellectual boundary. The DOI made their decision based on the "preponderance of the evidence" as

mandated by NAGPRA. Furthermore, as the DOI noted, a decision should be informed by science, but not directed by science. Magistrate Jelderks, however, appeared to conclude that NAGPRA should be directed by science, which defeats the purpose of NAGPRA itself. Although Magistrate Jelderks raised some questions regarding the treatment and judicial processes involved in this case, he presented no evidence to support his decision that the DOI made an "arbitrary and capricious" decision. As we have tried to show from an anthropological analysis of the evidence used in this case, the preponderance of the evidence supports the case that the present-day tribes of the Plateau have a "shared group identity which can reasonably be traced historically or [and] prehistorically" (25 USC § 3001(2)). It is our expectation that the 9th Circuit Appeals Court will overturn Magistrate Jelderks' Kennewick Man decision for similar reasons.

Notes

1. Peter Jones has worked on issues of cultural affiliation and cultural resource management in the Plateau and Great Basin for several years. He can be contacted at pnj@bauuinstitute.com.
2. Darby Stapp has worked in cultural resource management in the Pacific Northwest for 25 years. He has authored *Tribal Cultural Resource Management: the Full Circle to Stewardship* (with Michael Burney), published by Alta Mira Press in 2002. He can be contacted at dcstapp@aol.com.

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