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- NEWS FOCUS

SCIENCE AND NATIVE RIGHTS

Grave Disputes

Andrew Lawler*

As U.S. legislation requiring the return of Native American remains to tribes turns 20, a new controversy is threatening the tenuous relations between the scientific and Native American communities.

“No debate; repatriate!” was the chant of protesters standing outside the chancellor’s home at the University of California, San Diego (UCSD), on a winter’s day last year. The focus of their ire: 10,000-year-old Paleoindian bones found in 1976 during excavations at the former chancellor’s home. The local Kumeyaay Nation wanted to remove the remains from a university collection and return what they believe are their ancestors to Mother Earth.

More quietly, but just as passionately, the university’s anthropologists argued in nearby conference rooms that the rare ancient bones have no direct relation to the tribe and should be kept for scientific analysis. The remains, they said, could help illuminate the still-mysterious question of how and when humans migrated from the Old World to the New. Today, the sought-after bones remain locked away in a neutral facility.

Twenty years ago, Congress passed a law aimed at laying to rest such arguments between scientists and Native Americans, and government, university, and Indian representatives will gather in Washington, D.C., on 15 November to commemorate the anniversary. But the debate over the Native American Graves Protection and Repatriation Act (NAGPRA), which gives Indians a chance to reclaim their ancient dead, is very much alive. The Department of the Interior office that oversees NAGPRA came under fire this summer from the U.S. Government Accountability Office (GAO) for poor record keeping, questionable decision making, and inadequate resources. And new rules put into effect in May extend the law to give tribes like the Kumeyaay a way to recover even those ancient bones that cannot be linked to an existing people.

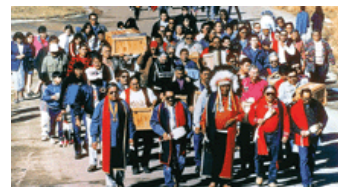
Neither Kumeyaay nor UCSD officials will say if the new regulations tilt the battle in favor of the tribe. But the controversy over the revised law exposes the divide between some Native Americans and scientists. “Anyone deceased should be allowed a decent burial,” says James

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Into the earth. Cheyenne rebury the remains of ancient members of their tribe in 1993, after repatriation became law.

CREDIT: JOHN WARNER

Riding In, an American Indian studies professor at Arizona State University (ASU), Tempe. "These are not just specimens for study." Yet scientific researchers say valuable data on past North American societies may be irretrievably lost. "This is disastrous," says physical anthropologist Keith Kintigh, who also works at ASU Tempe and helped negotiate the original legislation. "The law was not meant to return everything." The antipathy runs deep. "It's a mini culture war," laments Ann Kakaliouras, a physical anthropologist at Whittier College in California.

Conflicts such as the one between the Kumeyaay and UCSD, however, obscure a measure of reconciliation and even collaboration between some archaeologists and Native Americans. "Science doesn't always supersede human needs," says archaeologist Larry Zimmerman of Indiana University, Indianapolis. That view has resulted in growing trust between Indians and scientists, he says, and a growing number of Native Americans who are involved in archaeology in some way (see sidebar, p. 168). In return, archaeologists are increasingly gaining access to Indian oral tradition. And some researchers say early fears of a wholesale loss of specimens were overblown.

Yet researchers who study primarily human remains rather than artifacts worry that the new rules will make their work even more difficult. They point out that the oldest skeletons, many of which are likely to be covered by the new rules, are often the most valuable to science (see p. 171). "The idea of repatriating 10,000-year-old skeletal remains to the group that happens to be living in the vicinity where those remains were found is simply preposterous," says ASU Tempe paleontologist Geoffrey Clark. Kintigh hopes legal action will eventually overturn the new regulations.

Sherry Hutt, who directs Interior's NAGPRA office, acknowledges that data will be lost as bones are returned to Native Americans. "I would be wrong and naïve to say otherwise," she says. But she also warns researchers that it is "untenable and inappropriate" to retain the roughly 180,000 objects and remains now controlled by federal agencies and federally funded universities and museums. The message, she says, is that "if you haven't got going on it, you better get going."

Unpleasant work

The roots of the conflict lie in the enormous collections of Indian remains and grave goods assembled primarily during the second half of the 19th century. For example, more than 4000 heads of Native Americans were taken from battlefields and burial grounds, stored in the Army Medical Museum in Washington, D.C., and used by some researchers to argue for the racial inferiority of Native Americans. Famed anthropologist Franz Boas said that it was "most unpleasant work to steal bones from graves, but what is the use, someone has to do it."

Native Americans had little say about the disposition of such remains, many of which were displayed publicly. "They should have stayed in the ground with Mother Earth," says Riding In. Given the long history of grave desecration and the reverence most tribes have for ancestors, asserting control over such remains became a key goal of the nascent Native American movement during the 1970s.

During the same period, American archaeology was changing. Its long association with art and the humanities began to wane. A new generation of researchers began to draw on the hard sciences to piece together past cultures. "The move was away from the history of a people and toward adopting the scientific method," says archaeologist Michael Wilcox of Stanford University in Palo Alto, California, a descendant of Arizona Yumans. Archaeologists began to use new and more sophisticated tools to study animal, plant, and human remains often neglected in the past. They dated remains with radiocarbon, analyzed diets with isotopes, and took the first



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No debate. Native American protesters demand the return of UCSD's bones.

CREDIT: ADRIANE TILLMAN / LA JOLLA VILLAGE NEWS



steps toward extracting DNA to trace relationships among populations. As a result, osteoarchaeology, or the study of ancient human bones, flourished in the 1980s.

The unfortunate conjunction of these two trends pitted Native Americans, with their pent-up grievances and newfound political muscle, against a group of overwhelmingly white scientists devoted to rational inquiry and largely unfamiliar with modern Indian culture. Researchers initially fought the law but misjudged its appeal. NAGPRA was widely seen as human-rights legislation, granting Native Americans—there are roughly 4.5 million in the United States today—the right to rebury their dead. The bill passed both houses of Congress unanimously and became law on 16 November 1990 (*Science*, 1 April 1994, p. [20](#)).

The final legislation was a compromise with scientists that laid out a complicated process for repatriation. Under NAGPRA, all institutions that receive federal funding were to make inventories of remains and ceremonial objects and repatriate them to “culturally affiliated” tribes. Some items were exempt, including objects and remains that could not be linked to a particular tribe and those found on private land.

Repatriations proceeded, though slowly in many cases. By the end of 2009, federal agencies had reported giving back about 9000 or 55% of “affiliated” human remains and 130,000 or about 68% of associated funerary objects, according to a recent GAO report.

However, in the most famous repatriation case, scientists won a lawsuit arguing for the right to study a 9400-year-old Paleoindian dubbed Kennewick Man, which they said could not be affiliated to Native Americans at all, in part because of its great age (*Science*, 30 July 2004, p. [591](#)). And in other cases, Native Americans felt that institutions were using the law's “unaffiliated” category to block repatriation. So they pushed for changes that would give them an opportunity to recover those remains as well. In May, the Department of the Interior implemented rules that allow tribes to request “culturally unaffiliated” remains found on their current or historical lands. The new rules affect roughly 120,000 Native American and Hawaiian remains.

Many Native Americans complain that the rule doesn't go far enough, because it exempts unaffiliated ceremonial objects and grave goods. And some researchers predict that the impact on science will be limited because Indians simply won't ask for large numbers of bones. Some groups no longer remember traditional ceremonies, have taboos on handling the dead, or lack the necessary time, money, and organization. “Tribes don't have the facilities or the personnel to handle this stuff,” says Wilcox. “Much of it will remain in the collections.”

But others foresee disaster. The new rules are “draconian,” says archaeologist Stephen Lekson of the University of Colorado Museum of Natural History in Boulder, and make it much easier for tribes to request unaffiliated objects. After the original law passed, says Kintigh, “I was not one of those who said the sky would fall.” But he fears the new rule will deny researchers access to crucial specimens forever. The American Association of Physical Anthropologists argued in a 10 May letter to Hutt that the rule “could effectively remove ... human remains that document the rich and complex biocultural history of the first Americans.” The result, it warned, could be “wholesale reburial of indigenous history.” The Society for American Archaeology took a softer line, criticizing the rule for failing “to recognize scientific study as an important part of increasing knowledge about the human past.”

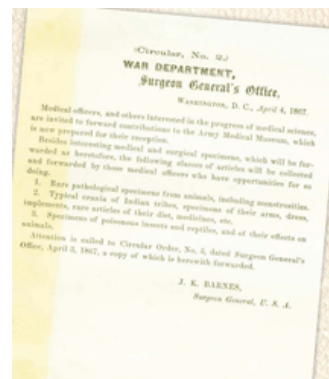
Counting bones

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Whose bones? Scientists want to study these 10,000-year-old bones, which the Kumeyaay claim as ancestors.

CREDIT: JAN AUSTIN/SANTA MONICA COMMUNITY COLLEGE



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Grave disrespect. In the 1800s, an army museum requested Native American remains and objects.

CREDIT: NATIONAL MUSEUM OF HEALTH AND MEDICINE, SGO CIRCULAR 2, 1867

After 20 years, just how much has NAGPRA affected research? Individual opinions vary, and answers based on quantitative analyses are hard to come by. But several researchers have tried. Physical anthropologist Elizabeth Weiss of San José State University in California examined osteological graduate work from the 1980s to 2006 and found that the number of anthropology theses using skeletal remains worldwide increased dramatically, while the percentage of U.S. work using Native American remains dropped sharply. She thinks students are abandoning research in North American bones in favor of greener pastures elsewhere (see sidebar, p. 170). Kakaliouras also found a steep drop in the number of papers based on Native American skeletal remains at annual physical anthropology meetings, but her results don't quite fit with Weiss's: She found that the decline didn't begin until after 2004 and thinks it may be due more to fear of NAGPRA than to NAGPRA itself.

The most comprehensive attempt to understand NAGPRA's impact is now under way at the University of Arizona in Tucson, led by physical anthropology Ph.D. student Elisabeth Cutright-Smith. She and two other graduate students are analyzing the content of two journals that represent different though related disciplines—the archaeological journal *American Antiquity* and the *American Journal of Physical Anthropology*—before and after NAGPRA. Like the other studies, the team found that worldwide analyses of human remains have risen since the 1970s.

But preliminary results show contrasting patterns in the two journals. The number of papers on Native American remains published by the archaeological journal increased after the early 1990s, but the number published by the physical anthropology journal began to decline in 2001. In addition, mention of consultation with tribes rose after 1996 in *American Antiquity*, as did the amount of ethnohistorical data and oral tradition. But in the anthropology journal, use of tribal knowledge declined. “The passage of NAGPRA has provoked contradictory outcomes,” says Cutright-Smith.

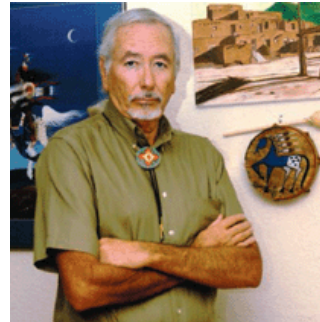
Determining the law's effect on fieldwork is even more difficult to quantify. Under NAGPRA, archaeologists and land managers must notify tribes of finds on tribal or federal land, triggering what can be a protracted consultation. Utah's state archaeologist, Kevin Jones of Salt Lake City, says land managers find the NAGPRA process “daunting and burdensome” and “want a quick decision,” so they're inclined to swiftly turn newly discovered human remains over to tribes. “I have no doubt that information is being lost,” he adds.

Some archaeologists will even turn their backs on bones found in the field. Wilcox recalls finding a human bone in a national park with a National Park Service archaeologist, who immediately warned him against picking it up or even looking at it. That's not an option for those who rely on bones for data. “Archaeologists in the field can just avoid burials” and work on artifacts, explains Kakaliouras. “But for physical anthropologists, this is their bread and butter.”

Collaboration or conflict?

For many archaeologists, however, the loss of data that comes with repatriation is trumped by its human-rights value. “Absolutely, we lose some pretty important information,” says Lekson. “But it's still the right thing to do.” And NAGPRA has actually proved beneficial to some researchers. “For a long time, indigenous people were left out of the equation,” says George Nicholas, an American archaeologist who teaches at Simon Fraser University in Burnaby, Canada. “Now archaeologists increasingly are working with descendant communities” in both the United States and Canada.

Collaboration can provide access to tribal knowledge and shed light on material remains, particularly from more recent eras. For example, Sebastian LeBeau, a Lakota who now teaches



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Rescue mission. ASU's James Riding In says remains must be reburied.

CREDIT: JAMES RIDING IN



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Boning up.

ethnographic studies at Minnesota State University, Mankato, was able to elicit data on sites used for vision quests from the people of the Cheyenne River Reservation for his anthropology Ph.D. That gave researchers a more nuanced understanding of the way the people used the landscape, says Zimmerman.

Anthropologist Elizabeth Weiss seeks to learn from ancient bones.

CREDIT: ELIZABETH WEISS

Such work reflects the growing interest in archaeology within Indian communities. Wilcox believes that Native Americans are more curious now about the traditions of their ancestors, including diet, technologies, and material culture. "When you get beyond the politics, people are interested in these kinds of questions," he says. "Not the whole community, but enough to establish good relations." There are more Native American professors and students, as well as many who work for private cultural resource management companies, some of which are wholly owned by Native Americans. "Before this dialogue started, many Native Americans may have hated archaeologists," says Wilcox. "Now they see what it can do, that it can offer jobs, and they have a much more positive feeling."

On the scientists' side, with NAGPRA no longer an adolescent, a younger generation of researchers says they view the legislation as a historical fact and a welcome righting of past wrongs. Nicholas, for example, simply accepts that Native Americans have the right to withhold objects that contain what amounts to proprietary data. And he's confident that the new rules won't prove as damaging as many fear. "Some folks thought NAGPRA marked the end of archaeology," he says. "But 20 years later, it is more vibrant and relevant than ever."

Others, particularly physical anthropologists, are more pessimistic. "The next few years will be pretty dismal," predicts Weiss. "We'll see an increase in lawsuits, infighting by tribes, and more collections placed off-limits. It's not going to be a pretty picture." Riding In of ASU agrees there are dark clouds ahead. "Relations are still strained, especially with those hard-core scientists who want to deny Indians our human rights," he says. "They are just as determined to resist as we are."

[↵](#)* With reporting by Keith Kloor, a writer in New York City.

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