

NATIONAL MUSEUM of the AMERICAN  
**INDIAN**

WINTER 2010

SCIENCE AND STORYTELLING  
**SPECIAL**



CAHOKIA UNCOVERED  
KENNEWICK MAN REVISITED  
THE TALES OF WINTER

+

VERACRUZ FESTIVAL WITH THREE HEARTS

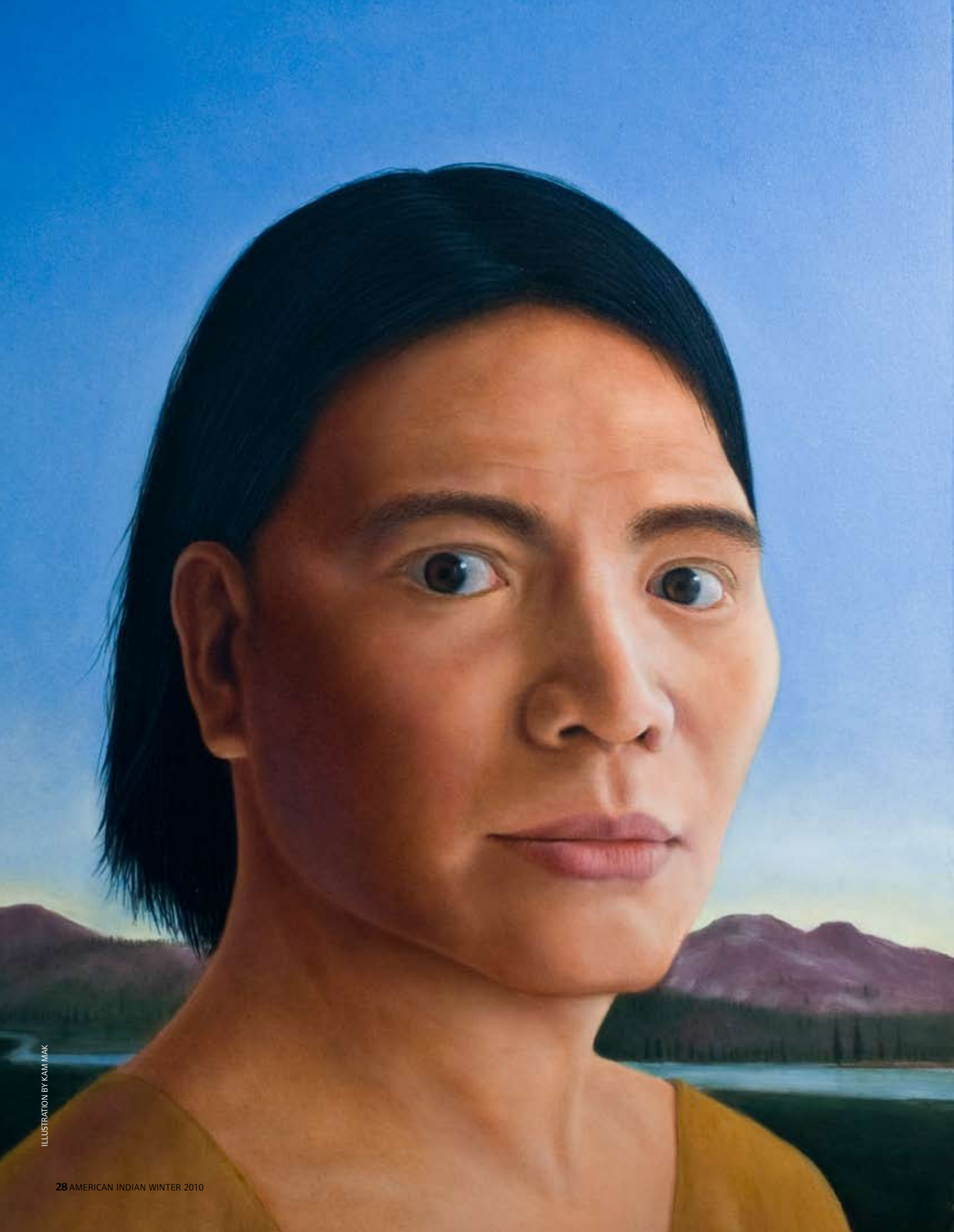


ILLUSTRATION BY KAM MAK

**W**hen a besotted college student stumbled over a human skull in the sludge of the Columbia River in Washington State in July 1996, police first thought it was an unsolved homicide. But it soon turned into a major battlefield in the on-going struggle between the western and the indigenous outlook on the universe.

# WAYS OF KNOWING

## "NAKED SCIENCE" OR NATIVE WISDOM

As police recovered a nearly complete skeleton, scientific experts were called in to untangle what PBS called "the mystery of the bones." Modern methods such as carbon dating revealed that the skeleton was among the oldest ever found on the continent, somewhere between 9,000 and 9,400 years old.

The story unfolded like an installment from one of television's CSI (Crime Scene Investigation) programs as an anthropologist pored over the bones. At press conference a month after the discovery, the anthropologist James C. Chatters announced that the skull had some Caucasoid features. In the words of journalist Roger Downey, "within the week, hundreds of millions round the world had been informed that the skeleton of a 9000-year-old European had been found on North American soil."

This highly questionable conclusion started what is known as the Kennewick Man controversy. The extensive media coverage and popular debate provides an excellent example of the privileging of conventional, western ways of knowing over traditional, indigenous ways of knowing.

This Asian-influenced interpretation by illustrator Kam Mak, ran on the cover of the March 13, 2006 issue of *Time* magazine for a story entitled, "The Untold Saga of Early Man in America."



Keith Kasnot, an artist specializing in medical illustrations, produced these images for *National Geographic* after being advised that Kennewick Man's skull was similar to those of the Ainu people of Japan.

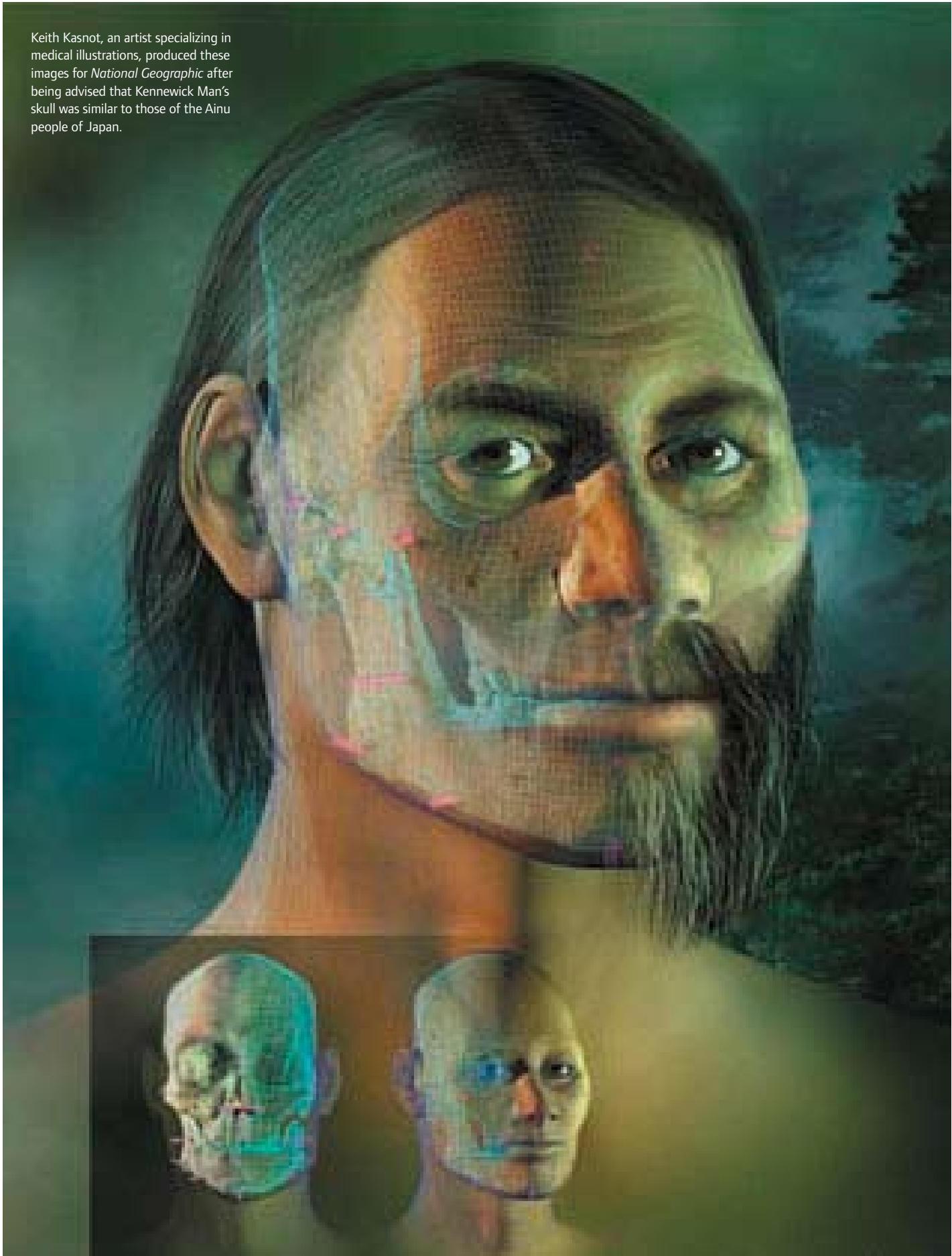


ILLUSTRATION BY KEITH KASNOT



AND BECAUSE THE SKELETON WAS FOUND ON LANDS LONG INHABITED BY NATIVE PEOPLES, LOCAL TRIBES URGED OFFICIALS TO RETURN THE REMAINS TO THE EARTH. IN FACT, SOME TRIBAL MEMBERS WERE DEEPLY DISTURBED, ARGUING THAT AN ANCESTOR HAD BEEN UNCEREMONIOUSLY YANKED FROM HIS RESTING PLACE IN YET ANOTHER EXAMPLE OF GRAVE ROBBING.

## SCIENCE, MASS MEDIA AND KENNEWICK MAN

Conventional western scientists approach problem-solving in a reductionist vein. Components of the problem are separated into discrete bits, the better to envision each piece of the puzzle. The assumption is that by unlocking segments of a problem, scientists will be better positioned to uncover essential truths.

In contrast, American Indian knowledge systems arise from the connections between the puzzle pieces; how the segments fit into place undergirds indigenous epistemologies. In other words, relationships are key to understanding Native logic. Such linkages are missing in most of the popular discussion about issues in Indian Country.

News coverage of “Kennewick Man” mirrored reductionist logic by hyping themes of *discovery* and *mystery*, indispensable elements of a great yarn regarding a scientific breakthrough.

News reporters heralded “the discovery” as a “priceless gift to science” and a “treasure trove of information.” American Indian writers and scholars called in their own experts who argued that skull morphology is an “elastic” science and the claim that “Kennewick Man” wasn’t American Indian was a leap of faith, not a sound judgment based on the paltry evidence available.

And because the skeleton was found on lands long inhabited by Native peoples, local tribes urged officials to return the remains to the earth. In fact, some tribal members were deeply disturbed, arguing that an ancestor had been unceremoniously yanked from his resting place in yet another example of grave robbing.

A coalition of Indian tribes – the Colville, Nez Perce, Umatilla, Wanapum and Yakama – invoked the Native American Graves Protection and Repatriation Act (NAGPRA), which

protects Indian artifacts and remains, and demanded repatriation of the remains. A group of anthropologists from seven institutions, including the Smithsonian’s National Museum of Natural History, sued, arguing that restricting their access to the skeleton impinged on their First Amendment rights.

For a few years news coverage waxed and waned over “who owns the bones” until 2004, when the court ruled in favor of the anthropologists. One columnist called the case “an epic struggle between science and religion” in which science “won.” The contest between Indians and scientists pitted science against spirituality, expressed in the Indian argument that “tribal policies and procedures, and our own religious beliefs, prohibit scientific testing on human remains.” News stories even created imaginary fabrications of indigenous peoples as “savages.”

In a more basic sense, the public presentation of contemporary issues like “Kennewick Man” pits knowledge systems against one another in a version of entitlements. The Indian perspective – that the ancestor should be returned to the tribes in accordance with NAGPRA – was roundly dismissed by critics in the media as backward, regressive and superstitious. One newspaper editorial described returning the skeleton to the tribes as “bad science” and called it the “head-in-the-sand attitude of a pre-literate society” – a thinly veiled insult to Indian tribes.

In a *60 Minutes* interview with anthropologists, politicians and Natives, the reporter asked an Umatilla spokesman, “Does your religion specifically tell you that you were the first people here?” When the spokesman replied “yes,” the reporter concluded that, for the Indians, “science doesn’t matter to them.”

In framing Indians as anti-science, the reporter followed the journalistic tradition of according Western science the status of a superior form of knowledge. When scientists

are interviewed in news stories, they receive special treatment. Their views are often unchallenged. Because of their status, scientists are quoted with deference, having what sociologist Dorothy Nelkin called “some special insight into every problem.” As a result, anyone with a different approach is viewed with less authority, and, in the case of “Kennewick Man,” dismissed as anti-science.

## THE SEPARATION OF SCIENCE

But Western science can learn a lot from indigenous ways-of-knowing, which are grounded in the interconnectedness of living things. We critique the modernist notion that science is “objective and value free,” arguing instead that science results from an historical agenda that is both political and economic. By no means value-free, science is undergirded by its own belief system about the nature of the universe and how we may know about and understand it. We especially dispute the assumption that phenomena which cannot be “known” by scientific methods fall in the realm of the “unscientific,” shorthand for “untrue.”

“Science” refers to systematized knowledge. Until the 19<sup>th</sup> century there was no clear boundary in Western thought between science and philosophy. In the 18<sup>th</sup> century, science was considered just one of many approaches to knowledge. The separation of science from philosophy and religion began with the Protestant Reformation and heralded the de-sacralization of the world that characterizes modernity: Divinity is removed from a world which thereby becomes raw material for human use.

Of course, Europeans never had the sole claim to systematic knowledge. Cultures everywhere have sustained themselves by developing systematic knowledge for survival:

of planting, hunting, weather and climate, environmental conditions, medicine and health care, navigation and engineering – the list is extensive. So why are these not “science”? The short answer is, because our popular discourse tells us they are not. And this is a remnant of the colonial legacy whereby Europeans and their knowledge were elevated above others.

Western science has been used since the early 19<sup>th</sup> century to displace Native peoples – from power, from authority over knowledge, and from ownership of their lands and resources. Colonialism relied on depicting Native peoples as inferior, a depiction that originally invoked both scientific and religious values: the Native peoples did not understand science as the path to truth, and as “pagans” they didn’t understand the “Truth of the Supreme God.”

By the 20<sup>th</sup> century Science and Religion had in much American popular thought parted ways. Americans today tend to see science as separate from and superior to religion as an approach to knowledge. But while the Judeo-Christian tradition doesn’t have as much sway as science for many Americans, it still trumps Native spirituality. So when indigenous approaches to knowledge butt up against Western science, they can be condemned on both fronts: they are “not scientific,” especially when they make arguments based on spirituality (e.g. “This land is sacred”), and the spiritual argument itself can be dismissed as less than “real” religion.

## “NAKED SCIENCE” OR WISDOM

There is nothing inherently wrong with Western science. It offers a very powerful methodology and set of tools that have moved humanity forward enormously, and all of us have benefited from this. But Science (with a capital S) dismisses the much larger issues of human existence – those that are addressed by religion and philosophy; by traditional practices and moral codes, and by the cultivation of wisdom. Thus Western science has also brought on environmental crises of global proportions. It does not tell us how to live on this earth while it arms us with tools of enormous power. Its mission to unlock the mysteries of the universe does not include a code of how to act properly along that journey.

Western science is framed as being devoid of cultural values and is, in fact, perceived as “naked.” Anthropologist Laura Nader writes that naked science is “stripped of its ideologized vestments.” But the history of Western science clearly shows that this is far from the

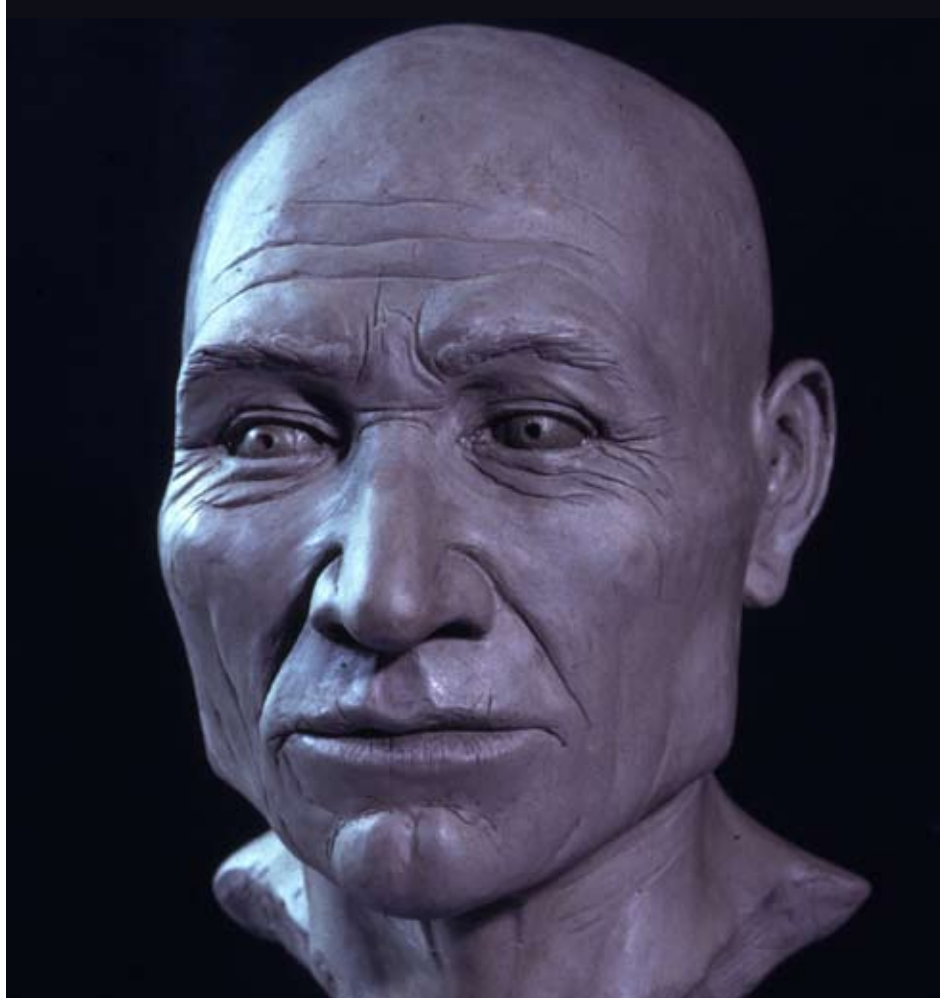


PHOTO COURTESY, JAMES CHATTERS AND THOMAS MCCLELLAND

“I never said, ‘He was European,’” says forensic anthropologist James C. Chatters, who worked with sculptor Thomas McClelland to recreate this likeness – often compared to Capt. Jean-Luc Picard from the *Star Trek* series. “I was misquoted in the press and have been fighting it ever since.”

case. Science is loaded – ideologically, politically and morally. Yet in popular discussions about science, especially in news reports, science is held aloft from cultural influences. In the case of “Kennewick Man,” scientists are portrayed as the arbiters of truth, and American Indians become the challengers of truth. Thus the tropes of old return: the savage, illiterate, uncivilized denizen shackled and subdued by the greater authority.

But it is important to distinguish between popular notions of science, and the practices of scientists themselves. When Indians are framed as “anti-science,” some anthropologists jump to their defense, arguing that Native science should be accorded equal status with Western science. In his book on Zapotec science, Roberto Gonzales refers to indigenous knowledge as “local science” and Western knowledge as “cosmopolitan science.” Yet even this thoughtful attempt to reframe indigenous “ways of knowing” separates Big Science from little science.

Instead it is necessary to reimagine the construct “science.” We need to own up to the cultural values that saturate all science. Indeed, the strength and power of Native science is the

acknowledgement of the welding of values to knowledge systems, where science is just another knowledge system. Rather than taking the reductionist approach noted above, and rather than pretending that science is naked, we urge a vision of science as part of an interconnected system of dependent elements that emerge side by side—that are complementary and inseparable.

Indigenous knowledges are informed by such interconnections: earth and air; humor and language; birth and burial. As Jhon Goes in Center notes in the book *Science and Native American Communities*, “Our ancestors were very sensitive in their relationships with the land. They systematically organized experiential information about cycles, seasons, connections, and strategies in their cultures. Experience was evolved into knowledge, and knowledge was evolved into wisdom.” And with the power that Western science has unleashed in the world, more wisdom is something we desperately need. ✨

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