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Michael Wilcox

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## Marketing conquest and the vanishing Indian

*An Indigenous response to Jared Diamond's Guns, Germs, and Steel and Collapse*

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### ABSTRACT

In recent years, Jared Diamond's *Guns, Germs, and Steel: The Fates of Human Societies* (1996) and *Collapse: How Societies Choose to Fail or Survive* (2005) have come to represent the widely read and discussed secular narratives of human social and cultural evolution in the late twentieth and early twenty-first centuries. Disguised as an attack on racial determinism, *Guns* suggests that colonization and conquest were largely 'accidents' of history and that modern collapses can be avoided by careful study of Indigenous environmental mismanagement. Much of Diamond's data is drawn from archaeological literature largely written in isolation from Native American descendent communities. The universalizing discourses advanced by processual studies can provide powerful counter-arguments to these claims when rearticulated with more recent Native American historical narratives. This essay responds to Diamond's works, questions their veracity and assumptions and suggests that narratives such as Diamond's are the most potent instruments of conquest.

**KEYWORDS**

colonization ● development ● environmental collapse ● Indigenous peoples ● Jared Diamond ● racism

**■ INTRODUCTION**

The popularity of Jared Diamond's *Guns, Germs, and Steel: The Fates of Human Societies* (1996) as well as his second book, *Collapse: How Societies Choose to Fail or Survive* (2005), attests to the tremendous interest people have in subjects normally covered by archaeologists and anthropologists. The colonization of the Americas, the development of social complexity, the ascendancy of western capitalism as well as the threat of economic, social and environmental collapse are all topics which command great attention in contemporary society. Diamond's books are arguably the most widely read secular *grand narratives* of the recent human past. Each makes liberal use of Indigenous cultures either as exemplars of environmental mismanagement or as unwitting victims of biological, technological and geographic forces. Curiously, the role of human agency, colonialism and the ideological bases of conquest are completely ignored when applied to Europeans while Indigenous societies are driven by the 'choice' of failure. Many of Diamond's assumptions are informed by a lack of awareness and interaction with contemporary Native peoples – particularly in his North American examples. Some of his research accurately reflects the social history of North American archaeological scholarship in the late twentieth century. Both works are grounded in an archaeological literature that at times has emphasized long-term analyses of human social evolution (processualism) at the expense of more recent historical analyses. Historical narratives can provide bridges between a more generic, *universal* human past and those of contemporary Native peoples. Used in combination, processual archaeology and historical studies raise important questions about the conclusions articulated by Diamond: Did Indigenous societies simply collapse and vanish as Jared Diamond suggests in *Guns, Germs, and Steel* and *Collapse*? Or is the mythology of conquest and disappearance grounded in a scholarship that has failed to incorporate Indigenous histories? Working from the proposition that Native peoples are still here, how might we better understand the complex relationships between archaeological scholarship, Indigenous descendent communities and the ideologically laden narratives of conquests and collapses?

The following essay helps to answer these questions. The first section explains how the Pima lost not only their economic power, but also their past in the late nineteenth and early twentieth centuries. The second part

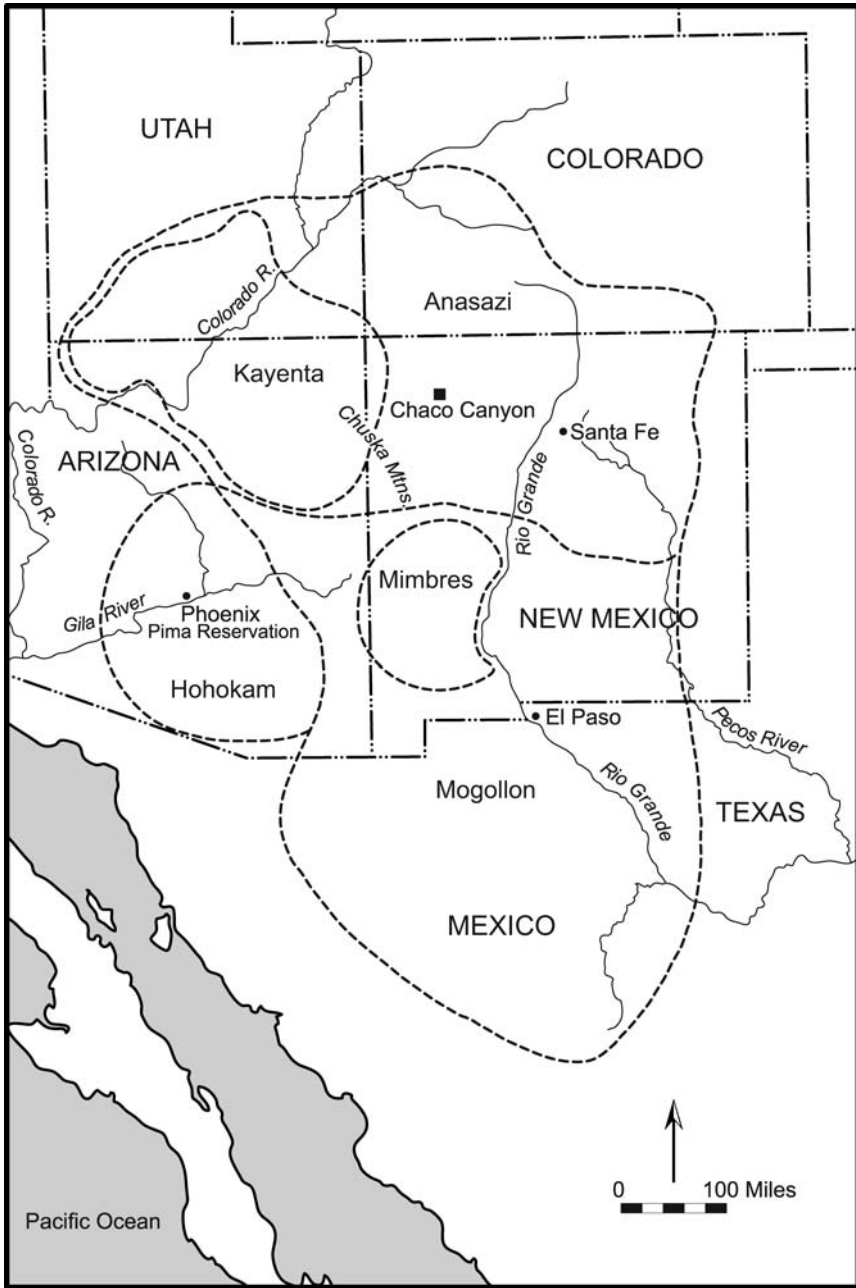


reveals the ideological basis (and popular appeal) of Diamond's account of European ascendancy. I explain how archaeological scholarship (and discussions of abandonments in particular) has played an important part in the portrayal of Native Americans as 'failed' stewards of the environment. The third segment examines Diamond's thesis of overpopulation, deforestation and collapse at Chaco using archaeological evidence. The final section deals with the survival of descendent communities from Chaco during the Pueblo Revolt of 1680. Here, the Revolt provides an important counter-narrative to both of Diamond's works through a discussion of abandonments and demonstrates the important role that narratives and ideology play in any account of European ascendancy and conquest.

### ■ AN OPENING FABLE: HOW THE PIMA LOST THEIR PAST AND THE HOHOKAM WERE BORN

Most people visiting Arizona are unaware that a major river once ran from the mountains of New Mexico, through Phoenix, across the northern Sonoran Desert and into the Gulf of California. Fewer realize that contrary to popular imagery, most Indians in the arid Southwest were agriculturalists. In the years leading up to the Mexican American War (1846–1848), US Cavalry expeditions, exhausted by heat and lacking provisions, were shocked to find a large community of Indian farmers diverting water from the Gila River into an elaborate system of canals which fed expansive fields of wheat, cotton, corn, melons and squashes. Throughout the 1800s, Pima farmers freely offered thousands of pounds of emergency provisions and water to the US Army. By the 1870s, the tribe had provided both safe passage through the desert and up to six million pounds of wheat annually to gold rush dreamers, military parties and transcontinental migrants (Office of Indian Affairs, 1869: 208–9).

The Pima never called themselves by that name. In 1692 a party of Spanish soldiers happened upon a small group of O'odham men and asked them who they were. They dutifully recorded the reply, 'pimas', as the name of the people – not knowing that the phrase '*pi maas*' translates roughly from O'odham as 'I don't understand what you are saying' or 'huh?'. It is not surprising that incomprehension might come to literally define a people. What is surprising is the degree to which their history has been largely ignored by archaeologists and historians and replaced with other more fantastic tales of disappearance or invisibility. The act of selection, of deciding which stories to tell and how to tell them, is itself a subtle yet pervasive instrument of conquest. The power to articulate some stories and to disregard others, to name a people the 'Huh?' and to deny their own self-definitions, has helped give rise to an American mythology few people



**Figure 1** Map of Gila and Chaco Regions



acknowledge, but which is marketed and sold to us on television, the internet and in academic and popular print media. It is a mythology filled with tales of mysterious disappearances of Indian civilizations such as the *Hohokam* or *Anasazi* – ancient and remote peoples who apparently left no descendants and whose ‘failures’, as interpreted by Jared Diamond and others, provide us with cautionary tales of societal collapse.

But just like these imagined groups (none of whom ever referred to themselves as *Anasazi* or *Hohokam*), the popular narratives of conquest and disappearance are just that – a mythology. And any consumer of that mythology, concerned with the destruction of the planet or searching for an account of European dominance, need look no further than our own more recent past for fables just as fantastic and unbelievable as those articulated by popular authors such as Jared Diamond. The stories of how the *Hohokam* along the Gila River or the *Anasazi* at Chaco Canyon self-destructed and vanished through environmental mismanagement are, as we shall see, largely fictional. So too is the notion that colonization and conquest were accidents of geography or biology. The descendants of these groups, the Pima, their neighbors and the Pueblos, still live in the lands of their ancestors. And one could argue that the most damaging collapses and failures they have endured have been at the hands of scholars who have not accounted for their presence in a modern world or failed to tell the stories which explain that presence.

Perhaps the real question we should be concerned with is why these fictions exist. I would argue that the stories of Indigenous disappearance and the fables of conquest and European ascendancy articulated by Jared Diamond in *Guns, Germs, and Steel: The Fates of Human Societies* as well as his subsequent work *Collapse: How Societies Choose to Fail or Survive* are not only factually incorrect but also exemplify a powerful impulse to reshape and reconfigure colonial histories to suit the needs of a changing audience. Diamond’s accounts of poverty and failure market a new version of conquest and Indigenous failure in which human agency and ideology are left unexamined. The narratives we choose to believe, how we construct the winners and losers in modernity, how we locate our own society in a continuum of failure and success are born of universal human impulses to make sense out of the social and cultural worlds in which we live. But this mythology also obscures other more immediate causes of Indigenous ‘failures’ and provides us with a set of more palatable, self-serving narratives – narratives which remove the reader (as a consumer of information) from a position of critical reflection, participation and responsibility. But the consumer is an active agent in this exchange. And the story of how the O’odham became the Pima and how the ‘*Hohokam*’ were invented demonstrates the powerful consequences associated with the marketing of success and wealth for the victors, and failure and poverty to the victims.

Race and citizenship, not *Indigenous environmental mismanagement* as Diamond states in *Collapse*, is at the center of the story of the Pima and the invention of the Hohokam. Having cornered the agricultural market and secured contracts and treaties with the US government in the 1850s, the Gila River Pima, much like their Hohokam ancestors, were arguably the most powerful economic group in the entire Southwest. But within a decade of American settlement, Anglo farmers would divert so much water upstream that the Gila would run dry before it reached Pima farms. For white farmers, citizenship had its privileges. Recognizing the economic power wielded by the Pima and eager to populate western territories with yeoman farmers and ranchers, the United States government passed the Desert Land Act (1887), offering 640 acres to any Euro-American willing to cultivate farmland along the desert waterways of the Southwest.

Understanding the mechanisms of plant reproduction, the Pima (hereafter referred to as the O'Odham, as they call themselves) knew from centuries of practice to segregate fields in order to prevent bees from cross-pollinating the wrong flowers (Dobyns, 1989: 23). They had a year-round crop cycle alternating fallow and active fields in order to not exhaust the fragile desert soils and drained irrigated fields to prevent salinization of the soil. They engineered hundreds of miles of canals with precise slope and elevation calculations (without writing) and coordinated the opening of gates and barriers to direct water flow at proper intervals. These were technologies they had developed for over a thousand years. Incredibly, in *Collapse* Diamond completely ignores the history of the O'Odham and cites the presence of abandoned fields in the O'Odham homeland as evidence of willful environmental mismanagement, fed by 'overextension', a euphemism for greed. Greed, willful environmental mismanagement and ignorance *did* in fact lead to the abandonment of O'Odham fields and farms. But a more nuanced historical analysis of the region might lead one to a very different set of conclusions.

Because rain provided all the water needed for farms east of the Mississippi, Anglo-American settlers had no experience with irrigation agriculture. The massive tracts of land (40 acres per household was the norm) were far too large for any single family to operate. They over-watered their fields and did not understand the importance of drainage (Robinson, 1979: 38). Minerals built up through evaporation and salinization ruined both crop and soil. Individual farmers, unfamiliar with the scale of communal coordination required to practice this kind of farming, could not manage the canals and millions of gallons of water were wasted. Within a few years of passage of the Desert Land Act, Anglo-American farmers had diverted so much water upstream that the Gila River was dry by the time it reached the O'Odham farms (Office of Indian Affairs, 1870: 117; 1885: 3–4). Cattle compounded the problem by overgrazing. Erosion followed and flash floods



cut arroyos into the dry earth, lowering the water table. The river was dying and so were the O'Odham (Rea, 1983).

In 1873 a delegation of O'Odham officials, led by General Antonio Azul, travelled to Washington DC to plead with the government to stop the theft of water by Anglo farmers. His pleas fell upon deaf ears. Indians, lacking rights of United States citizens until 1924, were unable to defend themselves or their water rights in the US legal system. The democratic process ensured that the rights of voters would be affirmed and defended by elected representatives. But in this version of democracy, full citizenship was restricted to white males. No politician could justify the protection of Indian interests when in conflict with their constituents; by 1878 the 45th Congress recommended that the issue be settled by *removal of the Pima* (as well as every other tribe in the Southwest) to Oklahoma. In a few short years the O'Odham were reduced to dependence upon the federal government. To make matters worse, the Bureau of Indian Affairs followed a practice of sending teachers, clerks and Indian Agents infected with tuberculosis to work in the dry environment of Arizona. By 1893 half of all O'Odham children and adults succumbed to the pathogen. Starvation and disease among the Pima were no accidents (Dobyns, 1978: 29; Office of Indian Affairs, 1893: 121, 216).

When the first groups of American archaeologists and anthropologists came to investigate reports of a massive irrigation system, large abandoned village complexes and massive adobe 'great houses' in 1880, they had trouble believing that any connection existed between this advanced civilization and the starving and impoverished O'Odham.<sup>1</sup> Rather than documenting the tragic consequences of American agricultural policies and the recent collapse of the O'Odham economy (which was happening right before their eyes), they chose instead to invent an imaginary ethnic group based on the O'Odham word '*hohokam*' for 'those who have gone before' or 'all used up'. And so the Hohokam were invented and the Pima lost their past.<sup>2</sup> Unfortunately, this is a common story. And it is only in recent years that archaeologists have begun to explore the historical bridges between the Hohokam and contemporary Native Americans.<sup>3</sup>

Selective use of historical and archaeological data is at the heart of the fables of poverty and environmental mismanagement rendered in the popular works of Jared Diamond – fables in which Native Americans and other Indigenous peoples are both blamed for their own poverty and misfortune through 'accidental conquests' in *Guns, Germs, and Steel: The Fates of Human Societies* and used as examples of environmental mismanagement in *Collapse: How Societies Choose to Fail or Survive*. The questions these works raise are both familiar to Native People and troubling in their conclusions: How is it that five hundred years after Columbus one still reads with regularity about the perpetually vanishing primitive or the mythical Hohokam or the Anasazi? How does Diamond's

bio-cultural Armageddon, fueled by Old World diseases or environmental mismanagement, explain the presence of the O'Odham, myself or any other Native American? Is it all geography and biology? Or have archaeologists and historians failed to explain the presence of Indigenous peoples and their histories? As a response to the questions raised by Diamond's texts (hereafter referred to as *Guns* and *Collapse*), I would like to explore the appealing nature of these works and raise questions about Diamond's notion that conquests are accidents of biology, geography and technology. I will demonstrate how Diamond's discussion of deforestation and environmental catastrophe at Chaco Canyon relies on a selective use of archaeological and historical evidence. As is the case with the O'Odham, archaeology has at times contributed to the mythology of the vanishing Anasazi and generated a pervasive narrative of environmental mismanagement by Native Americans. While few would agree totally with Diamond's work, North American archaeologists bear some responsibility for many of his conclusions. Archaeological interpretations of abandonments, and a failure to integrate indigenous histories into archaeological studies, have helped support a national mythology in which conquests are accidents and Indigenous peoples are to blame for their own problems.

## ■ A CONVENIENT DIALOGUE: CONQUEST (AND PROSPERITY) AS ACCIDENT

Disguised as an attack on racial determinism, Diamond's *Guns* lays out the most palatable of narratives of western global domination. For Diamond, the disparities – between the 'haves' and 'have-nots' (as depicted in Diamond's introductory conversation with the unfortunate Papua New Guinean, Yali), between those 'Who have so much cargo' and those who do not, were set in motion long ago, just beyond the effective reach of his sympathetic reader. His argument strikes one as a kind of Greek tragedy infused with the dispassionate logic of evolutionary biology. According to Diamond, unknown and unnamed geographic forces (continental axes) proffered selective advantages over the centuries to unwitting – but select – Eurasian populations. Diamond's dialogue with his primitive prototype Yali could be summarized as follows:

'You see Yali, if your ancestors had come from *here* in the northern hemisphere instead of *there* in the southern hemisphere, you might have found yourself on the other end of our equation of inequality . . . Were it not for geography, *you* might be explaining *my* unfortunate fate to *me*.'

In Seussian simplicity we learn that *guns* and *steel* were just technologies that happened to fall into the hands of one's collective ancestors. Further



removing human agency from the process, these only *marginally* benefited westerners in relation to their Indigenous foes in the New World. The *real* conquest was accomplished by other forces floating free in the cosmic lottery – microscopic pathogens. Diamond's grand narrative cleverly rejects the racism and naked triumphalism of our not so distant forebears and embraces a nouveau-democratic narrative which speaks to the logical sensibilities and sympathies of modern readers: successful colonization was an accident. Conquest was an accident accomplished by randomly apportioned technologies and the invisible hand of fate. Immunities to disease conferred a selective advantage to some populations, and in the contest among peoples the result was biologically foreordained. A reader of Diamond's story, perhaps lounging in the tropics on his holidays, glances at the hired help and drifts off into a sleep made more peaceful by the notion that his fortunate fate, and indeed the fates of human societies, were settled long ago somewhere in the collective memory of one's collective ancestors.

Many people – educated or just curious – (this author included) have spent time, perhaps on a beach somewhere, wondering about the same things. What startles me into wakefulness is my own position as a fully modern Native American archaeologist. I have now read, in courses that I have taken and in those which I teach, innumerable accounts of my ancestors' collective failures in the dreamtime landscape of the foremost journal in my field, *American Antiquity*. Name the tragic fable of the day and one can find it in the scientific (value free) explanations of the flagship journal of American archaeology. For most of the history of archaeology, the cultures and histories of Indigenous peoples have been appropriated and deployed by scholars in the service of democracy, environmentalism and gender equality. All are worthy pursuits. These studies should not be dismissed as irrelevant or unimportant. But when read without reference to descendent communities, the shortcomings of the universal (as opposed to local) narrative are brought into relief. Archaeologists may be writing about everyone's past, but the judgements of success, failure and collapse fall squarely upon the shoulders of Native Americans. The consequences of narrating our *collective* failures acquire a very different meaning when projected upon Indigenous populations.

Read from this perspective, it would not be difficult for Diamond to reach his conclusions about Chaco Canyon or the Hohokam. Any curious reader interested in learning about Indigenous prehistory is likely to encounter a whole genre of academic literature devoted to the technological, environmental and political shortcomings of Native Americans. Archaeology, by the very nature of its materials (discarded things and uninhabited dwellings), provides a natural data set from which disasters of all kinds can be reverse-engineered. In Diamond's work we see the logical conclusions one might reach by leafing through the last 35 years of archaeological literature on the Southwestern USA. From these journals we learn

that all archaeological sites, by virtue of their abandonment, can be interpreted as evidence of some form of social, technological or environmental failure. In a neo-evolutionary calculus, where adaptation insures survival (and a claim on the landscape), the Indian affirms his failure to adapt by his absence.

The connections between the 'archaeological record' and living peoples are often obscured through the invention of archaeo-ethnicities such as the Anasazi, Chacoans, Athapaskans and Hohokam – invented cultures with apparently invisible descendants. Through a process of professional appropriation, places like Chaco Canyon became the data set of concerned scientists instead of a part of the living cosmogram of contemporary Pueblos and their neighbors. Instead, we find in *Collapse* a perfectly logical account of the shortcomings of Indigenous peoples, another origin myth of the *haves* and *have-nots* in *Guns*. One can't help but notice the subtle shift between the 'accident' of conquest in *Guns* and the 'choice' of success or failure among Diamond's Anasazi in *Collapse*.

One might similarly wonder when visiting the flooded golf courses and melting asphalt surrounding the ivory towers of the southwestern mega-universities, how Indigenous peoples, who cultivated fields, rotated crops, and developed drought- and disease-resistant strains of corn for at least a thousand years in a desert, are now the *locus classicus* of willful environmental mismanagement. In *Collapse*, Diamond merely relays the well-worn tradition among many southwestern archaeologists of explaining the abandonment of just about every archaeological site as the consequence of environmental mismanagement or warfare resulting from environmental mismanagement. It seems that prior to the accident of European conquest, Native Americans chose to abuse either the environment, or each other, and this set the scene for conquest, colonization, poverty and the 'vanished' (or invisible) Indian.

For Diamond, Indian prehistory has come to exemplify a tragedy of the commons on wheels – a movable feast of miscalculation, mismanagement and misery. Environmental modeling, isolation from descendent communities and the reluctance of archaeologists to examine recent historical connections between Native peoples and the past, fed into a fallacy few archaeologists recognized as damaging to contemporary Native peoples. Under the admirable guise of furthering the knowledge of human prehistory writ large, where the archaeological record is viewed as a data set belonging to everyone, local more recent historically situated narratives like those of the O'odham and the Pueblos have attracted little attention from archaeologists. Although this situation has begun to change in recent years, for much of the twentieth century, Native Americans were disarticulated from both the material remains of their ancestors and the process of interpreting these remains to the public. The result of being written out of history (and prehistory) is that the presence of 4.5 million Indians in the



USA today is a complete mystery to most Americans. Unfortunately, the alienation of the O'Odham from their past is not unique. Many Indigenous peoples, frustrated by the activities and scholarship of archaeologists, advocated for a greater voice in the interpretation of their histories. Passed into law in 1990, the Native American Graves Protections and Repatriation Act (NAGPRA) required archaeologists and museums to consult with Native Americans and return cultural properties and human remains to descendent communities.

It is not surprising that the main challenge posed by the NAGPRA legislation was the process of rearticulating these materials with living groups. Working with the living descendants of an archaeological landscape quickly interrupts the logical links between what archaeologists interpret as an 'abandonment', the ready-made parable of 'failure', and the social deaths of invented groups such as the Hohokam and Anasazi. Without such a dialogue, each archaeological site is viewed as a kind of skeleton – the corpse of an evolutionary dead-end. Since archaeologists and museum curators are now required by law to consult with tribes, invisible Indians are now very visible indeed; many archaeological projects have become collaborative ventures where ethnographic skills (and talking to living Indians) have become a central component of research.

Diamond's work completely missed this more recent tectonic shift in archaeology. Not once does he mention speaking with any living Native peoples about the significance of Chaco or the legacy of the Hohokam. Instead, in *Collapse*, we learn that the Anasazi deforested the landscape and were 'done in' by the resulting dropping water tables (Diamond, 2005: 155). Salinization similarly forced the Hohokam to abandon their villages. The Mogollon (in the central mountains of Arizona and western New Mexico) exhausted their agricultural potential. Diamond writes:

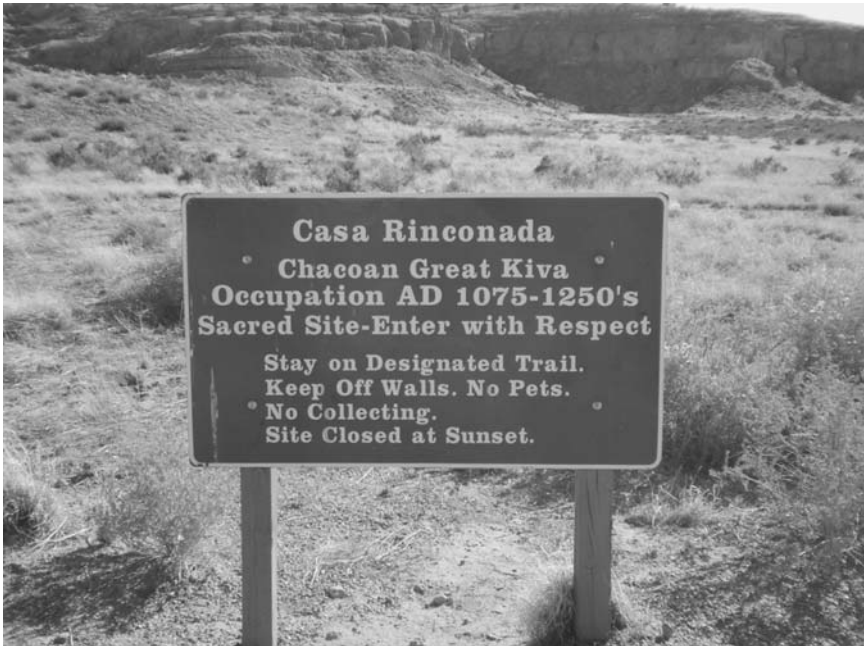
All these abandonments were ultimately due to the same fundamental challenge: people living in fragile and difficult environments, adopting solutions that were brilliantly successful 'in the short run', but that failed or else created fatal problems in the long run, when people became confronted with external environmental change or human caused environmental changes that '*societies without written histories and without archaeologists could have anticipated*'. (2005: 155)

According to Diamond, without archaeologists, Native peoples not only lacked any notion of memory or concept of sustainability but were also unable to realize that they lived in a marginal environment. Their 'failures', according to Diamond, should serve as a warning to more enlightened peoples – people with technological know-how, written histories and archaeologists. The same people who have managed to turn the center of the Hohokam homeland into the sprawling, asphalt-covered capital city of Arizona – a region fed by the same massive irrigation projects which have

made the Gila River and the mighty Colorado completely disappear miles inland from their former outlets. For Diamond, failure is in the eye of the beholder.

### ■ A LESSON IN DRIVE-BY ARCHAEOLOGY: URBAN DEFORESTATION AMONG THE CHACO ANASAZI

Diamond simply ignores basic facts about the history of Chaco Canyon (in north-central New Mexico) in order to cast Chaco (and the Pueblos) as models of urban and social failure. Tooling through the arid landscape of northern New Mexico, Diamond marvels at the 'Anasazi ability to build an advanced city in such a wasteland' – a wasteland that he fails to recognize as the present homeland of 19 contemporary Pueblo reservations. One has to wonder how Diamond was able to ignore the large permanent signs located at the entrance to every Great House in Chaco Canyon, reminding visitors that Chaco continues to serve as a sacred landscape to contemporary Native peoples (Figure 2). Because he does not speak to any living



**Figure 2** Chaco national monument sign reminding visitors that Chaco is a sacred site



Pueblos (apparently there was no ‘Yali’ with whom he might converse), his assessments of environmental mismanagement and ‘the collapse and disappearance of the Chacoans’ are based on a very narrow selection of archaeological manuscripts and articles – materials in which environmental mismanagement is foregrounded and Pueblo interpretations of the region are largely ignored. Just as he does with the Hohokam, Diamond misrepresents the significance, function and history of what was (and still is) an important center of Pueblo ritual and history. To add insult to injury, he argues that the same Pueblos who had been ‘choosing to fail’ *for the past two thousand years* were once again doomed when drought snuck up on them in the years leading up to the Great Pueblo Rebellion of 1680. Diamond was rightly alarmed as he left the modern urban sprawl of Albuquerque, the endless tracts of homes and strip-malls, the evidence of overgrazing, erosion and arroyo cutting, and the depressing sight of the Rio Grande which is dry for much of the year due to the relentless groundwater pumping for urban and agricultural purposes – all of which were caused by Diamond’s mythical colonial ancestors, not the Pueblos.

Archaeology, as a field and as an interrogatory practice, remains a powerful tool with which the human past can be investigated. When linked to contemporary peoples, scientific archaeology (or processualism) can be used to illuminate the persistence of Indigenous cultures and illuminate some of the fallacies advanced in Diamond’s works. Over a century of excellent (and some regrettable) archaeological investigations have taken place at Chaco Canyon. These investigations directly contradict the facts as presented by Diamond. To summarize, Chaco represented the florescence of an unprecedented social movement within the Pueblo world. The evidence for that movement is embodied in a collection of large pueblo-like buildings called *Great Houses*, some with hundreds of rooms, along a small river in the center of an arid basin in northwest New Mexico (Figure 3). In *Collapse*, Diamond argues that Chaco Canyon was an oasis in which agricultural production (especially of maize) was first adopted and later intensified over a period of six hundred years (AD 600–1200). Gradually, the population expanded beyond the carrying capacity of the land, the region was deforested by large construction projects and the resulting erosion cut channels which lowered the water table. When the environment changed (via an extended drought between AD 1125 and 1150), the social system collapsed into a period of incessant warfare, extreme violence and cannibalism (Diamond, 2005: 151–2). This scenario is either incomplete or simply not supported by archaeological evidence.

First, Chaco was occupied much earlier than AD 600 (Atlatl Cave has been dated to 1000 BC) by small scale, more mobile groups who experimented with agriculture. Permanent villages dating to AD 400 are found beneath two of the Great Houses (Shabik’eschee Village and Penasco Blanco) and there is every reason to believe that others may be similarly

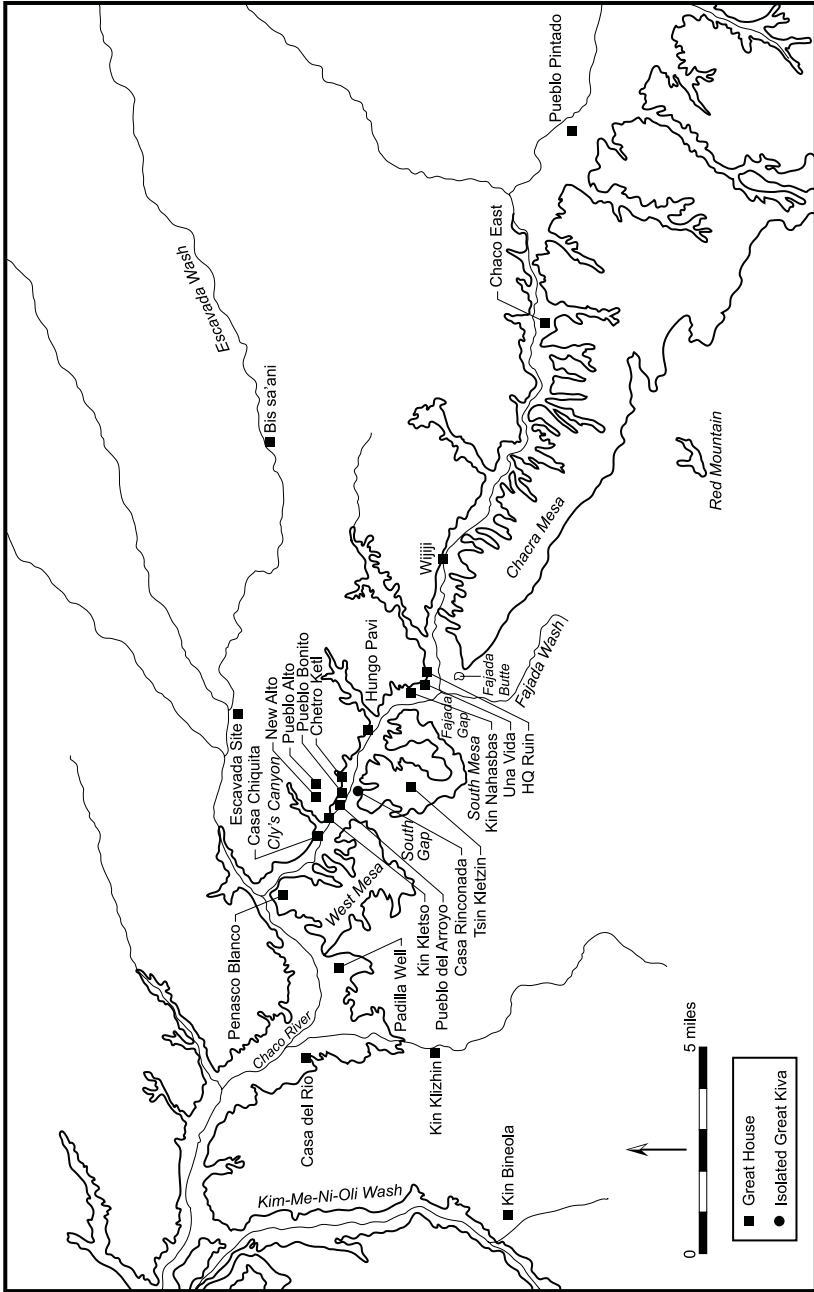
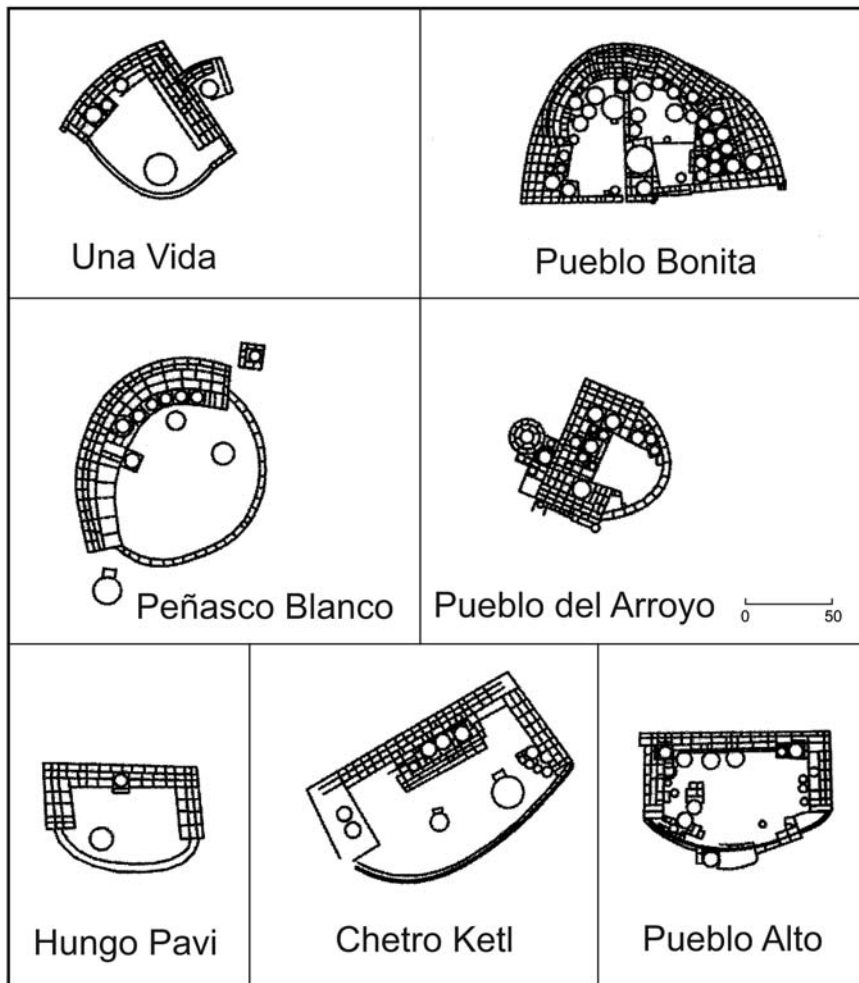


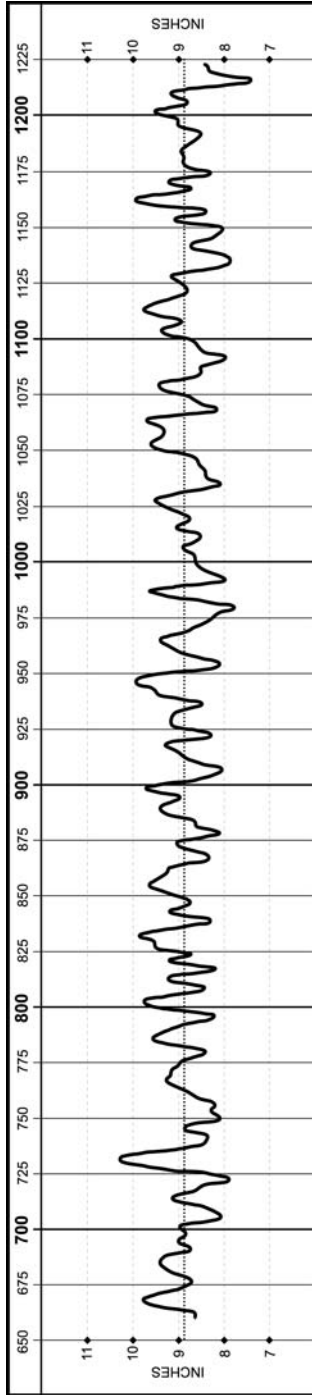
Figure 3 Map of Chaco Canyon great houses (courtesy of Chaco Canyon National Park)



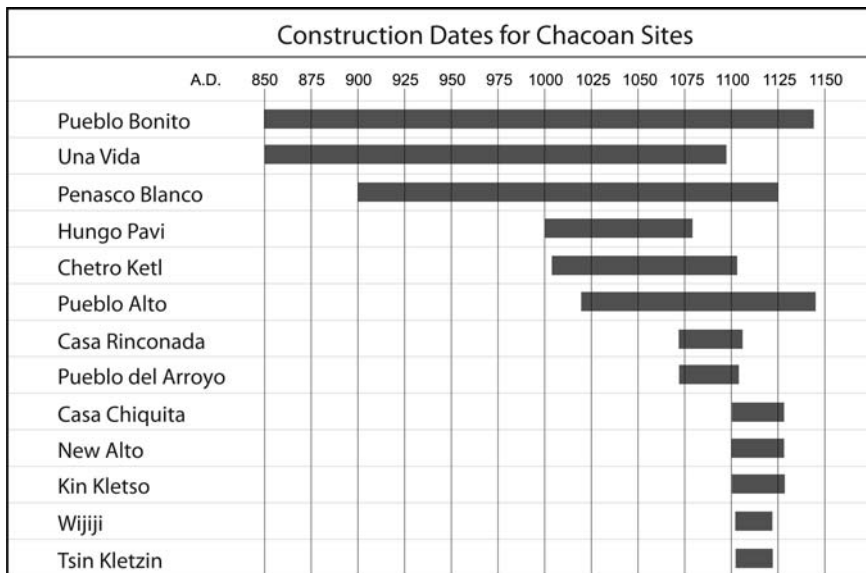
located (Elliott, 1986; Lekson, 2006: 71). Second, while environmental stresses play a part in every agricultural society, the people at Chaco lived literally for centuries in a landscape where extended droughts occurred with great regularity (Huckleberry, 2007: 466) (Figure 5). There were approximately *twenty* periods of drought between AD 650 and 1225 in which the canyon remained occupied; construction events at Great Houses span several of these periods of drought (see Figures 4, 6–8). According to Diamond, in order to support a rapidly expanding population, a large forest in the canyon was cleared to construct these large apartment structures



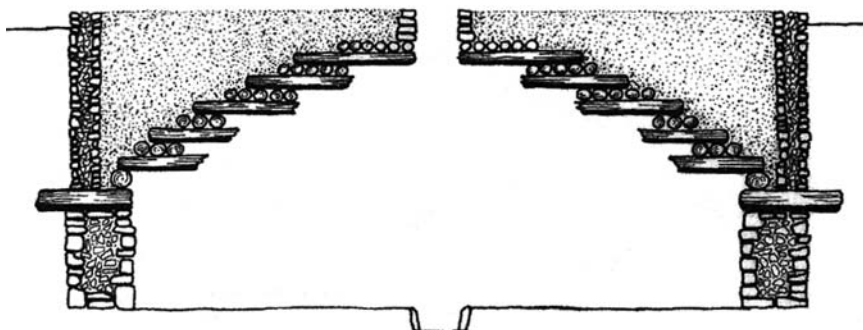
**Figure 4** Chaco Great House floorplans



**Figure 5** Low frequency trends in rainfall. The mean is 8.9 +/- 1.42 inches (adapted from Lekson 2007:393)



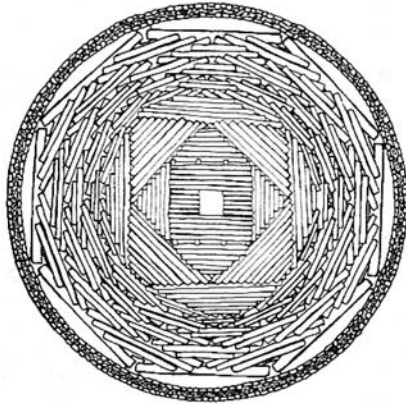
**Figure 6** Construction dates for Chacoan sites



**Figure 7** Cribbed roof of kiva (side view)

(Great Houses and Great Kivas). Deforestation led to erosion, *entrenchment* (or arroyo cutting), the lowering of the water table and the disappearance of the Chaco River.

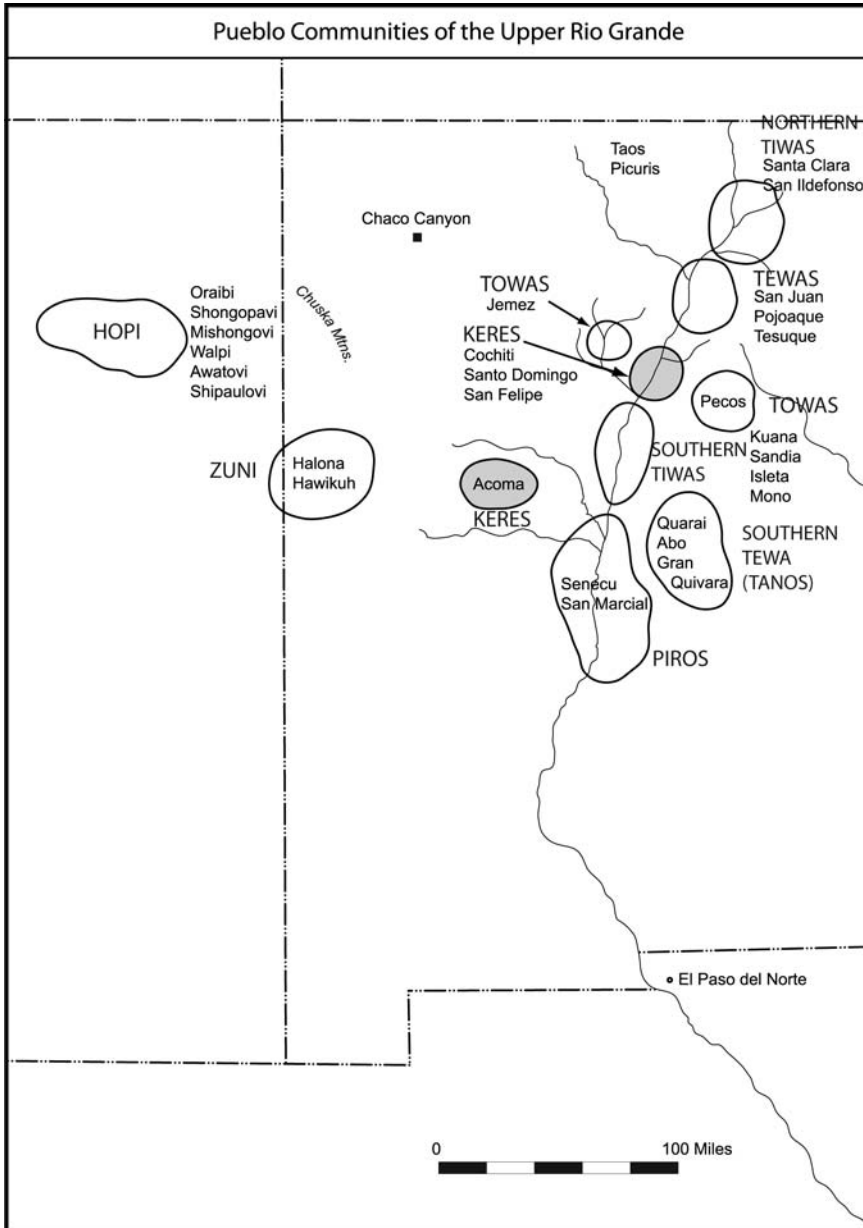
However, there was never an arboreal forest in the canyon. Packrat middens (which reveal the presence of ancient pollens) in the valley reveal a climate and ecology almost exactly like that which exists today (Hall, 1988: 582). So where did the estimated 200,000 trees that were cut down to supply building materials come from? The same place where the cycles of drought



**Figure 8** Cribbed roof of kiva (top view)

are documented – 75 kilometers to the west in the Chuska Mountains (Figure 9). There *is* no wood from which rainfall amounts in the canyon itself can be documented. As far as arroyo cutting is concerned, geologist Eric Force (Force et al., 2002) has identified several periods of aggradation (deposition of sediments) and entrenchment (erosion of water channels) at Chaco. While construction events coincide *loosely* with the deposition of sediments, it is unknown whether drought or water diversion (and farming) led to sedimentation. Neither do major entrenchment events coincide with the abandonment of the canyon in the 1300s. We do know that the water table at Chaco fell in the late 1800s with the introduction of cattle and that since the early 1900s a large arroyo has been cut along the course of the Chaco River. None of these changes were caused by the original inhabitants of the canyon.

The idea that Chacoans recklessly expanded farming in the valley in order to feed large permanent populations is similarly a fiction. Annual temperature at Chaco varies from  $-38^{\circ}\text{F}$  to  $102^{\circ}\text{F}$ . In order to cultivate corn, modern Pueblo farmers require 120 frost-free days (Vivian, 1990: 22). In the canyon today the average is fewer than 100 days, making stable agricultural production largely impossible. So where did the food come from? It was brought in periodically – probably during pilgrimages to the ritual center that was Chaco. Corn and wood (construction materials) collected from Chaco have helped debunk the notion that the canyon was ever used as the source of building materials *or* food. Water leaves isotopic signatures (ratios of Strontium  $\text{Sr}87/\text{Sr}86$ ) in plants that are particular to specific geographic contexts (Reynolds et al., 2005). Throughout the Chaco sequence, corn gathered from middens (garbage dumps) and wood have isotopic signatures similar to plants grown 80 kilometers away in the Chuska mountains or the San Juan River floodplain, 90 kilometers to the



**Figure 9** Map of Chaco in relation to modern Pueblos and Chuska Mountains

north (Benson et al., 2003). Corn and other food supported a very small year-round population. Early investigators were puzzled by the low

numbers of burials and human remains within any of the Great Houses in the canyon. After over a century of excavations, only 350 burials have been discovered at a site which was occupied for about eight centuries (AD 400–1300). As for evidence of warfare, violence and social conflict, only a very small percentage of the burials show evidence of perimortem violence and there is no burial evidence supporting large-scale warfare at any time in the canyon's history (Lekson, 2002: 607–24). The processing of human remains belonging to Puebloan people accused of witchcraft does resemble dietary processing, but the cultural contexts are completely different (Darling, 1998; Dongoske et al., 2000; Walker, 2001). Finally, only a small number of rooms at Chaco have fire pits, hearths or mealing bins, normal indications of year-round occupation (Mathien, 1986, 2005).

So what was Chaco? Most likely, Chaco was a multi-ethnic ritual center where ideas, as well as some food, were exchanged. Evidence for large-scale feasting is present at many of the Great Houses. One of the largest middens in the area is positioned at Pueblo Alto, marking the terminus of one of the road systems on the bluffs overlooking the northern entrance to the canyon. Many of the Chacoan structures appear to have been built as arenas and for ceremonies and demonstrations of sacred knowledge (Mills, 2002). Current interpretations of Chaco suggest that the network of precisely oriented roads extending hundreds of kilometers throughout the San Juan Basin seem to have directed people into the canyon for festivals and ritual performances. The 'end' of the Chaco system coincides with the appearance of Pueblo peoples throughout the region – exhibiting the same architectural forms, subsistence technologies and material cultures as the people at Chaco. One important difference between contemporary Pueblos and the Chaco system is the notion that ritual centralization was socially dangerous. Secrecy and the compartmentalization of ritual knowledge (even within Pueblo communities) may have developed in response to what happened at Chaco. Diamond ignores this story, which is as interesting and significant (certainly to modern people) as the existence of Chaco itself. The relationship between social change and ideology appears to have played a significant role in the history of Chaco. Ideology is central to many of the most dramatic changes in western civilization. There is every reason to believe that these types of changes were at least as transformative among Native Americans as they were to Europeans.

## ■ CREATING AN IDEOLOGY OF CONQUEST: CHRISTIANITY AND THE PUEBLO REVOLT OF 1680

It is significant that Diamond makes reference to the Pueblo Revolt of 1680 as an historically recorded instance of extended drought. 'A model for the



end of Anasazi settlement at Chaco Canyon,' Diamond writes, 'which the Europeans did observe' (2005: 153). However, the archaeology of the Pueblo Revolt of 1680 tells little about the natural environment. Rather, it speaks significantly about the importance of ideology in European colonization, the responses of Indigenous peoples to social violence and the meaning of abandonments from the perspectives of the Pueblos themselves. The Revolt provides an important counter-narrative of survival and helps address the most salient question for Native peoples: How is it that we are still here?

From my own perspective, a more appropriate troika of destruction would be 'Lawyers, Gods and Money'. First and foremost I reject the notion that any military conquest, however rapid, immediately or totally transforms any society. Conquests are continuously reformulated and reiterated through time. As we have seen recently in the news from the Middle East, conquests demand maintenance. But the maintenance and motives of conquests are not found in 'free floating' military technologies that happen to accumulate within a particular population. Conquests require ideologies and philosophies that allow one group to imagine itself as the naturally or divinely ordained instrument of progress and change. The philosophical justifications of subordination are not only the most fundamental element of conquests, they are also the most interesting.

What greater irony could one imagine than the manner in which Christianity, which begins as a small sectarian cult that rejected materialism and embraced a radical egalitarian philosophy, is yoked violently to the arms and economic ambitions of the Spanish state? In Spain and its colonies, Christianity was militarized through the character of Santiago Matamoros (St James the Moor killer), a mythical brother of Christ. Between 1540 and 1600 the Pueblos endured eight successive waves of violent raids from Spanish colonists culminating in the first permanent European settlement in the USA – Santa Fe. Santa Fe in Spain was the name of the siege city from which Christian warriors launched a siege against Grenada, the final Arabic kingdom to fall in the Reconquista of Spain. Colonial New Mexico was a projected cosmogram of the Reconquista. When battling the Pueblos, the Spanish warriors invoked the name of Santiago and referred to Pueblo kivas as 'mosques'. Ideology, a human construct, is central to this narrative. Justifications for the use of violence as a tool of conversion and enforcement can be traced to the theologian Augustine in the fifth century. Augustine, in a series of letters to the Pope, advocated the use of force as a means of subjugating a rival Christian sect known as the Donatists in North Africa. Borrowing from the gospels, Augustine cites three words uttered by Jesus to his disciples: 'Feed my sheep'. Using this single sentence, Augustine reasoned that for the sake of salvation, all of the earth's peoples can and should be compelled to join at the table of the Lord: compelled, even if by force of arms. Thus begins

nearly one thousand years of legal, morally justified warfare between Christian peoples, heretics, heathens and idolaters. Without this legal and theological justification, the fledgling nations of early modern Europe were thought to lack the moral authority to interfere in the lives of peoples who were geographically separated from, and therefore could not have yet heard, the word of Christ. It is instructive that this geographic connection would doom whole populations of West Africans to the slave trade of the Americas. Conquest was far from accidental or simply a product of geography, but was accomplished under the rule of law and the philosophical underpinnings of that law, an actively constructed rationale for conquest and subjugation.

In the early Spanish *Entradas* (expeditions) into New Mexico, a lengthy document outlining the relationship between Jesus and Peter, Peter and the popes, and the pope and the soldiers of the Holy Roman Empire was read (in Spanish and Latin) to Native peoples as a formal requirement before military engagement. Those who resisted after its recital could have a 'Total War', a just war or Fire and Blood waged upon them (Williams, 1990: 30–2, 64). Resisting the Spanish was equated with resisting Christ, and Pueblo prisoners were killed according to the rules of conquest – they were to be burned. Colonial violence was not a crime of passion. It was a technical discipline, routinized by a bureaucracy and upheld by the rule of law. It would seem that the histories of the Roman and Spanish empires would attest to the central importance of ideology in global conquests. But these human constructs remain completely unexplored in Diamond's tale of accidental conquest.

In my work on the archaeology of the post-contact period in New Mexico I have found a very different set of responses by the Pueblos to colonization than is characterized in *Guns* (Wilcox, 2009). Many of the abandonments which occurred during the contact period did not result from disease, but from a desire to use mobility as a means of establishing social segregation. After 60 years of violent raids along Spain's colonial northern frontier, the Pueblos and their neighbors repeatedly used mobility as a social strategy in order to remove themselves from the social, religious and economic coercion of the Spanish. To maintain social distance, the Pueblos created geographic distance. Until very recently, few post-contact period Indigenous sites (other than missions) have been systematically explored or documented. Now we can see that during the Revolt of 1680, when Pueblo people attacked missions and Spanish villages, several new communities were constructed on mesas, or deep within the forests of the Jemez Mountains.

The existence of these sites requires archaeologists, not just Jared Diamond, to rethink the meaning of abandonment. Rather than regarding abandoned sites as skeletons or corpses of a dead society, a more appropriate metaphor is that of a shell. The living organism creates it, inhabits it



and then moves from it only to construct a new home and preserve the life inside somewhere else. Abandonment, like mobility, is a social strategy and *not* evidence of a social failure or 'collapse'. One interpretation suggests continuity and creates a space for the survival of Indigenous peoples; the other effectively writes Indians out of the present and alienates them from the material remains and communities of their ancestors.

As for the causes of the Revolt of 1680, human agency and ideology were at the heart of the conflict, not disease, drought or weaponry. In the years following the permanent colonial settlement of Santa Fe in 1600, the Pueblos were more willing to work in the textile factories and fields of secular officials as long as they did not interfere with the Pueblo religious life. When a new regime of Christian missionaries and secular officials arrived from Mexico in 1650, they increased taxation from a per household rate to a per capita rate, forbade the practice of ancient Pueblo ceremonies which ensured the survival of the Pueblos, and arrested the Pueblo religious leaders. Within a decade, the Pueblos revolted and the Spanish were expelled from the Pueblo world and forced to negotiate with and accommodate Pueblo religious practices.

The Spanish legal system, the infrastructure and the fragile economy of New Spain were all human constructs, not accidents. No story about Chaco, the O'odham or the Pueblo Revolt can be told without referring to ideology, culture and history. The passage of laws such as the Desert Land Act, and the failure of democratic institutions to protect the rights of small minorities such as the O'odham, are social artifacts of Manifest Destiny. The importance of Chaco as a pilgrimage site and the role of Christian evangelism as a justification for military conquest and colonization each emphasize the importance of ideology and history in shaping the trajectories of human societies.

## ■ CONCLUSION

And so we return to my original proposition. If we shift our questions 180 degrees, and ask if there are narratives which explain not invisibility and disappearance or marginality but the survival of Indigenous peoples, we are led to an entirely different set of micro-narratives. Assuming that Indians are still here (as I am forced to do), I am asked to perform a mythic reversal. If after reading Diamond we are led to think that conquest was driven by invisible forces, that the scene was set (and colonization is justified) by the mismanagement of the environment by prehistoric peoples of North America, we have participated in and consumed the most noxious and potent agent of conquest: the narrative itself.

My criticisms are not simply of Jared Diamond himself, but of those who explain global inequalities and poverty, and the have-nots who have no

cargo, as powerless victims of impersonal forces. As a reader, I cannot be held responsible for military encounters 500 years ago. But as an archaeologist I am responsible for understanding how the work I create can take on a life of its own and be interpreted as a collective explanation for Indigenous ‘failures’ – failures that seem to justify colonization and the replacement and removal of Indian peoples. Diamond’s tidy explanation of conquest and global poverty is not only factually incorrect; it gives us the sense that its origins lie somewhere out there, beyond the agency of the reader. The implication is that if conquests were situated long ago, somewhere else, then we are powerless over their contemporary manifestations. Conquests are never instantaneous, transformative nor all encompassing. They are enacted, re-enacted and rewritten for each succeeding generation. In this sense, Diamond’s narrative of disappearance and marginalization is one of conquest’s most potent instruments.

## Notes

- 1 Adolph Bandelier was a notable exception. Bandelier lamented the disconnect he observed in memoirs and letters to his colleagues (Bandelier and Kate, 1977: 142; Fewkes, 1912; Hodge, 1893: 323–30).
- 2 Linguistic evidence suggests that the material culture archaeologists characterize as ‘Hohokam’ is actually the remains of multi-ethnic communities. Other tribes in the area, such as the Maricopa and Yuma, are likely also among the descendants of the Hohokam (Shaul and Hill, 1998: 375–96).
- 3 For a review of various attitudes among archaeologists about the fate of the Hohokam and their relationship (or lack thereof) to the Pima, see Cordell and Gumerman (1989: 19–63); Di Peso et al. (1993: 224–30); Doelle (1981: 445); Doyel (1991: 231–78); Gladwin (1937, 1965: 5–18); Haury (1976: 357).

## References

- Bandelier, A.F.A. and H.F.C. Kate (1977) *An Outline of the Documentary History of the Zuni Tribe*. New York: AMS Press.
- Benson, L., L. Cordell, K. Vincent, H. Taylor, J. Stein, G.L. Farmer and K. Futa (2003) ‘Ancient Maize from Chacoan Great Houses: Where Was it Grown?’, *Proceedings of the National Academy of Sciences* 100: 13111–5.
- Cordell, L.S., G.J. Gumerman and School of American Research (1989) *Dynamics of Southwest Prehistory*. Washington, DC: Smithsonian Institution Press.
- Darling, J.A. (1998) ‘Mass Inhumation and the Execution of Witches in the American Southwest’, *American Anthropologist* 100: 732–52.
- Di Peso, C.C., A.I. Woosley and J.C. Ravesloot (1993) *Culture and Contact: Charles C. Di Peso’s Gran Chichimeca*. Albuquerque: University of New Mexico Press.
- Diamond, J.M. (1996) *Guns, Germs, and Steel: The Fates of Human Societies*. New York: Norton.
- Diamond, J.M. (2005) *Collapse: How Societies Choose to Fail or Survive*. New York: Viking.



- Dobyns, H.F. (1978) 'Who Killed the Gila?', *The Journal of Arizona History* 19(1): 17–30.
- Dobyns, H.F. (1989) *The Pima-Maricopa*. New York: Chelsea House.
- Doelle, W.H. (1981) 'The Gila Pima in the Seventeenth Century', in D.R. Wilcox and W.B. Masse (eds) *The Protohistoric Period in the North American Southwest, AD 1450–1700*, pp. 57–70. Anthropological Research Paper 70. Tempe: Arizona State University.
- Dongoske, K.E., D.L. Martin and T.J. Ferguson (2000) 'Critique of the Claim of Cannibalism at Cowboy Wash', *American Antiquity* 65: 179–90.
- Doyel, D.E. (1991) 'Hohokam Cultural Evolution in the Phoenix Basin', in G.J. Gumerman (ed.) *Exploring the Hohokam: Prehistoric Desert Peoples of the American Southwest*, pp. 231–78. Dragoon, AZ: Amerind Foundation; Albuquerque: University of New Mexico Press.
- Elliott, M. (1986) *Atlatl Cave and the Late Archaic Period in Chaco Canyon, New Mexico*. Albuquerque: University of New Mexico Press.
- Fewkes, J.W. (1912) *Casa Grande, Arizona*. Washington, DC: Smithsonian Institution.
- Force, E.R., J.S. Dean and G. Funkhauser (2002) *Relation of 'Bonito' Paleo-channels and Base-level Variations to Anasazi Occupation, Chaco Canyon, New Mexico*. Tucson: Arizona State Museum, University of Arizona.
- Gladwin, H.S. (1937) *Excavations at Snaketown*. Globe, AZ: Priv. print. for Gila Pueblo.
- Gladwin, H.S. (1965) *Excavations at Snaketown: Material Culture*. Tucson: Reprinted for the Arizona State Museum by the University of Arizona Press.
- Hall, S.A. (1988) 'Prehistoric Vegetation and Environment at Chaco Canyon', *American Antiquity* 53: 582–92.
- Haury, E.W. (1976) *The Hohokam: Desert Farmers and Craftsmen: Excavations at Snaketown, 1964–1965*. Tucson: University of Arizona Press.
- Hodge, F.W. (1893) 'Prehistoric Irrigation in Arizona', *American Anthropologist* 6: 323–30.
- Huckleberry, G. (2007) 'Environmental Change and Human Adaptation in the Ancient American Southwest', *The Kiva* 72: 466–9.
- Lekson, S.H. (2002) 'War in the Southwest, War in the World', *American Antiquity* 67: 607–24.
- Lekson, S.H. (2006) *The Archaeology of Chaco Canyon: An Eleventh-century Pueblo Regional Center*. Santa Fe, NM: School of American Research Press.
- Mathien, F.J. and United States National Park Service (1986) *Environment and Subsistence of Chaco Canyon, New Mexico*. Albuquerque, NM: National Park Service, US Dept. of the Interior.
- Mathien, F.J. and United States National Park Service (2005) *Culture and Ecology of Chaco Canyon and the San Juan Basin*. Santa Fe, NM: National Park Service, US Dept. of the Interior.
- Mills, B.J. (2002) 'Recent Research on Chaco: Changing Views on Economy, Ritual, and Society', *Journal of Archaeological Research* 10: 65–117.
- Office of Indian Affairs (1924) *Annual Report of the Commissioner of Indian Affairs to the Secretary of the Interior for the Fiscal Year Ended 1869, 1870, 1877, 1885, 1888*.

- Rea, A.M. (1983) *Once a River: Bird Life and Habitat Changes on the Middle Gila*. Tucson: University of Arizona Press.
- Reynolds, A.C., J.L. Betancourt, J. Quade, P.J. Patchett, J.S. Dean and J. Stein (2005) '87Sr/86Sr Sourcing of Ponderosa Pine Used in Anasazi Great House Construction at Chaco Canyon, New Mexico', *Journal of Archaeological Science* 32: 1061–75.
- Robinson, M.C. and Public Works Historical Society (1979) *Water for the West: The Bureau of Reclamation, 1902–1977*. Chicago, IL: Public Works Historical Society.
- Shaul, D.L. and J.H. Hill (1998) 'Tepimans, Yumans, and other Hohokam', *American Antiquity* 63: 375–96.
- Vivian, R.G. (1990) *The Chacoan Prehistory of the San Juan Basin*. San Diego, CA: Academic Press.
- Walker, P.L. (2001) 'A Bioarchaeological Perspective on the History of Violence', *Annual Review of Anthropology* 30: 573–96.
- Wilcox, M.V. (2009) *The Pueblo Revolt and the Mythology of Conquest: An Indigenous Archaeology of Contact*. Berkeley: University of California Press.
- Williams, R.A. (1990) *The American Indian in Western Legal Thought*. New York: Oxford University Press.

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