Catastrophe, Revitalization and Religious Change on the Prehispanic North Coast of Peru

Justin Jennings

Although archaeologists have become increasingly interested in disaster, collapse and regeneration, there has been insufficient attention paid to the social and psychological impact of disasters. Disasters can stimulate far-reaching religious changes. This article is a case study of the fall of the Middle Sicán polity of northern Peru (AD 900–1100) that draws on both archaeology and oral tradition. Middle Sicán cosmology was centred on the Sicán Deity, which did not survive the polity's collapse. The god's demise and the revitalization movement that followed the Middle Sicán can only be understood by considering both how many of the people of the region conceptualized their world and the disasters that occurred.

Some time around AD 1100, the Sicán Deity nearly vanished from the iconography of northern Peru. A ubiquitous religious symbol for 200 years in the region, the deity did not survive a spasm of environmentally and culturally induced disasters that toppled the Middle Sicán polity (Shimada 2000, 60–61).

Disasters such as floods and wars are events that create sudden social upheaval and population loss. The periods of turmoil that follow are deeply traumatic and filled with terror, despair, uncertainty and hope. Shaken, people that survive disasters often question their beliefs, create new social groupings, assign culpability and attempt to reconstruct their lives. While scholars have become increasingly interested in disasters and the collapse and regeneration of ancient complex societies (e.g. Bawden & Reycraft 2000; Demarest *et al*. 2004; Diamond 2005; Fagan 1999; 2003; McIntosh *et al*. 2000; Redman 1999; Schwartz & Nichols 2006; Stanley 1998; Stevens 1999; Tainter 1988; Yoffee & Cowgill 1998), there has been insufficient attention paid to the social and psychological impact of disasters (e.g. Van Buren 2001).

Catastrophes are 'triggers and revealers' that have been important catalysts of change for much of human history (García-Acosta 2002, 57). As people begin to re-build their lives in the wake of a disaster, one of their pressing concerns is for closure: they need to understand why things happened and they seek ways to make sure that it does not happen again. Under these conditions, new religious ideas and new leaders often emerge that take cultures in new directions. Despite the importance of understanding culture change for the spiritual upheavals that followed disasters, archaeologists feel perhaps ill-equipped

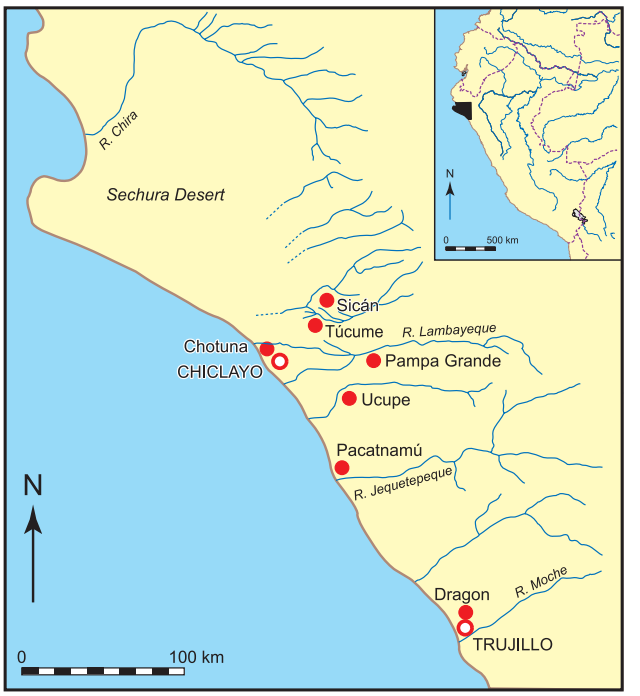

Figure 1. *The Lambayeque region of northern Peru.*

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to study them. Our ability to study many aspects of religion in prehistoric contexts remains hotly debated (Whitley & Keyser 2003), and the details of religious changes in these instances are often too rapid to track archaeologically. Nonetheless, it is possible to study the religious ramifications of catastrophes through a careful study of the material and environmental record. This article on the fall of the Sicán deity serves as a case study of how this could be done.

For those that study the Prehispanic North Coast of Peru, my choice of the Sicán for this case study might be a curious one.[1] In comparison to other complex societies of the North Coast, the Sicán have been little studied, since significant archaeological fieldwork on the culture only began in the late 1970s. Perhaps more importantly, the Sicán capital is perhaps the most heavily looted site in the world — there are over 100,000 looter's holes — and many of the outlying sites have been destroyed over the years by the encroachment of settlements and agriculture. These conditions make any description of the Sicán a tentative one. There are rich data on some aspects of Sicán culture, for example elite burials and craft production, but almost no reported data on other aspects of life, such as domestic data on commoner households. Nonetheless, I chose the Sicán as a case study for three reasons: the rupture in belief between Middle and Late Sicán is deep; this rupture is directly correlated with a series of well-studied disasters; and there has been extensive fieldwork in the major Sicán ceremonial centres that were occupied before and after the disasters occurred.

I begin my argument by discussing the role of religion during catastrophes. With this theoretical framework in place, I then briefly discuss the relationship between the environment, culture and natural disasters on the North Coast through the centuries. I focus next on Middle Sicán world view and the legitimization of power within that world view. Finally, I consider how the disasters that befell the Middle Sicán polity caused religious change that led to the emergence of an altered Sicán society in the Late Sicán period. By analysing how these changes were a result of reactions to a catastrophe, I build on previous discussions of the Sicán collapse that have been developed by Izumi Shimada (1990, 346; 2000, 61–2). Extending his arguments, I argue that religious changes were the result of the abandonment of aspects of a Sicán world view that had been critical to the legitimization of elite power and prerogatives in the Middle Sicán cult. This abandonment was spurred by a radical disjuncture between Sicán beliefs and the lived reality of the disasters. This abandonment, however, did not significantly alter fundamental beliefs about the relationship between nature and humanity that had been held for centuries. Instead, the disaster precipitated a revitalization movement that sought to return to traditional beliefs.

Catastrophes and religious change

Religion can be defined as any belief system that serves the psychological function of alleviating anxiety (Donovan 2003, 92). As the founders of modern anthropology recognized long ago (Frazer 1935; Tylor 1873), religion is seen by many scholars as functional in the sense that it allows us to cope with the hardships of human existence (e.g. Bloch 1992, 3; Boyer 2005, 12–13; Geertz 2005, 6; Fernandez 1978, 201). While many anxieties, like those over death, famine, disease, and conflict, are shared broadly across cultures, they are framed by the individual within specific social, historical and environmental contexts and addressed in radically different ways by religions. The belief systems found in religions alleviate anxiety by positing a general order of the world that forms models of and for reality that shape a person's understanding of their culture and their cosmos (Geertz 1973, 93). Religion works because it provides one with a way of understanding the world — it becomes the reality by which the world is judged (Rappaport 1999). This aspect of religion may perhaps be best illustrated by Michael Lambek's example of a rain-maker (2000, 315). If the rain-maker has done his work correctly, then it is the rain that is at fault for its absence. The lack of rains is not taken as proof against rain-making by believers; instead, either the rite was performed poorly or the gods are displeased.

Religions contain elements that are either taken for granted or believed (Bloch 2005, 120). How one acts, how one feels and how one knows in different social situations is often guided by the taken for granted conception of how the world works (Comaroff & Comaroff 1991, 28; Ortner 1989, 60). The basic beliefs in religions can become part of a culture in such a fundamental way that they become naturalized within a society (Bourdieu 1977, 164; Sahlins 1996, 395). These ideas are part of the tacit knowledge that one employs in the course of daily activities (Giddens 1979, 59), and they are often remarkably durable, surviving political, economic and social changes over hundreds of years (Geertz 1980, 134; Sahlins 1981, 17; 1996, 421). Other beliefs, however, are often less firmly entrenched. Elements believed in are not intuitive in the same manner as the non-discursive elements; instead, these elements are often discussed and pondered

(Harding 1999, 297). As Bloch (2005, 10) notes, what practitioners believe *in* are repeated 'emphatically and endlessly … to convince themselves and others that they believe *that* the world is so'. Believed elements of a religion, though paradoxically some of the most visible, fervently held aspects of a faith, are therefore much more vulnerable to cultural changes.

Clifford Geertz (2005, 10) suggests that history may not repeat itself but it does rhyme — religion works in a similar manner. The changing world is made intelligible through a pre-existing rationality that attempts to explain the changes occurring (Sahlins 1995). New religions are therefore based in part on previous taken for granted beliefs because the aspects of religions continue to structure world views. This is not to suggest that there is a deep unchanging structure to religions. The taken for granted aspects of a faith change as they are brought into play in distinct cultural and historical settings (Gluckman 1968, 230–31; Kertzer 1991; Wolf 1999). Core beliefs shape and in turn are shaped by a changing reality. The most rapid and far reaching religious changes can occur in moments of catastrophe. Catastrophes are unsettling moments for survivors because of 'the shock of knowing that the world is not as we thought it was and that we are not as we thought' (Csordas 2004, 175). In these instances, religious structures can come into conflict with lived realities.

The radical 'alterity' that occurs in catastrophes forces people to confront difficult existential questions (Csordas 2004, 164; Bode 1989; Hoffman 1999, 310; Oliver-Smith 1996, 308; Wallace 1956, 269–70), and 'social and cosmic justice, sin and retribution, the relationship of the secular to the sacred, and the existence of the divine' are widely discussed (Oliver-Smith 1996, 308; also see Hoffman 2002). As beliefs are scrutinized, the political, economic and social arrangements based on these beliefs are at least momentarily destabilized (Bates & Peacock 1987, 311; Comaroff & Comaroff 1991, 26; Oliver-Smith 1996, 309). The weeks after a catastrophe are therefore potential moments of profound social change not only because those in power may have failed to respond well to the disaster but also because their political ideologies are a sunk cost that make it difficult to quickly adapt to the changing social conditions (e.g. Janssen *et al*. 2003, also see Jennings 2003a; Wolf 1999).

The atmosphere is chaotic as people seek the religious grounding needed to continue their lives. New actors often join more established leaders in looking to correct the deficiencies laid bare by the event. What these deficiencies are, and how to correct them, are often hotly contested (Bode 1989). While some actors attempt to revise the *status quo*, others attempt systematically to deconstruct previous beliefs (Lincoln 1989, 115). Changes in one aspect of society act as catalysts for change in other areas, and often result in disruptive waves of restructuring (Linn & Kreps 1986, 119; Wallace 1956, 265). Revitalization movements are one of the more common reactions to these moments of crisis (Harkin 2004a; Wallace 1956; 1966). These movements are 'a deliberate … effort … to construct a more satisfying culture' (Wallace 1956, 265) and offer emotional relief and collective meaning in a moment of great stress (Harkin 2004b, 157). However, the new religious movements are often quite fragile because they tend initially to be based more on the charisma of their leaders (Johnson 1999, 379; Sørensen 2005, 169–70) than on the deference to traditions based in an indeterminable past that is seen in more established religions (Bloch 2005, 131). In some cases, regions go through cycles of revitalization that rise in times of crisis and dissolve rapidly when the movements fail to deal adequately with the new crises (Roscoe 2004). The Middle to Late Sicán transition on the North Coast of Peru demonstrates these aspects of religious change, continuity and revitalization in the ancient world.

Environment, natural disasters and North Coast cultures

The North Coast of Peru is one of the most dramatic environments in the world, where diverse climatic zones are compressed in a narrow band between the mountains and the sea (Fig. 1). While the ocean and shoreline provides a rich bounty of fish, sea mammals, crustaceans, guano and other resources, rivers and deserts yield crops, game and raw materials (Bawden 1996, 39–47). Since different resources could be exploited across the North Coast because of climate variation both in latitude and in elevation, the valleys in Prehispanic periods were often linked through either conquest or trade (Masuda *et al*. 1985). The North Coast's environmental bounty, strengthened through exchange, provided people with a rich and varied diet and made the region a centre of population growth and cultural development for much of Peruvian prehistory.

The North Coast, however, is also one of the most unstable regions in the world. Prone to earthquakes, volcanic eruptions, and, more rarely, tidal waves, the area is most frequently destabilized by *El Niños* and *La Niñas* caused by the El Niño Southern Oscillation. El Niños are characterized by weakening of the trade winds and warming of the surface layers in the tropical Pacific Ocean. These events devastate marine life and often cause torrential rainfall on the coast of

Figure 2. *Polychrome frieze from El Brujo: fish stylized as monsters swimming in a living sea. (Photograph: James Tate.)*

Figure 3. *The Sicán Deity depicted on a Middle Sicán single-spout blackware bottle. (Royal Ontario Museum Accession 971.165.480; photograph: Marieka Arksey for the Royal Ontario Museum.)*

Peru. The opposite weather pattern, La Niñas, causes major droughts. These twin phenomena occur today usually every two to seven years, although they vary considerably in their severity (Philander 1990). There is abundant evidence that suggests that all of these environmental conditions occurred in previous centuries (Dillehay *et al*. 2004; Huckleberry & Billman 2003; Moseley 1999; 2002; Moseley & Deeds 1982; Moseley & Feldman 1982; Shimada *et al*. 1991).

The precarious nature of the relationship between people and nature on the North Coast, and throughout the Andes, forms the basis of a view of nature as a vital, living entity intimately involved in the human experience. Natural phenomena are seen as manifestations of the supernatural, and rituals are performed to appease the forces of nature and maintain order (Bawden 1996, 62–3). These beliefs can perhaps best be understood from ethnographic fieldwork today in the highlands of Peru. In this region, the world is composed of circulating currents. Through these currents, the essence of life, in some regions called *sami*, flows through the world (Allen 1982, 179; 1988, 226; Bolin 1998, 232). Gods regulate sami and people are deeply concerned about maintaining sami's proper flow because some of the most tangible manifestations of the disapproval of the gods are natural disasters. Since the gods and ancestors are capricious and people are amoral, this flow is constantly endangered. Many Andean rituals work in part at holding, controlling and directing sami (Allen 1988, 50). These rituals are needed to ensure that the world remains in proper balance (Bastien 1995, 373; Bolin 1998, 9).

Despite the cultural upheavals and religious indoctrination that occurred in the years following the Spanish Conquest, this basic relationship between people and nature was likely the same at the time of the Inca (Ossio 1996; Ramírez 2005). In Inca cosmology, life energy flowed cyclically from the skies through the earth to the sky again (Valcárcel 1980, 91). The gods controlled this flow and were responsible for providing what was necessary for human life (Cobo 1990, 6; Gose 2000, 90). This world view also appears central to the practices of a variety of cultures in the Andes that pre-date the Inca (Janusek 2006; Quilter 1990; Reinhard 1985a,b; Sallnow 1987; Williams & Nash 2006). This does not mean, of course, that modern religious practices mimic those performed by Prehispanic cultures; but I do suggest that the general idea of nature as a living force that could be influenced by human interventions forms part of a tacit, unquestioned and taken for granted understanding of how the world works that is of long-standing importance in the central Andes. This idea is amply demonstrated for the Moche (AD 100–750), the culture on the North Coast of Peru that preceded the Sicán.

Much of our understanding of Moche beliefs has been driven by studies of iconography. This iconography was often displayed in a variety of complex scenes, called themes (Donnan 1976), that often reflected the rituals and mythic history of the Moche. In these themes, animals, objects, and even landscapes were anthropomorphized and intimately involved in social life (e.g. Donnan & McClelland 1999). The Moche, like earlier cultures in the region, were particularly concerned with controlling the life-giving but sometimes destructive forces of nature (Bawden 1996, 66–75). The living sea, for example, was often depicted as bountiful yet mysterious and dangerous (Fig. 2), and Moche iconography shows humans alternately making offerings and engaging in combat with the sea and its creatures (Bourget 1993; Hoquenghem 1987, 124–31). Themes involving the sea and other aspects of Moche world view were likely dramatized in public performances by priests that impersonated gods, the dead and mythical characters (Quilter 2001, 40; 2002, 164). Through performances, mock combat, offerings and other actions, these individuals acted as shamans or mediators between the community and the supernatural (e.g. Bawden 2001, 289; Berezkin 1980; Bourget 2006, 183; Quilter 1997, 130; Sharon & Donnan 1974). The ideological authority of these priests was tested by environmental disasters.

The people of the North Coast likely suffered from a number of disasters in the sixth century. The century was punctuated by a series of droughts, the last one occurring near the end of the century and lasting some 30 years (Shimada *et al*. 1991). Severe flooding also occurred during this century, and sand began increasingly to encroach on agricultural lands (Dillehay *et al*. 2004, 275; Moseley & Deeds 1982; Moseley & Feldman 1982). These problems, coupled with other factors, led to the abandonment of the Moche capital and the southern sector of the polity during the eighth century, a shift in population inland and into the northern sector, and the establishment of a new capital, Pampa Grande, in the Lambayeque district (Shimada 1994, 118–22). There were ideological changes that occurred after the disasters as Moche leaders sought to distance themselves from the failures of the past by down-playing individuals in art, modifying pre-existing themes to incorporate new foreign elements and reshaping mythic histories (Bawden 1995, 265; 1996, 278–83). These attempts at re-imagining religion enjoyed only limited success with a sceptical public (Bawden 2001), and the Late Moche culture

succumbed to a combination of natural disasters, foreign intrigue and entropy (Shimada 1994, 247–54).

The Sicán culture emerged on the northern North Coast after the Moche collapse. The culture is divided into three phases (Shimada 1990, 312; 2000, 51): Early (AD 750–900), Middle (AD 900–1100), and Late (AD 1100–1375). Sicán culture ended with the region's incorporation into the Chimú state around 1375. While Early Sicán remains poorly understood, the period was a time of external influence and political fragmentation (Carcedo Muro & Shimada 1985, 62; Shimada 1994, 254). Around 900, there was a 'rapid formalization of a set of material, organizational, and ideological features' that marked the transition to Middle Sicán (Carcedo Muro & Shimada 1985, 62). Middle Sicán iconography blended new elements and earlier Wari (a culture in the mountains, influential at the time) and Moche motifs into a new configuration (Shimada 2000, 52). The most important element of this iconography was the Sicán Deity.

Middle Sicán may perhaps best be described as a tight federation made up of major residential centres in Lambayeque that were tied together through shared beliefs (Kosok 1965, 178; Tschauner 2001, 329; but see Shimada 1985a; 1990 on Sicán as a state). This belief system was anchored at the eponymous site of Sicán, where 17 monumental platform mounds, *huacas*, are found (Carcedo Muro & Shimada 1985, 62; Shimada 1981, 412–14). The site of Sicán was not only a ceremonial centre for many people of the Lambayeque region; it was also a pilgrimage centre and necropolis for all of northern Peru at the height of Middle Sicán, a place where thousands worshipped and were buried (Shimada 1981, 442–3; 2000, 52, 59–60; Shimada & Montenegro 1993, 70). The rapid rise of the site, coupled with the introduction of a new god, was likely the result of a revitalization movement that brought a degree of cultural unity and economic stability to the northern Andes after the Moche period (e.g. Sallnow 1987, 21).

The Middle Sicán polity collapsed around AD 1100 after a period of internal conflict. This conflict is marked archaeologically by the destruction of Sicán's huacas by deliberate fires. The mounds at the site were in excellent condition at the time, and the intensity of the damage suggests that considerable fuel was used in the conflagrations (Shimada 1990, 362–3). Soon after, one of the worst El Niños in Peruvian history caused widespread flooding in Sicán and other outlying sites (Craig & Shimada 1986). The flood deposit has been dated independently by several scholars to AD 1100 (Shimada 2000, 61). While the time between the burning episode and the flooding is unknown, the presence of charcoal lumps from the fires in the flood deposit date between AD 1050 and AD 1100 and suggests that the two events were close in time (Shimada 2000, 224, n. 108). The flooding was likely exacerbated by severe drought that had occurred earlier in the century (Shimada 2000, 61; Thompson *et al*. 1985; 1988).

The collapse of the polity did not entail the collapse of Sicán culture. Most domestic sites continued to be occupied (Hayashida 2006, 253; Shimada & Wagner 2001; Tschauner 2001, 313, 327), and many domestic, technological and subsistence aspects of the Sicán remained unchanged (Hayashida 2006, 252; Higueras Hare 1987, 267–71; Shimada 2000, 62; Tschauner 2001, 298–313). Nonetheless, the collapse of the polity precipitated a significant shift in Sicán religion. The most striking material correlates are the abandonment of the site of Sicán and the demise of the Sicán Deity, a ubiquitous figure in Middle Sicán murals, ceramics, metalwork and textiles (Donnan & Cock 1986; Heyerdahl *et al*. 1995; Shimada 1990, 363). Compared to the Moche collapse, the disintegration of important aspects of Sicán religion was more sudden, radical, and complete. These changes, I argue, were brought about because people's reactions to these later catastrophes were based on religious beliefs, particularly in the manner by which elite status and the divine were understood in the Middle Sicán religious cult.

Power, pageantry and elite status in Middle Sicán

The collapse of formal aspects of Middle Sicán religion in the face of natural and cultural disasters can be understood by outlining Middle Sicán cosmology and the position of elites within that cosmology. Building on previous scholarship (e.g. Carcedo Muro & Shimada 1985; Elera 2006; Shimada 1990; 2000), I suggest that the elite legitimated themselves through ceremonies that tied their positions to a divine status that allowed them to mediate natural forces. I explore the relationship between the sacred and elites by looking at three important aspects of Sicán ceremonial life: the Sicán Deity, monumental platforms, and elite burials. Finally, I briefly consider how these elements came together in Middle Sicán cosmology.

The Sicán Deity

The Sicán Deity is one of the most ubiquitous figures in Middle Sicán art, common in ceramics, wood carvings, murals, metalwork and textiles (Fig. 3) (Pederson 1976, 67–8; Zevallos Quiñones 1989). Middle Sicán iconography was clearly derived from Moche, Wari, Cajamarca and Pachacamac styles, and the Sicán Deity also appears to have been created by merging local

and introduced elements (Shimada 2000, 313–25; Elera 2006, 66). The Deity is characterized by a wide, flat, semi-circular face with wing-shaped eyes, pointed ears with ear spools, a beak-like nose and a fan-shaped headdress (Shimada 1990, 321; Zevallos Quiñones 1989, 32). The Deity is usually shown in frontal view with hands extended, and often flanked by images of identical animals and, or, humans (Menzel 1977, 62; Zevallos Quiñones 1989, 32–48). For some scholars, the Deity has attributes of a diving sea bird (Elera 2006, 67). The Sicán Deity clearly has avian facial features and is sometimes displayed with wings and talon-like feet (Shimada 1990, 324). The Sicán were undoubtedly concerned with the ocean and water in general, since they were 'both blessed and cursed by the rivers, rain, and the sea' (Elera 2006, 67), and Middle Sicán imagery is replete with ocean images such as waves, fish, shells and rafts (Cordy-Collins 1990, 397; Elera 2006, 67; Zevallos Quiñones 1989, 64–71).

The Sicán Deity merged the concept of Moche gods with the Wari staffed deity (Menzel 1977, 62; Shimada 1985a, 99). The iconography suggests that the Deity was an 'Aloof Lord' capable of controlling the forces of nature and granting abundance to his followers (Elera 2006, 67; Menzel 1977, 62–3; Shimada 2000, 53). In particular, the Deity was closely associated with the sun and the moon (Carrión 1940; Elera 2006, 67; Shimada 1985a, 92, 99). The Sicán Deity appears to have been appeased through both service and sacrifice. Retainers, both human and animal, are often seen with the Deity, and he is sometimes portrayed standing above a temple (Menzel 1977, 62; Zevallos Quiñones 1989, 58–9). The importance of sacrifice is illustrated in depictions of the Deity with a *tumi* knife (a sacrificial knife with a half-moon blade of long ritual import in the Andes) and a decapitated human head (e.g. Reid 1989, 150). Arsenical bronze tumi knives are common in Middle Sicán graves. Gold and silver tumis often have a depiction of the Deity on the handle (Carcedo Muro & Shimada 1985, 69–70).

The Sicán Deity's position as an intercessor between humans and nature is perhaps best illustrated by two painted cloths with nearly identical designs found lining the walls of a tomb at Huacas Las Ventanas in Sicán (Fig. 4). The Deity stands in the middle of the ocean with arms outstretched. In one hand, he holds a tumi and, in the other, a decapitated head. The eastern side of the mural is anchored by a depiction of the sun, and the western side depicts a crescent moon. In between the two celestial bodies are large waves that break into the Deity on each side. The waves teem with wildlife, and each crest is depicted as a bird-like head. Following Carlos Elera and Izumi Shimada (Elera 2006, 69–70; Shimada 2000, 53), this mural can best be interpreted as showing the Sicán Deity standing in the centre of the universe and ensuring the abundance of nature through human sacrifice.

Monumental platforms

The Middle Sicán platforms at the Sicán capital are multi-level, steep-sided structures oriented east–west. Although the huacas differ significantly in architectural details, each could be reached by one or more ramps that lead up from open plazas at their base (Sapp 2002, 38–9). Portions of the mounds were often dominated by colonnades supporting a roof that protected polychrome friezes (Shimada 1990, 339–41; see Alva & Alva 1983 for depictions of the Sicán Deity on a mural at the base of a pyramid in Ucupe). Sherd-lined canals built into the huacas were likely used to pour libations down from the mound tops (Carcedo Muro & Shimada 1985, 74; Shimada 1985a, 105), and human sacrifices were also an important part of at least foundation rituals (hundreds of sacrificial victims are buried under columns at Huaca Rodillona, Huaca Loro, Huaca Las Ventanas and Huaca Soltillo; Shimada 1990, 341; pers. comm.; also see Shimada 1995, 42–3). According to iconographic depictions, ceremonies took place in the plazas and huacas at Sicán.

The best glimpse that we have of these ceremonies comes from the famous Chimú Litter (Carcedo Muro 1989). The Middle Sicán litter depicts six temples that match the form of the buildings found on top of some of the huacas at Sicán (Carcedo Muro 1989, 250; Carcedo Muro & Shimada 1985, 74). The temples on the litter are brilliantly coloured in red, orange and black, and decorated with sheets of gold and silver (Carcedo Muro 1989, 250–52). In each of the six temples, three figures are painstakingly detailed. They stand facing the viewer with outstretched arms in a pose and dress that mimics the Sicán Deity's. Each wears a headdress that at one time was festooned with feathers, a robe of gold or silver and ear spools, and holds a gold staff or standard in each hand. Most importantly, each has a gold mask of the Sicán Deity tied to his face with string. Details of the eyes, the use of cinnabar, and other features make each mask distinct (Carcedo Muro 1989, 256–8). The distinction between masks on the Chimú Litter parallels the distinctions found in other iconography and on the masks themselves (Alva & Alva 1983; Carcedo Muro & Shimada 1985, 67).

Ceremonies are integral to creating and maintaining a shared community of worshippers (Inomata 2006, 819). Following Carcedo Muro & Shimada (1985, 74), I therefore suggest that the tops of the huacas (along

Figure 4. *Reconstruction of the Sicán cosmovision from a mural found in the Huacas Las Ventanas tomb. (Drawing: C. Samillián, based on original by Izumi Shimada.)*

Figure 5. *The mask of the Sicán Deity covering the head of the principal personage of the West Tomb at Huaca Loro. (Photograph: Izumi Shimada.)*

with other spaces in the district) were used for the 'public display of key Sicán idols and icons'. Members of the Middle Sicán elite likely participated in rituals on the huacas that linked them as a group closely to the Sicán Deity and his relationship with the forces of nature. At the same time, the architectural differences between the huacas, combined with the differences seen in the masks, suggests that these ceremonies likely emphasized the differences between lineages or individuals (Carcedo Muro & Shimada 1985, 74; Shimada *et al*. 2000, 50–52; 2004, 388–9). The brilliant colours of the murals, combined with reflection of the sun off the precious metals on the temples and in the costumes of the participants, would have made a stunning display. The precious metals used in these displays, as well as other status goods, were likely collected at the time of a ruler's death and deposited in the shaft tombs clustered around the huacas (Carcedo Muro & Shimada 1985, 74; Shimada *et al*. 2000, 51).

Shaft tombs

Only a handful of Middle Sicán elite shaft tombs have been excavated by archaeologists, and all of these have been at least partly disturbed by looters. Results from the East and West Tombs at Huaca Loro are particularly valuable because the burials were undisturbed. Data from these excavations, as well as observations from other more looted tombs, provide us with a basic understanding of these burials. Shaft tombs appear to have been placed in a 'highly planned funerary pattern' around huacas (Shimada 2000, 57). At Huaca Loro in the Sicán capital, for example, excavation and ground-penetrating radar surveys by Izumi Shimada and his colleagues revealed as many as three rows of regularly spaced possible shaft tombs along the north-south axis of the huaca. In addition, at least two tombs appear to have been constructed underneath the huaca (Shimada 2000, 57). The shaft tombs vary considerably

in dimensions but many tombs were over ten metres deep (Shimada 2000, 56).

The chambers contained multiple burials that were sometimes arranged around a principal male. While some of the individuals were likely sacrificed just before interment, others' corpses were transported into the shaft after decomposition had started (Shimada *et al*. 2004, 375). Elite shaft tombs contained a staggering amount of artefacts (Shimada 1995, 46–7). The East Tomb at Huaca Loro, for example, contained 14 bundles of arsenical bronze implements, three piles of *tumbaga* (gold alloy) scrap, two piles of seashells, a basket with more than 60 gold and gold alloy ornaments and ritual paraphernalia, and some 1500 bundles of *naipes*, I-shaped arsenical bronze sheets likely used as money (Shimada 1995; 2006; Shimada & Montenegro 1993). Many tomb interiors were likely heavily decorated. For example, most of the Huaca Las Ventanas tomb interior was covered with layers of painted cloth pasted on to thin sheets of tumbaga (Shimada 1996, 36). The deep shafts leading to the chambers were likely filled with layers of cultural material interspersed with sand or other fill. One example is the Huaca Las Ventanas shaft described by Pederson (1976, 61) that may have contained separate layers of *Spondylus princeps* shells, sodalite, cinnabar, utilitarian ceramics and copper.

There are three features of these tombs that are of particular importance to this article. First, the contents of these tombs tend to emphasize long-distance exchange relationships, especially maritime connections. *Spondylus princeps,* and to a lesser extent *Conus fergusoni*, are found in large quantities in these burials (Pederson 1976, 61–2; Shimada *et al*. 2000, 37). *Spondylus* is a warm water shellfish obtainable off the coast of Ecuador. While important for millennia in the Andes, massive *Spondylus* use first develops in the Middle Sicán period (Cordy-Collins 1990, 396). In addition, imported beads made from amethyst, quartz, sodalite, turquoise, agate and amber were the result of trade connections with Ecuador and Columbia (Shimada 2000, 58; 2006, 108; Shimada *et al*. 1997). The Sicán likely exchanged naipes and other items made from arsenical bronze for these imports (Shimada 1985a, 117–22; 1985b, 384–92; 2000, 58). While overland trade undoubtedly occurred, large balsa rafts were an important means of transport (Heyerdahl 1995, 215–21). The trade goods in the tombs thus likely signalled not only connections to remoter parts of the world but also connections to the sea.

The second important feature of the tombs is the emphasis on relatedness and birth. Mitochondrial DNA and inherited dental traits of individuals buried in Huaca Loro tombs suggests that people were buried in endogamous groups, perhaps lineage (Corruccini & Shimada 2002, 119; Shimada *et al*. 2004, 384–6). In both the East and West tombs, connections between some individuals were further emphasized. The juvenile male in the West Tomb, for example, was positioned so that he directly faced the only other in the tomb, a 30- to 40-year-old male buried in the tomb's centre. *Spondylus* shells, tumbaga objects and lumps of hematite were positioned along the line of sight connecting the two individuals; and a similar connection between the youth and principal personage in the East Tomb was made through burial placement (Shimada *et al*. 2004, 377). The men from these tombs, as well as the juveniles associated with them, appear to have been very closely related through inherited dental traits (Shimada *et al*. 2004, 381). Birth connections are further emphasized in both tombs. In the East Tomb, for example, a woman was buried in a prone position with her legs splayed as if giving birth, while a second woman was positioned seated between the legs of the first (Shimada 2006, 111). The principal personage was buried nearby in an inverted, curled position as if he was a 'fetus … about to be born' (Shimada *et al*. 2004, 387). Kinship, especially as it is passed on through birth, was therefore an important message conveyed in Middle Sicán elite tombs.

The final feature of the tombs that is of interest for this article is the linkage between the principal personage and the Sicán Deity in those tombs arranged around a central personage. In both the East and West Tombs at Huaca Loro, the internal configuration of the tombs, the placement and quality of burial objects and the position of individuals clearly signal the centrality of the adult males buried (Shimada 2006, 89, 109; Shimada *et al*. 2004, 387). The Sicán Deity is similarly represented in a central position in iconography. More importantly, the buried men were dressed and posed as the deity (Fig. 5). In the East Tomb, for example, the lord was buried with a gold tumi knife in his left hand, gold greaves, a gold backflap above his hips, gold ear spools and an exquisite gold-alloy mask wrapped around the skull. The mask, as well as the other items of clothing, mimicked how the Sicán Deity was commonly depicted (Shimada & Montenegro 1993, 78–80). The man in the West Tomb was similarly attired (Shimada 2006, 106). The link between the central personage and the god were further emphasized by the depictions of the Sicán Deity on a variety of media in the tomb.

Playing god and divine descent

The Middle Sicán confederation was based in large part on spectacular ritual performances, and the charismatic

centre of the polity was Sicán's huaca complex (cf. Geertz 1983, 121–5). Worship focused on the Sicán Deity and iconography and performances acknowledged the Deity's position at the centre of the cosmos where he controlled the forces of nature. Local elites took great pains to perform as the deity in public rituals and they were buried as the deity. Unlike the Moche priests who portrayed themselves as engaging with the gods and the forces of the natural world (Bawden 1996, 165; Quilter 2001, 40), the Sicán priests portrayed themselves *as* a god. By embodying the Sicán Deity, they themselves claimed responsibility for the bounty that nature provided. The control over nature by the priestly elite was expressed not only through rituals but also through their association, at least in death, with the earth's products (gold, silver, copper) and the sea's (marine resources and exotic trade goods).

The importance of blood ties in Sicán culture would have further strengthened the Sicán elites' relationship to the deity. When the differences in mask details, tomb layout, use of cinnabar and huaca design are considered with the DNA and dental evidence, it becomes clear that relationships by descent were quite important at Sicán. Izumi Shimada and colleagues (2004, 389) have suggested that each huaca was built by a different lineage organized to support an ancestor cult. While this is likely the case, this should be understood against the backdrop of a pilgrimage centre where a priestly elite played the Sicán Deity in life and were buried as the god in death. Blood ties were elaborately shown through the placement of artefacts and individuals in the East and West Tombs and these connected the Sicán lord as *deity* to the lord's next of kin. By tracing their link to the divine through blood, the Sicán elite would have made a strong case for their religious authority in a society where descent was extremely important.

The lack of extensive excavations of Middle Sicán sites outside the Sicán capital severely limits our ability to assess the impact of the religion outside the capital itself. Nonetheless, the extensive Sicán trade network, coupled with the diffusion of material culture that depicted the Sicán Deity, attests at least to widespread familiarity with Sicán beliefs far outside the small polity's nominal borders (Shimada 1981, 442–3; 2000, 60). For some northern Peruvians, however, there was a deeper commitment to the Sicán world view. Many of the tombs surrounding the huacas in the Sicán capital likely contain foreigners. The architecture in these tombs is often distinct from local forms, and funerary assemblages combine foreign wares with local artefacts depicting the Sicán Deity (e.g. Alva 1985; Zevallos Quiñones 1989, 32; see Narváez 1995b, 170–73 for Middle Sicán burials at nearby Túcume). This evidence suggests that people came from long distances to worship and to bury their dead at Sicán's huacas (Shimada 1981, 442; 1985a, 112; Shimada & Cavallaro 1985, 49). Throughout the centuries in the Andes, pilgrimage centres were deeply influential aspects of the sacred landscape for a broad cross-section of a region's population (Sallnow 1987). In this case, people apparently walked hundreds of kilometres through the desert to worship at Sicán. They did so because they believed in the Sicán Deity and his representatives on earth.

The fall of a God

Sicán was the most important religious centre on the North Coast of Peru for 200 years and, through their performances as the Sicán Deity, elites gained the apex position of the cult and access to thousands of labourers and skilled crafts people (Shimada *et al*. 2004, 388–9). Then the disasters struck — drought, internal conflict and flooding brought the eleventh century AD to a close. While the collapse of the Middle Sicán polity was likely due to a number of factors (Shimada 2000, 61–2), my interest in this paper is in how the believers came to grips with the catastrophic consequences of these disasters. How did the disasters fit in their world view and what actions did they take in order to recover from the crises?

Judgment is perhaps a human universal. We are constantly assigning responsibility and meting out punishment for perceived wrongdoings (Hamilton & Sanders 1983, 199). The need to assign blame is particularly acute in periods of catastrophe, where long-standing practices are questioned (Hoffman 2002; Wallace 1956, 268–9). When an individual cannot be easily identified, cross-culturally blame is often placed on the individuals representing the organizations deemed culpable (Zemba 2006; Zemba *et al*. 2006).

A possible glimpse into how blame was assigned in the case of Sicán can be taken from an oral history recorded at the time of the Spanish Conquest that describes the ruler Naymlap and his dynasty coming to the Lambayeque area centuries earlier. The story was first recorded by Miguel Cabello Balboa in 1586 and again independently by Justo Rubiños y Andrade in 1781. While the historical validity of the story is debated (e.g. Donnan 1990b; Kosok 1965; Means 1931; Rowe 1948; Shimada 1990; Zuidema 1990), most scholars suggest that the Naymlap's story best relates to the Middle Sicán period.

The legend (Donnan 1990b, 243–4) describes the arrival on a fleet of balsa rafts of Naymlap, his follow-

ers, and a green stone idol called Yampellac. Naymlap established a settlement and built his palace. After many years, Naymlap was near death and he ordered his vassals to bury him in his room where he had lived and then proclaim to all that he had taken wings and flown away. His son, Cium, ruled after Naymlap's death for many years, and just before Cium died he asked to be placed in a subterranean vault so that he too would be considered immortal and divine. There were nine more rulers after Cium, and the last was named Fempellec. Seduced by the devil, he decided to move the green idol and unleashed a flood that lasted for 30 days. Stricken with a year of hunger and want, the people rose up, took him prisoner and threw him into the sea. After Fempellec's death, the region was without a ruler for many years until the Chimú conquest.

In the legend, the people of Lambayeque clearly blame the collapse of the dynasty on the behaviours of its rulers. The rulers are portrayed as false gods who incurred the wrath of the true gods by moving their idol. The legend corroborates the archaeological evidence for the semi-divine status of the Sicán priestly elites. A belief in semi-divine bird-men may have been compelling to people on the North Coast as they emerged out of the shadows of the Moche collapse. The flooding, drought and sand encroachment that felled the Moche state (and continued to plague the North Coast) highlighted the difficulties of trying to mediate between humans and the forces of nature. The suggestion that the Sicán Deity and his representatives controlled nature was a simple, powerful message that appears to have ignited religious fervour. This legitimizing strategy was inherently fragile, however (Huckleberry & Billman 2003; Moseley 1999; 2002; Moseley & Feldman 1982).

Andean religions were typically quite complex, with a multitude of gods serving multiple, often overlapping, roles (Ossio 2002). It was not uncommon for gods to lose their power or to be defeated in battle (Earls 1981; Jennings 2003b). The failure of the Sicán Deity, whose cult was already teetering because of drought and internal strife, was painfully evident in the flooding of the Sicán capital. While the Moche priestly elites could attempt to re-claim authority by suggesting that future disasters could be averted by altering mythic histories, adjusting rituals and propitiating different gods (Bawden 1995; 2001), the Sicán elite were unable to do so. By tying themselves through descent to the Sicán Deity, the Sicán elite could not distance themselves from the failings of their god. Although perhaps fervently believed in by many, the Sicán Deity was not taken for granted by most people in the North Coast religion. The flooding precipitated a norm cascade — wherein normative behaviours are abandoned by increasing waves of people until the behaviours become unacceptable (Sunstein 1997) — because their private faith in the Sicán Deity had been compromised in the years leading up to the flood (e.g. Butler 2006, 236–8). If the Legend of Naymlap can serve as a guide, the Sicán priestly elite may have been branded as false gods and thrown into the sea.

The flooding must have been a searing moment. It dumped at least a half meter of silty sand across the site and changed the course of the river so that it cut Sicán in half (Craig & Shimada 1986, 33; Shimada 1990, 364). According to the legend, famine followed, and the last ruler in the dynasty was killed by the people. The story cannot be fully corroborated by archaeological evidence (Shimada 1985a, 125–31) but it raises the possibility that the Sicán elite were blamed for the catastrophic collapse of the state around AD 1100.

The El Niño flooding was not limited to the Lambayeque region. Serious damage occurred throughout the North Coast (Craig & Shimada 1986). Yet the religious collapse of Sicán was not paralleled at that time elsewhere in northern Peru. I suggest that the primary reason that other areas were not similarly impacted is that the disasters were not as catastrophic. This is to suggest not that property damage was less severe or that fewer people were killed but rather that the flooding in other areas did not traumatically contradict a world view. Like the Moche and other groups, most people in northern Peru likely took the disaster as a manifestation of the gods' disapproval. The reality by which the world was judged following the flooding was not therefore threatened. Instead, religious beliefs were likely strengthened as people brought more conviction to their faiths. The Sicán faithful shared the idea of nature as a living force that could be influenced by human interventions but could not interpret the flood in the same manner because of the difference in the relationship between the Sicán Deity, the Sicán priestly elite and nature. While other religions remained intact, the Sicán religion did not survive the contradiction between beliefs and lived reality.

Revitalization and the Late Sicán culture

Rejection, of course, was only part of the reaction. The period must have been one of considerable apprehension as the people tried to re-envision their place within the cosmos. This apprehension was likely most profound around the former cult centre. Revitalization movements are particularly common after catastrophes that lead to the sudden loss of

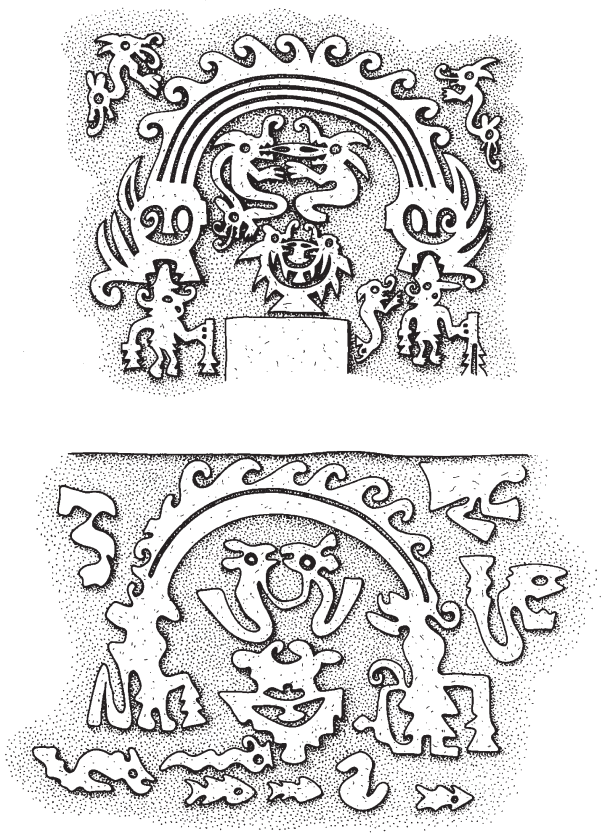

Figure 6. *Comparison of principal motif in the Moche friezes at Dragon, above, and the Late Sicán motifs at Chotuna, below. (Drawing: Christopher Donnan.)*

widely held, deeply felt religious beliefs (Harkin 2004a), and it appears that some of the people of Lambayeque were swept into a movement that was cleansing and nativistic. I argue that they looked to an imagined past for guidance — one that was free from the foreign-influenced Sicán Deity and its associated religious beliefs. In so doing, they sought to move back towards a relationship with nature that was more in keeping with Andean beliefs that were long standing and widely held.

During the Late Sicán Period, Túcume became the major ceremonial centre in the Lambayeque area and remained so until the Spanish Conquest in 1532 (Sandweiss 1995a, 65–7). Despite extensive building during the Chimu and Inca eras that has obscured much of the Late Sicán occupation at Túcume, we know that most of the site's platform mounds were constructed at this time (Sandweiss & Narváez 1995, 191). Regrettably, the results of long-term excavations at the site have only been published in summary form (Heyerdahl *et al*. 1995); most of the excavation notes were destroyed when the site was flooded. Nonetheless, no iconographic representations of the Sicán Deity are reported in Late Sicán contexts from the four seasons of excavation, the lone exception perhaps the evocation of the deity's headdress in the outline of the Temple of the Sacred Stone (Narváez 1995a, 104; Sandweiss, pers. comm.).

Middle Sicán iconography appears to have been 'lost or purged of its cultural significance' during Late Sicán (Shimada 1990, 333). The few representations that remain of the Sicán Deity on elite vessels found elsewhere are poorly done and located along a vessel's neck or underneath the handle (Higueras Hare 1987, 265). Ideologically charged *paleteada* (stamp-decorated) designs on domestic pots are replaced by geometric motifs (Cleland & Shimada 1994, 326–35). At the same time, Moche motifs, never abandoned during Middle Sicán (e.g. Shimada 1995, 138), took on greater importance during this period and become central iconographic features (Higueras Hare 1987, 270). This move towards the past was paralleled by an abandonment in the iconography of foreign motifs. Higueras (1987, 271) goes so far as to suggest that an 'ideological movement of great proportions' occurred in Late Sicán that reasserted religious ideas that had been displaced first by Wari and then by Middle Sicán ideologies.

Despite these changes, there are considerable continuities between Middle and Late Sicán religion. The huacas built at Túcume, for example, correspond closely to those built in the former Sicán capital: ramps provided access to upper levels, mound tops were topped with terraces and roofed colonnades, and colourful murals and friezes decorated these spaces (Narváez 1995a). Huacas, and the ceremonies that occurred on them, were evidently still of great importance to many of the people of Lambayeque. The huacas likely relate more to taken for granted ideas about how to worship than to a desire to retain Middle Sicán practices. Huacas had been an important feature of the cosmological landscape of the Peruvian coast since at least 2500 BC (Haas & Creamer 2006) and so could easily be parsed away from the failings of the Sicán Deity. Other continuities, such as offering traditions and secondary motifs, also may reflect taken for granted ideas about how the world works.

Late Sicán cosmology combined earlier beliefs with Middle Sicán elements purged of perceived foreign elements. The Late Sicán friezes at Chotuna best represent the new kinds of iconography that emerged after the abandonment of the Sicán capital (Fig. 6). The friezes were found in a courtyard on the northwest corner of Huaca Gloria. Instead of the Sicán Deity, the

friezes feature arched double-headed serpents, important motifs in Moche iconography (Donnan 1990a, 285). However, the serpents, and the figures that traditionally accompany them in Moche art are poorly rendered, as if 'the Chotuna artists did not truly understand what they were depicting' (Donnan 1990a, 286). Elsewhere in the Chotuna friezes, motifs that were used in Middle Sicán, such as birds, fish and boats, are confidently rendered (Donnan 1990a, 286). While Moche motifs were known, aspects of the underlying cosmology may have been less understood.

Late Sicán cosmology might best be understood as the result of a revitalization movement that sought to revive a 'traditional' cosmology that had been neglected (Wallace 1956, 275). Catastrophes are deeply unsettling, and revitalization movements offer emotional relief and collective meaning as a group rebuilds (Harkin 2004b, 157; Wallace 1956, 265). These movements are often strongly nativistic and revivalistic — they seek change through a return to old ways (Wallace 1966, 31–3). In the Taqui Onqoy movement that followed the Spanish Conquest of Peru, for example, adherents sought a return to the time of the Inca by reinvigorating the rites and ceremonies that fed the former empire's sacred places. However, the deities worshipped were often not Inca gods but regional gods that were of importance prior to the Inca expansion (MacCormack 1991, 181–3). In a similar manner, the Late Sicán revitalization movement tried to go back to another time that was free from the failed Middle Sicán religion — a pristine, traditional and, in part, invented past before the introduction of both foreign elements and the Sicán Deity. The resulting shift appears to have moved humans back into the subordinate position in relation to the gods that they held during the Moche period. This change made sense to people in the region because it was intelligible within a pre-existing world view (Oliver-Smith 1986, 17; Janusek 2005, 202). The taken for granted aspect of North Coast religion, of nature as a living force that could be influenced by human actions, remained, and structured these new beliefs.

Loss of the divine status of humans as controllers of nature might explain several aspects of Late Sicán material culture. For example, in vessel decorations, anthropomorphic depictions are rarer and, instead, vessels tend to be decorated in bands of repeated geographic, marine and zoomorphic motifs (Cleland & Shimada 1992; Higueras Hare 1987; Shimada 1990, 332–3). Late Sicán tombs are considerably poorer than Middle Sicán tombs in both the quantity and quality of grave goods (Boytner 1998, 181–4; Sandweiss pers. comm.). No Late Sicán shaft tombs have been documented, and almost all of the Sicán gold excavated scientifically and held in museums and private collections appears to date to the Middle Sicán. The loss of semi-divine status for priestly elites may explain this pattern. Finally, the shift is perhaps also evident in the organization of Túcume. Where huacas at Sicán were organized around a great plaza where ceremonies likely took place that depicted elites as the Sicán Deity, the huacas at Túcume were organized around a mountain (Higueras Hare 1987, 264): nothing was built on the mountain until the Inca period, and no Late Sicán fragments have been collected from the mountain's flanks (Sandweiss 1995b, 185–6, 189). Perhaps, instead of expressing control over nature at Túcume, Late Sicán rituals emphasized humility in the face of nature's power.

Catastrophe and the archaeological record

The most traumatic events in human history are spurred by disasters. These events often precipitate reflection as all members of the community struggle to answer fundamental questions (e.g. Bode 1989). What happened? Why did it happen? What should we do now? These moments of intense introspection are sometimes followed by sweeping cultural changes that are of fundamental importance to our understanding of the dynamics of ancient societies. While disasters and collapse are of increasing archaeological interest, there remains far less concern about the social and psychological dimensions of these events (e.g. Van Buren 2001). Archaeologists need to do better at trying to understand the 'emic' perspective on floods, famines, wars, and other disasters in order to make sense of the changes that follow in their wake. Although texts and depictions that speak directly to these events are often not available, one of the ways that we can study how people live through catastrophes is by studying those aspects of the material record that can indicate when religious changes occurred.

The transition from Middle to Late Sicán can serve as a case study for the archaeology of catastrophes. The changes that occurred can be understood by considering the relationship between Middle Sicán elites, the Sicán Deity and the natural world. Through iconography, costumes, performances and burial customs, the Sicán elite turned themselves into the earthly embodiments of the Deity. The fabulous wealth, far-flung trade networks and towering huacas were taken by spectators as a testament of elite cosmological power. The elite's position was tied to the role of the Sicán Deity as master of the natural world that balanced the forces of nature on the North Coast. The drought and flooding that occurred

during the eleventh century, however, suggested to believers that the Deity, and hence the Sicán elite, had lost control over these forces. The people then rejected the Deity and his representatives and turned towards a revitalization that mixed current practices with aspects of a past cosmology that were often only dimly remembered. This new religion remained grounded in taken for granted beliefs in nature as a living force that could be influenced by human actions.

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Note

1. Disagreement remains over the use of the term 'Sicán' for both the culture and the capital city. Before the work of Izumi Shimada and his colleagues, the culture was known as 'Lambayeque' and the capital was called Batán Grande after the hacienda where the ruins are located. Since 'Lambayeque' was used to designate regional styles from the Moche era to the Inca, Shimada chose the term 'Sicán' to denote a narrower cultural tradition that he felt occurred in Lambayeque from AD 750 to 1375. Since the hacienda of Batán Grande contained many sites from various periods, he chose to call the major Sicán period huaca and mortuary complex the 'Sicán capital' (Shimada 1985a). I have followed Shimada's conventions.

Justin Jennings
Department of World Cultures
Royal Ontario Museum
100, Queen's Park
Toronto
M5S 2C6
Canada
Email: collota@gmail.com

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Author biography

Justin Jennings is Associate Curator of New World Archaeology at the Royal Ontario Museum. His work focuses on ancient states and interregional interaction in the Andes. He has just finished leading multi-year excavations at Tenahaha and Collota, two sites in highland southern Peru that date from AD 800–1500.