

The Dangers of Ignoring the Evidence

Hurricanes, Hazards and Survival

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Anthropology is uniquely suited to respond to and study the on-going societal impact of catastrophic hurricanes, such as Katrina and Rita, as evidenced by the timely and diverse actions of many in the anthropology community. Here we want to emphasize the contribution that archaeology can make to the on-going anthropological response and analysis.

From the millennial perspective of archaeology, episodes of collapse—settlement abandonments, dramatic regional shifts in power and population and even cataclysmic events—are a regular feature of humankind's global history. In his recent book, *Collapse*, Pulitzer Prize-winning author Jared Diamond catalogs cases of what he terms "ecocide." These are unintentional episodes of ecological catastrophe through which past societies have degraded their environment, thereby precipitating social disintegration and demographic decline.

COMMENTARY

While we have criticized Diamond, most recently in the March issue of the *American Anthropologist*, for his over reliance on the causal importance that he gives to environmental hazards and factors in his case studies, we do agree with the major theoretical thesis advanced in this book. Namely the recognition that many past episodes of societal decline were caused by a complex interplay of natural perturbations (such as climatic change or environmental calamity) and anthropogenic or human factors (such as poor responses to initial challenges) that often played off each other for decades, if not much longer.

Of course, the final chapters of the storms that hit Louisiana and neighboring states have yet to be

written. Every effort toward ending suffering and rebuilding the Gulf Coast region should be undertaken as rapidly and thoughtfully as possible. The manner in which this is accomplished is yet to be determined and it is here that we believe anthropologists can make a significant contribution.

Taking a Step Back

When we read headlines that question whether the recent catastrophe was natural or human-induced or witness the political blame game over bungled responses to Hurricanes Katrina and Rita, we believe that it is also important to take a step back. From a longer-term perspective, the disaster along the Gulf

subarctic environment led to the eventual collapse of colonies, perhaps precipitated by increasingly cold conditions. In other instances, such as in ancient Mesopotamia and for the pre-Columbian Hohokam of southern Arizona, ways of harnessing water had to be renegotiated due to natural and human-caused environmental change, resulting in episodes of collapse and reorganization.

Resilience Phenomenon

Although the demise of every civilization is in certain respects unique, there are striking similarities in causal processes and human response. Many believe that human societies, having become fixed in

best suited to sea-borne commerce and the early attempts by the Army Corps of Engineers and others to stop flooding. A 1927 flood led to the profound rebuilding of the original levee system, meeting a desire for stability. Meanwhile in the following decades New Orleans sank or subsided as the delta region was not replenished by the alluvial sediments formerly brought by annual floods.

As New Orleans sank, it also became more vulnerable because of the loss of coastal marsh and barrier islands, as well as the increased urbanization of rural areas. In recent years, decreased federal funding for the levees curtailed short-term quick fixes and longer-term planning alike. At the same

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of Mexico is one that hauntingly reminds us of cases of past societal change and collapse. In such situations, the challenges of the environment repeatedly were not met and human decisions often exacerbated an initial ecological challenge. The results were disasters far worse than the initial damage or threat caused by nature.

We believe that to truly understand present events we must take a long-term perspective and consider the interplay of human decisions, environmental change and unintended consequences that led to the recent hurricane disasters. Unarguably the scope, severity and broad reach of the Gulf Coast cataclysm make it one of the worst natural calamities in US history. But in the history of our human species such catastrophic or even collapse episodes are de rigueur. All great powers eventually collapse and lose influence, sometimes slowly, sometimes overnight.

For the Maya, dense populations, frequently led by self-aggrandizing rulers, in a tropical environment contributed to a series of conflicts, collapses and reorganizations over millennia. In Norse Greenland circa 1300–1450, maintaining a European agricultural way of life in a

their responses to continual ecological and social change, lose the ability to react or adapt to crises outside the scope of shared memory. They become less resilient to destabilizing change through continual small-scale, short-term solutions to large-scale problems. Environmental catastrophes in this view are really communication failures between elements of societies tasked with solving problems.

One lesson from this work is that in our effort to achieve sustainable solutions for modern problems we must leave room for the unintended and the unexpected. We must develop solutions that are flexible enough to react to the unforeseen and that by examining past records of human change we can get some idea of the form that these large-scale cataclysms may take. At the same time there are some broader questions that should be addressed. Are we witnessing the start of our own collapse? What can we do to stop it?

The history of New Orleans, the cataclysm that is Katrina, the impact of Rita, and the aftermath are prime examples of the resilience phenomenon. This tragedy has deep roots, perhaps extending back to the founding of the city on delta land

time, global warming enhanced the likelihood of major hurricanes. Through short-term thinking and politically influenced decisions, resources were not allocated for the strengthening of the levees despite these ominous signs, ignoring the lessons that might have been learned from science and history.

If we are to see New Orleans (and its surrounds) return and are to avoid repeating the collapses of the past, then we must pay attention to history and science. We must integrate this knowledge into our policies. Only then do we have a chance to escape what the global record of humankind tells us has happened over and over again. People in the past have faced aspects of the problems that we face today—sometimes with success, sometimes with catastrophe—and this record can provide real world, contemporary solutions. There is no need to reinvent the wheel, nor should we ignore the rich knowledge that generations of scholarship have given us. The alternatives are simply too awful to accept. ■

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