

What Makes a Disaster “Natural”?

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Natural disasters differ from unnatural disasters not so much in their causes or in their effects but primarily in our reaction to them. In natural disasters nature plays the role of a catalyst. Yet nature does not provide a convenient enemy to rally against and attack in retribution. This in part explains why, unlike the social and political unity that followed the terrorist attacks of September 11, 2001, violence and political turmoil ensued in the immediate aftermath of Hurricane Katrina.

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Amid the roiling chaos and devastation that unfolded during this summer along the Gulf Coast, one thing was clear: Nature had exercised its raw destructive power, and in the process, it had delivered a crushing blow to an entire region. In their coverage of Hurricane Katrina, the news media regularly described nature as violent and even vindictive. According to *The New York Times* after centuries of trying to subdue the land, Gulf Coast residents had finally learned “who’s really the boss” (Dean & Revkin, 2005).

It now appears that Hurricane Katrina has become the costliest natural disaster in American history, in dollars if not in lives. Yet few have thought to question the term *natural disaster* or what it implies. In fact, nature was not directly responsible for the collapse of New Orleans. The closer we look, the more we see that so-called natural disasters actually result from human choices, blunders, and unintended historical consequences. The situation in Louisiana reveals that natural disasters differ from unnatural disasters not so much in their causes or in their effects, but primarily in our reaction to them.

Defining what constitutes a natural disaster seems easy enough. A natural disaster is a destructive event caused by the forces of nature. Yet, as anyone familiar with the geography of New Orleans knows, distinguishing what is natural from what is cultural in that vast and colossally engineered waterscape has become virtually impossible (Colten, 2005; Kelman, 2003). Did a natural phenomenon, Hurricane Katrina, cause the disaster? Or was it the destruction of Louisiana’s sheltering wetlands, which have eroded at an unprecedented rate in recent decades, leaving the city exposed to the full

brunt of oncoming storms? What about the failure of its manmade levees, most of which were designed only to withstand a 100-year storm, whereas levees in Holland were built to endure a one-in-10,000-year cataclysm? Even more menacing is the issue of global warming, which has caused increases in sea level and surface temperatures throughout the world. Havoc and calamity followed in the wake of Hurricane Katrina, but given the region's complex history of environmental manipulation, it would be disingenuous to claim that the storm itself caused the disaster.

Another definition of natural disasters includes natural events that are uncommon enough to be considered outside the range of normal human experience, and therefore present extreme challenges when they eventually do occur. However, hurricane formation can hardly be considered a rare occurrence, and over the past decade, the tropical Atlantic has been producing powerful storms at a truly frenetic rate. Anyone who has lived on the Gulf Coast for long has experienced a parade of storms, and residents of the region have been expecting "the big one" for over 200 years. By this definition, hurricanes, even extremely powerful ones such as Katrina, cannot be considered abnormal, even on the relatively short time scale of individual human memory.

One could also attempt to define natural disasters by comparing them with unnatural disasters. The attacks of September 11, 2001, clearly stemmed from unnatural causes. September 11 also had very different geopolitical consequences than Hurricane Katrina. After 9/11, the United States launched two wars and systematically unseated the governing powers of two foreign countries. After Katrina, Americans received generous offers of humanitarian aid from dozens of nations, including Afghanistan.

Yet events similar to those of September 11 could occur again on American soil without the aid of terrorists, if an earthquake of sufficient power rocked the central business district of a city such as San Francisco or Los Angeles. Building codes and construction have improved dramatically in recent decades, but thousands of structures remain in jeopardy. Even the monolithic U.S. Bank Tower in Los Angeles, the tallest building west of the Mississippi, was only constructed to withstand an earthquake measuring 8.3 on the Richter scale. Incidentally, California is also vulnerable to levee failures. A breach in the Sacramento River delta region could dump salt water into the California Aqueduct, and contaminate a significant portion of the Los Angeles water supply.

For decades, scientists have been warning us that many natural systems are inherently prone to disturbances, and that these disturbances actually play integral roles in the ecological order of things. Some systems, such as hurricane patterns in the Atlantic and El Niño oscillations in the Pacific, appear to fluctuate wildly on multiyear cycles. Others, such as fires in western North America, pose a danger each year to residents living at the urban-wildland interface. Most people still consider both hurricanes and wildfires natural disasters, because of the human suffering they inflict. However, we should not forget that both occur on a regular basis, and the effects of both have been significantly exacerbated by the choices of our society.

Looking at New Orleans, one cannot help but marvel at the degree to which human and natural forces merged during that city's long history to create an environment of tremendous risk and vulnerability. Officials working in the Mississippi delta have expressed confidence in the resiliency of the area's human and nonhuman residents, and many remain optimistic that the landscape and its inhabitants will heal in time. However, it has also become clear that, in order for New Orleans to resurrect itself and secure its future, Americans will have to reckon with (and pay for) their past environ-

mental mistakes in the region. This means working together with nature—instead of against it—in the process of repair.

With nature and culture so intertwined in southern Louisiana—indeed, virtually everywhere on earth—the line between natural and unnatural disasters no longer seems so distinct. In natural disasters nature certainly plays the role of a catalyst. However, all disasters that create human suffering ultimately stem from social factors. Only one characteristic clearly differentiates a natural disaster, such as Katrina, from an unnatural disaster, such as 9/11. In the case of hurricanes, we have no enemy to hold directly responsible, unless we erroneously chose to pin the blame on nature itself.

Even more important, with natural disasters, we have no enemy to rally against, bring us together, and attack in anger and retribution. This at least partly explains why, unlike after 9/11, in the immediate aftermath of Hurricane Katrina, Americans began attacking their own neighbors on the devastated streets of New Orleans and in the halls of Washington, D.C.

References

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