

Editorial

Environmental Apocalypse: Predicting Haiti's Plight and Other Revelations

In every human society, special privileges are reserved for individuals gifted with the ability to "predict the future." Such individuals are known by various titles (for examples, babalawo, shaman, scientist, etc.), and they typically spend many years in preparation for their esteemed status, studying natural phenomena and human social behavior in all their complexities. Occasionally, they consult "oracles" that serve as instruments of communication with natural and/or "supernatural" sources.

It is easy to understand why we want information about the future. Human cognition of time and its polar orientation, the gravity of the past, the certainty of the present, and the consequential volatility of what tomorrow may bring, all collude to fill our consciousness with taxing thought experiments and awkward projections. We seek to avoid natural disasters such as earthquakes and human-made disasters such as climate change.

Hence, the biblical visions captured in the stories of Noah's ark and the conservation of biodiversity following global flooding, and Joseph's (with the coat of many colors) interpretation of the Pharaoh's dreams predicting seven years of famine. Such predictions represent the original meaning of the word apocalypse, from the Greek *Apokálypsis* or "lifting of the veil," a revelation.

The modern success of the scientific enterprise rests on the better-than-chance accuracy rate of predictions made following peer-reviewed results of painstaking research. But making accurate predictions is not necessarily accompanied by planning to avoid disasters. We tend to discount heavily risks that seem too far in the future. And in this premise came this month's blemish on the planet and our social world.

On January 12th, 2010, a massive earthquake struck the island harboring the countries of Haiti and Dominican Republic. The epicenter was near the city of Port au Prince. A week later, the estimated number of deaths stood at 200,000 people, with an equal or higher number of people injured, and millions rendered homeless. In terms of public health, this was a major disaster, and no disease in the modern world has killed so many people so quickly in one location. The scenario brings to mind the contemporary meaning of the word apocalypse, "a revelation of the end of the world," the *Armageddon*.

Prevention of human misery and premature mortality are responsibilities entrusted to environmental and public health scientists. Could the Haitian disaster have been prevented? Seismologists have mapped the major earthquake zones at the global level, and the fault that gave way to disaster on January 12th was well known.

Earthquake scenario exercises would have identified the extreme vulnerability of Haitian landscape. But the country was too poor and too politically unstable to implement costly engineering and land-use zoning strategies that would have saved lives. So, of what use is the apocalypse if we only have to look on in awe when the world as we know it collapses?

The Haitian earthquake is of course not the only apocalypse to threaten local civilization. Some of the revelations that we confront, such as abrupt climate change, are global in nature. Yet, collectively we face the future with an incredulous impotence. The climate summit at Copenhagen in December 2009 produced no concrete agreement despite decades of scientific treatises and prestigious prizes.

On the African continent, there is no shortage of environmental apocalypse as the predictions of disease and disability from inadequate management of land and water resources have become in daily communications. In the native traditions of revelations associated with deities, disasters are typically avoidable with the prescription for individuals, families, and whole communities to give up some material possessions, called sacrificial rituals for lack of a better phrase. So too it seems, that implementing the societal changes necessary to respond to scientific revelations must

require sacrifices at the global level. We are called to reduce our appetite for petroleum-guzzling technologies, invest in public health and urban engineering, re-discover small scale agriculture, and redefine the essence of the “good life.”

Oladele A. Ogunseitan, Ph.D., M.P.H.
Program in Public Health & School of Social Ecology,
University of California, Irvine,
CA 92697, USA.
Editor-in-Chief.