Book Review/Compte rendu

Raymond Murphy, *Leadership in Disaster: Learning for a Future with Global Climate Change*. Montreal and Kingston: McGill-Queen's University Press, 2009, 480 pp. $44.95 hardcover (978-0-7735-3524-4)

Leadership in Disaster investigates errors of expectations concerning nature's dynamics, the material consequences of such errors, and the social barriers to learning from the prompts of nature. Murphy focusses on a technological disaster of epic proportions, providing a thick description of the biophysical events of the 1998 ice storm which led to cascading failures of tightly coupled infrastructure in Ottawa, Montreal, New York State, and Northern New England.

Murphy's analysis challenges conceptions of the nature/culture divide and the one-sided approaches in the theoretical literature of environmental sociology that abstract either cultural or nature's constructions. He suggests instead that sociologists must understand such phenomena as the interaction of the social, cultural, and biophysical context; to exclude one from the other provides an incomplete image of the complexity of the dynamic interplay between them. He documents in detail the need for an epistemological expansion, demonstrating that social constructions of nature and risk should be understood in the material context of nature's dynamics, rather than treated as free-floating socio-cultural entities. He claims that sociological theories must include interactive effects of socio-cultural and biophysical dynamics, which will lead to a true complexity theory (p. 342).

Murphy's discussion begins with a detailed narrative of the unfolding events of the ice storm. His description leads the reader to realize that this "act of god" quickly became a "technological disaster." Five days of freezing rain left more than a million people without power for weeks on end; businesses, schools, daycares, hospitals, and banks were shut down; water, sewer, and transportation systems were deeply compromised; and the communications infrastructure was severely taxed.

In the midst of such a widespread disaster, leadership was characterized as being well-coordinated and collaborative, but several points of potential failure could have led to catastrophic results. Here Murphy turns to interview data collected nearly seven years after the event to describe two key issues that are not uncommon in disaster response. He

first discusses the misplaced concern about panic which, in this event, led key officials to withhold information from the public. This was most evident when Montreal faced a severe water shortage in the middle of the disaster, raising the risk of fire and of possible water contamination. Rather than requesting a collaborative effort to conserve water, leaders chose instead to withhold this information in the hope that the problem would be overcome before there was a need to alert people to the truth. This decision was based entirely upon fear that the population would act in an irrational manner, leading to panic or hoarding of supplies, and worsening the already dire situation. Fortunately, the need to inform the public never arose; this turn of fates was characterized as good luck, but it could equally have resulted in catastrophe. Murphy's second critique centers on a set of conflict-points that resulted in confusion, set up turf battles, and delivered resources through previously undedicated channels. Such was the case when directives were made from top leaders to redistribute organizational power, inadvertently taking away responsibility from organizations to which disaster response tasks had been previously assigned.

Murphy's examination of leadership in disaster then turns from the 1998 ice storm to investigate perceptions of risk and willingness to prepare for the unexpected. The scope and magnitude of the ice storm was unpredicted and unpredictable. Even in this day and age of sophisticated modeling and meteorological precision, a level of uncertainty accompanies all forecasts and warnings, and must be taken into consideration by leaders and decision makers. This uncertainty also applies to the problem of global climate change. Murphy uses the ice storm as a point of departure for a discussion about why people do not prepare for events that can be envisioned for the future but may not hold immediate risk. He identifies a number of chronic social obstacles to disaster mitigation and preparation including cost, diminished perception of risk, uncertainty, and unfounded assumptions of far-off recurrence.

In conclusion, Murphy contrasts the technologically dependent societies that were most heavily affected by the ice storm to a small New York sub-population whose lives the storm had little effect. This was a group of Amish families whose everyday traditional practices and lack of reliance on modern electricity and communications reduced their vulnerability to a disaster of this sort. Robustness did not reside in resistant power lines so much as in cultural values that include decentralized, self-reliant communities. In contrast, the everyday practices of modern society, particularly dependence on a central power grid, exacerbated vulnerability. These differing approaches to rational living — in which one, the Amish, reflectively consider whether technological innovation

and adoption will affect their culture and values, and the other, the moderns, launch new technologies and commodities without assessing their potential social impacts — provides keen insight into future disaster preparedness efforts. Amish communities achieve "business continuity" where modern societies fail. Their resilience to disaster comes from self-reliance, kinship networks, and social capital. Modern societies that are dependent upon centralized infrastructures must build resiliency into their systems through risk assessments, monitoring, planning, and preparedness.

That one society living in close proximity to another can experience such extreme weather without disaster, while the other experienced something close to a catastrophe, becomes Murphy's ending thesis. Disasters are not simply biophysical processes which happen *to* a population; they are processes which occur in partnership with a population that places itself at risk. Risk occurs due to decisions that are made in advance of a hazardous process; disasters are manufactured, and unintended consequences occur as a result of human interaction with nature's dynamics.

This book serves as a departure from Murphy's traditional academic emphasis on pure social theory and debates in the field of sociology. This empirical study becomes a case showing how the sociocultural and the natural worlds intersect and interact in very complex ways. It is a welcome addition to the field of disaster research and draws together classical and modern theories to argue for an epistemological expansion of the social sciences. Because of his emphasis on theory development and his strategy of grounding the event through thick description, the book reads as a sort of primer for students new to the world of environmental sociology. It also holds some simple, if not all too familiar, reminders about leadership in disaster. Such lessons on risk perception, transparency, collaboration, and trust remain common but true to all disaster events and will likely continue long into the future.

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