

JAMES K. MITCHELL: RESEARCH PROFILE (JUNE 2011)

Neglected human dimensions of hazards and disasters

I am engaged in several long running research projects that seek to illuminate aspects of human engagement with environmental hazards that have not received adequate attention from mainstream scholars. The purpose of these projects is to broaden public discourse about hazard as one way of encouraging the growth of larger, more permanent and more effective constituencies for the use of hazard information in the management of disruptive change.

1. Transitions of knowledge about human adjustment to climate risks

It is important to push back the historical record of what humans have done about floods, storms, droughts and other extreme events because existing knowledge about society's responses to climate risks is largely based on 20th century data. These are too limited to reveal the kinds of far-reaching transitions of thought and action that previously developed over decades to centuries but are now being forced more rapidly by globalization and other societal pressures. This project is being addressed by means of trans-Atlantic library research on newspapers, letters, diaries and other documentary evidence from the 19th, 18th and late 17th centuries, with a particular focus on Ireland and the Northeast USA.

2. The Shantytown Mapping Project

The widespread availability of high quality aerial imagery for many major urban areas is making it possible for laypeople, as well as experts, to gain a better understanding of the hazard vulnerability of communities at risk to extreme natural events. This project explores the feasibility of identifying, analyzing and classifying shantytown vulnerability to flooding in large poor cities of the developing world. These are vulnerable neighborhoods that bear a disproportionately heavy burden of disaster losses. They are relatively easy to identify on images cataloged on Google Earth, Wikimapia and similar sources. An initial investigation of Mumbai has identified approximately 250 shantytowns, on 9 square miles of land, and developed a systematic characterization of their vulnerability to flooding. A comparative phase of research among several megacities is now being initiated.

3. The reinvention of disaster recovery

The theory and practice of disaster recovery is being radically restructured in affluent and privileged regions like the United States, Australasia, Japan and parts of Europe. The emerging new view advocates "holistic" analytical and prescriptive approaches to recovery combined with increased sensitivity to ecosystem

considerations. Countervailing societal trends jeopardize these initiatives. The main focus of my work is on the growing dominance of economic criteria over humanitarian justifications for recovery planning and the difficulties of defining and achieving “sustainable” recovery in countries whose populations are aging and whose economies are retrenching. Research on recovery from the Tohoku tsunami of 2011 is ongoing.

4. Pivots in the trajectories of hazards research and policy-making

New developments in hazard research and public policy often occur in the wake of major disasters, though not necessarily at the same time and in response to the same events. Certain disasters that have been pivotal for researchers have not produced policy changes while others have stimulated new management initiatives without affecting social scientific understanding of the processes at work. I am examining the circumstances that favor different outcomes by canvassing evidence of the degree to which hazard information circulates among different user groups in the months and years after selected major disasters and the extent to which policy changes taken in the aftermath of such disasters influence the production of new research findings.