

Howard Kunreuther's Past and The Future of Disaster Research

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Abstract

When Howard first started working on floods, he showed the potential value of trying to understand the genesis of apparently irrational individual behavior. He identified the information sources, perceptual biases, and risk tastes resulted in people living with risks that most would accept and to refuse to mitigate even when offered enormously subsidized opportunities to do so. From this base, he moved to concern about how to influence the mechanisms in place within which these individuals operate. He recognized and advocated for new generation modeling so that we could see the aggregated effects of disasters in advance, so that decisions and incentives could be formulated to yield greater post-disaster well-being at a societal level.

These two streams of Howard's work have stimulated three generations of subsequent scholars:

- behavioral economists have examined individual risk decisions;
- policy scholars have dreamed of having better information for making decisions about design of mechanisms to bring about better mitigation decisions; and
- disaster researchers have focused on how to reduce vulnerabilities and increase resilience, employing the insights and methods devised by the other two groups.

Vulnerability and resilience appear poised to serve as the integrating paradigm for both scholars and policy makers in coming years. If we are going in this direction, we need integrated social/economic data.

Suppose we had the data? What do we need then? How do we aggregate up? Traditional probabilistic risk assessment has obvious limitations for understanding extreme events, but what are the alternatives? Is complexity theory part of the answer? Where should we be headed as scholars, and how are we likely to succeed?