Lecture Notes: Disaster Vulnerability and Resilience

Session 8

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The Politics of Natural and Unnatural Hazards

Introduction:

Why study disasters from the perspective of political science?

- I. Theory of path dependency in public policy: once you start on a path, it is difficult to diverge from it. My thesis advisor focused on this area, and I followed his lead.
- II. I am from Alaska, and the Exxon Valdez oil spill had a profound impact on me. Despite its dependence on oil for economic development, even Alaska would prefer that oil not be spilled in Prince William Sound. Alaskans were annoyed. I originally wanted to write a paper about "internal colonialism." Instead, I studied why big events or "focusing events" get people's attention.
 - a. Focusing events have agenda-setting effects.
 - i. Studying them gives good insights into the way that policy works.
 - ii. How do disasters influence policy or not in terms of mitigation?

Some Basic Concepts

- III. Politics:
 - a. Definition: the process by which a society decides who gets what, when they get it, why they get it.
 - b. Some things are removed from the political and fall outside the range of things that society should decide.
 - c. What is or is not political is a societal question.
- IV. Public Policy:
 - a. Definition: the outcome of a political process (what governments choose to do or not to do).
 - b. For example, the United States government has chosen to not have a universal health care system
- V. The Policy Process (also known as the "Textbook" Process)
 - a. Elements (set of steps developed during the 1970s):
 - i. Problem definition: E.g. defining the problem of natural hazards as an "Act of God" vs. a problem with how structures are built to withstand the hazard.
 - 1. The "Act of God" definition was the primary problem definition for natural hazards for many years (well into the twentieth century).
 - a. Policy solution is the encouragement of prayer
 - b. For many years, disaster relief was very ad hoc as a result.

- c. Such problem definition ignores the fact that hazards only become disasters when humans are negatively impacted by them.
- ii. Agenda setting:
 - 1. Natural hazards get on the agenda because of the occurrence of a disaster ("focusing event") that focuses attention on it.
- iii. Policy development
 - 1. Once something is on the agenda, policy is crafted to address it
- iv. Alternative selection
- v. Implementation
- vi. Evaluation
- vii. Feedback:
 - 1. Process starts all over.
- b. Problems with the Stages Model:
 - i. Steps don't always happen
 - ii. Order changes
- c. Revised View of the Policy Process
 - i. Emphasis on agenda setting:
 - 1. What is an agenda?
 - 2. What are the levels of the agenda?
 - a. The agenda universe:
 - i. All of the ideas out there that could be translated into policy
 - ii. Many ideas exist in the agenda universe that will never exist on any other agenda level.
 - 1. Deconstruction of the constitution
 - 2. Gay marriage?
 - b. Systemic agenda:
 - i. Issues that have begun circulating in political discourse.
 - ii. Gay marriage, 20 years ago, was not something that could ever have been discussed within the U.S. political system, but today it appears in public discourse.
 - iii. Things can move from the agenda universe into other levels of the agenda over time.
 - c. Institutional agenda:
 - i. A list of all items that any decision making body is dealing with at that time.
 - d. Decision Agenda:
 - i. Those items that are being addressed through actual policy measures.
 - 1. I.e. If a bill is drafted and a decision must be made about whether or not

to adopt a particular policy, that is on the decision agenda.

- 3. Each level of agenda gets smaller and smaller; in diagram form they would be a set of concentric circles.
 - a. Society cannot deal with all ideas at any particular time.
- 4. The role of actors is to put things onto the agenda and to take things off the agenda
 - a. Issue of political power arises: actors with more political power can suppress or promote items that serve their own interests.
- 5. Why is the Agenda important:
 - a. Limited space
 - i. Society has a limited amount of attention it can pay to agenda issues.
 - b. More attention usually yields negative attention
 - i. If you are a group that doesn't want to do something about a problem, you want to keep the issue off the agenda.
 - c. The act of getting an issue on the agenda can influence the choice of policies that are ultimately adopted:
 - i. The process of putting something on the agenda is also a process of framing the issue in a particular way.
 - 1. E.g. Columbine shooting: issue came down to either one of morals or of gun control.
 - 2. Trend in school violence in 1999: it was declining.
 - a. By framing the problem in the terms: "If it can happen here, it could happen anywhere," the meaning translated that "if that could happen in a white upper middle class community it could happen anywhere," and this affects policy measures.
 - b. The recent Minnesota shooting is getting less attention. Why?
 - i. It involved Native Americans?
 - ii. It occurred in a rural area?

- iii. After 9/11 it seems like a relatively small event?
- iv. The Schiavo case and the Pope's death have pushed it off the agenda?
- 6. How do issues reach the agenda?
 - a. Changes in indicators of a problem
 - i. Must evaluate whether it is a real problem or is it not a real problem.
 - ii. Changes tend to grow slowly over time.
 - iii. Some people (policy makers) can learn about the changes more quickly than others and mitigate both the effect of the problem and the public's reactions.
 - b. Focusing events:
 - i. An event that is or is potentially harmful, affects a particular community of interest, and that is known by mass and elite actors almost simultaneously.
 - 1. There is no particular information advantage for people in government, for example.
 - ii. These events bring issues onto the agenda much faster than changes in indicators.
- ii. Improved Models of the Policy Process help us understand focusing events.
 - 1. The "CNN Effect"
 - a. Media coverage has increased its volume of coverage but not its information density.
 - b. Media has a huge influence on disasters.
 - i. Earthquake in Sumatra: Media overemphasized "panic" despite the fact that social scientists have found that
 - 2. Kingdon's Streams Metaphor:
 - a. A problem stream is where various problems persist.
 - b. A policy stream is where problems are addressed in political systems.
 - c. The politics stream is where problems are framed and understood by society.
 - d. These streams do not naturally come together unless there is a focusing event that opens a window of

- opportunity. When these streams come together, it can change the nature of each stream.
- e. Policy Entrepreneur: People who take the time to link ideas and policies with problems and push them through the system.
- 3. Baumgartner and Jones: Agendas and Instability in American Politics
 - a. Pose the Question: Why are there long periods of stasis in American politics followed by quick changes?
 - i. Three Mile Island example: an accident that was about as bad had occurred a few years earlier and almost melted down.
 - 1. No mention of original disaster in the New York Times for six months.
 - 2. The policy images of nuclear power changed between 1966 and 1979.
 - a. Little events happen that change the domain.
 - 3. Most important change in the policy domain was that Congress had 30 committees overseeing nuclear power by the late 1970s whereas it had only one in the mid-1960s.
- 4. Groups usually coalesce into two to four advocacy coalitions.
 - a. Disputes are mediated between policy brokers (policy entrepreneurs)
 - b. Groups learn about better ways to solve problems through policy instruments and how to make more effective arguments.

Disasters and Learning

- VI. Earthquake Focusing Events:
 - a. 1925 Santa Barbara California Earthquake.
 - i. Current faux Spanish-mission style was mandated after the earthquake.
 - ii. Also mandated better building codes.
 - b. 1933 Long Beach Earthquake
 - i. John Muir School collapse led directly to the passage of the Field Act:
 - 1. Schools must be built in such a way as to withstand earthquake damage.
 - c. 1964 Alaska Earthquake
 - i. 114 killed in the event. An important focusing event in earthquake policy
 - d. 1971 Sylmar Earthquake:

- i. A hospital collapsed
- e. 1989 Loma Prieta Earthquake
 - i. Highway collapsed
- f. 1994 Northridge Earthquake:
 - i. Freeway bridges collapse.
- g. What do events have in common?
- VII. After Disaster: Agenda Setting, Public Policy and Focusing Events (American Governance and Public Policy)
 - a. Goal: What makes some disasters more focal than others?
 - b. The political model: greater attention to disasters (agenda change) is a function of various indicators.
 - i. Regression model shows that for Earthquakes, Congressional Agenda Activity is directly and statistically significantly related to:
 - 1. News Changes
 - 2. News Density
 - 3. Mobilization
 - 4. Tone
 - ii. The finding was not significant in the case of hurricanes.
 - iii. Tone mattered with earthquakes but had an opposite effect for hurricanes.
 - iv. Conclusion: there is an active policy community that deals with earthquakes but not with hurricanes.
 - c. What the model means:
 - i. Ideas matter more in the earthquake domain than in the hurricane domain (the tone variable).
 - ii. The model is a better fit for earthquakes than hurricanes.
 - d. What do congressional witnesses talk about?
 - i. The modal issue for both earthquakes and hurricanes is Disaster Relief
 - ii. When there is no specific event, people in the earthquake domain talk about the National Earthquake Hazard Reduction Act. With hurricanes, the emphasis remains on disaster relief.
 - e. What does it mean?
 - i. All natural disaster policy is a policy without publics
 - ii. Policies without publics rely on technical expertise to advance beneficial policy.
 - iii. This expertise has long existed in California for the earthquake hazard and has been influential in policy making.
 - iv. Such expertise may exist in hurricanes, but experts do not participated in Congressional hearings (except for meteorologists) and their work hasn't had much influence on policy.
 - 1. This is surprising because hurricanes are extremely dangerous and cause a lot of damage.
 - f. The big difference: "The National Earthquake Hazard Reduction Act"
 - i. Why has there been more learning in California on earthquake policy but limited learning on hurricane policy?

- ii. Steinberg's book *Acts of God* emphasize the local focus hazard denial as a contributing factor to slow learning.
 - 1. Over first half of the twentieth century, California slowly moved from complete denial of earthquake hazard to local acceptance of need for new building codes, to the Field Act, which required improved school buildings and some communities passing URM ordinances.
- VIII. Policy Changes Relating to Earthquakes
 - a. Policies are shaped the way they are because of who they are going to affect
 - b. 1964-70 *National Academy Studies of the Alaska Earthquake*. Captured the impacts of earthquakes.
 - c. 1971 San Fernando earthquake resulted in a number of policy changes:
 - i. Hospital Safety Act
 - ii. Strong Motion Instrumentation Act:
 - 1. Instruments that can measure strong lateral accelerations during earthquakes.
 - 2. The goal is to keep the building standing DURING the earthquake (not necessarily to be habitable afterward.
 - iii. Alquist-Priolo Earthquake Fault Zoning Act:
 - 1. People must be informed during real estate transactions of the seismic hazards of the property.
 - 2. Helps people know where hazards are and their own risk.
 - iv. Seismic Safety Commission Act.
 - v. Bridge Seismic Retrofit Program
 - vi. How can you know that these measures are a result of a single earthquake?
 - 1. It has been said explicitly by the people developing the policies.
- IX. Big Learning Opportunity in Hurricanes: Andrew, 1992.
 - a. Why a learning opportunity?
 - i. Relatively few very large hurricanes hit the United States compared with earthquakes, so it was a major focusing event.
 - ii. Revealed hurricane problems at both the local and national level.
 - 1. Poor building code enforcement
 - a. Code requires that roofs be strapped on to hold the frame of the building together.
 - 2. Shoddy construction
 - 3. Exposure of insurance industry to catastrophic losses
 - a. Many insurers tried to depart the Florida insurance market.
 - b. Insurance companies become part of a promitigation group
 - 4. Differences in impact between wealthy and poor.

- a. The poor are more likely to be living in substandard housing, with no resources to get new housing, and with more barriers to recouping losses.
- b. What policy changes resulted from Hurricane Andrew?
 - i. FEMA was more professionalized
 - 1. Had become a dumping ground for political appointees who were completely overwhelmed by the event.
 - ii. Mitigation became more important in all hazards, especially hurricanes.
 - iii. Florida passed legislation to mitigate hurricanes
 - 1. Made changes to the building code and put greater emphasis on enforcement
 - 2. Set up the Hurricane Catastrophe Fund
 - 3. Enacted the Hurricane Loss Mitigation Program
 - a. Created in 1999.
 - b. 40% goes to mitigate losses to mobile homes, which are particularly vulnerable to hurricanes.
 - c. Some of the money goes to reinforce public buildings, thus ensuring protection for people in public spaces.
 - iv. Ultimately the Wind Hazard Reduction Program was created, modeled on the NEHRP.
- c. Is Florida now a leader in hurricanes the way California is in earthquakes?
 - i. Florida has not reached the same level of leadership for hurricanes as California.
 - 1. California is far ahead of any other state in terms of its work on earthquake policy.
 - 2. Other states such as North Carolina have also done some interesting work on hurricanes.
 - ii. Florida seems to be taking on a leadership role in hurricane mitigation policy because of the focusing event of Hurricane Andrew.
- X. Reasons for Policy Changes after Earthquakes vs. Hurricanes
 - a. Professional Community
 - i. Earthquakes have a large professional community; hurricanes have a smaller community with a relatively low policy presence before 2004.
 - ii. Earthquake mitigation relies on engineering and technology; hurricane mitigation relies on unpopular land use restrictions.
 - iii. Earthquakes are scarier (and less predictable); hurricanes are can be tracked, and they allow for preparedness and evacuation.
 - iv. Earthquakes are large events focused in one place; hurricane events are scattered, fewer.
 - v. Earthquakes yield a high capacity for putting lessons into practice; Hurricanes have a lower capacity for applying lessons.
- XI. Conclusion: Corporations and Policy

- a. Crisis management literature encourages misperceptions:
 - i. When a disaster happens, it is the fault of the company.
- ii. Interest groups exist to make life difficult.b. Crisis management literature needs greater emphasis on the role of various interest groups and stakeholders within the corporation or community/society.