

# n BUILDING RESEARCH CAPACITY TO ADDRESS TERRORISM

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## n THE RANGE OF RESEARCH NEEDS

- u Workshops
- u Projects
- u Training
- u Infrastructure
- u Education
- u Bureaucracy

# WORKSHOPS

- The research community needs to engage in debate about 2 topics that transcend the specifics of terrorism
- F **THE INTELLECTUAL AND POLICY CONSEQUENCES OF NARROWING THE SCOPE OF INQUIRY TO MATCH POPULAR PREFERENCES FOR ACTION**
- F **STRENGTHS AND LIMITS OF HAZARD THEORY IN THE CONTEXT OF TERRORISM**

# Scope of inquiry

## n The fox and the hedgehog (Archilochus)

- Will researchers “follow the money” to study emergency response, GIS and related themes that have proven popular with policy makers and managers while **neglecting topics that are more likely to advance knowledge?**
- Will public policies place **less emphasis on mitigation and other strategies that are designed to address “root causes” of hazard** because emergency response, military action and similar reactive measures are popular with political leaders and public constituencies?

# Hazard theory

- u Three processes, not well addressed by existing theories of hazard, play key roles in terrorism
  - F instrumentality
  - F reflexivity
  - F surprise
- u Application to terrorism of existing knowledge about hazards may be hampered
  - F How should existing theories be modified?
  - F What are the implications of modified theories for natural and technological hazards researchers?

# RESEARCH PROJECTS

- n Understudied but important topics
  - F Vulnerability
  - F Values
  - F Victimization & Visibility
  - F Symbolism
  - F Landscapes of hazard
  - F Metropolitan contexts
  - F Gaps in existing terrorism research

# 1. Vulnerability

- u Step-child of hazard science & policy; overshadowed by attention to risk
- u Inadequate understanding of vulnerability among researchers and policy makers
  - F Perceived as **dependent** state of physical systems that is revealed by an extreme event and explained in terms of structural or infrastructural limits
  - F Vulnerability of people, firms, institutions, communities etc. is continuously socially constructed often in response to factors **independent** of hazard

## 2. Values

- F Effectiveness of terrorism is a function of degree to which it accurately engages human fears and values
- F Terrorists
  - exacerbate anxieties re: existing known risks (e.g. flying)
  - undermine assumptions about secure places (e.g. private workplaces, high-rise office buildings)
  - feed fears about safety of cherished others (e.g. children, non-combatants)
- F Few parallels among natural & tech. hazards
  - The more is known about how “we” and “they” construct notions of value, the more likely that the actions of terrorists can be anticipated and steps taken to reduce the vulnerability of affected populations

# 3. Victimization and Visibility

- u Who is a victim of terrorism, to what degree?
  - F targets, bystanders, helpers, perpetrators
  - F heinousness of the event
  - F defiance of danger may be judged positively
  - F how blame and justifications are weighed
- u Victims are differentially visible
  - F Some avoid publicity because it attracts unsympathetic bureaucracies or further attacks
  - F Some receive added publicity because of the salience of their occupations or status
  - F Publicity affects charitable giving patterns

# 4. Symbolism

- Terrorism *losses* are symbolic as well as real
- Symbols of authority & identity are most at risk
  - government buildings (e.g. Embassies-Kenya & Tanzanian, Murrah Building, Pentagon, US Capitol)
  - culturally significant structures (e.g. WTC; Eiffel Tower; Irish monuments; Uffizi)
  - BUT “ordinary” places may be selected for banal symbolism (e.g. restaurants, hotels, social clubs)
- Symbolism is deeply implicated in *reconstruction* projects, especially when identities are perceived to be at risk
  - Natural & technological hazards literature skips lightly over (sometimes unique) issues of symbolism

# 5. Landscapes of hazard

## u Landscapes are marked by terrorism

- Landscape semiotics convey identity of terrorist groups, inscribe their ideologies, mark boundaries, assert claims to territory; confirm terrorism's presence on policy agendas
- Identification with characteristic landscapes is a foundational element of nationalism & patriotism
- Undamaged landscapes are part of "normal" for populations at risk
- Damaged landscapes offered as proof of terrorist strength
- Landscapes of annihilation are agents of social solidarity among victims & strong motivators of anti-terrorist actions

## 6. Metropolitan contexts of hazard

- F In MDCs terrorism is pre-eminently metropolitan
- F Complexity & surprise are common in such areas, thereby requiring special investigative methods
- F For example, large cities:
  - continually change in response to global as well as local forces
  - contain complex information environments that offer many competing signals of hazard
  - include different constituencies that do not necessarily agree about hazards that are posed by terrorism or the degree to which terrorist acts should be judged as hazards

# 7. Close holes in existing terrorism research

- u Most analytic research on terrorism is either:
  - F highly generalized study of sociopolitical & cultural contexts that facilitate international terrorism
  - F highly contextualized investigations of specific terrorist incidents or issues in particular places
- u Methods and models that link causal structures and phenomena of terrorism at different scales and bring researchers with area studies experience into contact with systematic scholars of terrorism should be encouraged

# TRAINING

- u Hazards researchers are not necessarily familiar with the existing interdisciplinary field of terrorism studies

# INFRASTRUCTURE

- u Real time assessment of risk and vulnerability to extreme (e.g. terrorism) events is hampered by varying standards and compatibilities for exchanging GIS data among different sources and users
- u Readiness to address these and other surprises might require a human genome-scale mapping effort

# EDUCATIONAL SUPPORT

- F September 11, 2001 will have a profound influence on the field of hazards research in upcoming decades and on the recruitment and training of the next generation of hazards researchers
- F The existing relatively small number of hazards researchers will bear heavy responsibility for training their successors
- F Increased support for graduate and undergraduate study of hazards is required, including but not limited to research and training fellowships
- F Funds for curricular development, instruction, and faculty training should also be expanded

# HUMAN SUBJECTS OVERSIGHT

- F Quick-response studies of human behavior in disaster can face difficulties complying with federal regulations for protection of human subjects
- F These problems may increase in the emotionally charged atmosphere of terrorist attacks
- F There has been no national assessment of the effects of existing human subjects protection regulations
- F Now would be a good time to initiate a broad debate about these matters both within the hazards research community and with other stakeholders

# RECOMMENDATIONS

- F Convene multidisciplinary workshops to chart the intellectual territory BEFORE researchers commit to a narrow course of action based on weak theory
- F Fund disciplinary & cross-disciplinary investigations of understudied topics. Encourage collaboration among sciences, humanities and users.
- F Develop training courses about existing research on terrorism for hazards experts
- F Address GIS infrastructure needs
- F Expand fellowships & curricula for hazards students
- F Modify human subjects regulations that affect quick-response hazard research