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4 **DISASTER BELIEFS AND**
5
6 **INSTITUTIONAL INTERESTS:**
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8 **RECYCLING DISASTER MYTHS**
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10 **IN THE AFTERMATH OF 9–11**

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14 Kathleen Tierney

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17 **INTRODUCTION**
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19 Thirty years ago, in February 1972, an article by sociologists Henry Quarantelli
20 and Russell Dynes appeared in *Psychology Today* (Quarantelli & Dynes, 1972).
21 That article, which was entitled “When Disaster Strikes (It Isn’t Much Like What
22 You’ve Heard and Read About),” made the point that a great many of the things
23 people believe about social behavior in disasters are simply contrary to the findings
24 of social science research. The article went on to discuss a number of myths
25 or erroneous images of disaster behavior. Those myths included the notion that
26 panic is widespread in disaster situations; the idea that disasters lead to collective
27 demoralization and social disorganization, which then provide a context for the
28 emergence of anti-social behavior, such as looting; and the assumption that, rather
29 than carrying out their designated duties when disasters strike, emergency workers
30 will abandon their posts in favor of saving their loved ones. Using data obtained
31 through pioneering field studies that had been conducted by the National Opinion
32 Research Center, the National Academy of Sciences, and the Disaster Research
33 Center during the 1950s and 1960s, the article rebutted these myths and replaced
34 them with much more positive, adaptive images of social behavior in disasters.

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1 Since that *Psychology Today* article appeared, more intensive research on
2 disasters in the U.S., as well as research in other societies, has shown that many
3 of the findings from early disaster studies are very robust. At the same time,
4 however, other research has indicated that mythical thinking about social behavior
5 in disasters persists. Various studies have shown that despite evidence to the
6 contrary, the general public, governmental officials, and even many disaster
7 victims themselves continue to think about disaster-related behavior in terms of
8 erroneous images (Fischer, 1998; Wenger et al., 1975; Wenger, James & Faupel,
9 1985). Disaster scholars argue that these views have likely been influenced by
10 the ways in which disasters are framed in the mass media and in popular culture
11 (Clarke, 2002; Mitchell et al., 2000; Quarantelli, 1985). However, less attention
12 has been paid to the ways in which disaster myths serve to bolster the claims of
13 institutional actors and organizations that manage risks.

14 This latter aspect of disaster mythology – the idea that myths concerning
15 disaster behavior and disaster management reinforce particular institutional
16 interests – is the topic of this analysis. I begin by noting that following the attacks
17 on the World Trade Center and the Pentagon and the anthrax attacks that took
18 place last fall, old myths about the manner in which people and organizations
19 respond under conditions of extreme danger are being recycled, both in public
20 discourse and in governmental planning for emerging threats. My discussions
21 focus on two of these recycled myths: the panic myth and the notion that the way
22 to manage disasters is through hierarchies and centralized command-and-control
23 structures. I then contrast these mythical ideas with findings from empirical
24 research on disaster events, including the World Trade Center attack. The final
25 section of the paper discusses how beliefs concerning the fragility of the public
26 in the face of emerging threats are consistent with the perspectives and objectives
27 of organizations that have been seeking to expand their influence in the domestic
28 crisis management arena in the wake of the tragic events of September 11.

30 **PANICKY VICTIMS AND THE NEED FOR CONTROL:** 31 **MYTHICAL CLAIMS VERSUS SOCIAL** 32 **SCIENCE RESEARCH** 33 34

35 A recent review by Clarke (2002) starts by noting the important role that panic
36 serves as a plot device in disaster movies and moves on to discuss how assumptions
37 about the prevalence of public panic under crisis conditions have influenced recent
38 emergency preparedness activities, such as governmental planning for Year 2000
39 computer failures. Clarke juxtaposes mythical images of panic against actual data
40 on the adaptive and prosocial manner in which individuals and groups have behaved

1 in crises ranging from deadly conflagrations to plane crashes. The points he makes
2 have been borne out again and again in disaster research: despite the fact that
3 people may well be terrified in disaster situations, even to the point of feeling that
4 their lives are in imminent danger, they almost never resort to the kind of highly
5 individualistic, competitive, headlong flight behavior that characterizes true panic.
6 Instead, social bonds remain intact and the sense of responsibility to others – to
7 family members, friends, fellow workers, neighbors, and even total strangers –
8 remains strong (Johnson, 1987; Johnson, Feinberg & Johnson, 1994; Johnston &
9 Johnson, 1989).

10 The same patterns of rational, orderly response and helping behavior that have
11 been observed in other disasters were evident in numerous first-person accounts on
12 the evacuation of the World Trade Center. Despite media reports that continually
13 described occupants of the Trade Towers and evacuees as panicky, what was seen
14 instead were people behaving with admirable presence of mind under the most
15 adverse of circumstances. Endangered tower occupants sought information from
16 one another, made inquiries and spoke with loved ones via cell phones, engaged in
17 collective decision making when they encountered danger, and helped one another
18 to safety. When occupants escaped from the towers, the evacuation, which was
19 highly successful by any standard, was carried out in a calm and orderly manner
20 (see, for example, the detailed account of evacuee decision-making compiled by
21 Cauchon, 2001, for USA Today). Similar patterns of highly adaptive and pro-social
22 behavior were documented following the bombing of the World Trade Center in
23 1993 (Aguirre, Vigo & Wenger, 1998).

24 The incidence of panic behavior is vanishingly rare in actual crisis situations,
25 even those that are life-threatening. Of course, this does not mean that people feel
26 no fear when disaster strikes, or that they do not try to escape from danger. The
27 point is that despite fear and the entirely realistic desire to flee, individuals and
28 groups facing severe danger try to make rational decisions, and they maintain their
29 connections with others. For example, researchers have shown that in a catastrophic
30 nightclub fire that killed nearly two hundred people, there were a few isolated cases
31 of panic, but on the whole those who were trapped and searching for ways out of
32 the club as the fire raged behaved in an orderly and mutually supportive fashion
33 (Johnson, Feinberg & Johnston, 1994; Johnston & Johnson, 1989).

34 Influenced by strong norms of altruism that emerge during major emergencies,
35 those affected respond in ways that are positive and constructive. The literature on
36 disasters consistently shows that far from fleeing in terror when disasters strike,
37 disaster “victims” actually constitute the real first responders in those situations.
38 Numerous studies document the fact that individuals and groups in the immediate
39 impact area manage evacuations, perform rescues, locate and dig out fellow
40 victims who are trapped, transport them to emergency care providers, and put

1 themselves in danger repeatedly to ensure that others are safe (Aguirre et al., 1995;
2 Dynes, Quarantelli & Wenger, 1990; Noji, 1989; Tierney, 1994). Media reports
3 on disasters such as major earthquakes and on terrorist incidents like the attack
4 on the Murrah Federal Building in Oklahoma City and the World Trade Center
5 tend to feature stories on the rescue activities of official governmental search and
6 rescue teams, leaving community residents and other unofficial rescuers out of the
7 picture. The nation has twenty-eight such teams around the country, consisting of
8 trained personnel, heavy equipment, and search dogs. What the media do not state
9 is that while those teams do search, they virtually never rescue. Instead, the vast
10 majority of live rescues are carried out by community residents who are at the
11 scene of disasters, not by official response agencies or outside search and rescue
12 teams.¹ Indeed, rather than panicking and acting in otherwise unproductive ways,
13 members of the public typically converge en masse to help when disasters strike.
14 Behavior following the World Trade Center attack was no different. Victims helped
15 fellow victims to safety, and the wave of people leaving Lower Manhattan when the
16 Towers collapsed was accompanied by a counterwave of those converging into the
17 area to help.

18 Despite extensive empirical evidence to the contrary, many crisis planners
19 appear to assume that in any future terrorist attack, panicky community residents
20 will be a major problem and perhaps even a danger to public order. Much
21 current U.S. bioterrorism planning is predicated on the assumption that the
22 public will panic and flee in horror should such an attack occur. Writing about
23 the U.S. Centers for Disease Control plans for bioterrorism in this country, a
24 Washington Post article observed that “The CDC plan makes it clear that if an
25 attack occurred in the United States, avoiding mass panic would be a major
26 challenge” (Washington Post, November 27, 2001). Indeed, one prototype CDC
27 bioterrorism plan, developed prior to 9–11, states that “Following a terrorism-
28 related event, fear and panic can be expected from both patients and health care
29 providers” (Centers for Disease Control and Prevention, 1999). In the May,
30 2000 TOPOFF crisis management exercise, which involved weapons of mass
31 destruction, high-ranking officials taking part in the exercise conjured up images
32 of mass public panic, which then had to be managed. In the fall of 2001, the
33 entirely understandable and predictable information-seeking among the public
34 that occurred in connection with the anthrax attacks was labeled panic by many
35 U.S. media.

36 After attending a meeting held by the Royal Society and the British Association
37 for the Advancement of Science in December, 2001, an observer posted a report on
38 the Internet noting that “One certainty in this very uncertain area is that panic may
39 cause more havoc than any biological agent . . . the English Department of Health
40 has struck the correct balance with well prepared scenarios communicated to

1 officials and practised from time to time while downplaying the information to the
2 public to avoid panic” (Symons, 2001). Recent newspaper reports (see Gellman, Pl. check reference
3 2002) indicate that similar thinking dominates U.S. bioterrorism planning. As “Gellman, 2002”
4 in Great Britain, concern with creating panic is being used as a rationale for which is missing in
5 not communicating with the public or including the public more directly in reference list.
6 counter-terrorism planning. In one notable case that came to light in spring, 2002,
7 the federal government avoided informing public officials in New York City
8 about a credible threat involving nuclear material that had surfaced in fall, 2001,
9 ostensibly to avoid creating panic. Subsequent media coverage again promulgated
10 the panic myth, as illustrated in this transcript of an interview conducted on CNBC
11 with Bernard Kerik, former New York City Police Commissioner by television
12 personality Chris Matthews (CNBC, Inc., 2002):

13
14 Matthews: What would you have done with that information [the warning concerning nuclear
15 terrorism] without letting it out of the bag? . . .

16 Kerik: . . . I can’t tell you exactly what we would do in New York City . . . but what I will
17 tell you is that we have 41,000 New York City police officers, and if there was a
18 need to conduct a search . . . I think we would have been . . . much better prepared
19 by notifying the police department and the appropriate authorities in New York. . . .

20 Matthews: How would you have described the – how would you have described the targeting
21 of a search without causing the most historic, almost Biblical level of panic in
22 Manhattan? . . . Suppose a person in New York, who’s living in Manhattan, hears
23 there may be a nuclear weapon blowing up in New York. They would grab their
24 kids. They’d begin walking to the nearest bridge if they had to. They would have
25 taken a subway if they were still running. You would have almost a Japanese kind
26 of subway craziness going on, wouldn’t you?

27 Kerik: Well, I think that you have to walk a fine line on what you – what you let out and
28 what you do not.

29 Japanese subways are well-known for the orderly and civil manner in which pas-
30 sengers comport themselves, particularly during crowded rush hours, and moving
31 toward areas of safety is clearly a rational response to danger. Nevertheless, the
32 media remain undaunted in their search for panic. For example, in a virtual tour
33 de force of disaster mythology, an article published on the Web by the Newhouse
34 News Service (Wood, 2002), entitled “America Is Dangerously Vulnerable to
35 Panic in Terror Attack, Experts Say,” speaks grimly of the “widespread, blind
36 panic” that could break out among the U.S. population in the event of repeated
37 terrorist attacks – panic episodes that will be accompanied by looting and civil
38 unrest. An expert source is quoted as being “worried about terrorism causing
39 the collapse of civil society,” while elsewhere the article discusses the need for
40 law enforcement crackdowns in bioterrorism emergencies in which “[p]olice
barricade city and state borders. Armed guards patrol quarantine lines that may
divide neighborhoods and even families.”

1 Beliefs about the specter of public panic in future terrorist attacks are
2 widespread despite published work by researchers like those associated with the
3 Institute for Civil Biodefense Strategies at Johns Hopkins University, indicating
4 that on the basis of past research they do not expect the public to panic even in the
5 face of biological threats and that, on the contrary, the public should be seen as an
6 important resource for responding to those kinds of attacks. Institute researcher
7 Thomas Glass points out, for example, that in the massive 1918 flu pandemic,
8 which killed 500,000 U.S. residents, “people responded quite effectively and
9 implemented disease control and treatment strategies in the community . . . Little
10 evidence of panic can be discerned from the historical record” ([Biohazard News](#),
11 [2001](#), p. 3). Similarly, accounts of the 1947 smallpox outbreak in New York City,
12 which led to the very orderly vaccination of six million New York residents,
13 make no mention of public panic ([Weinstein, 1947](#)). Glass has also spoken
14 disapprovingly of what he calls “the yellow-tape effect” in terrorism planning –
15 the tendency on the part of official crisis management agencies to be suspicious
16 of the public and to want to keep volunteers at arms length because of their
17 lack of qualifications and potential disruptiveness ([Biohazard News, 2001](#)). He
18 and his colleagues have called instead for the provision of timely and accurate
19 information to the public – not the withholding of information – as well as the
20 inclusion of community residents into local preparedness efforts as the most
21 effective way of countering any potential for panic that may exist ([Glass &](#)
22 [Schoch-Spana, 2002](#)).

23 While concerns persist about not stirring up panic, there is little discussion on
24 the very real challenges associated with emerging threats, such as how to commu-
25 nicate emergency information to the public in appropriate ways, and, should the
26 need arise, how to issue warnings effectively in a society with pronounced social
27 class, ethnic, and language divisions. Indeed, concern with keeping information
28 from members of the public so that they will not panic may well obscure a more
29 serious risk – the very real possibility that crucial information on hazards and
30 recommended self-protective measures will not be equally available to all groups
31 in our diverse society should it be needed following some future terrorist attack.
32
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34 *Hierarchies of Command: Militarizing Emergency Management*

35
36 Paralleling the myth of panic and dysfunctional behavior on the part of the public
37 is a growing emphasis on the need for stricter lines of command and control
38 in disasters. Both sets of imagery are premised on the notion that extraordinary
39 measures are needed to counteract the social disorganization and precursors to
40 social breakdown that are thought to accompany disasters. Disaster scholars have

1 long called attention to the existence in both political and scholarly discourse of
2 two very different models of disaster response and management. The first, which
3 is based on what actually occurs in disaster situations, is commonly termed the
4 problem-solving or human resources model. The second, known as the military
5 or command-and-control model, is based on the idea that the appropriate way
6 to manage disasters and other crisis situations is through centralized control and
7 clear-cut hierarchies (for discussions, see [Dynes, 1993, 1994](#)). This mythical
8 command-and-control image persists in part because disasters are erroneously
9 seen as situations in which public order breaks down, and in part because the field
10 of disaster management itself has its roots in the Cold War and in military notions
11 of civil defense.

12 The command analogy appears in various ways in discourses on disasters and
13 their management. Following Hurricane Andrew in 1992 – a disaster in which
14 the intergovernmental response was slow and judged inadequate by many – there
15 were discussions on whether the military should be given a greater role in domestic
16 disasters, since the military has the command structure and the know-how to get
17 things done.² Critiques of the handling of the World Trade Center response by the
18 New York City fire and police departments (see [McKinsey & Company, 2002a, b](#);
19 [New York Times, 2002a, b](#)), have centered on the idea that no one appeared to be in
20 charge of the overall response, that command structures broke down, and that front-
21 line workers weren't sure to whom they were reporting on 9–11. Governmental
22 plans for the creation of the new federal homeland security agency are based on
23 the notion that hierarchical organizational arrangements are required to deal with
24 emerging homeland security threats – even though organizational research suggests
25 that hierarchies are likely to be especially ill-suited to managing those kinds of
26 risks ([Wise, 2002](#)).

27 Those who argue for greater command and control capability and hierarchical
28 structures for managing future crises fail to take into account how decisions are
29 actually made and how activities are carried out in disaster situations. Disasters
30 have long been characterized in the sociological literature as crisis occasions in
31 which demands on affected social units exceed their capability to handle those
32 demands. Faced with so many pressing problems, social units are forced to adapt.
33 For example, in disasters, many decisions must be made under extreme time pres-
34 sure. Research indicates that, due to such demands and time constraints, decision
35 making typically devolves to lower levels in crisis-response organizations than
36 would normally be the case, and front-line responders and mid-level personnel
37 have greater autonomy to act than during non-disaster times ([Drabek & Haas,](#)
38 [1969](#)). In another common pattern, emergent groups – that is, social groupings
39 that had no existence prior to the occurrence of the disaster – organize in order
40 to deal with disaster-related problems that their members define as pressing

1 (Stallings & Quarantelli, 1985). Group emergence occurs in a variety of contexts
2 in disasters. In many cases, groups emerge and carry out their activities entirely
3 outside the formal emergency response structure, as when community residents
4 organized themselves to prepare and deliver meals to workers at Ground Zero
5 following the World Trade Center attack. In another common pattern, new
6 networks form that blend the activities of existing organizations with those of
7 emergent groups. In an example of this type of blended network, building and
8 safety officials worked with volunteer structural engineers from New York and
9 from around the country to conduct safety inspections of hundreds of buildings
10 in and around the Ground Zero.

11 Emergence is also accommodated within existing crisis response organizations,
12 as activities performed by volunteers are incorporated into the official response.
13 For example, following the Trade Center attack, volunteers who came primarily
14 from local universities began staffing a geographic information systems (GIS)
15 and mapping unit within New York City's emergency operations center. That
16 unit, which expanded in the days and weeks after the attack, provided impor-
17 tant information and support services to government officials and responding
18 agencies.

19 Relatedly, and also directly contradicting top-down images of command and
20 control, because disasters always contain elements of surprise, they always be-
21 come occasions for extensive organizational improvisation. These improvisational
22 activities come about not through centralized control and decision-making but
23 through efforts to deal with local problems as they emerge, through the problem-
24 solving activities of informal networks, and through processes of bricolage that
25 use existing resources in novel ways. On the day of the World Trade Center attack,
26 for example, in a story that was undercovered by the mass media, several hundred
27 thousand people were evacuated from Lower Manhattan by water via an emergent
28 network of private and publicly-owned watercraft – a previously unplanned
29 activity that lacked central command and control. Those same vessels brought
30 rescue workers, volunteers, and donated supplies to the impact area (Kendra &
31 Wachtendorf, 2002; NYCStories.com, 2001; Snyder, 2001; Stravelli, 2001).
32 The volunteer engineers who worked with City building officials to inspect
33 damaged buildings at and around the Ground Zero site borrowed and adapted a
34 rapid-damage-screening protocol that had been originally developed by engineers
35 in California for conducting building safety assessments following earthquakes.
36 They used the information that was collected to produce a database and maps indi-
37 cating which buildings were safe and which were hazardous, in order to advise City
38 officials and building owners. Those activities were improvised; New York City
39 had no plan for rapidly screening damaged buildings prior to September 11. The
40 multiorganizational network that developed to deal with the massive task of debris

Pl. check the
reference
"NYCStories.com,
2001" which is
missing in
reference list.

1 removal from the World Trade Center, while made up of existing organizations, was
2 developed after the attack during the course of the emergency response itself. The
3 organizational roles and relationships that crystallized within that network were
4 very different from those envisioned in prior planning by the City. The stabilization
5 of the structures at the Ground Zero site and initiation of debris removal were key
6 elements in the emergency response to the Trade Center attacks. On September 11,
7 the City's Department of Design and Construction acted rapidly to define a role for
8 itself in the coordination of those activities – a disaster role for which that agency
9 had no prior authority (Langewiesche, 2002). The use of geographic information
10 systems, computer modeling, remote sensing, and other techniques and tech-
11 nologies to deal with numerous other problems as they developed following the
12 terrorist attacks was almost entirely improvised. And in what may have been the
13 most striking example of improvisation of all, the Mayor's Office of Emergency
14 Management was able to completely reconstitute its emergency operations center
15 because its state-of-the-art facility, which had been located at 7 World Trade Center,
16 was completely destroyed on September 11.³

17 The lesson here is that the response to the September 11 tragedy was so
18 effective precisely because it was *not* centrally directed and controlled. Instead,
19 it was flexible, adaptive, and focused on handling problems locally as they
20 emerged. Response activities initially involved mainly those who were present
21 in the immediate area when the attacks occurred and that later merged the efforts
22 of officially-designated disaster response agencies with those of newly-formed
23 groups, as well as literally thousands of other organized entities that had not been
24 included at all in prior emergency planning and that were not subject to any central
25 authority.

26 Actual community crisis response networks look nothing like the command-
27 and-control hierarchies that are the stuff of disaster myths. Rather, they consist of
28 loosely-coupled collections of individuals, groups, and organizations that contin-
29 ually change and that have permeable boundaries. Command-and-control models
30 do not work in disasters because authority and responsibility are distributed,
31 not centralized, and because so many of those who take part do so outside the
32 boundaries of official agencies. Some dimensions or phases of disaster response
33 activities, such as firefighting, can and do involve clear-cut chains of command,
34 but the term that more appropriately describes the overall response to disasters is
35 co-ordination – and in some cases, organized anarchy – rather than control.

36 Rather than being organized according to principles of command and control,
37 disaster response activities are undertaken through a complex and varied set of
38 organizational arrangements characterized by a high degree of emergence and im-
39 provisation. Some scholars characterize disaster responses as multiorganizational
40 garbage cans (Beamish, 2002; Clarke, 1989) in which solutions and problems

1 merge in ways that are unexpected and unplanned. Others view emergent disaster
2 response networks as complex adaptive systems (Comfort, 1999). Still other
3 analysts argue that network management is an appropriate term for the manner in
4 which disaster response activities are coordinated (Vaugh & Sylves, 2002; Wise,
5 2002). Indeed, the prevalence of network forms of organization (Podolny & Page,
6 1998), as opposed to hierarchies, is a distinguishing feature of the organized
7 response to major disaster events.

8 Instead of indicating weakness or management flaws, the decentralized multiorg-
9 ganizational responses that followed the World Trade Center attacks and that have
10 repeatedly been documented in major disasters are in fact a major strength and
11 a source of community and societal resilience. Centralization and hierarchy slow
12 down and otherwise hamper response efforts. Their flaws were highlighted follow-
13 ing a major earthquake that struck the Kansai region in Japan in January, 1995. That
14 disaster, which affected the city of Kobe and nearby communities, resulted in the
15 deaths of more than 6,000 people and left nearly 300,000 people (approximately
16 20% of the population of the impact region) homeless. The initial governmental
17 response to the earthquake was widely viewed as both sluggish and ineffective. The
18 inability to move expeditiously to address the very severe problems that resulted
19 from the earthquake stemmed in part from the highly centralized and hierarchical
20 nature of the Japanese governmental system – a system that was not flexible enough
21 to allow for autonomous action on the part of local agencies. On a scale never before
22 documented in a disaster in Japan, the earthquake triggered a massive convergence
23 of volunteers and the emergence of numerous citizen groups in the disaster-stricken
24 region. This volunteer mobilization, which involved an estimated 630,000 to 1.3
25 million people (International Federation of Red Cross and Red Crescent Societies,
26 1996), helped compensate for the government’s lack of foresight and for gaps in
27 response capability. However, many local jurisdictions had great difficulty incor-
28 porating volunteer groups into their response and recovery efforts, again owing
29 to their unwillingness to permit deviations from standard procedures and formal
30 lines of authority, even under the most extreme disaster conditions (Atsumi et al.,
31 1996; for an overview of the 1995 earthquake disaster, see United Nations Centre
32 for Regional Development, 1995).

33 Following the 9–11 attack, scholars have questioned what they see as a
34 movement toward more militaristic, command-and-control approaches to the
35 management of the terrorist threat. They even argue that the adoption of such
36 models may well make the nation less safe in future attacks. For example, Vaugh
37 and Sylves (2002) stress the notion that responses to disasters are characterized
38 by complex multiorganizational arrangements and a variety of forms of interorga-
39 nizational and intergroup collaboration and coordination, ranging on a continuum
40 from formal contracts to informal relationships based on trust. They warn that

1 given these characteristics of emergency response networks, it would be a major
2 mistake to (2002, p. 83):

3 superimpose overbearing command systems riddled with secrecy requirements that complicate
4 the collaboration and public involvement essential to dealing with hazards and disasters . . . [I]f
5 the war on terrorism inadvertently undercuts or distorts an emergency system designed to deal
6 with so-called routine disasters, it may well weaken current capabilities to manage conventional
7 hazards *and* the hazard posed by terrorism

8 Commenting on plans for organizing federal homeland security efforts, Wise
9 singles out hierarchical structures as especially inappropriate for managing the
10 war on terrorism, particularly in light of the environment in which organizations
11 will be carrying out their activities (2002, p. 132):

12 Adoption of standard, rational, hierarchical designs and practices is likely to be particu-
13 larly unsuitable for organizations that are expected to operate in complex, unstable environ-
14 ments . . . More unstable environments create a need for greater decentralization of authority
15 and less emphasis on formal structure, because a shifting environment requires rapid decisions
16 and changes, and it takes too long for information and decisions to travel up and down a strict
17 hierarchy.

18 In sum, of all possible ways to characterize responses to disasters – and also
19 to manage those events – images of command-and-control and hierarchical
20 organizational structures may well be the least appropriate. Such organizing
21 principles are inconsistent with what research indicates actually occurs in disasters
22 and ill-suited to the complex problems and challenges disasters present.

23

24

25 **WHY NOW? THE APPEAL OF RECYCLED MYTHS**

26

27 When September 11 offered so many examples of public heroism and selfless
28 devotion to others, why is there now such a focus on the specter of public panic?
29 When September 11 demonstrated the enormous resilience of our civil society,
30 why is disaster response now being characterized in militaristic terms? Media
31 influences are clearly relevant here, but recycled myths and discourses of panic and
32 command and control are also a reflection of two other and equally important – or
33 perhaps more important – influences: first, a movement on the part of governmental
34 agencies and private-sector organizations, particularly those associated with de-
35 fense, intelligence, and law enforcement, to claim ownership over the management
36 of emerging threats; and second and relatedly, the pressing of claims regarding the
37 need for management of future crises by those with particular kinds of specialized
38 expertise.

39 The history of crisis management in the Federal Emergency Management
40 Agency and its predecessor agencies has been accompanied by tensions between

1 militaristic or civil defense approaches, on the one hand, and an emphasis on
2 community-based preparedness for natural and technological disasters, on the
3 other (Kreps, 1990). While the latter management orientation – that is, the notion
4 that the U.S. emergency management system should focus on disasters and include
5 a wide spectrum of community institutions – had become more prominent during
6 the 1980s and 1990s, that approach never truly supplanted the war-oriented com-
7 mand and control model of management within FEMA and other federal agencies.
8 In the wake of 9–11, this persistent institutional ambivalence is once again being
9 resolved in favor of a more militarized approach to disasters and human-induced
10 threats. New institutional actors had become interested in disaster management
11 even before the September 11, 2001 terrorist attacks. Since the end of the Cold War
12 in the early 1990s, the defense and intelligence sectors of the federal government
13 had been seeking a larger role in U.S. disaster management. This movement was
14 evident in initiatives such as the Global Disaster Information Network (GDIN),
15 which attempted to employ technologies originally developed for military intelli-
16 gence to hazard assessment and emergency response activities in natural disasters
17 (Disaster Information Task Force, 1997).⁴ National Laboratories such as Los
18 Alamos National Labs, as well as consulting companies that frequently work with
19 the defense establishment, were also becoming increasingly involved in the natural
20 hazards area.

21 The events of 9–11 have opened a major window of opportunity for those
22 types of organizations and have also resulted in previously unimaginable levels
23 of funding for crisis preparedness, training, and response – and in particular for
24 the development and transfer of technologies that support command and control
25 functions. Whatever their strengths with respect to technology and hardware –
26 and those strengths are clearly considerable – the types of organizations that are
27 seeking to expand their domains in the aftermath of 9–11 generally have little
28 background either in understanding social behavior in disasters or, in many cases,
29 in understanding how disasters are actually managed in U.S. society.

30 New federal homeland security initiatives launched in response to the 9–11 at-
31 tacks signal a growing emphasis on top-down, command-and-control approaches
32 to managing future crises. This shift is evident in the composition of newly-formed
33 advisory committees, new agency alignments, and federal funding priorities. Some
34 members of the sixteen-person Homeland Security Advisory Council appointed
35 by President George W. Bush in June, 2002 have ties to local communities and a
36 broad understanding of the nation’s disaster management system. The mayor of
37 Washington, D.C. is a member of the Council, for example. Another member has
38 an extensive background in disaster management, having served as the director of
39 emergency services in a disaster-prone state. By and large, however, the Council
40 consists of individuals with highly technical backgrounds and training whose

1 careers have been spent in such organizations as the CIA, the FBI, MITRE
2 Corporation, Mitretek Systems, ANSER Institute, and other entities with close
3 ties to the intelligence and defense establishments. The Federal Emergency
4 Management Agency has now been absorbed in its entirety by the Department of
5 Homeland Security, where its personnel are likely to play a relatively minor role
6 compared with officials from other more powerful defense and security-oriented
7 agencies. FEMA’s organizational culture, never entirely comfortable with
8 broad community involvement in emergency preparedness and response, will
9 undoubtedly shift toward a greater emphasis command and control in all types
10 of emergencies.

11 Federal budget allocations for homeland security are moving the emergency
12 management system into a command and control mode, directing funds primarily
13 to border and transportation security, IT-related activities at the federal level, and
14 law enforcement, rather than to community-focused preparedness and response
15 activities. For example, the President’s 2003 budget allocates approximately 8%
16 of homeland security funding for training local “first responders” – fire, police,
17 and sheriff’s department personnel – as compared with 28% for border security.
18 Plans also include very modest amounts of funding for a “Citizen Corps” made
19 up of local volunteers. In contrast, “E-government” and other IT-related initiatives
20 are slated to receive substantial amounts of funding. The Department of Defense
21 is the single largest recipient of funds in the proposed homeland security budget,
22 followed by the Departments of Transportation and Justice.

23 As these budget figures suggest, emerging homeland security threats provide
24 major revenue opportunities both for the ailing information technology industry
25 and for defense, intelligence, and national security agencies and contractors.
26 The notion that the control of future threats will be achieved through successful
27 application of information technologies is accepted uncritically, in part due to the
28 myth that technology solves all problems, and in part as a consequence of the
29 vigorous marketing efforts on the part of the IT industry that began immediately
30 after the tragic events of September 11. Commenting in February, 2002 on the
31 events of September 11 as a bonanza for the industry, one technology newsletter
32 observed that

33
34 The Sept. 11 terrorist attacks have spurred the biggest push yet toward a vision of seamless,
35 electronically integrated government that tech firms have spent years pitching to federal
36 agencies . . . In the four months since the attacks, dozens of technology companies have tried
37 to sell themselves as the answer to the government’s security prayers. Suddenly, projects
38 like a multi-million dollar database integration effort for the entire federal law enforcement
39 community, explosive detection equipment for luggage screening at every U.S. airport and
40 new surveillance technologies for the domestic war on terrorism are all possible, and they’re
all business (Harris, 2002, p. 1).

1 Another newsletter reports that in the rush to identify IT solutions to the terrorist
2 threat

3 One of the first proposals out of the gate was from Oracle . . . Almost immediately after the
4 September 11 attacks, Chief Executive Larry Ellison began calling in television interviews and
5 newspaper op-ed pieces for a national identification-card system . . . Oracle is also teaming up
6 with Sun Microsystems, Electronic Data Systems, and PwC Consulting to help the Transporta-
7 tion Security Agency and other federal agencies adopt biometric technology to assess security
8 risks of airline passengers and airport employees (Gilbert, 2002, p. 2).

9 With these and other new developments, preparedness for emerging threats is
10 being framed not in terms of local capacity-building or developing resilience
11 within civil society institutions, but rather as a challenge best addressed by private
12 industry and by institutions that operate on the basis of command-and-control
13 and secrecy. Disaster myths, such as the notion that in the event of a future
14 attack residents of affected areas will panic and present problems for emergency
15 responders, resonate with the domain claims of these organizational actors.

16 Like the movement toward command and control, the increased emphasis on
17 specialized credentials and qualifications in the field of emergency management
18 also serves to sharpen the boundaries between those who are seen as qualified
19 to play a role in disaster management and presumably unqualified (and panicky)
20 members of the public. The last fifteen years have been marked by the emergence
21 of emergency management as a profession requiring a distinct set of skills, as
22 indicated by the proliferation of specialized course curricula and degree programs
23 and by the development of credentialing bodies in the emergency management
24 field. This process of professionalization has been judged by disaster scholars
25 both as broadening participation in disaster management activities to include more
26 involvement by civil-society institutions and as a counterforce against centralized
27 and hierarchical approaches to the management of disasters. For example,
28 [Sutphen and Waugh \(1998, p. 9\)](#) see professionalization as “encouraging the ‘de-
29 militarization’ of the field, reorienting agencies from their earlier ‘command and
30 control’ orientation to more coordinative and cooperative orientations.” However,
31 after 9–11, as federally-initiated homeland security initiatives increasingly take
32 precedence and exert influence over local emergency management systems, and as
33 emergency management becomes “remilitarized,” conceptions of what constitute
34 appropriate professional qualifications and activities for emergency managers are
35 also likely to change.

36 As new expertise-related claims are pressed and as new institutional align-
37 ments form around top-down command-and-control initiatives, the roles that
38 are envisioned for those outside systems of command and control and for
39 non-experts – particularly community residents and local non-governmental
40 organizations – shrink. Systems for managing emerging threats are increasingly

1 becoming the domain of government agencies and other organizations that
2 can claim expertise in the fields of military and national security intelligence,
3 information technology, and law enforcement. In the aftermath of September 11
4 and as a consequence of evolving definitions of societal danger, new institutional
5 actors are gaining increasing influence over the activities and missions of state
6 and local emergency management agencies in ways that will ultimately affect
7 how those agencies plan for and respond to crisis events of all types.

8 Recycled disaster myths both reflect and provide justification for this larger
9 trend, signaling the transformation of U.S. emergency management into a system
10 based on a hierarchical military and law enforcement model, rather than on a
11 more open and collaborative one. The resurgence of discredited views on disaster
12 management such as the panic myth accompanies a broader shift in the perceived
13 disaster roles of ordinary community residents and civil society institutions.
14 Especially with respect to emerging threats, rather than being characterized
15 as a resource in disaster situations (which is what both experience and social
16 science research have shown them to be), members of the public are viewed
17 increasingly as sources of disruption and as lacking the kinds of expertise needed
18 to play an active part in disaster response. Crisis preparedness and response are
19 now being redefined as the domain of agencies and organizations that have a
20 command over technology and that can function well in an atmosphere requiring
21 high levels of secrecy. Indeed, the presence of non-experts and non-credentialed
22 responders at any disaster site may now well be recast as a security risk. Seen in
23 this light, recycled myths serve a dual purpose: they provide a basis for placing
24 the management of new dangers more solidly in the hands of institutions and
25 professions can claim special expertise – particularly expertise with respect to
26 technologies that support command and control – and at the same time, they
27 provide a justification for not including the public more directly in planning for
28 future disasters.

29
30
31 **NOTES**
32

33 1. Often these initial response efforts are carried out under extremely dangerous
34 conditions. For example, in the earthquake that struck the San Francisco Bay Area on
35 October 17, 1989, workers from a nearby facility climbed onto the collapsed Nimitz
36 Freeway structure in West Oakland to help bring trapped motorists to safety, ignoring the
37 danger posed by potential aftershocks that could have caused additional collapses (see
38 sources cited in [Tierney, 1994](#)).

39 2. Arguments for expanding the role of the military were outlined in the official
40 assessment of federal emergency management capabilities that was carried out by the
National Academy of Public Administration following Hurricane Andrew. That report took

1 a position against assigning a greater role for the military in domestic disaster response
2 ([National Academy of Public Administration, 1993](#)).

3 3. Data on these and other activities that were carried out following the Trade Center
4 attacks were collected through quick-response observational field work and the analysis of
5 documents and media accounts undertaken by the staff of the Disaster Research Center.
6 More detailed information can be found in [Kendra and Wachtendorf \(2001a, b, 2002\)](#).

7 4. The GDIN task force was co-chaired by representatives from the Central Intelligence
8 Agency and the National Oceanic and Atmospheric Administration. The task force
9 membership included personnel from the Department of Defense, the National Security
10 Agency, the National Imagery and Mapping Agency, the Defense Information Systems
11 Agency, the National Aeronautics and Space Administration, and the Central Intelligence
12 Agency, along with representatives from the Federal Emergency Management Agency, the
13 Environmental Protection Agency, and other science-oriented agencies such as the
14 National Science Foundation.

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25 The views expressed here are mine alone.

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