6 The Cultural Turn in Disaster Research: Understanding Resilience and Vulnerability Through the Lens of Culture

Gary R. Webb

Contents

6.1 Introduction

When it was released in May, 2015, *San Andreas*, a movie about a massive earthquake, the big one, striking California, topped the box office charts. Enhanced by state of the art special effects technologies, the film, like many before it, featured scenes of total devastation, pandemonium, and the complete breakdown of social order. While the film may have been wildly off base in terms of how such an event would actually unfold, its financial success underscores two important points: the continuing appeal and profitability of the disaster movie genre and, more importantly, the central role that disasters occupy in popular culture.

In the first edition of this volume, it was suggested that the field of disaster research had begun taking a cultural turn (Webb, 2006). Ten years later, it can be said that the turn has been made and scholars are now fully embracing a cultural perspective on disasters (Krüger, Bankoff, Cannon, Orlowski, & Schipper, 2015). They are interested, for example, in understanding how disasters are framed and interpreted, remembered and memorialized, and represented and portrayed through folklore, songs, movies, and other media. This is in sharp contrast to an earlier era in which researchers were mostly concerned about the impacts disasters had on social systems (Fritz, 1961). While there is still a need for that kind of research, it has become abundantly clear to researchers, policy makers, and practitioners that the key to achieving future societal resilience is gaining a deeper understanding of the role of culture in both *producing* and *preventing* disasters.

In fact, this heightened awareness of and emphasis upon culture, which may have started as a scholarly movement, is now being put into practice. For example, the International Federation of Red Cross and Red Crescent Societies (2014) focused its annual *World Disasters Report* on the complex and reciprocal

G.R. Webb (✉)
Department of Emergency Management and Disaster Science, University of North Texas, Denton, TX, USA
e-mail: Gary.Webb@unt.edu

H. Rodríguez et al. (eds.), *Handbook of Disaster Research*, Handbooks of Sociology and Social Research, https://doi.org/10.1007/978-3-319-63254-4_6

relationship between culture and risk - namely, understanding how culture affects disaster risk reduction and how disasters and risk can impact culture. Similarly, the United Nations Office for Disaster Risk Reduction (2016), through the International Strategy for Disaster Reduction, aims to shift our emphasis from disaster response to a greater focus on disaster reduction by promoting a "culture of prevention." As these efforts clearly demonstrate, reducing future disaster risks will require more than just advances in technology and engineering; instead, it will require us to appreciate and understand the importance of culture and how it shapes people's lives.

Thus, the primary purpose of this chapter is to discuss and elaborate upon the relationship between culture and disasters. Specifically, it describes the shift that has occurred in the field of disaster research from being concerned primarily about issues related to social structure to focusing much more on the cultural dimensions of disasters. The chapter also discusses the role of culture in influencing how disasters are socially constructed, interpreted, and framed to promote various interests. This is followed by a discussion of culture as a source of resilience that protects communities from the impacts of disasters. Next, the chapter focuses on how culture can also be a source of vulnerability and may actually contribute to the occurrence of disasters. Finally, the chapter concludes by offering some insights on the importance of culture moving forward for the academic field of disaster research, for the profession of emergency management, and for future disaster risk reduction efforts.

6.2 The Cultural Turn in Disaster Research

To say that the field of disaster research, or any other field for that matter, has had a structural bias or has taken a cultural turn requires some explanation of what is meant by those terms. At the most basic level, social structure refers to the ways in which societies are organized, while culture is, "the complex system of meaning and behavior that defines the way of life for a given group or society" (Andersen & Taylor, 2011, p. 27). Examples of social structure include statuses and roles that individuals occupy, formal and informal groups and organizations, and major social institutions such as the economy, government, and educational systems. Culture, on the other hand, includes norms and values, beliefs and ideologies, morals and laws, customs, language, and other shared elements that bind people together. In addition to these non-material phenomena, culture also includes the material products of society, including buildings and other structures, consumable products, art and literature, monuments and memorials, and many other tangible objects.

In both the broader discipline of sociology and the more specialized field of disaster research, there has historically been a balancing act, if not a tension, between those perspectives that focus more heavily on structure and those that place greater emphasis upon culture. As its name denotes, for example, the structural functionalist perspective examines how society is structured, while symbolic interactionism studies the meanings people attach to things and how they make sense of the world around them. As described in this section, disaster studies have been informed by both of these perspectives and each has been present to varying degrees throughout the field's history. In the early years, it was the structural perspective that was more evident, but in more recent years the cultural approach has become much more noticeable.

For much of its history the field of disaster research has been dominated by a structural perspective. Scholars in the area have long sought to understand the impacts disasters have on social structures and how those structures respond to such large-scale systemic disruptions (Fritz, 1961; Kreps, 1989). Embedded in that perspective is the assumption that disasters, rather than being produced by human beings, are external events that impose themselves on societies in an arbitrary and indiscriminate manner. That assumption led researchers to focus their

efforts on developing a better understanding of the ways in which human societies prepare for and respond to disasters. Ignored was the role of human agency in the production of disasters, and, as a consequence, so too were measures to reduce or prevent these events from occurring in the first place.

From the vantage point of today's increasing global focus on disaster risk reduction, this early emphasis on disasters as external events imposing themselves on unsuspecting social systems and the prioritization of questions about social structure seems extremely limiting. However, at the time of the field's emergence in the early 1950s, it made sense. As has been documented, much of the early work on disasters was done by sociologists (Quarantelli, 1994). Not surprisingly, they were interested in the social aspects of disasters - not the psychological, political, or economic dimensions. And, at that time, structural functionalism was the prevailing theoretical perspective in sociology (Turner, 1986). This perspective views societies as social systems, akin to organisms in the biological sciences, in which various subsystems must function harmoniously to achieve a functional state of equilibrium. From this perspective, the social structure - including social institutions, organizations, and role sets - is vital to the survival of the system.

Another factor that contributed to the structural and response-focused bias of the field was the funding source for the research (Quarantelli, 1987; Webb, 2007). After World War II, the United States military sought to understand how communities could be expected to respond to an enemy attack. At that time, the primary concern was over a possible nuclear attack from the Soviet Union. To shed light on that question, the military began funding researchers to conduct field studies of communities struck by disasters. The types of events studied varied widely, including tornadoes, blizzards, chemical plant explosions, airplane crashes, and others. What they all had in common, though, was that they were sudden and unexpected events thought to resemble a surprise attack by an enemy.

Among the first recipients of the military funding was a team led by Charles Fritz at the University of Chicago's National Opinion Research Center (NORC). According to Fritz (1961, p. 654), in addition to serving the practical need of understanding how communities might respond to an enemy attack, disasters also provided social scientists, "a realistic laboratory for testing the integration, stamina, and recuperative power of large-scale social systems." Reflecting the structural functionalist influence of the time, he also developed a definition of disaster that has persisted for decades, one that viewed disasters as discrete events that overwhelm the capacities of social systems and prevent them from functioning normally. Fritz (1961, p. 655) defined disasters as events, "…concentrated in time and space, in which a society…incurs such losses… that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented."

With that, the stage was set. On the basis of the early work by Fritz and others, the field of disaster research would develop in a manner that focused primarily on the response phase of disaster and that mainly emphasized the effects of disasters on elements of the social structure. Dynes (1970), for example, published his influential book, *Organized Behavior in Disaster*, which detailed the various ways in which organizations adapt their structures and alter their tasks to meet the heightened demands of disasters. Specifically, he identified four common types of organizational responses to disasters: established, expanding, extending, and emergent. Established organizations such as police and fire departments maintain their existing structure and perform their normal tasks, while expanding organizations such as the Red Cross also perform their usual tasks but rely on a new, greatly expanded structure comprised largely of volunteers. Extending organizations, conversely, maintain their existing structure but adopt new tasks such as a construction crew participating in debris removal activities. Finally, emergent organizations, which do not exist prior to a disaster and form only after the event, both rely on a

new structure and perform new tasks. An example of an emergent organization is an informal search and rescue team comprised of neighbors formed after a tornado strikes.

Later, two edited volumes, one titled *Social Structure and Disaster* (Kreps, 1989) and the other titled *Organizing, Role Enactment, and Disaster* (Kreps & Bosworth, 1994), examined the complementary responses of organizations and role systems to disasters. These researchers identified four key attributes - domains, tasks, resources, and activities - that are present in all organizations and whose sequencing determines whether a response is formally organized or spontaneous and emergent. They also developed a model of role enactment comprised of three dimensions: status-role nexus, role linkages, and role performance. Taken together, these dimensions help determine whether a disaster response is planned or improvised.

This line of research, which is far more expansive than the few illustrative examples mentioned here, has been profoundly important and has measurably improved organizational and community preparedness and response efforts. However, it has also resulted in a fairly one-sided view of disasters. And that view has primarily emphasized social structure over culture.

In fairness, though, it should be noted that there has always been a cultural strain present in the field throughout its history. However, that strain has obviously been overshadowed by the structural bias. Fritz, in an unpublished paper in 1952, for example, acknowledged very early on that disasters occupy a prominent role in the folklore, literature, and culture of every society. Taylor (1978) later called attention to the importance of people's religious interpretations of disasters. And Quarantelli (1985) wrote decades ago about the role of disaster movies in shaping people's perceptions and knowledge of disasters and perpetuating harmful myths about human behavior under stress.

In fact, Quarantelli, who was a member of the NORC research team and a pioneer in the field of disaster research, was the first to call for more research on what he called the popular culture of disaster (see Quarantelli & Davis, 2011; Webb, 2006; Webb, Wachtendorf, & Eyre, 2000). Arguably, in fact, it was Quarantelli's efforts that precipitated the cultural turn in disaster research. He suggested that serious attention be paid by disaster researchers not just to movies but also to many other disaster-themed cultural phenomena, including graffiti, jokes and humor, t-shirts, spontaneous memorials, board games, and others. And, in direct response to his call for more culturally focused research, a special issue of the *International Journal of Mass Emergencies and Disasters* was published that explored the cultural dimensions of disasters (Eyre, Wachtendorf, & Webb, 2000). Several years later, the topic of the popular culture of disaster was also addressed in the first edition of this *Handbook* (Webb, 2006).

Since that time, the cultural turn has progressed and research in the area has flourished. Illustrating this turn and providing some measure of the degree to which a cultural perspective has been embraced, a recent issue of the Natural Hazards Observer (2016) was dedicated to the issues of culture, community, and disaster. Additionally, several recently published books provide further evidence of the turn. For example, *Cultures and Disasters: Understanding Cultural Framings in Disaster Risk Reduction* explores the ways in which culture can facilitate or impede disaster risk reduction efforts (Krüger et al., 2015). Another recent book, *Consuming Catastrophe: Mass Culture in America's Decade of Disaster*, examines the media's coverage of several recent major disasters (Recuber, 2016), including Hurricane Katrina and the mass shooting at Virginia Tech. Finally, *Standing in the Need: Culture, Comfort, and Coming Home after Katrina*, focuses on the importance of understanding culture to the success of long-term disaster recovery efforts (Browne, 2015).

As these titles clearly demonstrate, the cultural turn in disaster research has advanced significantly. That is not to say that studies of social structure have ceased or are no longer relevant. To the contrary, those studies are still being done and continue to provide insights on how best to equip our communities to respond to disasters.

Increasingly, though, researchers are balancing that emphasis on structure with an approach that recognizes that culture is also central to improving our understanding of disasters, particularly in the areas of mitigation and disaster risk reduction.

6.3 Culture and the Social Construction of Disasters

One area in which a cultural perspective is particularly important is in understanding disasters as socially constructed phenomena. Rather than being objective and obvious, disasters are subject to interpretation, framed and packaged in certain ways, and sometimes hotly contested and debated (Dove & Khan, 1995). As with the social construction of reality more generally, culture is part and parcel of the process through which certain historical occurrences, extreme events, or harmful episodes are defined as disasters. Culture, for example, provides a normative basis for judging something as positive or negative or as desirable or undesirable. And, although it rarely provides a ready-made script, culture also serves as a roadmap by equipping us with behavioral and collective action repertoires that are enacted to solve the social problems we collectively define.

To illustrate the socially constructed and contested nature of disasters, consider the water crisis that has been unfolding in Flint, Michigan since 2014 when the city switched water sources from Lake Huron to the Flint River (Bosman, 2016). As a result of the change, water supply pipes throughout the city became contaminated with lead, leaving residents without access to safe, clean drinking water and forcing them to rely exclusively on bottled water, much of which has been donated from across the country. Months into the controversy, a prominent national television news host, Rachel Maddow, said in a live broadcast on MSNBC that what was needed in Flint was a "FEMA-style" response to what many considered to be an obvious disaster (The Rachel Maddow Show, 2016). Despite that plea, the situation in Flint was never officially declared a disaster, despite causing severe harm to residents and serious financial harm to the city, state, and region, and the "FEMA-style" response never materialized.

The Flint case raises a very important question -namely, what is a disaster? This is a question that has challenged researchers for many years, as discussed in Chap. 1 of this volume, and yet the answer to the question remains elusive (Perry & Quarantelli, 2005; Quarantelli, 1998). In part, disasters are recognizable on the basis of their physical properties and the damage they cause, and they are also recognizable in terms of the social disruption they cause and the impacts they have on the social structure. Importantly, disasters are also socially constructed (Kroll-Smith & Couch, 1991). From this perspective, what is considered to be a disaster is a matter of perspective and debate. While societies may encounter numerous harmful episodes, not all of them are considered to be disasters, and certainly not all of them result in official disaster declarations. They may be viewed as accidents, emergencies, crises, or tragedies, but not disasters. Conversely, some events may be perceived as so harmful that they rise to the level of a catastrophe or even a calamity.

Such observations raise a number of important questions about disasters. Most notably, why are some episodes perceived and defined as disasters while others are not? What is the process through which disasters are socially constructed? Who are the primary actors involved in defining disasters? Are certain interests served by defining some episodes as disasters but not others?

While these questions may seem rather abstract and academic on the surface, they are critically important and have numerous practical implications. As Boin, Hart, Stern, and Sundelius (2005, pp. 82–83) point out, "Those who successfully 'frame' what a crisis is all about hold the key to defining the appropriate strategies for resolution." They go on to say that, "…the very act of labeling a particular set of conditions a 'crisis' is in itself a major communicative act with potentially far-reaching political consequences." And that, "It makes quite a difference whether one labels events in terms of an

'incident,' an 'accident,' a 'tragedy,' a 'disaster,' or a 'crisis.'"

Constructions of disaster, then, arise from a contested terrain in which various actors, including politicians, the media, safety experts, and ordinary citizens, make assertions about events and hope their definitions of those events prevail. In some cases, there is consensus on what has transpired, but in other cases there may be competing and contradictory claims made. In instances of disagreement, some actors are better positioned than others to succeed in defining the events, either because of the resonance of their rhetoric with various constituents or due to their access to power and resources. In the case of Flint, for example, the residents, who certainly considered themselves the victims of a disaster, did not prevail in defining the episode as a disaster, even with the help of a high-profile national TV news host. While there has been a federal response, it has not resembled the outpouring of help that typically follows a disaster, and it has not been undertaken with the same sense of urgency that a natural disaster would normally precipitate.

Efforts to socially construct - or frame - disasters are engaged in by multiple groups and organizations with diverse interests and for many different reasons. In his study of the earthquake threat in California, for example, Stallings (1995) identified an "earthquake establishment," consisting of engineers, safety experts, and others, and documented its efforts to define earthquakes as a pressing social problem and convince lawmakers to make preparedness and mitigation a policy priority. Shedding light on the role of the media in defining disasters, Monahan (2010, p. xii) examined how the media turned the events of 9/11 into a "public drama," a style of news which he argues bears, "greater resemblance to popular fiction than to journalism." Similarly, Dynes and Rodriguez (2010, p. 35) studied the role of the media in framing Hurricane Katrina, particularly its emphasis on, "portraying a state of chaos and anarchy," while at the same time, "…neglecting emergent prosocial behavior characterized by altruism, cooperation, and social cohesion." Others have pointed out that the media's perpetuation of disaster myths, namely, widespread panic, looting, and social breakdown, is not only inaccurate, but it may also promote particular interests, including those of the private security industry and those seeking to further militarize and privatize disaster response functions (Tierney, 2003; Tierney, Bevc, & Kuligowski, 2006).

Based on this discussion, there is a clear and compelling relationship between culture and disasters. In particular, culture plays a major role in shaping how we perceive environmental conditions and define various harmful episodes. Disasters are not always obvious, and they do not always evoke the same kinds of responses. In some cases, definitions align and people rally to support victims, while in other cases competing constructions emerge, harmful conditions may be ignored or denied, and victims may be left to suffer.

In addition to influencing how disasters are defined, culture is also important to understanding how communities cope and deal with extreme natural and technological events. Paradoxically, culture can serve as a source of both resilience and vulnerability in the face of hazards and disasters. On the one hand, as a source of resilience, culture makes us aware of the threats we face, it provides a framework for understanding them, and it serves as a roadmap for avoiding or managing those threats. But, on the other hand, culture can also make us more vulnerable by leading us to ignore some threats or providing us rationalizations for not taking measures to mitigate those threats, and ultimately producing the very disasters that cause harm to us.

6.4 Culture as a Source of Resilience

In recent years, researchers have devoted considerable attention to the concept of resilience (Tierney, 2014). For example, the National Academies (2012) recently published a report, titled *Disaster Resilience: A National Imperative*, which argued that a primary way to reduce disaster impacts on the nation is to invest in

enhancing resilience. It defined resilience as, "the ability to prepare and plan for, absorb, recover from, or more successfully adapt to actual or potential adverse events" (National Academies, 2012, p. 16). Achieving resilience requires the protection of the built environment, critical infrastructure systems, the economy, computer networks, and, of course, human societies.

Interestingly, the first systematic disaster studies, initiated in the early 1950s, also emphasized the importance of societal resilience. In an early publication, for example, Fritz (1961, p. 694) argued that, "…disaster studies show that human societies have enormous resilience and recuperative power when they are confronted with direct challenges to their continued existence." He went on to say that, "The further study of the regenerative mechanisms of disaster-struck societies may help the social scientist achieve a better understanding of the crises of everyday life and the basic processes of social reconstruction."

Since its inception, in fact, the field of disaster research has sought to better understand and promote societal resilience. In doing so, researchers have emphasized the contributions of both social structure and culture to achieving that resilience. Social structure, for example, contributes to resilience by becoming flexible and adaptive in responding to the heightened demands brought on by disasters. Existing organizations may assume new or unfamiliar tasks, and, in some case, new organizations, which did not exist previously, may form to carry out essential response-related tasks, such as neighborhood search and rescue teams (Dynes, 1970).

As discussed previously, while the early studies were primarily concerned with issues of social structure, there was also a cultural strain present in the work. Fritz (1961), for example, wrote about the emergence of new values and norms in the post-disaster environment, which led to the formation of a therapeutic community among survivors. The key elements of the therapeutic community involve agreement on the nature of the problem, consensus on what to do about it, and an overwhelming outpouring of sympathy and support from others. These emergent values are so powerful and motivating that many disaster-stricken communities become overwhelmed by the massive influx of volunteers, supplies, equipment, and aid, referred to by Fritz and Mathewson (1957) as the problem of convergence behavior. While some research has suggested that these same patterns are not present during the community response to technological disasters, the emergence of altruistic values and helping behavior has been firmly established in the research literature on natural disasters, and it underscores the importance of culture, in this case emergent norms and values, to achieving resilience.

Another cultural source of resilience involves what have been termed disaster subcultures (Wenger and Weller, 1973). For many communities, the presence of a hazard is constant in the daily lives of people, and over time members of the community learn to cope with and adapt to the threat. In areas known as "tornado alley" and "earthquake country," for example, people become deeply ingrained with knowledge of the hazards they face and intimately familiar with the precautionary measures they should take in the event of an actual disaster. That knowledge becomes tacit, or taken for granted, and is transmitted across generations from one to the next. That knowledge, then, serves as a roadmap and toolkit for those living with hazards.

In the realm of organizational studies, culture has also been shown to be a source of resilience and safety. More specifically, researchers who study a unique type of organization, known as high-reliability organizations (HROs), have argued that the development of a safety culture is central to the success of these organizations (Roberts, Bea, & Bartles, 2001). HROs are those that deal with complex and risky technologies, such as nuclear power production and air traffic control, which manage to largely avoid accidents, mistakes, and disasters. While technology and system redundancy are major contributors, these organizations also succeed in large measure because they foster, promote, and enforce a culture of safety among their members.

Disaster subcultures in communities and safety cultures in organizations are both examples of ways in which culture contributes to resilience prior to the onset of a disaster. In both instances, culture equips people with awareness of threats and knowledge of how to avoid or minimize harm if something happens. People living in tornado alley, for example, learn from an early age to seek shelter in the lowest level of their homes, nearest the center, and away from windows. Within high reliability organizations, such as offshore drilling rigs and air traffic control towers, workers are socialized to value safety, reprimanded for violations, and well-versed on what to do in the event of an accident.

Culture can also serve as a valuable source of resilience after disasters have occurred. Researchers, for example, have documented the importance of disaster memorials and their role in facilitating community recovery from a disaster (Eyre, 2006). Others have studied the use of humor in helping people cope with past events and future uncertainty (Couch & Wade, 2003). In some cases, songs are written and recorded to memorialize past disasters, pay tribute to victims, and recount stories of loss and heroism (Scanlon, Johnston, Vandervalk, & Sparling, 2012).

As all of these examples demonstrate, culture is an important source of resilience. Prior to disasters, communities rely on disaster subcultures and organizations rely on safety cultures to educate, inform, prepare, and equip their members with knowledge in case something goes wrong. In the immediate aftermath of natural disasters, communities often experience the emergence of a therapeutic community in which new norms and values promoting altruism and helping behavior emerge. And, over the longer term, past events are remembered and victims honored through informal and formal disaster memorials, anniversary ceremonies, songs, and other forms of cultural expression.

6.5 Culture as a Source of Vulnerability

Although in many ways culture contributes significantly to societal resilience, it can also in some cases increase social vulnerability to disasters. Some groups, for example, may hold fatalistic beliefs that disasters are inevitable or the product of divine intervention and therefore unpreventable and beyond human control. In other cases, profit is valued so highly that safety may be compromised and resulting disasters assumed to be merely the cost of doing business. Cultural values, then, shape our perceptions of risk, the decisions we make about those risks, and the actions we take toward them.

Perhaps the most salient example of culture as a source of vulnerability is when demands for economic growth and increased profits clash with expectations of safety. While profit is an imperative of the economic system, it is also a cultural value and therefore something that is related to and sometimes in competition with other cultural values, including safety. In his book, *Disasters by Design*, Mileti (1999) places the clash between safety and the persistent push for increased growth and development at the center of his analysis, suggesting sustainability as framework for resolving the conflict. From this perspective, economic growth and development is still pursued but balanced against safety concerns, quality of life issues, and equity considerations. More recently, Tierney (2014), in her book, *The Social Roots of Risk*, argues that disasters, rather than being caused by forces beyond human control, result from an accumulating process of risk buildup driven by the constant demand for growth and facilitated by various powerful institutional actors.

From this perspective, the key to reducing disasters is curtailing risk buildup and reorienting ourselves toward an approach that invests in and values resilience measures. In other words, what

is needed, at least in part, is a change in culture. As Tierney (2014, p. 7) states, "The origins of disaster lie not in nature, and not in technology, but rather in the ordinary everyday workings of society itself." Thus, she argues, we need to shift to a "…fuller understanding of the role that social, political, economic, and cultural factors play in making events disastrous."

Another example of culture being a source of vulnerability can be seen in the impacts that technological disasters can have on communities. Rather than precipitating the outpouring of support characteristic of natural disasters, technological disasters often produce conflict, distrust, chronic stress, and litigation (Gill & Picou, 2008; Picou, Marshall, & Gill, 2004). In contrast to the therapeutic community that often emerges after natural disasters, researchers have used the term corrosive community to describe the aftermath of technological disasters (Freudenburg, 1997). Instead of bringing people together and enhancing social solidarity, these events tend to erode the collective sense of community, spark arguments and debates over what has happened and who is to blame, and undermine people's trust in government, corporations, and other social institutions (Erikson, 1976).

Interestingly, disaster subcultures, which were discussed in the previous section as a source of resilience, can also be a source of vulnerability. In some cases, the knowledge that is transmitted from one generation to the next is based on myth, not fact, and can actually place people in grave danger. In "tornado alley," for example, many people believe that a highway overpass is a safe place to seek shelter during a storm, but in fact that can be a very dangerous, even deadly, action to take. Because of this kind of misinformation and harmful knowledge being transmitted, organizations such as the National Weather Service (2017) must devote time and resources to combating myths, educating people, and attempting to promote safer behavior.

Disaster researchers have sought to debunk disaster myths for decades (Quarantelli, 1960). The most persistent have been the erroneous beliefs, held by many, including some public officials, that disasters induce panic among victims, incite widespread crime and looting, produce debilitating shock and stress among survivors, and induce emergency response workers to abandon their roles when they are needed most during the response period (Fischer, 2008). Unfortunately, these myths, which have been rebuked by research, are frequently perpetuated by the media, including in disaster movies like the one mentioned at the beginning of this chapter.

Disaster subcultures can also become a source of vulnerability when they lead to complacency and risky behaviors. An example of this problem is when groups of people ignore evacuation orders and instead stay behind to attend "hurricane parties" (Drabek, 2013). People who do this often assume that since they have survived past events they know best and are safe to stay put and ride out the storm. In that sense, rather than sensitizing them to the risk and making them more aware and proactive, the disaster subculture desensitizes people to risk, leads to complacency, and actually encourages greater risk taking behavior.

Just as disaster subcultures can serve as sources of both resilience and vulnerability so too can organizational cultures. The previous section described how HROs are successful largely because of the safety cultures they foster and promote. While that may the case in some cases, in other instances organizational culture can in fact become an impediment to safety (Sagan, 1993). Organizational researchers, for example, have pointed out how some organizations promote a culture of silence that stifles dissent, rewards conformity, and conceals risky, unethical, or even illegal conduct (Beamish, 2000). In other instances, adverse or negative information may not be intentionally concealed but ignored or neutralized nonetheless because different units or departments fail to communicate, a phenomenon known as structural secrecy (Vaughan, 1999). Another problem for many organizations is their lack of imagination and their "failures of foresight," which lead them to underestimate the potential adverse consequences of their actions (Turner, 1976). Even when they do consider the possibilities,

organizations often develop "fantasy plans" that are unrealistic, based on best case rather than worst case scenarios, and aimed mostly at appeasing regulators and easing public anxiety (Clarke, 1999). In sharp contrast to the safety cultures of HROs, many organizational cultures are dysfunctional, dangerous, and disaster-inducing.

As demonstrated in this section and the one that preceded it, culture is somewhat of a paradox. On the one hand, many aspects of culture serve as an important source of resilience. Therapeutic communities, disaster subcultures, safety cultures, and various forms of cultural expression, including humor, songs, and memorials, help us understand the hazards we confront, inform us about what to do if something goes wrong, and help us cope and adapt when disasters strike. But, on the other hand, various aspects of culture, including fatalistic beliefs, valuing profit above safety, corrosive communities, disaster myths, and cultures of silence and secrecy, can drastically increase our vulnerability to disasters.

On the basis of this paradox, it may be tempting to conclude that we simply need to educate people about the hazards they face, change their minds in terms of how they think about risks, and, ultimately, put an end to practices such as developing in hazard-prone areas that lead to disasters. However, culture is incredibly diverse across the globe, pervasive and deeply entrenched, and strongly resistant to change. It is particularly problematic when one group, even and perhaps especially one that possesses power, authority, and scientific or technical expertise, attempts to alter the beliefs, values, and practices of another. As Habermas (1973, p. 70) points out, "The cultural system is peculiarly resistant to administrative control. There is no administrative production of meaning."

Does this mean that social and cultural change is impossible and that future societal resilience is out of reach? Of course it does not. But it does mean that future efforts to promote resilience and enhance the safety of our world must be aware of, sensitive to, and respectful of cultural diversity (Krüger et al., 2015). For example, in many of the poorest nations in the world, people are entirely reliant on agriculture and fishing for their survival, and, as a result, must live in hazardous areas that may be prone to cyclones, tsunamis, and frequent flooding. It would be unrealistic and culturally insensitive to suggest that the solution to the problem is simply to move or relocate them out of harm's way. As part of their culture, people develop attachments to places, some of which are hazardous, and it is incumbent upon researchers, practitioners, and policy makers to be mindful of, sensitive to, and respectful toward those local cultures as they consider alternative measures to promote safety and resilience (Shriver & Kennedy, 2005).

6.6 Conclusion

The field of disaster research has evolved and grown since its founding in the middle of the 20th Century. In its early stages, the field focused much of its efforts on answering questions about social structure - namely, how it was maintained and transformed in response to large-scale disasters. In the 1990s, researchers in the field began placing much greater emphasis on social inequality, seeking to better understand how factors such as race, class, and gender shaped peoples' exposure to hazards and their vulnerability to disasters. Most recently, the field's focus has shifted to promoting and enhancing societal resilience, which enables communities to absorb the effects of disasters and rebound from them more quickly and effectively.

Another important development in disaster research, which was described in this chapter, has been the cultural turn. Although the field has long had a cultural strain, reflected in such concepts as therapeutic communities and disaster subcultures and especially in the work of anthropologists (e.g., Hoffman & Oliver-Smith, 2002), only in recent years has the field begun to fully embrace a cultural perspective. And, as discussed in this chapter, that embracement has

deepened our conceptual understanding of both vulnerability and resilience. What we have also learned is that that policy makers and practitioners must also embrace a cultural perspective for their ongoing disaster risk reduction efforts to succeed.

Fortunately, that message is being translated into practice, and various organizations, including the United Nations Office for Disaster Risk Reduction and the International Federation of Red Cross and Red Crescent Societies, have begun to recognize and emphasize the importance of culture. In their efforts to persuade nations around the world to shift their focus from increasing disaster response and recovery spending to investing in risk reduction measures, mitigation, and enhanced resilience, these organizations understand that culture can both facilitate and impede progress on those fronts. And they recognize that there is tremendous cultural diversity across the globe, and that one size does not fit all. Disaster risk reduction must be pursued in a way that is mindful of that diversity, respectful, and culturally sensitive.

In addition to practitioners and policy makers, researchers also stand to benefit from the cultural turn. Future studies, for example, can shed further light on the most basic question plaguing the field, namely, what is a disaster? As described in this chapter, episodes such as the Flint water crisis, challenge preconceived and taken for granted notions of what disasters look like and raise a host of important questions. Why are some events widely perceived as disasters while others are not? Who is involved in framing events as disasters, what strategies do they employ, and whose definitions usually prevail?

To answer these and other questions, another opportunity for future research on the cultural aspects of disasters is presented by the ever-growing use of social media. In addition to studying their effectiveness in improving disaster warnings and allowing public officials to communicate with and engage citizens, researchers can also study the ways in which people use social media to make sense of disasters and other harmful episodes, express grievances about the governmental responses to those events, and exhibit solidarity or conflict in the wake of such events.

As described in this chapter, researchers have long debated the similarities and differences between community responses to natural versus technological disasters. On the one hand, some argue that both types of events have unifying, even therapeutic, effects. On the other hand, some suggest that while natural disasters may bring people together technological disasters more often create conflict and corrosion. At their core, these are questions about culture and the different ways in which disasters affect not the structure of a community but its way of life.

This chapter has attempted to bring the relationship between culture and disaster into sharper focus. In doing so, it has traced the history of the field of disaster research from its early emphasis on social structure to its cultural turn in more recent years. It has also underscored the point that international organizations have become more aware of and sensitive to culture and are attempting to incorporate that awareness into their policies and programs. As disasters continue to occur more frequently in the future, as they grow in complexity, and as they increase in severity and financial costs, researchers and practitioners will likely need to rely even more heavily upon a cultural perspective to understand their root causes and ameliorate their devastating effects.

References

Andersen, M. L., & Taylor, H. F. (2011). *Sociology: The essentials* (6th ed.). Belmont, CA, USA: Wadsworth.

Beamish, T. (2000). Accumulating trouble: Complex organization, a culture of silence, and a silent spill. *Social Problems, 47*(4), 473–498.

Boin, A., Hart, P., Stern, E., & Sundelius, B. (2005). *The politics of crisis management: Public leadership under pressure*. Cambridge: Cambridge University Press.

Bosman, J. (2016). After water fiasco, trust of officials is in short supply in Flint. *New York Times*, October 8. Last accessed March 3, 2017 at https://www.nytimes.com/news-event/flint-water-crisis.

Browne, K. (2015). *Standing in the need: Culture, comfort, and coming home after Katrina*. Austin, TX, USA: University of Texas Press.

Clarke, L. (1999). *Mission improbable*. Chicago, IL, USA: University of Chicago Press.

Couch, S. R., & Wade, B. A. (2003). "I want to barbecue bin Laden": Humor after 9/11. *International Journal of Mass Emergencies and Disasters, 21*, 67–86.

Dove, M. R., & Khan, M. H. (1995). Competing constructions of calamity: The April 1991 Bangladesh cyclone. *Population and Environment, 16,* 445–471.

Drabek, T. E. (2013). *The human side of disaster* (2nd ed.). Boca Raton, FL, USA: CRC Press.

Dynes, R. R. (1970). *Organized behavior in disaster*. Lexington, MA, USA: Heath Lexington.

Dynes, R. R., & Rodriguez, H. (2010). Finding and framing Katrina: The social construction of disaster. In D. L. Brunsma, D. Overfelt, & J. S. Picou (Eds.), *The sociology of Katrina: Perspectives on a modern catastrophe* (pp. 25–36). Lanham, MD, USA: Rowman & Littlefield.

Erikson, K. (1976). *Everything in its path*. New York, NY, USA: Simon and Schuster.

Eyre, A. (2006). Remembering: Community commemorations after disaster. In H. Rodriguez, E. L. Quarantelli, & R. R. Dynes (Eds.), *Handbook of disaster research* (pp. 441–455). New York, NY, USA: Springer.

Eyre, A., Wachtendorf, T., & Webb, G. R. (Eds.). (2000). The popular culture of disaster. A special issue of the *International Journal of Mass Emergencies and Disasters, 18*(1).

Fischer, H. W. (2008). *Response to disaster* (3rd ed.). Lanham, MD, USA: University Press of America.

Freudenburg, W. R. (1997). Contamination, corrosion, and the social order: An overview. *Current Sociology, 45,* 19–39.

Fritz, C. E. (1961). Disaster. In R. K. Merton & R. A. Nisbet (Eds.), *Contemporary social problems* (pp. 651–694). New York, NY, USA: Harcourt, Brace, and World Inc.

Fritz, C. E., & Mathewson, J. H. (1957). *Convergence behavior in disasters: A problem in social control*. Washington, D.C., USA: National Academy of Science-National Research Council.

Gill, D. A., & Picou, J. S. (2008). Technological disaster and chronic community stress. *Society & Natural Resources, 11*(8), 795–815.

Habermas, J. (1973). *Legitimation crisis*. Boston, MA, USA: Beacon Press.

Hoffman, S. H., & Oliver-Smith, A. (2002). *Catastrophe and culture*. Santa Fe, NM, USA: School of American Research Press.

International Federation of Red Cross and Red Crescent Societies. (2014). *World disasters report: Focus on cultures and risk*. Geneva: International Federation of Red Cross and Red Crescent Societies.

Kreps, G. A. (1989). *Social structure and disaster*. Newark, DE, USA: University of Delaware Press.

Kreps, G. A., & Bosworth, S. L. (Eds.). (1994). *Organizing, role enactment, and disaster*. Newark, DE, USA: University of Delaware Press.

Kroll-Smith, J. S., & Couch, S. R. (1991). What is a disaster? An ecological-symbolic approach to resolving the definitional debate. *International Journal of Mass Emergencies and Disasters, 9*(3), 355–366.

Krüger, F., Bankoff, G., Cannon, T., Orlowski, B., & Schipper, L. F. (2015). *Cultures and disasters: Understanding cultural framings in disaster risk reduction*. London: Routledge.

Mileti, D. M. (1999). *Disasters by design*. Washington, D. C., USA: Joseph Henry Press.

Monahan, B. A. (2010). *The shock of the news: Media coverage and the making of 9/11*. New York, NY, USA: New York University Press.

National Academies. (2012). *Disaster resilience: A national imperative*. Washington, D.C., USA: National Academies Press.

National Weather Service. (2017). *Severe weather facts and myths*. Last accessed March 3, 2017 at https://www.weather.gov/media/top/myths.pdf.

Natural Hazards Observer. (2016). *Culture, community, and disaster* (XL (5)). Boulder, CO, USA: Natural Hazards Center.

Perry, R. W., & Quarantelli, E. L. (Eds.). (2005). *What is a disaster? New answers to old questions*. Philadelphia, PA, USA: XLibris.

Picou, J. S., Marshall, B. K., & Gill, D. A. (2004). Disaster, litigation, and the corrosive community. *Social Forces, 82,* 1497–1526.

Quarantelli, E. L. (1960). Images of withdrawal behavior in disasters: Some basic misconceptions. *Social Problems, 8,* 68–79.

Quarantelli, E. L. (1985). Realities and mythologies in disaster films. *Communications, 11,* 31–44.

Quarantelli, E. L. (1987). Disaster studies: An analysis of the social historical factors affecting the development of research in the area. *International Journal of Mass Emergencies and Disasters, 5,* 285–310.

Quarantelli, E. L. (1994). Disaster studies: The consequences of the historical use of a sociological approach in the development of research. *International Journal of Mass Emergencies and Disasters, 12,* 25–49.

Quarantelli, E. L. (Ed.). (1998). *What is a disaster? Perspectives on the question*. London: Routledge.

Quarantelli, E. L., & Davis, I. (2011). *An exploratory research agenda for studying the popular culture of disasters (PCD): Its characteristics, conditions, and consequences*. Newark, DE, USA: Disaster Research Center.

Recuber, T. (2016). *Consuming catastrophe: Mass culture in America's decade of disaster*. Philadelphia, PA, USA: Temple University Press.

Roberts, K. H., Bea, R., & Bartles, D. L. (2001). Must accidents happen? Lessons from high-reliability organizations. *Academy of Management Perspectives, 15*(3), 70–78.

Sagan, S. (1993). *The limits of safety*. Princeton, NJ, USA: Princeton University Press.

Scanlon, J., Johnston, N., & Vandervalk, A., with Sparling, H. (2012). 101 years of mine disasters and 101 years of song: Truth or myth in Nova Scotia mining songs. *International Journal of Mass emergencies and Disasters, 30*(1), 34–60.

Shriver, T. E., & Kennedy, D. K. (2005). Contested environmental hazards and community conflict over relocation. *Rural Sociology, 70*(4), 491–513.

Stallings, R. A. (1995). *Promoting risk*. New York, NY, USA: Aldine de Gruyter.

Taylor, V. A. (1978). Future directions for study. In E. L. Quarantelli (Ed.), *Disasters: Theory and research* (pp. 251–280). London: Sage.

The Rachel Maddow Show. (2016). Live broadcast on MSNBC, January 7. Last accessed on March 3, 2017 at http://www.msnbc.com/transcripts/rachel-maddow-show/2016–01-07.

Tierney, K. J. (2003). Disaster beliefs and institutional interests: Recycling disaster myths in the aftermath of 9-11. *Research in Social Problems and Public Policy, 11,* 33–51.

Tierney, K. J. (2014). *The social roots of risk: Producing disasters, promoting resilience*. Standord, CA, USA: Stanford University Press.

Tierney, K., Bevc, C., & Kuligowski, E. (2006). Metaphors matter: Disaster myths, media frames, and their consequences in Hurricane Katrina. *Annals of the American Academy of Political and Social Science, 604,* 57–81.

Turner, B. (1976). The organizational and interorganizational development of disasters. *Administrative Science Quarterly, 21*(3), 378–397.

Turner, J. H. (1986). *The structure of sociological theory* (4th ed.). Belmont, CA, USA: Wadsworth.

United Nations Office for Disaster Risk Reduction. (2016). *UNISDR annual report, 2015*. Geneva: United Nations Office for Disaster Risk Reduction.

Vaughan, D. (1999). The dark side of organizations: Mistake, misconduct, and disaster. *Annual Review of Sociology, 25,* 271–305.

Webb, G. R. (2006). The popular culture of disaster: Exploring a new dimension of disaster research. In H. Rodriguez, E. L. Quarantelli, & R. R. Dynes (Eds.), *Handbook of disaster research* (pp. 430–440). New York, NY, USA: Springer.

Webb, G. R. (2007). The sociology of disaster. In C. Bryant & D. Peck (Eds.), *21st Century sociology: A reference handbook* (Vol. 2, pp. 286–294). Thousand Oaks, CA, USA: Sage.

Webb, G. R., Wachtendorf, T., & Eyre, A. (2000). Bringing culture back in: Exploring the cultural dimensions of disaster. *International Journal of Mass Emergencies and Disasters, 18*, 5–19.

Wenger, D. E., & Weller, J. M. (1973). *Disaster subcultures: The cultural residues of community disasters*. Newark, DE,USA: Disaster Research Center, University of Delaware.