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RITUAL AND DISRUPTION: INSIGHTS FROM EARLY DISASTER RESEARCH

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ABSTRACT: *This paper examines the role of cultural elements, in particular rituals, in disasters. To study this issue we employ structural ritualization theory and argue that reconstituting ritualized practices after disasters enables people to cope with such events. Evidence concerning ritual practices actors engage in following disasters (i.e., reritualization) was collected by conducting a content analysis of 19 seminal sociological studies carried out by the National Academy of Sciences in the 1950s and early 1960s. Different categories of rituals are identified along with other distinguishing features. Evidence concerning this dimension of disasters derived from research, which operated with a noticeable structural bias, attests, we argue, to the importance of this topic. Implications of this study and the need for further research are also discussed.*

Keywords: *Disaster Research, Disruption, Structural ritualization theory.*

The role of ritual in social life has been a significant issue in sociological theory and empirical research. Durkheim viewed ritual as a key mechanism in social life and Goffman argued rituals were an essential component of human interaction. And, Collins (2004) in his theory on interaction ritual chains stresses the fundamental role ritual plays in social life. These perspectives highlight the continuing importance of ritual in understanding the complexity of social reality. Structural ritualization theory also examines how human actors structure their social world through rituals. This paper builds on this tradition of thought, especially the latter perspective, by focusing on how ritual practices enable people to organize their lives following disasters.

For decades sociologists have identified disasters as a natural laboratory for the study of social processes. Insights gained from this research have demonstrated the importance of norms, roles, and interaction in disasters. And, disaster research has proven to be a fruitful area for studying social systems in the midst of radical change. Disasters, we suggest, also present social scientists the opportunity to study the ways people experience and respond to disturbances of their normal everyday practices.

The thesis of this paper is that ritual practices enable people to cope with the disruption caused by a disaster. The first part of the paper will discuss disaster research and its particular applicability to this study. Next, we explicate the theoretical framework for understanding ritualized behaviors and how they help people respond

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to a disruptive event. Then, we re-examine a series of seminal disaster studies to provide empirical evidence of the importance of rituals in disaster response. Our analytic approach is similar to the one employed in Stallings' (2002) re-examination of a classic study, in which he demonstrated the value of applying a political-economic perspective to the original work. Our aim is to re-interpret the pioneering disaster studies through the lens of the theory of structural ritualization.

With its focus on rituals and interaction, this paper highlights the importance of understanding the cultural dimensions of disasters. While past studies of disasters have focused largely on social structure (Kreps 1989)–namely, how it is maintained and transformed in response to disruptions–researchers have recently begun to pay more attention to the impacts of disasters on cultural life (Webb 2006). It is important to note, however, that to emphasize culture is not to suggest that structure is unimportant or irrelevant. Indeed, the most productive approach to studying disasters or any other social phenomena is one that pays adequate attention to both social structure and culture.

Disaster Research

Sociologists in the United States began conducting research on disasters in the early 1950s (Quarantelli 1987, 1994). Since that time a great deal has been learned about the impacts of extreme events on social systems, and those findings have been summarized at various times over the years (Drabek 1986; Fritz 1961; Kreps 1984; Quarantelli & Dyne 1977; Tierney, Lindell, & Perry 2001). While it is often assumed that disasters result in social breakdown, widespread panic, and looting, sociological research reveals that these images are myths (Fischer 1998; Quarantelli 1960). Rather than breaking down in the face of disaster, human societies display remarkable resilience and recuperative capacities.

In their studies of disasters and their attempts to uncover the sources of this resilience, researchers have operated with a noticeable structural bias (Webb 2006). In particular, they have examined the impacts of disasters on basic elements of the social structure, including organizations and role systems (Kreps 1989). Dynes (1970), for example, in a classic study developed a typology of organizational responses to disasters in which he described the ways in which organizational structures and tasks are altered to meet disaster-induced social demands. At a different level of analysis, Kreps and Bosworth (1993) have documented the impacts of disasters on role systems, assessing the extent to which those systems remain stable or change following a disaster.

When disaster research emerged in the 1950s structural functionalism dominated American sociology, so it is not surprising that the field contains a structural bias. The functionalist perspective views society as a system comprised of interdependent parts, all of which must work in concert to ensure the successful performance of the system. Reflecting the pervasive influence of functionalism, Fritz (1961:655) defined a disaster as:

> "...an event, concentrated in time and space, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented."

This definition is clearly derived from the functionalist tradition, and it continues to exert a strong influence over the field today.

While the field of disaster research within sociology has been largely dominated by structural approaches, researchers are paying increasing attention to the cultural dimensions of disasters (Webb 2006). As Nigg (1994) points out, because the early disaster studies were conducted by researchers at the University of Chicago, symbolic interactionism—which emphasizes culture, symbols, and micro-level interactions—has also influenced the field's development. In this paper we assume that culture is central to understanding human response to disaster and that it serves as a source of resilience following major social disruptions. Specifically, we argue that rituals are key elements of social life during both normal times and in the wake of disasters. The next section discusses structural ritualization theory, which guides the current research.

Structural Ritualization Theory

Structural ritualization theory (Knottnerus 1997) is concerned with the role rituals play in groups and, more generally, social behavior. This perspective argues that rituals are a major part of everyday social life and are often involved in the structuring of social events regardless of cultural group membership, gender, class, and racial/ethnic background. This is the case whether they occur in institutionalized settings or more informal and even emergent collective contexts such as social movements.

While various scholars emphasize the importance of rituals (e.g., Durkheim 1915; Goffman 1967; Warner 1959; Kertzer 1988; Douglas 1970; Turner 1967) structural ritualization theory differs from these and other treatments because it provides more formal definitions of rituals. In this way it provides a precise theory, allows for further theory development, and facilitates use of the perspective for the purposes of analysis and empirical research. The theory is presented as a generalizable framework that can be applied to different social phenomena. As such, it focuses on ritualized actions and interaction sequences that are found in both secular and sacred settings. Research issues examined using the theory include the reproduction of ritualized activities and social structure in different settings, the mobilization of ritualized behavior (especially deviant behavior) within organizations, and the strategic use of rituals and the role power may play in their enactment.[1]

While a number of parts of the theory that are not relevant to the present investigation need not be discussed here certain elements must be presented. The theory focuses on *ritualized symbolic practices* (RSPs). RSPs are defined as action repertoires that are schema-driven. Schemas are cognitive frameworks. RSPs, therefore, involve regularly engaged in or standardized actions that possess meaning and express symbolic themes. They contribute to the patterning of everyday behavior and

interaction in various social milieus. RSPs refer to the widespread form of social behavior in which people engage in regularized and repetitious activities when interacting with others. Such practices are found throughout social life and can include ritualized forms of interaction within different institutions, subcultures, and groups of varying size (e.g., egalitarian or authoritarian patterns of behavior and communication in a group, periodic family gatherings and celebrations, religious practices, musical performances, ritualized play and recreational pursuits). This perspective emphasizes that RSPs which comprise much of the taken for granted daily lives of people rest upon cognitive schemas. While actors may not reflect upon and consciously attend to many of the actions that constitute their everyday lives, RSPs are still based upon cognitive structures or symbolic frameworks, which communicate various thematic meanings.

Particularly relevant to the present study is one line of research, which focuses on the basic assumption underlying this approach: that ritualized practices are central to social life and play a significant role in providing meaning, focus and direction, and a sense of stability to social behavior (Knottnerus 2002, 2005; Sell, Knottnerus, and Adcock 2003; Wu and Knottnerus 2005, 2007; Thornburg, Knottnerus, and Webb 2007). These studies address this topic by examining different aspects of "disruption" and "deritualization" and the ways different social groups respond to such experiences. Deritualization refers to the loss or breakdown of previously engaged in RSPs among individuals and groups. It involves the breakdown of ritualized activities that occur in daily life.

Deritualization results from disruptive events, developments, and conditions. These are occurrences that interrupt or disturb the RSPs people normally engage in. They refer to events that impact the daily social lives of actors and result in varying degrees of deritualization. While research is currently underway investigating disruption and deritualization in several contexts (e.g., internment in concentration camps in different societies in the 20th century and negative, positive, and neutral disruptions in experimental task groups) it is quite likely that numerous kinds of events can lead to the breakdown of ritualized behaviors.

A disaster is one such event. Different kinds of disasters ranging from hurricanes, floods, tornadoes, earthquakes, and fires to terrorist attacks and nuclear disasters may disrupt the ritualized practices enacted by people in their everyday lives. Indeed, the disruptive impact of disasters can be so severe that they affect not only individuals and the social processes operating among them but entire communities and even societies. We, therefore, suggest that disasters are a disruptive event resulting in (given their specific nature, magnitude, and duration) the breakdown of taken for granted ritualized activities, i.e., deritualization. To better understand and investigate the nature of deritualization experiences in disasters we draw upon the theory's basic definition of an RSP as schema-drive action repertoires.

Ritualized practices contain two essential components (Thornburg, Knottnerus, and Webb 2007). On the one hand, they involve human acts. At the same time, they are

grounded in cognitive or symbolic frameworks that possess meaning. These ingredients provide the fundamental parts of an RSP and the two key aspects of a ritualized activity, which are subject to breakdown during deritualization. Deritualization is manifested through its effects on behavior and meaning in rituals, i.e., it involves the breakdown or loss of meaning and action in actors' daily lives. Of course, while both action and meaning are normally involved in deritualization the degree to which they are present or are emphasized can vary. For this reason we conceptualize this phenomenon along these two dimensions which enables approximate determinations to be made about whether such experiences are more indicative of the loss of meaning, the breakdown of action, or both to an approximately equal degree. Whatever the specific case, however, deritualization always involves to greater or lesser degrees both key dimensions.

A critical question concerns the ways people may or may not cope with deritualization induced by disasters. The theory suggests that ritual enactments serve as buffers, which enable individuals to adapt to or cope with the harmful consequences of deritualization. By reconstituting old or constructing new rituals people are better able to adapt to disruptive events. It may well be that disaster victims also engage in these types of behaviors.

We suggest that by reconstructing ritualized practices subsequent to a severe disruption (such as a disaster) and deritualization, actors are able to reestablish fundamental behavioral and social repertoires and more effectively deal with the situation they find themselves in. The re-creation of ritualized symbolic activities in this type of situation–which we refer to as *reritualization*–enables people to recreate meaning and a focus and direction in their social behavior. By reestablishing coherence in one's perception of reality and actions, ritualized enactments create a sense of stability. Actors are provided with a cognitive clarity and plan of action, a re-grounding in the taken for granted world they previously occupied, and a basic sense of security and assurance.

Whether people engage in reritualization after a disaster and the types of rituals they may enact after such events are issues that have not, however, been formally addressed in studies of disasters. The research to be described focuses on the ritual dynamics that may follow such occurrences.

Methodology

Data were collected from 19 seminal sociological studies conducted by the National Academy of Sciences published first under the name of the Committee on Disaster Studies (1951-1957) and then under the designation of the Disaster Research Group (1957-1962). These various studies included investigations of social behaviors before, during, and after disasters as well as more technical discussions of preparedness and evacuation. The reports reflected a wide range of information from first hand accounts of research to summaries and methodological challenges in disaster studies. Some of the disasters studied included a flood, a fireworks explosion, a Coal Mine collapse,

tornadoes, and hurricanes. A listing of these studies illustrates the breadth of their scope.

1. Human Behavior in Extreme Situations: Survey of the Literature and Suggestions for Further Research.
2. The Houston Fireworks Explosion.
3. Tornado in Worchester: An Exploratory Study of Individual and Community Behavior in an Extreme Situation.
4. Social Aspects of Wartime Evacuation of American Cities.
5. The Child and His Family in Disasters, A Summary of Recorded Experience.
6. Emergency Medical Care in Disasters, A Summary of Recorded Experience.
7. The Rio Grande Flood: A Comparative Study of Border Communities in Disaster.
8. An Introduction of Methodological Problems of Fieled Studies in Disasters.
9. Convergence behavior in Disasters: A Problem in Social Control.
10. The Effects of a Threatening Rumor on a Disaster-Stricken Community.
11. The Schoolhouse Disasters: Family and Community as Determinants of a Child's Response to Disaster.
12. Human Problems in the Utilization of Fallout Shelters.
13. Individual and Group Behavior in a Coal Mine Disaster.
14. The Occasion Instant: The Structure of Social Responses to Field Studies of Disaster Behavior: An Inventory.
15. Unanticipated Air Raid Warnings.
16. Behavioral Science and Civil Defense.
17. Social Organization Under Stress: A Sociological Review of Disaster Studies.
18. The Social and Psychological Consequences of a Natural Disaster: A Longitudinal Study of Hurricane Audrey.
19. Before the Wind: A Study of the Responses to Hurricane Carla.

Because these studies were primarily funded through the US military and civil defense, much of the focus were on questions of social disorganization and collective behavior in response to sudden catastrophic events (Quarantelli 1987, 1994). Many of the studies contained primary material and first hand descriptions of people's experiences following a disaster. Even though ritual was not a focus of these studies, in the present investigation, we have analyzed this material for any description of ritual practices.

Ritual practices are defined as action repertoires that are schema-driven. Ritual practices, therefore, involve regularly engaged in actions that encompass meaning and express symbolic themes. Rituals are standardized social behaviors that communicate a symbolic meaning of some form or another. We might view rituals along a continuum ranging from often repeated individualized or overtly social behaviors involving limited or modest amounts of cognitive meaning to more formal ceremonies rich in symbolic significance.

A qualitative content analysis of the studies was used to identify ritual practices following a disaster. This re-ritualization or attempt to re-engage in ritual practices was identified in people's accounts as well as in descriptions by researchers of people's responses to the disaster. Human behaviors such as praying, game playing, and singing were identified as ritual practices.

The researchers began with an open coding strategy, identifying paragraphs and passages that generally describe ritual practices. A second assessment of these sections was analyzed by all three researchers to eliminate the more ambivalent examples and further distinguish such ritual practices. Only those behaviors agreed upon by all three researchers were identified as ritual practices. And finally, through axial coding, these ritual practices were sorted into eight general categories identified by the researchers in the course of the content analysis.

The ritual practices were organized within the following categories by consensus of the researchers:

Category 1–Eating/drinking

Category 2–Recreational

Category 3–Discursive

Category 4–Religious

Category 5–Visiting/Comforting

Category 6–Convergence

Category 7–Family/Domestic

Category 8–Other

The researchers also identified several differences in rituals such as a distinction between formalized rituals and those of an informal character. For instance, an impromptu gathering of people for prayer was differentiated from more formal religious ceremonies such as a funeral.

Ten of the nineteen studies included at least one example of a ritual practice with most containing multiple references to rituals. (Disaster Studies [DS] 1, 3, 5, 6, 9, 11, 12, 13, 17, 18, 19) Those studies that did not have any specific references to ritual practices were either focused on an aspect of disaster beyond the scope of this study or did not contain any specific descriptions of behavior following the disaster. DS 2 focused entirely on people's interpretation of a firework explosion as a possible atomic blast.

DS 4 analyzed evacuation concerns as well as long-term housing and reemployment issues.[2] DS 7 compared two border communities' governmental responses to the same flood.[3] DS 8 dealt with methodological field issues while DS 10 investigated the effects of rumors on a community previously impacted by a disaster. DS 12 appraised the problems created by using fall out shelters and DS 14 was simply an inventory of field studies. DS 15 considered responses to unanticipated air raid warnings while DS 16 scrutinized the relationship between the behavioral sciences and civil defense.

What is striking in the content analysis is where there were direct references to people's specific behaviors following a disaster, examples of rituals were easily identifiable. Moreover, when these studies included primary material from individuals in the disaster, invariably ritual practices could be found. In order to illustrate the importance of re-ritualization, a fictional case study will be presented with real examples from primary data in the disaster studies followed by further explication of the findings.

A Conglomerate Case Study

Imagine a major city is hit by an earthquake resulting in large scale damage to sections of the city and extreme disruption of people's lives. An observer arriving on the scene would find damage beyond description and the wounded arising out of the debris. They would appear to be walking in a dazed and confused condition apparently unable to cope with the immensity of the tragedy that has befallen them. As one observer describes the survivors:

> "…he has been suddenly shorn of much of the support and assistance of a culture and a society upon which he depends and from which he draws sustenance; he has been deprived of the instrumentalities by which he has manipulated his environment; he has been, in effect, castrated, rendered impotent; separated from all sources of support, and left naked and alone, without a sense of his own identity, in a terrifying wilderness of ruins." (DS3:127).

The observer begins to see rather strange behavior that could be interpreted as pathological and a result of the sudden trauma they have experienced. A man tries to sweep away debris in his house which is no longer there while a woman rocks and cares for a dead baby. Among the injured and dead, people appear to be having inconsequential conversations with some smoking cigarettes and others looking for items among the rubble. This behavior, while bizarre, has a common characteristic.

> "Those who are too strongly bound by the old norms regulating means…Or who are incapable of successfully engaging in innovative behavior may abandon the goal but keep up the activities intended to achieve it–ritualistic behavior… These casualties may take the form of ritualism–continuation of accustomed activities which have no relevance to the real situation…" (DS 17:22).

Soon, emergency workers and others begin to arrive on the scene to help the survivors who themselves have begun digging through the debris, assisting the wounded. They find an almost eerie silence as many survivors wander aimlessly unsure of what to do and say. People may be praying here and there with some even singing

some verse from a song as if to comfort themselves. The emergency workers themselves struggle to make sense of what has happened and note the strange behavior of the survivors that is described in the following terms: "The common denominator of this deterioration of behavior is its regressive quality: there is reversion to previously learned less complex ways of doing tasks and of establishing the relations of the individual to his environment. (DS 6: 6)"

With more and more people arriving some semblance of order begins to arise as police and fire fighters implement their training transferring the wounded to triage centers and offering as much comfort as possible to those affected by the disaster. They become more and more organized in their efforts to help clear away debris and find survivors. When a dead body is found, many of the volunteers pause in silence as the body is ceremoniously covered and removed. They then go on digging through the rubble.

At the triage centers, the walking wounded tell their story of what happened to them and share quiet moments comforting each other with hugs and whispered expressions of kinship. As the shock of their experience begins to dissipate, it seems more and more important to talk of their experience with impromptu groups gathering together to comfort each other.

As the day progresses, a strange convergence of people from the surrounding parts of town begin to arrive on the outskirts of the disaster. Even though they are not allowed into the affected area, many come to see if loved ones are still alive. It is almost as if they cannot wait for word from others about the event but must see for themselves what has happened. Some have arrived to volunteer while there are those who simply gawk at the destruction. But most are there simply because they must bear witness to the disaster as if they cannot make sense of what has happened unless they together see it for themselves.

In the days immediately following, many of the survivors must live in shelters set up to aid those who have lost their homes. People pass the time playing card and board games and even tell stories and jokes to each other. Children are found playing as usual while parents try to create as much normalcy as possible in their displaced condition. Times of eating become community affairs as people gather around, as if they were one big family, and share stories of survival and loss. The coffee and beverage stand becomes a gathering place for people to talk and visit with one another. Religious services are quickly organized. Funerals and rituals surrounding death are also implemented to help the survivors cope with the loss of family and friends.

In the months following, the community begins to resume its normal activities as schools are opened and people find more permanent shelter. Teachers help their students cope with the traumatic events by using art to help them express what they felt and experienced. The children even put on a play for the community. Families as much as possible reengage their own family rituals including holidays and celebrations. And as time progresses, many mark the tragic events with ceremonies and

remembrances in order to make some sense of the tragedy that had so disrupted their lives.

Findings

The above scenario is based on various examples found in the disaster studies. It illustrates the ways people invariably engage in ritualized symbolic practices to reestablish the "instrumentalities" that make sense of the world around them. In this section we focus more precisely on the types and kinds of rituals reestablished by victims of disaster. A table is provided which identifies the types of rituals found. A simple analytical distinction is also made between those rituals that are formal and informal. Formal rituals involve rituals which are highly stylized in the sense they are either codified or a clear consensus exists among actors concerning how the ritual enactment will occur. While informal rituals to varying degrees are stylized, they tend to be more spontaneous, not codified, and allow for greater variability in the enactment of the ritual. The preponderance of informal rituals are most likely a reflection of the focus of the researchers on the immediate aftermath of a disaster because more formal ritual practices apparently emerged in later stages following a disaster.

Table 1
Types of Rituals

Category	*Informal*	*Formal*	*Total*
Eating/Drinking	3	2	5
Recreational	2	4	6
Discursive	10	1	11
Religious	11	4	15
Visiting/Comforting	14	0	14
Convergence	6	0	6
Family/Domestic	8	4	12
Other	3	4	7
Total	57	19	76

The Table above illustrates the various types of rituals people engaged in following a disaster. It should be noted that despite the fact that rituals were not the focal point of research gathered in the disaster studies, they invariably contained observations of ritual behavior. If researchers included in their study descriptions of victim's behavior, ritual practices could be identified. A discussion of each of the types of rituals follows along with several general observations about the ways people engage in ritual practices following a disaster.

The first type of ritualized behavior that is periodically referred to involved eating and drinking. One researcher observed how people seemed "to congregate and engage in conversation and drink coffee together as part of daily activities" and even noted that the "most ritualistic serving of coffee is an ever present symbol of hospitality" (DS18:101). In the same study the researcher also points out how "a great deal of the anxiety to rebuild was the anxiety to reestablish their old habitual patterns of everyday

behavior" particularly around food customs (DS 18:56). Another study acknowledged how spirits were lifted among many of the victims when they would gather for meals in a school and talk about the clean up (DS 17:186). Finally, one researcher comments how a victim responded to the disruptive experience of the disaster by not eating. "At the time of the March interviews, Martha was still not eating on Tuesdays (the day of the disaster)…While this showed real disturbance, it was ritualistic and compulsively obsessional handling of her anxiety; by the time of the June interview, her eating habits had become normal again" (DS11:42). It should be noted that more often than not researchers who observed ritualistic behavior ascribed a pathological quality to their actions. This will be discussed further in the conclusion.

Recreational rituals including play, games, and artistic activities are also referred to. Such ritualized activities provide a structure for people's interaction and allow for the expression of emotions in appropriate ways. Disaster study 19 shows a picture of a group playing a game in a shelter with its caption reading "No hurricane ever stopped the basic social processes" (133). Another study highlighted the practice of children playing as usual (DS3:123). Disaster Study 6 in a follow up to a disaster recorded the recuperative effectiveness of social agencies providing recreational activities for fifty children in a housing project near a disaster (39). Finally, Disaster Study 5 noted that:

> "Most of the school personnel in our study agreed that the teacher's stressing of expressive activities provides the child with an increased opportunity to achieve a meaningful interpretation of the disaster experience through manipulation of materials, such as paint or clay, and through the medium of more or less impromptu stories, plays, or pageants" (54).

Discursive rituals refer to practices using verbal expressions such as singing and storytelling to communicate and contextualize human experience. Singing and storytelling are highly ritualistic practices involving strong symbolic elements. Several studies highlighted the importance for victims to tell their stories (DS 3:121; DS 11: 16). But it was in a coalmine disaster where miners trapped deep below in the earth awaiting rescue demonstrate the efficacy of singing, joking, and storytelling.

> "In order to dispel despondency, he told jokes and recalled amusing incidents concerning his own life and family. He sang songs and led the group in singing the Old Rugged Cross…to promote a type of inspirational group therapy which proved most effective during the extremely stressful; and prolonged survival period" (DS 13:56).

For the wives who anxiously waited for their husbands to be saved: "Much of the waiting was filled with conversation about neutral, non evocative subjects" (DS 13:57). Another telling example of the importance of verbalization is noted in DS 3 which describes a woman immediately following a disaster exhibiting the seemingly bizarre behavior of simply "wandering around having inconsequential conversation" (113). Though these "conversations" are not necessarily fully developed, they do reflect the need for people to engage in a ritual such as talking and the attempted sharing of thoughts and feelings with others.

It is not surprising that religious rituals were significantly present in the data. Religion often involves highly ritualistic behaviors that provide comfort and direction in people's lives. One researcher observed in relation to how people coped with a particular disaster "Some patterns of religious behavior in rural Southern areas permit and even call for a high degree of expression of emotion in periods of exaltation and bereavement" (DS 11:20-21). Funerals were an important way to manage the grief (DS 5:46) and when this ritual was absent, it had detrimental effects on victims. "The social expression of grief through customary practices and rituals facilitates the work of grieving…in many instances, there could be no funerals because many bodies were not recovered…the process of grieving was not completed" (DS18:85).

The ritual of prayer was also a central mechanism for coping with the stresses of the disaster. "Family prayer was frequently used by the parents as a source of comfort for themselves and as a means for comforting the children" (DS 5:43). DS 9 contains a picture of a group of people standing together in prayer before a chaotic landscape of debris and destruction (65). Over and over researchers noted how victims would pray in order to cope with the stresses of the disaster (DS11:33,56; DS13:62,116; DS17:32,84; DS18: 44). At the same time, we again find that researchers would sometimes dismiss this ritualistic behavior as pathological. DS 17 portrays prayer as "largely a woman's occupation" (28) and DS 18 describes people as becoming "overly religious" (70).

Rituals involving visiting and comforting also received a significant amount of attention in the disaster studies. A number of studies noted the value of visiting rituals (DS 1:21; DS 5:30; DS 13:27). DS 9 highlighted the importance of rituals focused on visiting and comfort citing a study indicating 70 per cent of the sample of victims of a flood had family and friends visit them within the first month following the disaster (39). The researcher points out "the need to establish face-to-face or verbal contact appears essential for the relief of anxiety" and how "in virtually every society, there is a general social expectation that persons who have undergone a frightening and depriving experience need the presence of intimates for emotional reassurance, if not for physical assistance" (DS 9:39-40). A mortician describes his role conflict when he expressed the need to visit his family in the hospital as well as fulfill his responsibilities following a disaster (DS17:48). A rescuer in a first hand description of the people following a disaster states: "They wanted comfort rather than physical help…almost everyone wanted to go beyond a handshake, wanted an embrace; wanted to lean on you" (DS 3:118). Other first hand observations in DS 3 describe ritual behaviors in which people were "setting victims on the lawn, wrapping them with blanket and coat, and offering a cigarette" (62) and how a father "was talking in a friendly neighborly way" while his seriously injured son was being tended (115). In one wrenching image, an observer describes how a woman comforts and rocks her dead baby as if it were alive (DS 17:22).

Another ritualized practice referenced in disaster research deals with the convergence of people on a disaster scene. This entails victims, first responders, emergency workers, and people in the surrounding areas coming to help. This phenomenon also involves onlookers drawn to the site to observe the damage and relief efforts. DS 9 extensively studies people assembling after a disaster and articulates

an explanation in which convergence could be understood as a ritualistic way of dealing with such a disruptive event. Victims often return to a disaster site in order to be in familiar surroundings (30) and "reestablish some semblance of their normal life pattern within the same surroundings which they left" (32). The researcher concludes that this convergence behavior may be a kind of "structuring activity" (46) in order to make sense of what has happened. Convergence could be understood as a ritualized behavior that involves more than standing around and gaping. It helps not only the victims cope with the disaster but also those in surrounding communities.

> "Current evidence suggests that most curiosity convergence in disasters does not arise from neurotic impulses or ghoulish glee in witnessing destruction or suffering, but, rather, arises from the need to assimilate a happening…outside the viewer's frame of reference or realm of experience, and which may affect his future safety. In this sense, at least, curiosity may be viewed as an adaptive, future oriented response to disaster" (DS 9:49).

Family/Domestic rituals make up a significant part of people's lives. So it is not surprising that these rituals would arise following a disaster. Victims describe the importance of restoring familiar family patterns such as going to get "a Father's Day gift" (DS 3:147) and fulfilling certain functions in the family (DS 5:34). DS 11 points out the importance of family practices because they serve as "ritualized procedures for relating the family to immediate friends and relatives" (16) and "these rituals may serve as an emotional bond of some intensity between the participants for that period" (17). Domestic chores could be perceived as ritualistic particularly when first hand accounts describe one man in the midst of the wreckage of his home "going through some papers" (DS 3:113) and others "sweeping the street" (DS 3:133) or trying to "sweep away 20 tons of debris with a broom" (DS 17:109). DS 18 recounts one man after a flood who stated "that he and wife elected to stay home until they could get the mud and debris cleared from the house, even though the house was off its foundation…they stayed for four days" (17). One researcher remarks that this "sweeping and mopping were a practice more symbolic in nature" (DS 3:98). In yet another example of a researcher pathologizing this ritualistic behavior, he describes the first hand account of a man laying out clothes on a concrete block as "a father preoccupied with his own narcissistic needs" (DS 11: 33).

Finally, there are various ritual practices that cannot be placed within the categories just discussed. These range from the importance of the restoration of familiar activities such as attending school (DS 5:36, 43; DS 11: 45) to exercising (DS 13:117). In this regard, one study noted how practices such as these quickly become part of peoples taken for granted daily lives.

> "Quite unconsciously, through constant dealing with danger and death, patterns of behavior became established and through time, so widely used that they can be considered norms, codes, popular myths, and institutional arrangements. This appropriate social structure allowed for, and cushioned, many social effects of disaster."

References to such ritualized activities are placed in the "other" category.

Along with categorizing ritual practices according to types of rituals, the researchers also distinguished between formal ritualized practices and those more informal in nature. This distinction is based on identifying those ritualized symbolic practices that appear more prescribed, organized, and ceremonial in form versus those practices that can be characterized as less prescribed and emergent. An example of such a distinction would be a formalized funeral and the informal nature of spontaneous prayer. Both are ritualized symbolic practices but are enacted in quite different ways. The data indicates that informal rituals occurred most frequently within the first day or two after the disaster and grew more formalized as time passed. As previously noted, the preponderance of informal practices may be due in large part to our focusing on the immediate after effects of a disaster. This issue deserves greater attention in future research.

Finally, a distinction could be made between rudimentary and more elaborate ritualized practices. Elaborate rituals involve action repertoires containing all the necessary components and discrete acts that comprise a ritual practice which would normally be recognizable to an observer. Rudimentary rituals contain some but not all of those components of action and may not be perceived as a ritual action by observers. For this reason, it is more difficult for people to recognize behaviors like sweeping out one's kitchen with the roof gone or rocking a dead baby as being ritualistic. Such behaviors we suggest are rudimentary rituals containing some action components of a normal ritualized action repertoire. While we do not provide a quantitative measure of these kinds of rituals, qualitative evidence suggests both kinds of practices are engaged in by disaster victims.

In sum, analysis of these early disaster studies provides ample evidence concerning the occurrence of reritualization. Subsequent to the disruptive event of a disaster, we find that victims almost immediately began to reconstitute ritualized symbolic practices. People engaged in a wide variety of ritual types involving eating/drinking, recreational, discursive, religious, visiting/comforting convergence, and family rituals in addition to various other ritualized behaviors grouped in the "Other" category. We also find that these ritualized activities, which provide actors a cognitive clarity, a focus and direction in their social behavior, and a sense of stability, included both informal and formal rituals and rudimentary and more elaborate ritualized enactments. The presence and significance of such practices, we suggest, is even more compelling given the structural (or systemic) orientation typical of much research, particularly these early groundbreaking studies, dealing with disasters.

Conclusion

Disaster research has given inadequate attention to cultural and social-psychological factors in disasters. The study described here attempts to rectify this situation by explicitly focusing on the role that ritualized symbolic practices play in disasters. Social

practices such as rituals mitigate the effects of a disaster as well as equip survivors to cope with the aftereffects of such a traumatic experience.

More precisely, disasters can be characterized as disruptive events leading to experiences of extreme deritualization and the eventual reestablishment of daily rituals i.e. reritualization. Based on analysis of nineteen classic studies of the Disaster Research Group, a significant number of references to rituals were found, particularly in first hand accounts of people's behavior following a disaster. These rituals were identified as belonging to eight different categories.

Distinctions were also made between formal/informal rituals and rudimentary/elaborate rituals. Despite the fact that rituals were not a focus of any of the studies, a significant number of references to such practices were identified. Many of the researchers involved in these studies noted and sometimes even expressed puzzlement over these ritualistic behaviors.

We would emphasize that the evidence examined in this study strongly suggests that reritualization following disasters is a very basic and widespread phenomenon occurring in quite different groups, i. e., among victims of different kinds of disasters, men, women, adults, and children. And, while certain kinds of rituals are referred to more often than other actions–religious, visiting/comforting, family/domestic, and discursive rituals-wide variations exist in the content of practices engaged in by people. This observation is consistent with findings from other research examining internees in concentration camps and the forced displacement of educated youth into rural areas during the Cultural Revolution in China, where we also find people engaging in quite different types of ritualized behaviors. These findings attest to the diversity of ways ritual enactments may occur and how individuals can utilize different ritualized behaviors in ways that are significant to them. They underscore the meaningful, expressive, and consequential nature of rituals.

In this regard, growing evidence concerning the wide variation in ritual types suggests that what is of paramount importance is engaging in ritualized actions with various factors then influencing the form these practices take. In other words, the content of practices may well be of secondary importance to the need to perform a ritualized practice. These are issues, however, requiring much more study (including cross-cultural comparative research). Various factors very likely influence the kinds of ritualized behaviors people reconstitute and their import. Such factors would include the nature of the disruptive event and the situational constraints of the situation (that may facilitate or impede the development of different types of rituals) along with social and historical conditions, which predispose actors to engage in certain kinds of practices.

One implication of this study concerns the way past researchers have pathologized ritualistic behavior. Invariably when researchers discussed how a victim appeared to engage in ritualistic behavior, they described this activity in negative terms as a debilitating and unconstructive way of dealing with his/her experience. This study views these ritual practices in quite a different way. We argue that these behaviors represent attempts by people to reconstitute their lives rather than being irrational

pathologies. Instead of viewing the woman who rocks her dead baby or the man who sweeps his house without a roof as simply suffering from a psychological breakdown, we view their behavior as an attempt to re-ritualize a world devoid of the normal everyday rituals providing structure to human action and meaning.

A practical implication of this study is that more attention should be paid to helping people reconstitute ritualized practices. Responders to disasters should be sensitive to this aspect of human behavior and assist victims in the processes of reritualization. In fact, such popular programs as Critical Incident Debriefing and other psychological services following a disaster may be more effective for the ways they help people ritualize their experience than anything else. We suggest that those providing support for victims of a disaster can aid the recovery process by reestablishing ritualized symbolic practices as quickly as possible.

There is also a need for further research building upon the findings of this study. Such research should involve the collection of primary data dealing with victims' ritual behaviors following disasters. Attention could also focus on the ways emergency workers use rituals to cope with the trauma of their experience. For instance, following the World Trade Center disaster, emergency workers used symbolic markers (American Flags, spray painted mottos) and ritualized practices (standing in silence when a body was taken from the site) to manage their sad and tragic work. Providing more explicit attention to the reestablishment of rituals after disasters among both victims and responders would contribute to a deeper understanding of this phenomenon.

In conclusion, this study has value for disaster research and structural ritualization theory. It aids disaster research by providing a deeper and more nuanced understanding of the social/cultural practices and responses of actors to disaster. The study also builds upon ritualization theory by expanding our understanding of disruptions, deritualization, and reritualization. More attention to these issues will help to expand these insights and highlight the importance of culture and ritual within disaster research.

Notes

1. For research supporting the theory see Knottnerus and Van de Poel-Knottnerus 1999; Van de Poel-Knottnerus and Knottnerus 2002; Sell, Knottnerus, Ellison, and Mundt 2000; Knottnerus 1999, 2002, 2005, forthcoming; Knottnerus, Monk and Jones 1999; Guan and Knottnerus 1999, 2006; Knottnerus and Berry 2002; Varner and Knottnerus 2002; Knottnerus and LoConto 2003; Mitra and Knottnerus 2004; Knottnerus, Ulsperger, Cummins and Osteen 2006; Ulsperger and Knottnerus 2006, 2007; Thornburg, Knottnerus, and Webb 2007; Wu and Knottnerus 2005, 2007).
2. While not addressing behavioral issues, the study does indicate that people's sub-cultures particularly rooted in religious practices (which include religious rituals) were the most significant factor connected to tensions and adjustments in long term billeting (p.43).
3. The authors do note that the different cultures (Mexican and US) impacted their responses and in particular the traditional ways of the Mexican culture with its "highly ritualized political conferences…and stress on protocol (31).

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