

A NOTE ON NATURAL DISASTERS AND CIVIL DISTURBANCES: SIMILARITIES AND DIFFERENCES

George J. Warheit

Departments of Sociology and Psychiatry, University of Florida, Gainesville

INTRODUCTION

Barton (1970: 37- 47), in his well known work on the classification of the dimensions of disasters, has called attention to a generic class of social phenomena which he labels collective stress situations. He includes under this rubric a wide variety of events such as the sudden death of a head of state, earthquakes, ghetto riots, the economic decline of cities, explosions, political purges, air bombings, and the status deprivation of untouchables in a caste system. In addition to suggesting this general typology of collective stress situations, Barton outlines some of the dimensions upon which it is based (i.e., scope of impact, speed of onset, duration of the impact itself and social preparedness). However, he does not go beyond a general description of the common characteristics of these events although it is obvious that there are both similarities and differences among them.

In this paper we wish to note some of the basic similarities and differences between two of the major types of collective stress events, that is, natural disaster and civil disturbances. There are similarities. For example, each produces a large number of sudden demands which threaten and/or disrupt the normal flow of community activities and each often creates an imbalance in the social systems involved. This

disequilibrium is correctly perceived as a threat to the community by its members, and as a consequence they set in motion a wide range of activities designed to restore a systemic balance. Apart from this basic similarity, there are a number of fundamental differences between events such as floods, earthquakes, hurricanes, and so forth, and civil disturbances. They have different patterns of origin, warning, scope and duration. And, in addition, they occur within differing consensual contexts. As a result of these differences, they produce differing demands on the communities in which they occur. In this paper we examine these similarities and differences in the context of their most common sequential development.

Our analysis is drawn from a general consideration of the literature on the two kinds of events, but more specifically from a detailed comparative study we undertook of two major natural disasters and two civil disturbances that occurred in the United States in the late 1960's (Warheit, 1968). Given the latter focus, it is possible our analysis will not apply fully across different societies, but that is a matter to be established by research rather than speculation. We also do not consider the complicated case of technological as compared with natural disasters, that is, with catastrophes such as air crashes, ship and building explosions and fires, and radioactive spill-outs which differ in

origin, scope, and so forth, from both civil disturbances and natural disasters (see e.g., Drabek, 1968).

Origin

One of the fundamental differences between all natural disasters and civil disturbances is the origination of the stressful agent. Earthquakes, tsunamis, hurricanes, floods and similar events arise in a community's physical environment while civil disturbances have their origins in the thoughts and behaviors of people and social groups. Natural disasters arise from non-social forces which are external to a community's social system; civil disturbances emerge from social sources internal to the system. Natural disasters occur as purposeless, asocial events; civil disturbances can be viewed as instrumentally initiated to achieve certain social goals which are in conflict with those of the wider society. (For a more complete discussion of the issues associated with this position, see Grimshaw, 1968, 1970; Gurr, 1968, 1972; Warren, 1969; Caplan, 1970; Tomlinson and Sears, 1970; Geschwender, 1971.) As will be noted more fully, this characteristic of civil disturbances has a profound effect on a community and its emergency subsystems in terms of response and recovery.

Warning

Another difference between some natural disasters and civil disturbances is the type and amount of warning each affords. Fritz and Marks (1954), Janis (1958), Grosser (1964), Anderson (1969), Barton (1969), McLuckie (1970), Drabek and Stephenson (1971), and Mileti (1975) have noted the crucial role that warning plays in a community's response to a disaster event. Many types of natural disasters provide definite clues to the likelihood of their occurrence; some of these are general in character, while others are quite specific. Hurricanes, for example, can be monitored,

their speed measured and course determined; tsunamis can be reasonably predicted to follow severe earthquakes, and floods can be projected on the basis of meteorological and geographical factors. Civil disturbances, on the other hand, are more like earthquakes in that they provide little or no specific advance warning, and their occurrence is difficult to predict even when some general conditions known to be associated with them are present. Because of their unpredictability, civil disturbances pose serious problems for a community as it attempts to deal with the problems created by the emergency.

Duration

The duration of the collective stress situation is also extremely important in evaluating the impact it will have on a community and on the amount of time and resources required to return the community to some semblance of its pre-impact state. The duration of the disaster agent in natural disasters varies widely; tornadoes and earthquakes are usually over in a matter of minutes, hurricanes may last a few hours, while floods may last for several days. Major civil disturbances are probably more like floods than any of the other natural disasters, since they tend to last for several days and are marked by unpredictable alterations in location and intensity (see Abudu et al., 1972).

Variations in the duration of a collective stress agent are important to note since they affect the ability of a community to deal with the emergency. When the duration of the disaster agent is brief, such as in an earthquake or tornado, it takes community leaders a relatively short time to define the disaster situation, establish priorities and allocate the resources necessary to meet the demands created by the disaster agent. When the collective stress agent persists in a highly unpredictable fashion over time, as in a major civil disturbance, it is difficult to arrive at a single and static definition of the emergency situation, the establish-

ment of priorities becomes an ongoing process, the allocation of resources must be constantly reappraised and there is a great need for inter-organizational coordination and integration as first one organization and then another has the resources relevant to the community's recovery. The unpredictability of human behavior (the stressful agent) during civil disturbances is a significant problem for those attempting to deal with the crises being created. The human, volitional, anti-social dimension is rarely, if ever, a salient factor in community responses to natural disasters,

Scope

The scope of the two kinds of collective stress situations also varies. The threat posed by large floods, tornadoes, hurricanes or earthquakes tends to be a generalized one which affects or threatens the entire community. The Fairbanks, Alaska flood of 1967 is an excellent example. Transportation, communications, public services and most other community functions were severely disrupted for several days; more than 90 percent of the residents of the city were housed in public shelters at one time (Warheit, 1968). Civil disturbances, by contrast, have characteristically been confined to relatively small sections of the cities in which they have occurred. This is true even when the riots are defined as major ones. In Watts, Los Angeles, the disturbance was confined to about 45 square miles – approximately 10 percent of the city's area. And, although there may be a perceived threat on the part of those outside the site of the disturbance, the burning, looting, and sniping is generally confined to very limited areas. Ironically, those most immediately affected by civil disturbances are frequently residents of the same area as those actively involved in creating and sustaining it.

Community Contexts

As noted, the origins of natural disasters and

civil disturbances differ markedly: natural disasters arise in the physical environment from asocial causes, while the community crises caused by the civil disturbances which occurred during the 1960's in the United States were social acts which represented violations of the dominant norms of life and property held by the wider society. These differing origins produce two distinctively different normative contexts. Natural disasters create a social context marked by an initial overwhelming consensus regarding priorities and the allocation of resources. This consensus is so pervasive that it frequently sweeps away, at least temporarily, long-established hostilities and divisions (Wenger and Parr, 1969). Individuals, small groups and community organizations unite in a common assault on the problems created by the disaster event. Often the efforts of individuals and informal, emergent groups are so pervasive that the primary tasks associated with search and rescue are completed before the community's formal emergency organizations get mobilized (see Raker et al., 1956; Form and Nosow, 1958; Parr, 1970; Forrest, 1972). This outpouring of citizen response is so extensive that it sometimes poses problems (e.g., traffic control, the fragmentation of resources and overloaded communications) for the official emergency organizations in the community.

This is not to say that everyone in an affected community wishes to have it returned to its former condition. Fritz (1961) has noted that even in natural disasters, some groups may perceive the disruption of the social situation created by the disaster as desirable and may attempt to use it to effect changes in the social order. This desire was, of course, a component of the community crises created by the civil disturbances. There is, however, a basic difference between the latent aspects of social change implicit in natural disasters and the manifest and explicit desire for change associated with civil disturbances.

Civil disturbances, unlike natural disasters, reflect, intensify and produce a basic dissensus

in the communities in which they take place. As Dynes and Quarantelli (1968) have suggested, the norms which define private property are repudiated by many involved in the disorder and the behaviors of those engaged in burning, looting and sniping can be seen as attempts to redefine the norms regulating their own communities, norms which include accessibility to the area and the ownership of property and other resources.

The normative conflict inherent in civil disturbances represents an impediment to the community's recovery, since it militates against the vast outpouring of individual and small group response from the general public. And, importantly, those officially responsible for dealing with the emergency are harassed by persons and groups in the disturbance area. Most often, the only organizations functioning in the affected sections of the community during civil disturbances are the police (Wenger, 1973) and the military and fire departments (Warheit and Waxman, 1973). To the extent there is any convergence of community personnel and material resources, it takes place outside the affected areas. This is due in large measure to the fact that an explicit danger to human life exists, and to the fact that the tasks created by the disturbance require specialized skills and in many instances a legal mandate, e.g., the suppression of fires and the arresting and legal processing of persons. The inability of many of the community's emergency-relevant organizations and emergent citizen groups to become actively involved in dealing with the crisis, accompanied by the vigorous resistance of persons and groups involved in the disturbance, leads inevitably to a dependence on extra-community resources for logistical and operational support, particularly on the part of the police and fire departments.

The varying normative contexts which constitute the operational climate within which a community's emergency sub-system functions is perhaps the most important difference between natural disasters and civil disturbances.

This is true because the differing social definitions of the event evoke dissimilar community responses.

Organizational Response

Closely related to the problems associated with the differing normative contexts in which community recovery takes place is the problem of defining appropriate organizational behavior. The task of defining the collective stress situation and the response a community's emergency-relevant organizations ought to make is much simpler in natural disasters than in civil disturbances. Following the onset of a natural disaster, the community's emergency organizations and public agencies have a clear mandate: to rescue and treat the injured, locate, remove and identify the dead, aid the victims and restore the community to a state of normality as quickly as possible. There is little or no equivocation about these priorities, and confusion concerning organizational mandates during the immediate post-impact period is brief and temporary (Dynes, 1970). Such is not the case for community leaders and organizational officials confronted with a civil disturbance. For example, in riots in Los Angeles, Detroit, Cincinnati, Cleveland and elsewhere, fire officials were urged by some community leaders to become involved in crowd control. Except in rare and brief instances, however, these officials refused to arm their personnel or to use water streams against crowds, in spite of the fact that some persons in them were looting, setting fires and harassing firemen. In the civil disturbances studied, fire officials consistently refused to redefine their primary organizational goals even when such a redefinition might have lessened the demands being made on their departments. In most instances, they redefined some of their tasks, but they did so largely in an attempt to increase their organizational effectiveness; their primary organizational goals as defined by law and tradition remained unchanged: fighting fires and saving lives.

Police and other social control agencies are also faced with a number of highly ambivalent situations during civil disturbances. Probably the most difficult decision confronting them is that of defining the appropriate responses to crowd behavior. Under normal conditions, police would not hesitate to arrest or perhaps kill individuals engaged in felonious activities; this is not only within the province of their organizational domain, but is sometimes expected of them. However, when confronted with crowds of people, including women and children, engaged in a wide spectrum of illegal activities ranging from misdemeanors to felonies, it is difficult for police officials to define their appropriate responses. Does one shoot a looter regardless of the value of the property being taken; and what about arsonists? Does the age or sex of the looter make a difference? What about onlookers? What about the civil rights of those arrested? These and similar questions plagued police officials during the 1960 disturbances in American society. In the light of these problems, which for the most part grew out of the unstructured social situation created by the disturbance, governmental and other organizational officials had to come to a definition of the emergency situation which would enable police and other social control forces to restore order. The declaration of a state of emergency and the establishment of a curfew became the techniques of definition. Once put into effect, these mechanisms clearly delineated the boundaries of behavior for both social control agencies and citizens: anyone on the streets during certain hours would be subject to legal sanctions including arrest, and under certain circumstances would be liable to be shot.

The Watts disturbance of 1965 and the Detroit disturbance of 1967 illustrate this fact. The Watts disturbance began on Wednesday evening, August 11; it varied in intensity throughout Thursday and Friday, August 12 and 13. No deaths occurred among the civil population during these two full days. At

5.00 p.m. on Friday, August 13, a state of emergency was declared, and at 7.00 p.m. the first citizen was shot and killed; two more were killed between 7.00 p.m. and midnight; and from 12 midnight until 7.00 a.m. the next morning (Saturday the 14th), 11 more citizens were killed by social control personnel. The number of persons wounded during this period also increased sharply. In Detroit, the pattern was the same but much more abbreviated. The disturbance began at 5.20 a.m. on July 23, 1967. The looting and burning continued unabated throughout the day as officials from every level of government debated the steps to be taken. At 7.45 p.m. a curfew was declared in effect, and at 9.15 p.m. the first "looter" was reported shot and killed (Warheit, 1968). The declaration of an emergency and the imposition of a curfew proved to be effective instruments for social control, a fact which can be attested to by the immediacy and frequency with which they have been used since the early disturbances.

The Evaluative Response

In both natural disasters and civil disturbances there is a period after the crisis had passed when community officials, high-ranking officers in emergency organizations and public citizens evaluate the causes and extent of the emergency, as well as the performance of those organizations charged with the responsibility of dealing with it. This period is marked by the assigning of blame and praise and by efforts on the part of public officials and organizational personnel to justify their actions or inaction. For example, the civil disorders studied were so traumatic for the nation at large that a Presidential Commission was established to answer three basic questions: what happened? why did it happen? what can be done to prevent it from occurring again? (See Kerner, 1968.) Even in earlier riots in American society, such as in Chicago in 1919 and in Detroit in 1943, there had been post-event governmental evaluations of the happenings.

In the instance of natural disasters, the response is less likely to take such public and visible form. Nevertheless, emergency organizations very frequently undertake post-disaster critiques of their operations and community disaster plans are often reexamined after the crisis is over. Following some major disasters, the functional equivalent of a Presidential Riot Commission may be established. Thus, there were extensive congressional hearings in the aftermaths of Hurricane Camille and the Wilkes Barre Flood, and a massive federal research effort after the Alaskan earthquake.

However, in the longer run there are differences in the aftermaths of civil disturbances and natural disasters. In the case of riots, one often sees the beginning of long-term efforts to prevent, insofar as is possible, a recurrence of the collective stress situation and/or its adverse effects. Frequently, planning meetings are held to which representatives from the community's emergency-relevant organizations are invited. New plans are often made, tasks assigned and resources allocated on the basis of immediate past demands, organizational problems and possible future demands. At times a new community emergency synthesis occurs as the community's governmental agencies and emergency-relevant organizations attempt to restructure their resources and relationships, so as to make them more effective in the event of new emergency demands. Some of these plans are codified into laws; some become formal contractual relationships, while others remain informal, nonbinding agreements.

Both types of collective stress situations discussed in this paper evoke responses which call for the developing or strengthening of emergency plans. Most often, however, in the long run of natural disasters there tends to be more talk than action. And, at the organizational level, relatively few changes are initiated as a result of the experience of a disaster (see Anderson, 1969; Blanshan, 1975). This resistance to change is undoubtedly related to the boundary and domain maintenance activ-

ities associated with organizational behavior. Radical changes of a long-term nature in the intraorganizational and interorganizational structures of agencies involved in responding to collective stress situations are rare. Organizations have a life of their own; the perpetuation of that life is one of their major ongoing functions; and permanent alterations in their structures, even following periods of extreme demand and crisis, are the exception, not the rule.

CONCLUSION

On the basis of our analysis, it is possible to conclude that differing types of stressful agents produce contrasting kinds of community responses. Moreover, these differential responses can be attributed to the characteristics of the events, i.e., the amount of warning given, their scope and duration, and to the normative context produced by the emergency. Although these differences exist, there are also some similarities present in both types of collective stress situations. Both elicit organized community responses, that is, vigorous efforts are made to restore the community as quickly as possible to some semblance of its pre-crisis state and a period of assessment follows the emergency at which time an evaluation is made of what was done during the crisis.

REFERENCES

- Abudu, M. et al. (1972). "Black ghetto violence: A case study inquiry into the spatial patterns of four Los Angeles riot-event types," *Social Problems*, 19: 408-426.
- Anderson, W. (1969). "Disaster warning and communication processes in two communities," *Journal of Communication*, 19: 92-104.
- Anderson, W. (1969). *Disaster and Organizational Change*, Disaster Research Center Monograph Series No. 6. Columbus: Disaster Research Center, Ohio State University.
- Barton, A.H. (1970). *Communities in Disaster: A Sociological Analysis of Collective Stress Situations*. New York: Doubleday and Co., Inc.
- Blanshan, S.A. (1975). "Hospitals in waters: the effects of a flood disaster on organizational change." Ph.D. dissertation, The Ohio State University.

- Caplan, N. (1970). "The new ghetto man: a review of recent empirical studies," *Journal of Social Issues*, 26 (Winter): 51-73.
- Drabek, T. (1968). *Disaster in Aisle 13: A Case Study of the Coliseum Explosion at the Indiana State Fairgrounds, October 31, 1963*, Disaster Research Center Monograph Series No. 1. Columbus: College of Administrative Science, The Ohio State University.
- Drabek, T., and Stephenson, J.S. (1971). "When disaster strikes," *Journal of Applied Social Psychology* 1, 187-203.
- Dynes, R.R. (1970). *Organized Behavior in Disasters*. Lexington: Lexington Books.
- Dynes, R.R., and Quarantelli, E.L. (1967). "What looting in civil disturbances really means," *Transaction* (May), 9-14.
- Form, W., and Nosow, S. (1958). *Community in Disaster*. New York: Harper.
- Forrest, T.R. (1972). "Structural differentiation in emergent groups." Ph.D. dissertation, The Ohio State University.
- Fritz, C., and Marks, E.S. (1954). "The N.O.R.C. studies of human behavior in disasters," *Journal of Social Issues* 10, 26-41.
- Fritz, C.E. (1961). "Disaster." In: R.K. Merton and R.A. Nisbet, eds., *Contemporary Social Problems: An Introduction to the Sociology of Deviant Behavior and Social Disorganization*. New York: Harcourt, Brace and World.
- Geschwender, J., ed. (1971). *The Black Revolt*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Grimshaw, A. (1968). "Three views of urban violence: civil disturbance, racial revolt, class assault," *The American Behavioral Scientist* 4 (March-April), 2-7.
- Grimshaw, A. (1970). *Racial Violence in the United States*. New York: Aldine.
- Grosser, G.J. (1964). *The Threat of Impending Disasters: Contributions to the Psychology of Stress*. Cambridge, Mass.: M.I.T. Press.
- Gurr, T.R. (1968). "Urban disorder: perspectives from the comparative study of civil strife," *American Behavioral Scientist* 11, 50-55.
- Gurr, T.R. (1972). "The calculus of civil conflict," *Journal of Social Problems* 28, 27-47.
- Janis, I.J. (1958). *Psychological Stress*. New York: Wiley.
- Kerner, O. (1968). *Report of the National Advisory Commission on Civil Disorders*. New York: Bantam Books.
- McLuckie, B.F. (1970). "The warning system in disaster situations: a selective analysis," *Report Series No. 9*. Columbus, Ohio: The Disaster Research Center, The Ohio State University.
- Mileti, D.S. (1975). *Natural Hazard Warning Systems in the United States; A Research Assessment*. Institute of Behavioral Sciences, Boulder, Colorado.
- Parr, A. (1970). "Organizational response to community crisis and group emergence," *American Behavioral Scientist* 13, 423-429.
- Raker, J.W., Wallace, A.F., Rayner, J., and Eckert, A. (1956). "Emergency medical care in disasters: a summary of recorded experience," *Disaster Study No. 6*. Washington: National Academy of Science.
- Tomlinson, T.M., and Sears, D.O. (1970). "Negro attitudes toward the riot." In: N. Cohen, ed., *The Los Angeles Riots: A Sociopsychological Study*. New York: Praeger.
- Warheit, G.J. (1968). "The impact of major emergencies on the functional integration of four American communities." Ph.D. dissertation, The Ohio State University.
- Warheit, G.J., and Waxman, J. (1973). "Operational and organizational adaptations of fire departments to civil disturbances," *American Behavioral Scientist* 16, 343-355.
- Warren, D.I. (1969). "Neighborhood structure and riot behavior in Detroit: some exploratory findings," *Social Problems* 16, 464-484.
- Wenger, D. (1973). "The reluctant army: The functioning of police departments during civil disturbances," *American Behavioral Scientist* 16, 326-342.
- Wenger, D., and Parr, A. (1969). "Community functions under disaster conditions," *Report Series No. 4*. Columbus, Ohio: Disaster Research Center.