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REAL AND MYTHOLOGICAL PROBLEMS IN COMMUNITY DISASTERS*

E.L. Quarantelli

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Real and Mythological Problems in Community Disasters

What can you expect by way of human behavior when a major disaster occurs in an area? How will people, both as individual citizens and as members of organizations react in such a collective stress situation? Even if you assume the worst realistic scenario possible, that is, a catastrophe, what can you anticipate about the sociobehavioral reactions in such an extreme event?

You might think you would be faced with personal and social chaos. If you have the movie or cinema stereotypic version of disasters you will immediately think of panic and wild running around; of disorder, looting, and other antisocial behavior; of dazed and stunned victims unable to do anything for themselves; of local officials abandoning their positions to save themselves. The physical collapse and destruction in a disaster is supposedly also accompanied by much psychological disintegrating and social disorganization.

But is this picture of the ungluing of everything a correct version of what actually happens? Prior to a disaster, speculators and disaster planners usually anticipate breakdown and pathology.

Fortunately we need not totally speculate. Social and behavioral scientists in the last 25 years have been conducting field studies regarding behavior in disasters, including those generated by natural agents and technological mishaps. We now know the typical reaction patterns and what people will do and not do. My remarks that follow are based on much work done by many social scientists in different societies around the world who have looked at almost all the major disasters, including earthquakes, in recent years.

What do these studies show? What stands out? The answer is quite simple, the picture is very clear. We can state it in three sentences.

People as a whole, react in the emergency period of a disaster, much better than they are usually given credit for, although far from perfectly. In contrast,

organizations and groups do not do as well as might be expected, at best being eventually effective although seldom efficient. But both individuals and organizations do better if there has been prior planning.

Stated in other words, people almost always rise to a collective crisis occasion. Groups usually stumble around. But preparing for disasters can improve both individual and organizational responses, and make for greater efficiency (and remember effectiveness and efficiency are not the same thing).

Let us first look at individual behavior. What are the common expectations? What are the realities?

If you expect to be faced with panic, disorder, and dependency (mythological expectations for the most part) certain measures and preparations would be necessary. But if instead there is controlled behavior, order, and personal initiative, a different kind of disaster plan and activities are suggested. Which of the two possibilities should you assume?

Expectations and Realities

Expectations of Panic and the Reality

There may be expectations of panic, but what occurs is rather reasonable behavior in masse. For some reasons, perhaps because of mass media emphasis on the theme, many officials and others think that when people are faced with great threat or danger, they will panic. This panic supposedly manifests itself in hysterical breakdowns or wild flights. Presumably people can not be depended upon to react intelligently and non-selfishly in situations of great personal danger.

This is simply not the case. People as a whole do not panic. Actual instances of hysterical breakdowns and wild flights are extremely rare, and are of no practical or operational importance if they occur. In fact, instead of flight away from the danger site there is much more likely to be convergence on

an impacted area. Instead of collapse into hysterical breakdowns, people move to do what they think has to be done in the crisis. Disaster victims are usually quite frightened, but that does not mean they will act selfishly or impulsively. They do not become unreasoning animals, but instead (one could argue) they tend to show more rationality under stress than they do normally, if by rationality is meant conscious weighing of alternative courses of action in a situation. We do not do much conscious weighing of alternatives in performing most of our daily routine behaviors.

There may be expectations of disorder, but what appears is a great deal of prosocial instead of antisocial behavior. To inexperienced officials and journalists apparently disasters are seen as offering opportunities for the surfacing of antisocial behavior. It is speculated that deviant behavior will emerge and that dazed victims in the disaster area become easy targets for looting and other forms of criminal activity. Next to the supposed "panic" problem, is the supposed "looting" problem. The imagery is that as Mr. Hyde will take over from Dr. Jekyll, crime rates will rise and exploitative behavior will spread. This is also an incorrect view. Many stories of looting will circulate, but actual instances will be rare and if they occur will be done by outsiders rather than the impacted population itself. Far more material will be freely donated and given away than could conceivably be looted. In actuality, prosocial rather than antisocial behavior is a dominant characteristic of the emergency time period of a disaster. Crime rates will drop and exploitative behavior is likely to be seen in relatively rare instances of profiteering after the immediate emergency period is over. If disasters unleash anything, it is not the criminal in us, but the altruistic.

There may be expectations of dependency, but what develops instead is considerable self and small-group initiative. There is a tendency in disaster planning to assume that disasters leave large numbers of people dazed, shocked,

and unable to cope with the new realities of the crisis. The assumption is that victims are so disoriented and demoralized that they will need outsiders to do the most elementary tasks for them such as being fed, housed, and clothed. If the previously discussed expectation of disorder is based on a Dr. Jekyll and Mr. Hyde view of human beings, the expectation of dependency is based on a Big Brother image. If Big Brother does not step in, nothing, it is assumed, will happen.

This expectation is also quite false. Those who experience disasters are not immobilized by even the most catastrophic of events. They are neither devoid of initiative nor passively expectant that others will take care of them and their needs. Usually before the full impact is over, search and rescue efforts are initiated by neighbors, and the injured are brought to hospitals. Shelter is actively sought and offered by kin and friends. In fact the evidence is substantial and consistent that far from even seeking and much less depending upon formal relief and welfare organizations, these are the last sources that the vast majority of victims will turn to for help. In a disaster, self- and kin-help and mutual informal initiative and assistance will dominate.

We do not want to leave a picture that individuals by themselves or in conjunction with a few friends and neighbors can handle all disaster related problems. People perform far better than false speculations or widespread mythologies about human behavior under stress would indicate. But we are primarily talking about impact or emergency time behavior. People do not perform as well as might be desired in long run preparations for disasters or in coping with the difficulties of long run recovery. Also, there are some things, even in the transemergency time, which individuals can not or should not do. Neighbors might find victims in a search and rescue effort, but they can not perform major surgical operations or give blood transfusions. Similiarly, major debris clearance, restoration of electric power, testing for water pollution are not tasks that private citizens

or small groups of neighbors can perform very well. Futhermore, such matters as issuances of warnings about secondary threats, assigning priorities for emergency actions, integrating the convergence of outside relief help, or making surveys and policy decisions regarding recovery measures--to merely hint at the myriad possibilities involved--of necessity have to be organizational responsibilities and involve group actions; they cannot result from the initiative or be the acts of isolated individuals, separate persons, or in most cases private citizens.

Organizational Problems

Let us mention four kinds of disaster problems, at the emergency time, that are essentially problems of organizations as well as needing to be handled by organizations. These organizational problems can be discussed under these general categories:

communication
coordination
authority
personnel.

They are the kinds of difficulties in organizations which lend themselves to prior planning and preparedness measures.

1. Communication

There are four kinds of communication problems:

interorganizational or between organizations
intraorganizational or within an organization
from organizations to the public
from the public to organizations.

Interorganizational problems. In disasters organizations frequently have to communicate in unusual ways with unfamiliar organizations. Public agencies may have to deal with private concerns, or local organizations may have to communicate with extra community groups, that they may not even know existed before disaster impact, and they may have to interact through runners carrying oral messages, CB or ham radios, or informally written notes. The more formal and bureaucratic an

organization is in normal times, the more difficult it is to shift to such communication patterns at disaster times.

Intraorganizational problems. Within organizations, there are often three kinds of communication problems during emergency times. There may be extra shift personnel and/or volunteers who may have to be linked into the group's communication channels. The communication flow may be unusual with information, for example, entering the organization at unexpected entry points such as the head nurse in the emergency room of a hospital. Too often important information will be collected at different points in an organization and will never be communicated to all relevant officials. The problem in many disasters is not absence of information or knowledge, but its existence in the "wrong" places.

Organizations to public problems. Organizations may have to communicate with the public generally. Many organizations are not accustomed to doing this, not even emergency organizations. It is often unclear what information the public needs and if the public is being reached, because no feedback can be quickly obtained. There is a tendency to frame messages in terms of organizational expectations and requirements, and a failure to couch them from the perspective of the recovery population. This last is the typical bureaucratic tendency for an organization to do things on the basis of its needs and convenience, rather than from the viewpoint of the audience it is presumably servicing.

Public to organizations' problems. Finally, in a disaster it is very difficult for the public to communicate well with organizations. This involves more than an overload of inquires and questions, although overload is certainly a problem. People generally will call upon familiar organizations, and these are not necessarily those who have the information being requested. Not all organizations, including emergency ones, are fully trusted and seen as legitimate by all segments of an inquiring public.

2. Coordination

There are many coordination problems in disasters, of which we shall only mention three. These are problems in coodinating organizations from the public and private sectors. Coordination at times of disasters is qualitatively different from what occurs in simple emergencies.

Coordinating difficulties also abound when what is meant by coordination at disaster times is differently understood by different organizations, but also by different segments or sub-parts of the same organization.

Surface cordiality notwithstanding, organizations in the public and private sector often have difficulty coordinating disaster responses because they have different interests, tasks, and goals. Public organizations, by law and by tradition have to consider a disaster situation and the demands it creates from the perspective of the community at large of the general public. Private sector organizations necessarily have a much narrower perspective, assessing their involvement primarily as they see the disaster directly impinging on their operations and profitability. They have much less flexibility in using their resources than do public organizations, not to mention that they see themselves as much more vulnerable to legal actions because of their involvment in a disaster response. Public officials may want to knock down a building tottering from an earthquake shock, but a construction company whose engineering equipment is being used for debris clearance, may not want to cooperate in such a coordinated effort.

Coordination also becomes a major problem if it is assumed that a disaster response can be approached as if it involves only a bigger, everyday emergency. Too many disaster planners and operational people incorrectly assume that a disaster simply involves more of what occurs during a routine emergency. Thus, disasters are frequently viewed as the opposite end of a continuum which is anchored at the other end by routine emergencies, such as the public utilities face daily if

not hourly. Unfortunately, a disaster involves a difference of kind, not just degree. There is a qualitative, and not just a quantitative difference between everyday emergencies and a disaster. Thus, coordination is far more complicated in disasters since not only more but new organizations have to be coordinated with, and the coordination involves qualitatively different matters than would be involved, for instance, in the police coordinating with the phone company handling a telephone pole knocked down by a truck.

Finally, the term coordination is not self explanatory or obvious. To some officials it means keeping others generally informed about one's own organizational initiatives and activities; to other officials it means integrating the actions of one's own group with the behavior of all the rest of the organizations involved in the same situation. Unless there has been clear pre-impact understanding and consensus on the meaning of the term, in an actual disaster situation two organizations may mutually perceive one another as not "cooperating" in the way that they thought they had agreed upon. The same difficulty can also arise within organizations, especially those which in normal times allow considerable autonomy to their subgroups or parts, such as is true of many different kinds of community emergency organizations. Normally autonomous subunits of an organization do not find it easy to coordinate their activities with others at times of disasters.

3. Authority

In disasters there are various kinds of authority problems. They do not stem, as is sometimes thought, because authority lines breakdown within organizations. Studies show that this simply does not occur if in pre-impact times there was exercise of authority. Of course if authority is very weak in the first place, as is true for example of much county government authority in normal times, in the U.S. it can completely disappear at the time of an emergency. There is a principle of continuity operation from pre-impact to emergency time.

Nor are there authority problems because of a grab for power by one group or another. It is sometimes believed that a disaster could provide such an opportunity for some ambitious officials or agencies. However, at least insofar as emergency times of disasters are concerned, this is unlikely. In fact, instead of power being grabbed by the military or anyone else, there is a tendency for authority not to be fully exercised.

Instead, authority problems in disasters tend to be of two kinds. They can stem from old jurisdictional issues, or from new tasks.

Disasters tend to cut across jurisdictional boundaries or territories. Major problems for the exercise of authority are created in disasters if there are pre-impact ambiguities, overlaps, or uncertainties regarding which organizations have what domains. Since legal statutes and historical or traditional ways can be conflicting, disasters can bring such matters to a head because of the need for quick action. Question of authority responsibility, which in ordinary times can be resolved slowly or even left unsettled, can often not be delayed or avoided at the light of the emergency period.

Authority problems can also arise when different organizations may be engaged in similar emergency time non-routine tasks. This can arise with respect to, for example, the assumption of the right to requisition critical supplies, or the putting together of a list of missing persons. One emergency time new task around which there is almost always an authority clash is the matter of which organization(s) can issue passes and whether all organizations will respect the right of one or more other groups to issue passes. In many a disaster there have been many quarrels at roadblocks over this issue in which public officials, disaster victims, relief workers and other convergers have heatedly gotten involved. The heart of the problem is that the question of who has responsibility for a new and unfamiliar task cannot be left to be resolved during a disaster; it is obviously something which should be planned long before any emergency.

4. Personnel

It is sometimes thought that organizations might not be able to function well due to a conflict between the work role and the family role of officials. The fear is occasionally expressed that important officials or key personnel will stay away or leave their jobs at a time of disaster because of a concern for or a need to take care of their victimized families. Research has shown that this so-called role conflict does not result in the abandonment or failure to carry out occupational responsibilities. At least it is not a major problem especially in the higher echelons of organizations. It is clear officials can be expected to do their jobs, although it does result in psychological strain for those caught in such a role conflict.

Instead, organizational personnel problems in disasters are of a different kind. If anything, there is a strong tendency for staff members to remain on the job too long, or to overuse all personnel concurrently. Officials who work around the clock days on end--and it is remarkable for how long human beings can go without sleep in an emergency--not only eventually collapse from exhaustion, but also insure that their replacements will not have all the necessary information and knowledge they should, because it has accumulated in the head of one or just a few individuals. Similarly, organizations with shift personnel are courting trouble by mobilizing all personnel concurrently. Except in the most catastrophic of situations where there is an unavoidable need for massive manpower, for a short period of time, one shift of any shift type organization should always be on an off-duty status, thus insuring a constant flow of fresh personnel. In fact, it would be wise for non-shift organizations to consider moving into a shift arrangement for at least major disasters.

The other and almost always existing disaster problem with personnel is with volunteers. Many well-motivated volunteers with a wide variety of skills are not

necessarily a resource which can be used. In fact, in the absence of prior planning of who will use the volunteers, where they will be sent, how they will be supervised, when they will be used and so on--in the absence of such and much planning, the sheer presence of a mass of individual volunteers will simply create another disaster-related problem. Often vitally needed regular staff members will have to be used to get rid of the volunteers or to attempt some ad hoc planning and/or training of them for some hurriedly designed task. Volunteers can be far more of a problem than a help if careful and detailed preparations have not been made and coordinated with all relevant parties.

A Final Observation

In conclusion, let us emphasize again that disaster planning is necessary if a good response is to occur. But planning can not evoke a good response unless it is based on correct assumptions. Community disaster preparedness can be no better than what the key emergency organizations assume about human behavior under extreme stress. If the assumptions are valid then the preparedness will be appropriate and the response can be adequate when the disaster strikes. If the assumptions are invalid, the response will be inadequate.

We have tried in our remarks to suggest some of the real problems relevant to humar behavior under stress. If we have gotten you to thinking about the possibility you may have held some mythological beliefs, we will clearly have achieved the objective behind our statements. But even if we have simply confirmed what you already knew, we would also consider that as achieving our objective, namely for you to think intensively about what you are assuming about human behavior in a major disaster, be it from a natural agent such as a hurricane or a technological accident as in the spill of toxic chemicals.