ROLE SIMPLIFICATION IN DISASTER*

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The notion of role conflict and its consequences in emergencies introduces a problem in conceptualization and empirical documentation. It is also a problem in the sociology of knowledge and in the sociology of science as to how both facts and interpretations develop truth value in the scientific and policy communities. Much of this paper relates to the first issue and only incidental attention is given to the second.

Background

It is a standard sociological view that human beings play multiple roles. Implicit in that conceptualization is that a person, on occasion, may be called on to play conflicting or competing roles. Thus the concept of role conflict based on the possible incongruity of multiple roles is periodically addressed in the literature.

Role conflict was one of the first sociological concepts used in the area of disaster study. In 1952, Lewis Killian published the "Significance of Multiple Group Membership in Disaster," which has been widely quoted and cited ever since. Killian's intent was to develop a typology that might generalize to situations other than disaster. He identified four types of potential dilemmas of loyalty. First, he pointed out the choice between the family and other groups, principally the employment group or the community, and explained that this was the most common type of role conflict. Second, he noted the conflict to those faced with playing the heroic role of rescue worker in contrast to fulfilling occupational roles. Third, he discussed the conflict between the loyalty of employees to the company as an organization, as opposed to loyalties to fellow employees as friends and human beings. Fourth, he cited the conflict between loyalties to the community vs. certain extracommunity groups.

In each of these cases, Killian suggested the choice between conflicting demands made by the person may have serious consequences for the reorganization of the community and, in general, proposed that primary groups have the advantage in a conflict of loyalties. Other researchers subsequently picked up the idea of role
conflict as an explanatory concept and added anecdotal evidence that reinforced his findings. Most studies, however, were unclear about the concept of role as well as uncertain about the effects on actual behavior, but case study anecdotes of someone’s personal dilemmas gave a sense of reality to the concept. Killian, however, in the original article, was more cautious. While he suggested that negative consequences could occur and implied that people do abandon their roles in favor of the family, he concluded, paradoxically, that the resolution did not have the negative consequences one would have anticipated. He said, "...yet in none of the four community studies did the disastrous consequences contemplated...seem to have materialized" (Killian 1952, p. 311).

The implication of "family first" that was drawn from the discussion of role conflict was perhaps inadvertently reinforced by another theme in earlier research. That theme was the continuing and perhaps enhanced functions of the family in disasters. In the fifties, a rather standard interpretation stated that industrialization had defunctionalized the family. That interpretation was not supported by early studies on disaster. Quarantelli (1960) summarized about 50 different reports containing observations that the extended family was still a major source of support to which disaster victims turned for help, and concluded that the protective function of the family was still important, in contrast to the standard view. Consequently, the enhanced importance of the family in disaster situations was interpreted by many as heightening the conditions that produce role conflict.

Subsequently, the concept of role conflict and the notion of the continuing importance of the family were combined to become a part of the conventional wisdom of the social sciences. Since most social scientists are teachers or textbook authors, striking illustrations of concepts are scarce. Role conflict, however, could always be illustrated by the conclusion that much of the seeming disorganization in emergencies was created by persons in panic flight to join their families. This conventional wisdom had other consequences. Following the logic that serious manpower losses would occur in emergencies, emergency planning efforts often were based on the assumption that strong authoritarian efforts would be necessary to overcome this weakness, while others concluded that any type of emergency planning would be impossible. In addition, role conflict came to be used as an ad hoc generic explanation to interpret almost every problem in emergencies.

Conventional wisdom, of course, is usually impervious to evidence since it is easily supported by anecdotes and the logic of common sense. Contrary evidence is always seen as an exception that can be explained away on other grounds. Consequently, Killian’s conceptual article continues to be cited as proof so as to close the book on the discussion. Two studies, however, suggest that role conflict is not an important causal factor in the ability of individuals to perform duties in emergency organizations.

Empirical Observations of Role Behavior in Emergency Situations

The first of these studies was done by Meda White for the Disaster Study Group, National Academy of Sciences/National Research Council (1962). In observing the fact that many of the illustrations used by Killian focused on persons whose roles in emergency activity were unclear (e.g., refinery workers, ministers). White decided to study persons who had definite role responsibility in disaster-activated organizations. She selected three tornado-struck communities (Waco, Flint, Worcester) because tornado was the disaster agent Killian had used for his examples. She then interviewed organizational members who had role-defined responsibility during these emergencies.

She selected a number of organizations: city government, police and fire departments, state police, power company, gas company, radio stations, Red Cross, Salvation Army, and civil defense. In each organization, the de jure leaders of the organization during the disaster were interviewed, as well as one organizational member of middle rank and three of lower rank chosen by the every eighth name method.

White managed to complete 126 interviews. While her interviewing took place some 8 years after the events, she concluded that "not a single person abandoned ongoing disaster work to be with his family." Even taking into account the possibility of memory distortion, this is scarcely the type of resolution that would have been anticipated, given the prevailing assumptions about the usual consequences of role conflict.

In the sample, she found that 77 percent did their jobs first, without diversion to family roles. Another 5 percent did rescue work as individuals, rather than as organizational members. Others at home at the time of impact did disaster-related activity there and then reported to work. In all, by the end of 4 hours, 89 percent had been engaged in disaster-related activities and, again, not a single person had abandoned ongoing disaster work to be with his/her family.

When we began our own systematic research on disaster in 1963, we were aware of White’s research. On the other hand, her findings were contrary to the conventional wisdom. Since our research focus was on emergency organizations, we still anticipated that role conflict might be problematic, and we were sensitive to possible indications of it. However, in examining over 150 different disaster events and in the course of interviewing over 7,000 different organizational officials, role conflict did not emerge as a problem.

In fact, over the years of field work, even anecdotal evidence about such problems in emergency organizations was nonexistent. On the contrary, excess manpower was frequently problematic.
Since there was such a discrepancy between the conventional wisdom and our own field experience, we decided to look more closely at a number of cases with the intent of better documenting what was commonly "known" about role conflict. We had, over the years, collected detailed descriptions about the behavior of a large number of role incumbents in a variety of types of organizations in several types of disaster events.

Various disaster agents have characteristics with differential implications for behavior. We tried, then, to choose sites that provided some contrast in disaster agents. For example, both floods and hurricanes usually are preceded by a buildup that allows time for warning and subsequent preparation for impact. This would mean that some of the potential consequences of role conflict could be anticipated and perhaps avoided. On the other hand, both of these disaster agents create a wide scope of impact and, therefore, are likely to create situations that may involve both work and family situations. Tornadoes, by contrast, generally provide little warning and usually have a narrow scope of impact, although the damage potential in that impact zone is great. The optimum conditions for role conflict, however, are created by earthquakes. These agents generally occur without forewarning and are widespread. Therefore, they create the conditions in which the greatest degree of role conflict might be found.

We selected six different disaster events to examine in more detail. These cases involved four different types of disaster agents—tornado, flood, hurricane, and earthquake. The six research sites were Anchorage in the Alaskan earthquake, 1964; New Orleans in Hurricane Betsy, 1965; a tornado in Topeka, Kansas, 1966; an extensive flood in Fairbanks, Alaska, 1977; a tornado in Lubbock, Texas, 1970; and a tornado in Xenia, Ohio, 1974. Three tornadoes were chosen since these were the primary disaster agents upon which the Killian articles were based.

At each of these research sites, we interviewed key persons—usually both the head of the organizations and the person who filled the major operational role during the emergency—in a variety of relevant organizations: local police departments, fire departments, hospitals, civil defense offices, municipal public works departments, offices of the mayor and city manager, various utilities, mass media, Red Cross, Salvation Army, military units, National Guard units, sheriff's departments, and others.

In addition, in several of the communities we interviewed specific types of organizations more extensively. For example, in certain smaller organizations, every organizational member was interviewed. This was the case in the State Office of Civil Defense in Anchorage and the local Red Cross chapter in New Orleans. In larger organizations, we interviewed persons in all of the top organizational positions and sampled those working at lower levels. For example, in Anchorage we interviewed all of the 25 supervisory personnel who had the position of foreman or above in the Department of Public Works. This department included six divisions—airports, building inspection, traffic, engineering, maintenance, and water. We also interviewed a 20 percent sample of lower level positions. In Topeka, we interviewed all personnel with the rank of captain and above within the police department. In addition, in the service division, all desk sergeants and dispatching personnel were interviewed. Among the divisions most involved in disaster activity on duty at the time of impact was the patrol division. We interviewed two of three lieutenants, four of five sergeants, and 23 patrol officers. In the traffic division, the two lieutenants, 3 of 4 sergeants, and 15 patrol officers were interviewed. In all, 79 interviews were obtained in a department of 142.

In each community, the interviewing pattern was similar. After establishing the person's occupation and organizational role, the individual was asked to indicate his or her physical location at the exact time the disaster occurred, and then asked to detail personal behavior during the emergency period. The length of the interviews, which included additional information about the behavior of the person in the organizational role, whatever it was, varied from 1 to 8 hours, averaging about 1 1/2 hours. After being transcribed, the interviews were read for the specific purpose of noting any verbal expression or any behavioral indication of role conflict.

There is little likelihood that persons who were interviewed would systematically avoid describing any family search behavior that involved abandoning their occupational roles. A number of cross checks mitigated against this. In some of the organizations, the authors or other staff members of the Disaster Research Center were able to observe organizational behavior during much of the emergency period. And while we were generally not there at the time of impact, we picked up much common knowledge about impact behavior during the emergency period. In almost all of the organizations, we had multiple interviews that provided further cross checks. Since the focus of the interview was on organizational role behavior, operational problems, particularly those created by role abandonment, would be tapped. Since we interviewed all relevant emergency organizations about various interorganizational problems during the emergency, we had the added observations of outside personnel about their problems with other organizations, including problems that would ensue from role abandonment of key personnel.

Consequently, we read 413 different interviews of personnel in relevant emergency organizations. The interviews were detailed descriptions of their behavior during the emergency period. We did not ask them whether they had experienced role conflict since we were concerned only with the ways in which they behaved in an emergency. We classified them as to where they were when they became aware of the emergency—at work, at home, or neither (see Table 1).

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Discussion
It is difficult to discuss a concept that has no empirical support.
One might focus on why some social scientists feel that it is a
viable concept in the absence of such support. Thus, the problem is
embedded in the belief structure of social scientists, rather than in
the behavior of people in emergencies. The lack of empirical sup-
1. Perhaps the greatest problem is the lack of relationship between a person verbalizing contradictory demands and his/her actual behavior in emergencies. The relationship between verbal statements and subsequent behavior is an old and complicated issue and will not be reviewed here. It is sufficient to suggest that paper and pencil tests asking oppositional questions, such as "would you go to work or save your child" may evoke conventional answers, but never knowledge.

2. The very formulation of role conflict poses an oppositional form that distorts social reality. Since people always play many roles, life, even in emergencies, is never an either/or matter. The opposition implied in the construct is analytical and thus located in the investigator's mind rather than in actual behavior. It is perhaps better to drop completely the notion of conflict and to use the vocabulary of "role strain" (Goode 1960).

3. Part of the problem comes from the reification of occupation and emergency-relevant roles. Many occupational roles become irrelevant in emergencies. In fact, many of the illustrations Killian used were drawn from situations where persons had roles in which they were unsure of how they should behave. Since they were unsure, they went home. Such usual action does not necessarily illustrate the resolution of searing choices among alternatives.

   The status of emergency planning in the early 1950s was, at best, embryonic. Since that time, role responsibilities for emergencies have been much less ambiguous within American communities. That greater certainty now allows for families to engage in planning for various contingencies. Such planning has always been characteristic of the more traditional emergency organizations, such as police, fire, utilities, and health care organizations.

4. Part of the problem comes from the reification of the family. Most of the anecdotal evidence of role conflict is usually stated in terms of a classic stereotype of the family. That stereotype involves an employed and competent male whose place of employment is separated from the location of his unemployed wife, who is there with her small and anxious children. The location of that family unit is in danger and lacks alternative sources of support, such as kin and neighbors. It is also assumed that no information is available about the family while the husband is on the job that has emergency responsibility. Given that scenario, the usual prediction is that the husband will leave the job to take care of family members, or he will somehow delay his job responsibilities until he is assured of their safety.

   That stereotype is filled with implausible assumptions and is atypical within American society. In the 1980 census, about 13 percent of American families had an employed male, unemployed female, and small children at home. There is no reason to suspect that all those family units are composed of macho males and incompetent females.

5. Part of the problem lies in the assumption about overwhelming manpower needs in emergencies—that because communities have an increase in problems, they require an increase in manpower. That is incorrect. During emergencies, many standard roles are irrelevant, so that the existing personnel can be utilized in roles actually needed. In addition, American communities are very inefficient in allocating human resources in nonemergency situations, so that such traditionally underutilized personnel as the aged, teenagers, and housewives can be utilized when needed.

6. Part of the problem lies in the assumption of the dramatic quality of the emergency period. An emergency is usually portrayed as being substantively different from normal times. However, changes are not necessarily dramatic. There is always a period of time when an assessment is made as to what the nature of the disaster problem will be. In that period, the understanding of tasks is gradually achieved. In that period, too, people know they will be involved at some future time, and they can make family arrangements for that involvement. Also, not all organizational activities are simultaneous during a disaster event. The public works department might be at its peak activity long after medical personnel have completed their tasks.

   In addition, everything that goes on in normal times in work organizations cannot be classified as work, and these activities continue in emergencies. Personnel in emergency organizations still have to eat, go to the bathroom, rest, sleep, etc. Although people might spend less time fulfilling these needs during an emergency, there is nothing to prevent workers from contacting family members when it does not contradict the immediate tasks.

   Some observers assume that disasters and other types of emergencies constitute dramatic break points in social life, so that behavior is qualitatively different. Such a view is incorrect. An incompetent employee prior to an emergency is
not likely to become competent in an emergency. A competent employee is not likely to become incompetent. The best prediction of emergency behavior is to base it on its similarity to preimpact behavior. Continuity of behavior is the best assumption, rather than dramatic change and discontinuity.

7. Part of the problem comes from designers of the "big" scenario. Such scholars are very inventive in the creation of large hypothetical problems that might will occur in the future. Their tactic suggests that any evidence about lack of role conflict from past emergencies is irrelevant since it will surely occur some time in the future.

It is sufficient to note, however, that only once in the over 200-year history of the United States have we had an emergency that involved 5,000 deaths (Galveston in 1900). When the big scenario comes, it will be an event new in human history for all those living at the time, so it would be more prudent to base prediction of our behavior on past experiences rather than on our future imaginations.

The reasons for the lack of evidence to support the role conflict hypothesis are not totally explained by errors in conceptualization. Much of the lack of evidence is due to structural changes that occur in emergencies. These changes simplify role relationships and inhibit the development of role conflict. It is to those issues which we now turn.

Structural Factors That Lead to Role Simplification in Emergencies

The discussion of role conflict usually focuses on personality and postulates intrapsychic and interpersonal causes. The social system is seen only as producing conflicting demands, which are internalized. Since this approach produces no evidence, the problem should be examined instead from the vantage point of the social system. The system problem in emergencies is one of integrating role systems, so that the role performance of the actors fulfills the necessary institutional requirements. If one starts from that vantage point, the lack of evidence for role conflict is understandable since, in emergencies, role systems within communities are better integrated and, paradoxically, problems of role strain are reduced rather than enhanced.

Instead of assuming that role strain is emergent in crisis situations, it is more appropriate to start with the assumption that the malintegration of role systems is universal and that role strain is a normal state for all actors. In other words, individuals commonly face a wide, distracting, and sometimes conflicting set of role obligations. Since this is a normal state of affairs, certain institutionalized mechanisms exist to reduce the strain, e.g., compartmentalization, delegation, and elimination of role relationships. However, the ability of the actor to minimize role strain is both limited and determined by certain structural factors.

The initial concern about role conflict in crisis situations completely ignored the possibility of certain structural changes within roles, as well as changed forms of integration within disaster-affected communities.

It is suggested here that the aggregate scope and intensity of role strain is actually less in disaster than during normal times. This facilitates the fulfillment of role obligations during the emergency period. In fact, some of the changes that occur in emergencies provide conditions for the positive reinforcement of relevant emergency roles. These factors are discussed below in terms of (a) the community role structure and (b) the role structure of emergency-relevant organizations. Subsequently, we will discuss the family, which continues to assume a major focus for role allocation and continues to provide some of the mechanisms that mitigate role strain.

Community Role Structure

In various ways, sociologists usually contend that role obligations ultimately are based on values. Therefore, in observing types of behavior, explanation for repetitive role performances is usually provided by positing degrees of consensus on desired ends. In explaining the aggregate role structure of a community, the common view is to posit a multiplicity of values and to suggest that in the normal state, a community can be viewed as a collective attempt to achieve many different values. In this normal state, time, energy, and other resources are normally available to achieve multiple values, even when many of these values are potentially contradictory. Activities of most community inhabitants are compartmentalized or sequenced, and the activities of most community organizations are oriented toward one or another value without much direct competition. In other words, both at the individual and institutional levels, a somewhat free market state exists that allows the achievement of multiple, but often conflicting, values.

A disaster event changes this rather dramatically. No longer can the community assume that resources will be plentiful so that all existing values within the community can be achieved. Choices have to be made. Certain values become more critical than others in the survival of the community and, therefore, become more important in the allocation of resources. This means that certain norms and, consequently, certain roles become important, while other norms and roles become less important.

During the early stages of the emergency period, communities go through a reshuffling of value priorities, which has been concep-
ualized as the development of an emergency consensus (Dynes 1970). In fact, the results produce a state of consensus that is perhaps the closest empirical realization of normative consensus possible in modern societies. In Durkheimian terms, organic solidarity shifts to mechanical solidarity (see Turner 1967 for a related discussion). This emergency consensus has as its highest priority the care for disaster victims—provision of both medical care and basic necessities. Somewhat lower in the priority system are those tasks that are directly relevant to achievement of core values, e.g., restoration and maintenance of essential community services and maintenance of public order. The shift in values also means that any of the traditional locality-relevant functions of the community are no longer important (Wenger and Parr 1969). For example, roles related to the production/distribution and consumption of goods are drastically altered. Roles related to socialization functions within the community or to various avenues of socialization within regions remain around a set of value priorities. At the same time, irrelevant roles that could produce strain are eliminated until the emergency is over.

Values that are central to the emergency consensus are those traditionally called primary values. In other words, they are values that give high priority to caring for people, helping persons in distress, providing for their basic physical and emotional needs, and sharing with others. These were the dimensions that the Killian article tended to put in opposition to other types of demands on the person. While there may be some conflict with the preimpact structure, they are very consistent with the demands of the emergency period. The implementation of these values can be achieved in several different forms. Some organizations within the community have as a part of their organizational domain responsibility for implementing some of these values. Therefore, occupational role expectations within these organizations are still relevant since they are consistent with the emergency value structure. On the other hand, these values can also be achieved through a variety of more informal actions on the part of community members whose customary occupational roles are irrelevant in the emergency period.

Role Structure of Emergency-Relevant Organizations

From the viewpoint of the community system, a relatively small number of roles are essential for the immediate tasks created by disaster impact. In the early stages, knowledge is lacking about the scope of the impact and the tasks it has created. The more obvious problems and, therefore, the most known problems are those that involve search and rescue of victims, provision of medical care, and protection against continuing threat. These tasks pass on to various community organizations where there is a high probability that persons will be occupying the positions and performing the roles with competence. Such organizations—police departments, fire departments, hospitals, ambulance services, segments of the public works departments—have been designed with emergency tasks as part of their organizational domain. Such organizations build into their roles certain expectations about emergency behavior. These expectations are less concerned with explicit prescriptions of behavior than with implicit understandings of general obligations. These involve the expectation to stay on the job if on duty when the emergency occurs, or to report to duty when informed of the emergency. These expectations may be generally understood and/or they may be institutionalized into organizational notification schemes—fan-out phone systems and the like.

The emergency relevant organizations generally operate around the clock. This means that, with multiple shifts, they often have between two and three times the personnel necessary to maintain normal operations at any one time. The existence of such personnel allows for the possibility of expansion of organizational activities to compensate for overloads and/or allows for an excess to compensate for any potential loss of personnel from injury (or from role conflict).

Because organizational members are assured that those members on duty will remain there, off-duty personnel at the time of the emergency feel that they have time to check personal and familial damage and engage in certain types of nonoccupational role behavior prior to reporting. In fact, in many communities where work relationships spill over into friendship relationships and into neighborhood clusters, persons often have some knowledge of the family obligations of fellow employees. Consequently, these employees may stop on their way to reporting for work to informally check on family members of those on duty.

In the immediate postimpact period, research indicates that individuals go through a rather momentary cognitive reorientation process. This involves a consideration of what has happened and the consequences, and what behavior is required at that point. Many of the preimpact roles of the community members within the impact area are irrelevant at this point, freeing individuals to perform familial roles or to perform more informal altruistic neighboring, helping roles. For example, most of what is known as search and
Family Role

It seems strange that a whole set of assumptions has developed that implies that family obligations somehow undercut emergency activity, or that performing emergency activity is antithetical to family values. In contrast, the research over the last 20 years continues to support Quarantelli's earlier summary of the enhancement of the extended family in emergencies. In fact, the most appropriate way to view the functioning of the family is in terms of its important supportive, rather than conflictual, role in emergencies.

In the development of an emergency consensus, it was suggested that the values expressed are primary values, very consistent with the expressive functions of the family. There are no reasons to suggest that family norms do not facilitate effective occupational performance in emergency situations. In fact, a major element in the role definition of father and husband rests on successful occupational performance. In addition, the values of family participation in the community can certainly be realized through emergency activities. It is very common to observe, in emergency organizations, segments being run by family units (husbands, wives, children) even though only one family member may be officially employed.

In fact, it is most accurate to see the family unit as a "role budget" center in which various types of necessary role allocations can be made, and where support can be provided for those allocative decisions. For example, if it is determined that "mother" needs to work a double shift at the hospital, other family members can be allocated food preparation or child care responsibilities. Thus, other family members, either from the nuclear or extended family, can pick up the obligations that might go unmet during the emergency period. Such decisions free the family member to participate fully and without conflict in the occupational expectations created by the emergency.

Of course, not all such supplementation comes from family groups; it also comes from neighbors and other more impersonal help sources. But the family provides a natural decisionmaking unit that can make such allocations easily—without conflict or strain—since it recognizes that the occupational demands are necessary as well consonant with primary values. While there may be high demands of time and energy made on family members, such requests are perceived not as conflictual but only as understandable. Instead of experiencing role conflict, family members feel good about their ability to participate, sometimes directly through roles in emergency organizations and sometimes indirectly through providing familial support for other family members who are involved in such roles. In sum, while role conflict seems to be a problem for many professionals contemplating emergencies, it is seldom a problem for those solving emergencies.

References