STRUCTURAL FACTORS IN THE MINIMIZATION OF ROLE CONFLICT: A RE-EXAMINATION OF THE SIGNIFICANCE OF MULTIPLE GROUP MEMBERSHIP IN DISASTERS*

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ABSTRACT

Structural Factors in the Minimization of Role Conflict:
A Re-Examination of the Significance of
Multiple Group Membership in Disaster

It is a standard sociological view that human beings play multiple roles. Implicit in the idea of multi-role enactment is the possibility that a person may simultaneously be called upon to manifest two conflicting or competing roles. Thus, the concept of role conflict is established.

Role conflict was one of the first sociological concepts to be used in the area of disaster study. In fact, one article by Killian using this concept was among the earliest to appear in the professional literature on disasters and has been widely quoted and cited, both in the disaster area and in sociology generally.

However, studies we have conducted lend very little support to the presence of role conflict in disasters. We document this with a systematic analysis of organizational role behavior in six major disasters. The analysis shows a lack of evidence for the behavioral consequences of role conflict in disaster operations.

Our explanation for this finding follows these lines. Most formulations of role conflict are based on examining the social psychological processes of the actor. Such a view implicitly assumes that role obligations are somewhat constant. They are not in disasters. In such mass emergencies, there are certain types of structural shifts which not only mitigate the potential behavioral consequences of role conflict, but also provide the conditions for the reinforcement of relevant emergency roles by the family.

Three factors seem especially important.

(1) There are radical shifts in the institutional structure within the disaster-impacted community which minimize potential role conflicts strain. Certain irrelevant occupational roles are deactivated; the sanction system shifts. Many elements within particular role sets are eliminated. Certain role dimensions are no longer as relevant, e.g., ascriptive dimensions, status dimensions, etc. The division of labor is reshuffled. There is a "despecialization" of the role structure and a movement back to more diffuse role obligations. The net effect seems to be to release the person from potentially conflicting obligations by simplifying the role structure.

(2) Not all positions are relevant for emergencies, but there are key emergency organizations. Roles within key emergency organizations contain dimensions which create explicit expectations for behavior in emergency situations. Emergency relevant roles have built-in mechanisms for resolving conflict or have structural dimensions which reduce it.

(3) Many family norms encourage or supplement occupational performance in mass emergencies. Some family roles are
dependent upon successful occupational performance. Also, expressive dimensions tend to reinforce emergency obligations. The family is the "role budget" center in which various types of role allocations are made. Other members of the family pick up internal obligations to immediate family, kin, neighbors, etc., which allows certain family members to participate in emergency roles.
It is a standard sociological view that human beings play multiple roles. Implicit in the idea of multi-role enactment is the possibility that a person may simultaneously be called upon to manifest two conflicting or competing roles. Thus, the concept of role conflict or some variant upon the notion of incongruity of multiple roles is periodically addressed in the literature (see, for example, Ehrlich, Rinehart and Howell, 1961; Pugh, 1966; Nordlie, 1969; Lipman-Blumen, 1973; Sieber, 1974; and Marks, 1977).

Role conflict was one of the first sociological concepts to be used in the area of disaster study. In fact, one article which was among the earliest to appear in the professional literature on disasters became widely quoted and cited in subsequent writings, both within the disaster area and in sociology more generally. This article is Lewis Killian's "The Significance of Multiple Groups Membership in Disaster" (1952). While the reasons for the popularity of the article are a more appropriate topic for an historian of sociology, certain tentative suggestions can be made concerning its appeal. The article was theoretically important since it touched on a number of existing and emerging themes. It conceptualized certain dimensions in sociological terms which had previously been treated in terms of psychological theory. The article grappled with the concept of multiple-group membership and, as such, offered continuity to the work of Park, Cooley and Hughes. It also could be considered a contribution to reference group theory. It used the terminology of role theory which was coming into vogue at that time. It reinforced the importance of the primary group as an important determinant of behavior, a theme which had been emphasized several years earlier with the publication of the American Soldier (Stouffer et al, 1949). The article seemed to provide some support for the continued importance of the family's behavior at a time when predictions of the defunctionalization of the family were dominant.

Killian's stated intent was to develop a typology of role conflict that might generalize to situations other than disaster, since multiple group membership was characteristic of modern societies. He identified four different 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. He explained that this was the most common type of role conflict and discussed it at length. Second, he noted the conflict of those faced with the alternative of playing the "heroic" role of rescue worker in contrast to fulfilling essentially "occupational roles." Third, he discussed the conflict between the loyalty of employees to "the company" as an organization and to fellow employees as friends and human beings. Fourth, he cited the conflict between loyalty to the community and loyalty to certain extra-community groups.

It was the first type of conflict between family and occupational group which attracted greatest subsequent attention. The disaster context, of course, provides a rather vivid setting in which to illustrate role conflict. Since most sociologists are teachers and only a
slightly less number are textbook authors, striking illustrations of sociological concepts are often hard to come by. It would not be an exaggeration to suggest that the article has been the source of countless classroom illustrations. In fact, it is not inaccurate to suggest that aspects of the article have become part of the conventional wisdom of sociology. Specifically, a particular section of the Killian paper appears frequently in the more popular sociological writings (e.g., Lowry & Rankin, 1969: 216; Scott, 1970: 61).

The great majority of persons interviewed who were involved in such dilemmas resolved them in favor of the family, or, in some cases, to friendship groups. Much of the initial confusion, disorder and seemingly complete disorganization reported in disaster communities was the result of the rush of families to find and rejoin their families (1952:311).

Certain scholars, studying situations similar to those from which Killian derived his illustrations, seemingly reinforced such conclusions. For example, Moore, in Tornadoes Over Texas, says, "Efforts to reunite the family were the first things done in many cases. Until this was done, everything else was postponed and reported to have been insignificant." (1958:245).

There was, in addition, other support which indicated the increased importance of certain aspects of the family in disasters. Quarantelli, in summarizing about 50 different reports which had contained observations concerning the protective function of the family, concluded that the extended family was the major source to which disaster victims turned for help in disasters. This conclusion was evident in the context of the lack of dependence of disaster victims upon formal welfare agencies for help. Quarantelli also suggested that the physical dispersion of kin groups in modern urban societies was actually functional since crises then did not incapacitate simultaneously all members of the same extended family. In view of the defunctionalization theories of the family, Quarantelli concluded that the protective function was still a major one for the extended family.

There is an added dimension of importance to such conceptualizations. Many sociological concepts are characterized by a degree of abstraction which limit their implications within the "real" world. This is not true of Killian's. If persons in crises situations actually resolve role conflict in terms of family loyalties, any type of coherent organized emergency activity would be difficult, if not impossible, and would make outside assistance essential. The expectation for such a "familial retreat" has grown into a considerable concern to those involved in emergency planning and those charged with such organizational responsibility. This concern is evidenced by conversations we have had over the years with a wide variety of persons in many different types of organizations, both in the U.S. and in many other countries. Such practical concern for these effects in crisis situations has spawned, among other things, the development of mathematical models predicting the loss of manpower in possible nuclear attack.
In sum, then, the Killian article and interpretations made from it, i.e., person resolves role conflicts in disaster situations toward the family, have become part of the conventional wisdom of the discipline. Because such knowledge has very important practical implications in emergency planning, these well-known "findings" have been the basis for concern and for efforts to compensate the negative consequences of this behavior.

Our own research on disaster was initiated in 1963. Since it was focused on organizational involvement in disaster, we were aware, of course, of the common interpretations given to Killian's article. We had initially contemplated that the behavioral consequences of role conflict might be a major problem which might confront emergency organizations, so we were sensitive to indications of it. However, in over 150 different disaster events and in the course of interviewing over 6,000 different organizational officials, we found that role conflict was not a serious problem in the loss of manpower in emergency situations. Even good examples were hard to find. On the contrary, one might make the case that a major problem might be the presence of excess potential organizational personnel who are motivated to help but who have no relevant roles which are available to them.

Since there was a significant gap between this conventional wisdom and our continuing field work experience, we decided to look more closely at a number of cases with the intent of documenting what was "commonly" known. We had collected detailed descriptions of the behavior of large numbers of role incumbents in many different types of organizations in a variety of types of communities in several different types of disaster events.

Disaster agents have characteristics which have differential implications for behavior (Dynes, 1975). For example, both floods and hurricanes usually are preceded by a build-up which 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 disaster agents create a wide scope of impact and, therefore, are likely to create situations which may involve both work situations 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. Specifically, we chose three tornadoes these were the primary disaster agents upon which the Killian articles were based. 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—a tornado, a flood, a hurricane and an earthquake. These 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, 1967; a tornado in Lubbock, Texas, 1970, and a tornado in Xenia, Ohio, 1974. In 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 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, 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 or 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 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 one to eight hours, averaging about 1 hour and a half. 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 which involved abandoning their occupational roles. There were a number of cross checks which 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 which 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 which would ensue from role abandonment of key personnel.
What did we find? The table below summarizes our general findings.

<table>
<thead>
<tr>
<th>Location</th>
<th>At Home</th>
<th>At Work</th>
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<tbody>
<tr>
<td>Passengers</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Active Response</td>
<td>12</td>
<td>53</td>
</tr>
<tr>
<td>Passive Response</td>
<td>16</td>
<td>37</td>
</tr>
<tr>
<td>Earthquake</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Abandoned Occupation Role</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>On Job At Time</td>
<td>83</td>
<td>14</td>
</tr>
<tr>
<td>Search Behavior</td>
<td>N</td>
<td>Location at Time</td>
</tr>
<tr>
<td>Flood-Hurricane</td>
<td>104</td>
<td></td>
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</tbody>
</table>
The evidence which has been presented here does not support in any way the contention that multiple group membership leads to role conflict in a disaster which consequently results in occupational role abandonment. While this has been primarily an empirical question to which we have addressed ourselves, the complete lack of support suggests that there are a number of problems which exist in the conceptualization of role conflict. Now, let us turn to a consideration of the problems.

The first, and perhaps most important, problem in most discussions of role conflict is that usually a clear distinction is not drawn in the context of potentially conflicting role expectations between the verbalizations of the contradictory demands on the part of the actor and his actual behavior. While the verbalization may be a reasonably accurate indicator of anxiety levels, they may not be, as the previous evidence suggests, an accurate predictor of the director of behavior. Part of the problem lies in the oppositional form that much of the role conflict literature poses, e.g., family obligations vs. work obligations, etc. We would argue that, while these may be useful analytical categories, they also tend to oversimplify social reality. Thus, there is greater continuity among and between role expectations than is suggested by certain types of analytical categories. For example, successful occupational performance is also an integral part of the expectations of the husband and father role.

A beginning for re-conceptualization is to shift the vocabulary somewhat and to use Goode's (1960) terminology of role strain -- felt difficulty in fulfilling role obligations--rather than continuing to use the concept of role conflict with its connotation of equally weighted contradictory alternatives. We would suggest, however, that the major problem of conceptualization is the choice of the level of analysis. Most analyses of role strain are from the vantage point of the actor, examining the allocative behavior of the person or trying to predict it. We would argue that in order to accurately predict behavior, it is more efficient to view the problem from the vantage point of the social system. The system problem is one of integrating various role systems so that the role performances of the actors fulfill the "necessary" institutional activities. (By contrast, the actor's problem is to allocate energies and skills to fulfill role obligations.) We would argue that a major reason for the absence of role abandonment in disaster situations is a consequence of certain structural changes within disaster impacted communities which results in the better integration of various role systems and which consequently minimize the potential negative consequences of role strain.

Rather than starting with the assumption that role strain is emergent in crises situations, it is perhaps more appropriate to start with the assumption that the malintegration of role systems is universal and, consequently, role strain is a "normal" state for 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 develop which allow the actor to reduce the strain, e.g., compartmentalization, delegation, elimination of role relationships, etc. However, the ability of the actor to minimize role strain is
both limited and determined by certain structural factors, primarily those which deal with the integration of various role systems.

Since the initial concern for role conflict in crises situations seemingly is based upon the inability of actors to compartmentalize various role demands, this focus completely ignores the possibility of certain structural changes within roles, as well as changed forms of integration within disaster impacted communities. While there may be factors which may create or increase role strain during the emergency period, it is suggested here that the aggregate scope and intensity of role strain is perhaps less in disaster than during "normal times." Consequently, this facilitates the fulfillment of role obligations during the emergency period. In fact, some of these changes which occur in emergencies provide the 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 the role allocation and which continues to provide some of the mechanisms which mitigate role strain.

A. 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 role level and at the institutional level, a somewhat free market state exists which 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 in plentiful supply 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, they become more important in the allocation of resources. This means that certain norms and, consequently, certain roles become important, whereas other norms and roles become less important. During the early stages of the emergency period, communities go through a reshuffling of value priorities which elsewhere are conceptualized as the development of an "emergency consensus" (Dynes, 1975). In fact, the results produce a state of consensus which is perhaps the closest empirical realization of normative consensus possible in modern societies. In Durkheimian terms, there is a shift from organic solidarity to mechanical solidarity (see Turner, 1967, for a related discussion). This emergency consensus has as its highest priority the care for disaster victims—both of a
medical nature and of the provision for basic necessities. Somewhat lower in the priority system are those tasks which are directly relevant to achievement of core values, e.g., restoration and maintenance of essential community services, maintenance of public order, etc. The shift in values also means that many of the traditional "locality relevant functions" of the community are no longer important (Wenger and Peerr, 1969). For example, roles which are 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 social participation now become only minimally important. As the emergency consensus makes certain roles more critical, it also makes many other role obligations completely irrelevant. For example, in the instance of widespread impact, it is common for much organized activity not directly related to high priority values to close or to operate a minimum holding operation. This is true of many department stores, luxury goods stores, movie houses, clubs, leisure organizations, schools and other educationally related organizations (Yutzy, Anderson and Dynes, 1969). (This provides an explanation as to why there is a surplus of personnel during the emergency period.) From a systemic viewpoint the community responds by eliminating non-relevant roles by specifying minimum performance levels at the same time that other roles become critical and performance levels enhanced. The net result from the viewpoint of the individual is to reduce the scope of this total role obligation, as well as to eliminate many elements of the remaining role sets. The net results from the system viewpoint is to minimize the possibilities for role strain and to achieve more adequate performance in the critical roles which remain. The total role structure of the community has become rather coherently organized around a set of value priorities. At the same time, irrelevant roles which could produce strain are eliminated until the emergency is over.

Perhaps it is important to note here that the values which are central to the emergency consensus are those which are traditionally called "primary" values. In other words, they are values which give high priority to caring for people, helping persons in distress, providing for their basic physical and emotional needs, sharing with others, etc. These were the dimensions which the Killian article tended to put in opposition with other types of demands on the person. While there may be some conflict with the pre-impact structure, they are very consistent with the demands in 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 organization are still relevant since they are consistent with the existing 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. We will discuss the more informal aspects first before turning to a discussion of emergency organizations.

The release from many pre-impact role obligations tends to mitigate expectations which might be contradictory to those roles necessary during the emergency period. It is normatively sanctioned
to leave non-essential work roles to engage in the more important roles within the emergency period.

B. The 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, there is an absence of knowledge about the scope of the impact and the tasks it has created. The more obvious problems and, therefore, the most known problems are those which involve search and rescue of victims, providing medical attention and protecting against continuing threat. These tasks pass onto various community organizations in which 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, etc.--have been designed with emergency tasks as a 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 knowledge is gained about the emergency. These expectations may be "generally understood and/or they may be institutionalized into organizational notification schemes--fan-out phone systems, etc.

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 or 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 also can engage in certain types of non-occupational role behavior prior to reporting. In fact, in many communities, where work relationships spill over into friendship relationship and into neighborhood clusterings, persons often have some knowledge of the family obligations of fellow employees. Consequently, these employees may stop on their way to report for work to informally check on family members of others in order to pass on this information to those on duty.

In the immediate post-impact period, research indicates that there is a rather momentary cognitive reorientation process which individuals go through. This involves a consideration of what has happened, what has been the consequences and what behavior is required at that point. Many of the pre-impact roles of the community members within the impact area are irrelevant at this point. With the exception of a relatively small number of individuals who have role obligations in emergency organizations, most other occupational roles are irrelevant. This, then, frees the individual to perform familial roles or to perform more informal altruistic neighboring,
helping roles. For example, most of what is known as search and rescue operations are conducted by "unattached" persons in the impact area. Their initial action is later supplemented by emergent organized types of activity (Quarantelli, 1970). Much of this type of activity is often viewed as being disorganized by outsiders. It is, to the extent that this effort is a by-product of "uncoordinated" actions on the part of diverse actors, since it is a situation where individuals and small informal groups become involved in similar actions. Practically all of these individuals have no other specific role responsibilities in the emergency. If they do, their initial action is considered by themselves and by others to be within the scope of occupational involvement, e.g., a police officer or fireman who becomes involved in search and rescue activity. Search behavior for family members then is a legitimate role expectation for those without explicit emergency role obligations, because it is consistent with the core values which have become critical.

At this point, we can make only a few more general observations. For example, many family norms encourage or supplement occupational performance in emergency situations. As an illustration, we can note elements in the role of father and husband are dependent upon the successful occupational performance. Also, expressive dimensions tend to reinforce emergency obligations.

The family is the "role budget" center in which various types of role allocations are made. Other members of the family pick up internal obligations to immediate family, kin, neighbors, etc., which allow certain family members to participate in emergency roles. Our case studies of decision making by persons caught in disaster-generated crisis illustrate this point well.

In conclusion, we want to re-emphasize our central thesis. The social psychological processes of the actor in a situation is one way of looking at role behavior. But such a view implicitly assumes that role obligations are somewhat constant. That is not always the case. In disasters, there are certain types of structural shifts which not only mitigate the potential behavioral consequences of role conflict, but actually provide the conditions for the reinforcement of relevant emergency roles by the family. While our study does not totally disprove the notion of role conflict in disasters, it certainly provides substantial evidence that there is some empirical basis for the position. Only future research will be able to fully specify all the structural conditions in mass emergencies which minimize role conflict.
BIBLIOGRAPHY

Dynes, Russell R.

Ehrlich, Howard J., James W. Rinehart and John C. Howell

Goode, William J.

Killian, Lewis M.

Lipman-Blumen, Jean
1973 "Role De-Differentiation as a System Response to Crisis." Sociological Inquiry 43: 105-129.

Lowery, Ritchie and Robert Rankin

Marks, Stephen

Moore, Harry E.

Nordlie, Peter G.

Pugh, Derek

Quarantelli, E.L.

Scott, W. Richard

Sieber, Sam D.

Turner, Ralph H.  

Wenger, Dennis E. and Arnold R. Parr  
1969 Community Functions Under Disaster Conditions. Disaster Research Center Report Series #4: Columbus, Ohio.