

THE PREPARATIONS OF CITIZEN GROUPS FOR EARTHQUAKES:
THE ATYPICAL NATURE OF SUCH GROUPS AND THE CONDITIONS FOR THEIR EMERGENCE

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SUMMARY

The Disaster Research Center (DRC) undertook a nationwide study of private citizens who organize themselves in groups to prepare for or to recover from disasters. Part of that research looked for citizen groups preparing for earthquakes. We found, relatively and absolutely, few earthquake preparedness citizen groups. To explain this finding, we detail an explanatory model which specifies the conditions necessary for the general emergence of citizen groups, and apply it to the likelihood of earthquake preparedness groups. The implications for earthquake planning in general and some of the atypical characteristics, careers, and consequences of such groups are also noted.

THE GENERAL STUDY

In 1981, under a grant from the National Science Foundation, DRC initiated a study of emergent citizen groups (ECG's). We had three research objectives: (1) to determine the characteristics of ECG's; (2) to identify the major social conditions associated with the emergence of such groups; and (3) to ascertain some of the more manifest consequences of those citizen groups which do emerge. For purposes of understanding the dynamics of the phenomena, we also looked at the careers of ECG's. These four C's (i.e., characteristics, conditions, consequences, and careers) provided the research focus of our work.

Field data was obtained through intensive open-ended interviewing with core and peripheral members of ECG's, as well as with local public/private officials and mass media personnel. This data was supplemented by systematic document collecting and some participant observing. (See Ref. 1 for other methodological details.)

At the end of last year, DRC completed its field work on 50 different ECG's including 28 with a natural disaster orientation, and 22 with a technological disaster orientation. A brief follow-up study was conducted a year after initial field contact with each ECG. All the data were subjected to a variety of qualitative and quantitative analyses. (See Refs. 2-5 for initial reports.)

Earthquake Oriented ECG's

While we were interested in any kind of emergent citizen group, whether focused on natural hazards or technological threats, we singled out for special attention ECG's associated with earthquakes. DRC made a

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concentrated and systematic effort to find ECG's in California, the coastal Pacific states, and other places in the United States known to be subject to earthquakes such as around Memphis, Tennessee and Charleston, South Carolina. All sources and leads about the possible existence of such groups were contacted. In particular, federal, state, and local community agencies whose responsibilities usually involved contact with citizen groups, and in the private sector, public interest groups and national citizen organizations concerned with environmental problems, as well as ECG's we found focused on other kinds of hazards, were asked about any knowledge of earthquake related ECG's.

THE FINDINGS

A General Finding About Earthquake Oriented ECG's

Despite an extensive and exhaustive search effort, DRC was able to identify only about a dozen possible ECG situations related to earthquakes. When these situations were explored, we found that most involved abortive efforts to form earthquake oriented ECG's, represented educational activities on the part of one or two individual persons rather than an ECG, or involved informational activities undertaken by well established formal organizations (e.g., Junior League chapters). DRC found only several clear-cut earthquake oriented ECG's in the San Francisco-Oakland area which met our criteria of an ECG. In this, we found what some earlier research by Turner and his colleagues had previously discovered in a study in the Los Angeles area with a somewhat different focus, namely that "very few new groups were established because of the earthquake threat. The extremely small number of spontaneously crated neighborhood groups concerned with family and neighborhood earthquake preparations did not survive beyond single meetings. One group spurred by the enthusiasm of a student organization was active during two years at a high school. Other groups were shaped as extensions of the preexisting interests of their founders; a hobbyist established an earthquake prediction group using a simple 'tiltmeter' he had constructed...a small group of home economists first saw the relevance of home dried food to earthquake survival and then moved into full fledged consideration of earthquake preparedness..." (see Ref. 6, p. 57).

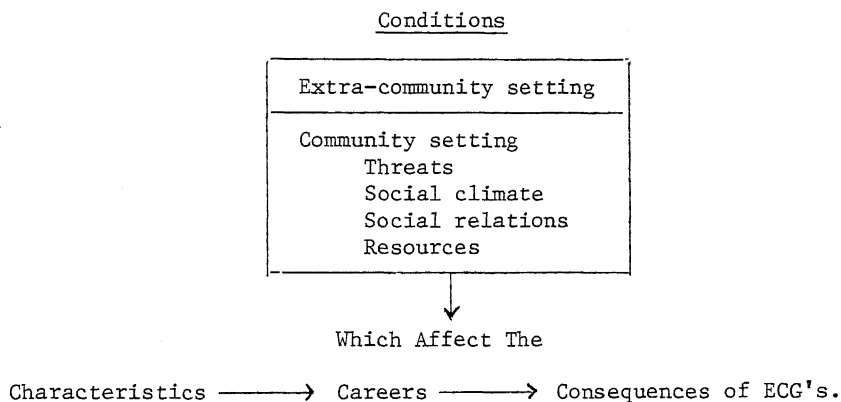
Although DRC conducted only two systematic studies of earthquake oriented ECG's, it does not mean that this number constituted the total universe of such ECG's existing during the period of our field work. In one community, we did hear about other citizen groups interested in earthquake preparedness (but did not attempt to examine them in depth since our sample quota for the area had already been met). It is also possible there were ECG's which we did not find despite our search effort, and our looking outside of California was nowhere as extensive or intensive as it was inside the state where we primarily concentrated on the Los Angeles and the San Francisco-Oakland areas. We also did pick up indications of earlier formed ECG's which had dissolved by the time we hunted them down. In addition, since the conclusion of our field work, we have heard of the possible existence of other earthquake related ECG's.

Nonetheless, unlike in the case of floods or of toxic waste sites, for example, where DRC encountered many ECG's concerned with such situations,

it is clear that earthquake oriented ECG's are relatively and absolutely few in number. In fact, for no other general disaster agent, natural or technological, does there appear to be fewer ECG's, at the present time in American society. This finding raises a basic question about earthquake oriented ECG's, namely, what accounts for their infrequent emergence?

AN EXPLANATORY MODEL

While our general examination of the conditions associated with the emergence, development, and survival of all ECG's is not yet complete, the outlines of an explanatory model have been tentatively formulated. Five factors appear particularly significant: (1) a legitimizing extra-community social setting; and at the local community level; (2) a perceived threat; (3) a supportive social climate; (4) a facilitating set of social relations; and (5) the availability of certain non-material resources. In graphic terms we can visualize these elements.



If the indicated conditions exist, there is a very high probability that citizen groups will form around particular disaster agents.

Applications to the Earthquake Area

When the model is applied to earthquake situations, what do we find? The first three conditions especially, seem generally absent or lacking, and thus discourage or prevent the emergence of earthquake oriented ECG's. Put in another way, the three general conditions and factors--namely, a legitimizing social setting, a perceived threat, and a supportive social climate--which lead to the general emergence of ECG's rarely appear at the local community level in the appropriate degree so as to lead to the appearance of ECG's concerned with earthquakes. More specifically, our study found the following with respect to each of these three conditions.

1. Supra-community citizen groups and networks while they generally have little direct input and influence on the origins of local ECG's, nonetheless serve to indicate that a locally expressed concern must be

legitimate because it is given attention elsewhere. Such extra-community factors also help in the origination of local ECG's because they suggest that the local issue is part of a national problem. The extra-community setting also frequently indicates the need for political action.

There are no supra-community citizen groups and national networks concerned with earthquakes. There is little indicating to possible local groups that their concern is part of a national problem. There is no model from outside the community suggesting that local residents should organize themselves to take political action.

Such extra-community groupings, definitions as a national problem, and political actions do characterize other potential threat situations such as nuclear plants and hazardous waste disposal sites. These are not existing social conditions for earthquakes. As such, there is no legitimizing extra-community social setting for the possible emergence of earthquake oriented ECG's.

2. For ECG's in general to come into being there must be a perceived threat, either by way of an actual dangerous event (i.e., an actual disaster) or an acceptable definition of a possible threat. The danger must be seen as threatening the home and the family of actual or potential victims. Finally, the hazard must be seen as having fairly immediate probable impact and not be simply a remote possibility.

General surveys indicate that Californians as a whole, and even more so populations in other regions of the United States at risk from earthquakes, minimize or downplay the earthquake threat to themselves. It is easy also, even if there is an acceptance of a general threat of an earthquake to the local community as a whole, to believe that the chances of being personally impacted are rather low. (In very many specific localities at risk, there also have been no local earthquakes of significance in the memory of the residents.) Additionally, the lack of periodicity and seasonality to earthquakes, and the fact that they are not of a cumulative nature, are statistically very infrequent, and are thought unlikely to reoccur after a major occurrence, all tend to take away a perception of immediacy of threat.

Again, there is relative greater perception of threat, the likelihood of being directly impacted, and the immediacy of the danger for residents living in hurricane prone areas or next to toxic waste sites than there is by populations in earthquake prone localities. These are not typical existing social conditions for residents in areas prone to earthquakes. Thus, the perceived threat necessary for the emergence of ECG's is only seldom present for the possible development of ECG's with a concern with earthquakes.

3. A supportive social climate must generally exist if ECG's are to appear and survive; this has to do with the presence of certain norms, values, and beliefs about who has the responsibility for dealing with community threats, what priorities should be assigned to handling the threats, and what can be done about the possible dangerous consequences. Especially important in the crystallization of ECG's is the failure of community, particularly governmental officials, to acknowledge or recognize the threat, whatever it may be. Spotlighting of the threat by the local mass communication system, and a public belief that they can do something about the threat, are also typically part of a supportive social climate.

If these are the general conditions necessary for the emergence of citizen groups, the state and community planning and designated official agencies to deal with the earthquake threat, at least in California, is probably working against the establishment of earthquake oriented citizen groups. Low value priority on the public agenda is not challenged by the erratic and low profile given to the earthquake problem both in California as well as other risk areas by local mass media outlets. In addition, there is the widespread belief, documented in survey data that "people do see the prospect of an earthquake as requiring collective rather than merely individual and family action, and they see government, especially local government, as the appropriate agency for collective response" (see Ref. 7, p. 80).

Unlike in the instance of say, floods or hurricanes, there seldom is a supportive social climate at the local community level to help establish earthquake oriented ECG's. There is particular irony in the fact that obvious governmental action that acknowledges the earthquake threat, by meeting public expectations (or norms) of where earthquake disaster planning responsibility rests, is almost certainly discouraging citizens formally organizing themselves. The low value priority seemingly given to earthquake planning in the typical local mass communication system, and the public belief that earthquake preparatory or mitigation measures can and should be taken by non-individual or family sources, are simply another part of the typical non-supportive social climate in almost all communities for the emergence of earthquake oriented ECG's.

The absence of the conditions we have discussed seems to account for the relative and absolute scarcity of citizen groups with an earthquake focus. Nonetheless, some such groups do come into being. Our research, however, also found that in many respects these ECG's showed atypical patterns. That is, their characteristics, careers, and consequences are manifestly different than found in more typical ECG's oriented around other possible disaster agents.

While the earthquake oriented ECG's do have a number of aspects in common with other kinds of disaster oriented ECG's, there are also a number of noticeable differences. To illustrate these differences we note a dozen major ones with respect to the careers, characteristics, and consequences of the groups. There are more than we list, but we limit ourselves because our purpose regarding this point is primarily illustration.

Careers

1. Earthquake oriented ECG's grow out of or are parallel with other neighborhood security or environmental concerns(e.g., crime watches or landslides). Most other ECG's have their origins in the specific disaster agent around which they eventually form.
2. The local mass media system often plays a crucial role in the development of ECG's; it is almost not involved in this way in the formation of citizen groups concerned with earthquakes.
3. The great majority of ECG's turn toward political action or goals; this is not true of earthquake oriented ECG's.
4. There typically is an evolution of the structure of ECG's, often although not always in the direction of greater complexity, but at the very least, some change. The original structure of earthquake oriented ECG's show almost no change.

5. Most ECG's formally incorporate if they come into being; those concerned with earthquakes do not.

Characteristics

1. Women predominate both as members and leaders in the typical ECG. Women are the majority of members in citizen groups concerned with earthquakes, but they tend not to be the leaders.

2. Membership in most ECG's is open-ended, and all members of the community are potential members. Membership in earthquake oriented ECG's is closed and exclusive, confined to the residents of a particular neighborhood.

3. ECG's typically have a core group which makes the key decisions and does most of the work; earthquake oriented ECG's tend to operate more as a committee of the whole or through a committee system.

4. The typical ECG is conflict oriented or takes an advocacy role. This is not true of citizen groups focused on earthquakes.

5. The great majority of ECG's direct most of their activities outside of the group, whereas earthquake oriented ECG's are largely internally focused.

Consequences

1. ECG's typically engage in much interaction with other groups and attempt to communicate with governmental agencies. ECG's concerned with earthquakes make very few attempts to interact with other community groups, governmental or otherwise.

2. ECG's which become established almost always achieve a degree of success in getting the issue defined as a social problem, but few ECG's attain their initially formulated goals. Earthquake oriented ECG's remain almost unknown outside of their local neighborhood, and define success in terms of information circulation to their own members.

In concluding this part of the paper we should note the not insignificant observation that citizen groups do sometimes form in connection with earthquakes but in opposition to action. These groups as Nigg and Young have noted, have emerged along with formal business groups with vested interests to resist the implementation of seismic safety legislation (Ref. 8). Despite the fact that the resisters were the intended beneficiaries of the legislation, they fought and in the cases examined, were successful in stalling the hazard mitigation intent of the legislators.

IMPLICATIONS FOR EARTHQUAKE PLANNING

There is no reason to believe that in the short run the particular conditions necessary for the emergence of earthquake oriented ECG's will come into being as the result of natural social processes. Such processes are also unlikely in the long run. But neither is there reason to think that social planning could bring about the appropriate generating conditions for earthquake oriented ECG's. Disaster planning can best be implemented and instituted when some of the necessary conditions for whatever is desired are already present in the situation; planning per se can seldom create such conditions.

Among some implications from our study for earthquake planning in general in American society are:

1. No assumption should be made that any significant organized citizen planning for earthquakes will develop in the future.
2. Efforts that might be made to generate such group developments among citizens are probably best directed at other individual or household preparedness measures (e.g., informational and educational programs on how to protect oneself and household at impact time).
3. Organization and community planning and preparedness ought to be expanded to cover what earthquake victims will not have organized themselves to do (e.g., post-impact systematic search and rescue efforts in neighborhoods).
4. Community disaster planners will have to seek other sources of political support for earthquake planning given the absence of local advocacy groups of citizens (e.g., among well established financial institutions).
5. Disaster planning should aim at training a cadre of knowledgeable operational personnel who know how to mobilize and manage resources rather than attempting to develop a grass-root base of trained citizens.

These recommendations are in line with the general position in much of the research into the social and behavioral aspects of disasters these last 30 years. It is the view that improvement in the efficiency and effectiveness of responses at emergency time will primarily be attained by improving the emergency organizations which will be involved instead of trying to change the behavioral response patterns of individual victims. Citizen groups can be an important factor in certain aspects of disaster planning, and especially as advocates for better mitigation and preparedness measures for some kinds of disaster agents, such as flood, hurricanes, toxic wastes and nuclear plants, but the earthquake area does not appear to be a very fruitful one to look for the emergence of similar types of citizen groups.

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