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A CROSS-SOCIETAL COMPARISON
OF DISASTER NEWS REPORTING
IN JAPAN AND THE UNITED STATES

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During 1984-1985, sociologists from the Disaster Research Center (DRC) at the University of Delaware and social scientists associated with the Institute of Mass Communication and Journalism at the University of Tokyo in Japan undertook a joint research project on mass media reporting of news about disasters in both countries. Using a common although not identical research design, cooperatively developed ahead of time, the Americans studied local community-level reporting of a major hurricane (Hurricane Alicia in the Houston, Texas area in 1983) and a major sudden flood (around Tulsa, Oklahoma in 1984) while the Japanese concurrently researched the reporting of two similar disasters (floods around Nagasaki in 1982 and an earthquake in the Tohoku district in 1983) in their country. After the field data had been mostly analyzed, the researchers from both societies held a meeting in the United States to compare their findings.

The conclusions drawn at that meeting as well as other later comparison of interviews and content analyses are summarized in this paper. We additionally point out the new questions generated by our findings. Also, since despite the considerable socio-cultural contrasts between the two societies, far more similarities than differences were found in mass media reporting of disaster news, we advance an explanation for this in the last part of the paper along with some policy implications.

The research within the United States focused upon organizational and content analysis of mostly local but to some extent also national media operations. Within the two communities studied, DRC personnel obtained a general profile or picture of the total community mass media involvement in the disaster (this necessitated obtaining survey like data from a universe of 35 radio stations, seven television stations, and three daily newspapers in the Houston-Galveston area, and from 10 radio stations, six television stations, and two daily newspapers in the Tulsa area. We also developed a very detailed case study of the major television, radio and newspaper outlet in both Houston and Tulsa. Through 49 in-depth interviews in the former community and 22 similar interviews in the latter area, data were gathered allowing a comparison of normal time operations and structure of these organizations with their emergency time period activities. Available content (television and radio programs and one of the newspapers) from these major outlets were also systematically analyzed (for example, all issues of the Houston newspaper were examined from three days before the hurricane to two weeks afterwards; a total of 160 hurricane related stories were found). In addition, a limited content analysis was also done on some of the national television, radio and newspaper coverage of the disasters, and we had access to two audience surveys in Houston. (For more details of the methodology used in the United States, the data obtained, and the analyses undertaken, see Quarantelli and Wenger, unpublished).

The Japanese researchers also had a three fold focus. They, closely paralleling the DRC model, examined the news gathering and processing activities of the various mass media that operated in the disasters they studied. However, they additionally gave special attention to the role and effectiveness of the mass communication system in providing disaster warnings. Finally, the ability of the system to fulfill audience needs for specific types of information during the disasters was studied through two random samples of 1,000 local residents in the affected areas.

While the data analyses were not identical, the examination of the survey data, the organizational analysis undertaken and the content analyses done in Japan roughly paralleled what DRC did in the United States. (For more details on the data gathering and analyses undertaken by the Japanese researchers, see Hiroi, Mikami and Miyata, 1985).

There are some limitations to the study. It dealt with only two natural disasters in both countries; furthermore, while the disasters were major in that they disrupted the routine functioning of the local communities they impacted, none approached the status of being catastrophic in nature such as the recent earthquake in Armenia or what Hurricane Hugo did in several Caribbean islands. Also, while we undertook some content analyses of the national radio and television network outputs we did not directly study the intraorganizational behavior of the networks involved. Moreover, there was no examination of the activities or contents of the wire services, or the views of the mass media held by the emergency organizations involved. (see Quarantelli, 1980, 1989 for topics that might be studied). Our basic focus was on local news reporting at the emergency time period of the disasters.

Nonetheless, our cross-societal comparative research is the first systematic one of its kind ever undertaken (see Rogers and Sood, 1981, for a very impressionistic comparison of American and Dominican coverage of disaster news). Also, our in-depth and concurrent examination of radio, television and newspaper organizations in reporting disaster news is the first with such a focus (see Wenger and Quarantelli, 1989 for some later work). Given this, it would appear significant that we found far more similarities than differences in the local Japanese and American mass media organizational responses to disasters.

The Similarities

We first discuss ten similarities which stood out in our comparative analysis of the data from the two countries. The following statements are not advanced in any particular order of importance because our data do not allow such a hierarchical differentiation. However, although they are stated in flat form, we do consider the propositions as tentative hypotheses that can eventually be brought to a more systematic test not only in Japan

and the United States, but also other societies with different social, political and economic structures, as well as different mass communication systems.

1. Disasters are treated as major news stories.

In both countries, the disasters were treated as the most important news stories in the communities at the time they occurred. During the emergency time period, at some of the local media outlets, practically nothing was reported that was not disaster related. Overall and for several days almost all other aspects of community life were given secondary attention by the local mass communication systems. News of national and international was scanty and usually only locally disseminated through extra-community sources (e.g., regular on the hour national network news reports).

This may appear to be stating the obvious, but it is not necessarily a generalization that holds across all social systems. For example, until recently in the Soviet Union--and even now in some African countries--it is known that manifestly major domestic disasters were not even mentioned in either local or national mass media news stories (Sanders, 1986; Shabad, 1986). The existence of a disaster does not automatically mean that it will be treated as news. Leaving aside macro level societal/political/ideological differences between societies that affect what is defined as "news," our generalization raises a question of what mass communication systems will treat as disasters? Is the AIDS epidemic handled as a "disaster" story anywhere? What accounts for the known differentiation between reporting local, domestic, and foreign disasters (see Gans, 1980, who documents such differences in American national media news stories).

2. There are similar cross-media differences in utilization and exposure at times of disasters.

In both Japan and the United States, the differences in utilization of and exposure to various media were quite similar. For example, in both countries the electronic media were relied upon most heavily by the public during the immediate post-impact emergency period. The increasing communication output from the electronic media was matched by increasing exposure on the part of the audience. In disasters where electric power is disrupted, radio stations played the key role (in part because victims can use battery powered radios). However, where power was not disrupted, television appeared to be the primary medium for distributing information during the phases of relief and restoration.

While these may be unexceptional observations, we have documented them in a way not done before (see Larson, 1980 for a review of the disaster relevant mass communication literature up to that time). Also, our findings raise the question of why the

seeming preference for television over radio when both are available, given the possible argument that more information could be obtained through the latter rather than the former kind of medium, and also the fact that much of the audience in both societies is accustomed to listening during normal times to regular one hour and half hour radio broadcasts of news stories.

3. There are intra-media "style" differences in reporting disasters.

Both in Japan and the United States, differences in the nature of the content was observed across organizations within the same medium. For example, the television networks in the United States covered the disasters with different "story lines or themes." For ABC the story was one of danger, threat and the helplessness of ordinary people to control the ravages of nature. CBS, on the other hand, painted a picture of calm, technological enlightenment. In Japan, the NHK radio broadcasts reported damage and destruction, while the commercial network, ABC, tried to respond to citizens' requests for contact with their family.

These observations are not inherently obvious, although supported by the work of Nimmo (1984; see also Nimmo and Combs, 1985) who reported similar differences of American network television coverage of the Three Mile Island nuclear plant accident.

It might be asked how conscious the mass media organizations are of their "styles" and whether there are cross-societal similarities? Equally as important, in what way, if any, do intramedia style differences affect audience exposure to and use of mass media content? Another worthwhile question to ask is whether there are also style differences among the print media? Anecdotal and impressionistic observations would seem to support the idea, but systematic empirical documentation is currently not available.

4. Mass media systems are faced collectively with an initial lack of accurate information about disaster impacts.

In both countries, local media personnel faced the problem of a lack of information about the magnitude and scope of the disaster impacts. In Japan, the broadcasting media personnel faced delays of two hours or more in obtaining details about the events. Similarly, reporters in the United States complained about the difficulty of getting early and detailed information from community officials.

To a considerable extent, in both countries local mass media systems had limited, selective, incomplete and in some cases incorrect information in the immediate aftermath of disaster impact (also reported for Canadian mass media by Scanlon and Alldred, 1982). This is not surprising given that a similar lack of

information prevails among emergency organization and community officials (Quarantelli, 1985). Nevertheless, the observations imply a number of additional research questions.

What difference does the lack of information make in what the media report? A systematic comparison of early and later content might be instructive. Does the lack of information contribute to the media perpetuating myths about disaster behavior? How are emergency organization officials and private citizens affected by the kind of information which is available? Is the emphasis on accuracy a misplaced one given that perhaps relevance of information might be a more meaningful criteria in the emergency time period of disasters? (See Scanlon, Luukko and Morton, 1978; also for some Japanese work see Hiroi, Mikami and Miyata, 1985).

5. The "command post view" of disasters prevails among mass media organizations.

Mass media field representatives within the United States tend to rely upon official sources for their information in constructing stories about both disasters and civil disturbances (Quarantelli, 1981; this is also confirmed for natural disasters by Sood, Stockdale and Rogers, 1987). Journalists usually ignore nontraditional sources and go directly to the Emergency Operating Center where they interview top governmental and officials from emergency agencies. As a result, what is usually reported is a "command post" view of the disaster. This is one possible perspective, but it is only one of many different orientations that could be possible about a disaster. For example other possible perspectives would be that of on-the-line operational personnel such as police and fire officers; of disaster impacted victims; of relief workers from outside the community; of foreign researchers; of distant relatives and friends of victims; of non-impacted community residents, etc. Therefore, coverage is somewhat limited and reflects a more formal, top down, governmental and social control perspective than any other possible view.

Our data from Houston and Tulsa reconfirmed this general observation. Moreover, there was a similar reliance on top official sources in Japan, also. National and prefectural officials were the primary sources for many stories and generally were the first persons to whom field reporters turned. There was almost no use of nontraditional sources.

To describe the "command post" perspective is one thing; to explain it is another. Although Quarantelli (1981) suggests some reasons for its prevalence, no systematic study has ever been done to account for the process. In addition, nontraditional sources are occasionally used; what are the conditions which bring this about in disasters? Moreover, it can be asked what are the consequences of the "command post" perspective? For instance, does it contribute to disaster mythologies about looting and antisocial

behavior given that such matters are the understandable interests of such social control agencies as the police?

6. There is a diminution of the mass media gatekeeping process in disasters.

The normal gatekeeping process of radio stations is altered during the emergency time period of disasters in the United States (Waxman, 1973). Various steps in the process are eliminated, and a condition of "open gates" becomes operative. Information is gathered by the station, either through its own initiative or from calls from the public, and is disseminated through the media without undergoing the normal editing or gatekeeping process (see also Sood, 1982).

We observed this pattern again in our study in both Japan and the United States. Radio stations aired information immediately. Normal validity checks were ignored in both societies. But the pattern was more noticeable at radio stations. The gatekeeping process was less altered in television reporting and remained almost untouched in newspaper organizations.

Why is the decrease in the gatekeeping process more likely to occur in radio rather than other media? While there are several plausible explanations, none have been systematically studied (although we have more recently examined some possibilities, see Wenger and Quarantelli, 1989). There is also a question at the more macro level of why gatekeeping, which works well for the mass communication system during normal times, is apparently less functional during the emergency time periods of community disasters.

7. There is the emergence of personalized media use in disasters.

In both societies the electronic media, particularly radio, was often significantly altered in one important aspect. It often became a very elaborate mechanism for interpersonal and not just mass communication. In Japan, thousands of personal messages about safety, location or concern, were broadcast. These were directed to specific relatives and friends of the victims. People would call radio stations with messages that were frequently aired verbatim. A similar pattern was observed in the United States, although to a lesser dramatic degree.

This is hardly the first time disaster researchers have noted mass media outlets being used for personal messages; DRC field researchers observed it as long ago as the Alaskan earthquake of 1963. But it is not clear what leads broadcasters to engage in a practice which is rather deviant in normal times; in fact, personal messages by the electronic media on an everyday basis are prohibited by law in the United States. Of research interest, too,

would be a content analysis of such messages and a study of how audiences use them.

8. There is little specific planning for disasters by mass media organizations.

In both Japan and the United States, planning on the part of mass communication outlets for disaster operations was relatively weak. It was not totally absent because a few media groups (especially certain larger organizations) had given some systematic thought to the coverage of major stories on disasters. But on the whole, the local organizational response pattern in the emergency time period of disasters either followed established routines or were emergent and ad hoc in nature.

Why do mass media systems generally not undertake planning for disaster coverage (for a comparison with the planning for civil disturbances, see Kueneman and Wright, 1976)? Even in those rare cases where there is systematic planning it is almost always focused only on one kind of disaster agent (e.g., hurricanes in some Southern communities or earthquakes in certain California cities). We would hypothesize that it is because most mass media organizations see themselves primarily as observers and reporters (their everyday view) of disaster occasions, rather than as possible victims or part of the responding community actors in the emergency. This seems a reasonable supposition, but the supporting empirical data for the idea does not currently exist.

9. Certain socio-organizational and technical problems typically occur in mass media coverage of disasters.

Since systematic disaster planning by mass media groups in both societies is limited, it was not surprising to find that the problems they encountered in covering stories were dramatically similar. Mobilizing media personnel and resources in both Japan and the United States was problematical. There were, for example, difficulties in both settings in finding higher level management personnel when the emergency developed. Disruption of telephone service generated similar kinds of technical problems for media operations. Communication difficulties arose in both societies due to the convergence of calls and requests for information from citizens. Altered and ad hoc decision-making in the media organizations occurred in both Japan and the United States, sometimes as a result of the absence of personnel or equipment.

It is difficult to see any common or differentiating dimensions in the difficulties observed. However, we would think further research could establish which problems would be likely to occur earlier than others and which are more difficult to solve or handle. In addition, all the observed problems seemed to be related both to the degree of (or lack of) mass media preparedness planning and the constraints created by the physical impact of the

disaster agent. (Some of these issues have been addressed in our more recent research, see Wenger and Quarantelli, 1989).

10. There are typical alterations and changes in mass media organizational structures and processes during disasters.

In both Japan and the United States there were alterations in the news gathering activities, in the news processing, and in the decision-making structures of the local mass media organizations. The everyday or usual patterns of assignment of reporters in the field, the allocation of resources, and relationships between editors and staff personnel were altered. Also, a "team approach" to newsgathering very strongly emerged in both societies.

Many new research questions are generated by these findings. Why is there a curvilinear relationship between size of the mass media outlet and changes in operations (see Friedman, 1987)? How are the alterations affected both by the media technology used and work time schedules of news organizations? In addition, it is not clear what the implications are from the observations of the more centralized activities at control points such as the news room and the more decentralized decision making undertaken by reporters in the field. This dialectic in decision making at different levels of an organization is not peculiar to the mass media area (see Quarantelli, 1985), but the consequences for what is done and what is produced by way of news stories have not been traced out (see also the ideas on this matter advanced in Sood, 1982, and Wenger, 1985).

While the above are the major similarities we observed, there were also others which for various reasons we could not document as well. For example, it seemed that in both societies the local mass media outlets were important in providing critical information wanted by the general public. However, the Japanese who more systematically studied this matter found that not all citizens wanted what was provided! Also, although the mass media systems appeared to provide the bulk of the warnings that people received of the impending disasters, in both societies some persons were never reached despite the massive dissemination of warning messages by the local mass communication system (see Ledingham and Massel-Walters, 1984).

Let us now turn to a discussion of the far fewer differences we noted in the mass media disaster operations in the two societies.

The Differences

There were some differences in how local and extra-community mass media groups even within the same larger social organization related to one another in the two societies. For example, in the

tsunami disaster in Nagasaki, extensive assistance was given to the local NHK television station by other NHK stations from different parts of Japan. As many as 95 staff members arrived from NHK headquarters in Tokyo and several neighboring stations assisted the local station in its local coverage. These mass media personnel brought with them 10 ENG cameras, four editing units, two ENG cars, three helicopters, and a facsimile machine that became a part of the resource base of the local station. Although network personnel often converge upon disaster areas in the United States and sometime utilize the facilities of local stations (well dramatized in the recent mass media coverage of the earthquake in San Francisco), they are present to generate stories for their network programs, not to help the local station in its coverage. This altruism on the part of the other units within the network is not found in the United States and is not likely to develop given the competitive work norms that exist in American society.

Also, the content of the disaster coverage disseminated by the national networks in the two countries somewhat differed. There are four time zones within the continental United States; all of Japan is within one time zone. One consequence at the national network level is that in the United States, except for some breaking stories, there is an effort to avoid current time references in a news story (e.g., to say that a hurricane will reach land at 10 a.m. is not too meaningful in the state of Florida which cuts across two time zones). The Japanese, in contrast to American journalists, do not need to update news stories that will be telecast three hours later on the west coast after their initial reporting on the east coast.

Finally, there are some legal differences that influence the operations of the mass communication systems. For example, NHK in Japan, in addition to its normal news gathering functions, has the legal responsibility of being a part of the emergency response system. The Meteorological Service Law, for instance, mandates that if the Japan Meteorological Agency issues a warning of weather conditions or of a tsunami, NHK must broadcast it promptly and exactly as the message was issued. Also, according to the Disaster Countermeasures Basic Law, NHK is identified as one of the public corporations for disaster mitigation; it is legally bound to gather and broadcast relevant information to the public at times of disaster. The commercial broadcasting companies and newspapers are not bound by these same laws. However, they voluntarily subscribe to them and attempt to play an important role in the emergency response.

Within the United States, however, there are no legal requirements that mass media outlets must participate in an emergency warning response, although obviously the majority do so. There certainly is no obligation to pass on warning messages exactly as they are issued by the U.S. National Weather Service: in fact, many radio and television stations use private weather

services or even their own forecasters. Furthermore, within the United States many mass media representatives do not view themselves as being a part of the community emergency response effort; they see themselves as being somehow outside the social system, and observing, chronicling, and evaluating its performance. In fact, disaster researchers have consistently observed that representatives of the local mass media are among the most difficult of all organizational personnel to convince and to get to participate directly in overall community disaster planning (Wenger and Quarantelli, 1989).

Accounting for the Observations

Why are there far more similarities than differences? Can our findings be extrapolated elsewhere? Clearly at most what we can say will have to be tentative.

Our general approach is that the similarities found have to do with the evolution of social institutions as these are sociologically viewed. Generally speaking, all the major social institutional systems currently in existence fall into one of two categories. On the one hand, there are the traditional institutions organized around such activities as family life, economic exchanges, religious worship, political power, etc. These social institutions have existed for a long time in human history. On the other hand, there are a set of social institutions which have only relatively recently evolved, such as those organized around activities like science, medicine, sports, etc. The mass media system is one of these newer institutions having evolved as a distinctly identifiable entity only this century (see McQuail, 1984; Wright, 1986; DeFleur and Ball-Rokeach, 1989).

Apart from the time of their origins, the traditional and newer social institutions differ in how much they are specifically culturally bound. The older or traditional institutions tend to reflect the specific sociocultural settings in which they are embedded. But the newer or more recently evolved ones are less culturally bound. A heart transplant operation, a chemical experiment, a soccer match will be generally undertaken in the same way irrespective of whether it takes place in China, Chile, Iran, Libya, Romania, South Africa, or any society elsewhere in the world. On the other hand, for example, the political institutions may be superficially similar but fundamentally different depending on the country involved (e.g., almost all nations everywhere have a representative form of governmental legislative structure, but few would argue that all are real democracies).

Our basic thesis is that the mass communication system is one of the less culturally bound of all social institutions. We are not alone in this view. The point is well made by Jacobson and Deutschmann who write:

Journalism has idiosyncratic tendencies in various countries, but these are more than outweighed by the common usages of the profession. The announcer on the Nigerian Broadcasting Company network has a different audience in the village of his country from that of the announcer in...Chile, but much of the techniques and content of broadcasts in their two countries are startlingly similar.

Cinema from the great producing centres in the United States...the USSR, the United Kingdom, India, Japan, France, and Italy is likely to find an outlet in any countries of the world. And when a public event of world-wide importance occurs, such as the projecting of a human being in a space vehicle into orbit around the world, or the detonation of a nuclear device, there are few places where the news does not penetrate quickly.

The authors note that the similarity of patterns includes certain aspects of the audiences and contents as well as the communicators.

Not only is the basis for the network already established, but the responses to the communication media have come to assume common patterns. There are certain segments in society that have greater access to communications than others. The various mass media seem characteristically to have accepted a division of labour in the spread of information that crosses national and cultural boundaries.

Necessarily, all of these phenomena occur in conjunction with a standardization of the content of communication so that there is neither the variety nor the unique flavour in subject matter that would be expected from the immense diversity of peoples. Partly because of the history of the professional training in mass media techniques, and partly because of the organization and interrelationships of the great news agencies, what is news in London seems also to be news in Buenos Aire (1962: 151-152).

If the above is true, it is not surprising that we found far more similarities than differences in the mass communication system operations in disasters in Japan and the United States. There are undoubtedly many sociocultural differences between the two societies, but the mass media systems in both--as one of the more newly evolved and culturally independent social institutions--transcend those differences. If our study had been of the social institution of religion, we would have expected the reverse finding.

Of course, our general hypothesis needs considerable testing. We need to build on the handful of cross-societal studies done so

far in the disaster area (these are summarized in Dynes, 1988). Cross-societal research is difficult and fraught with problems and difficulties (see Quarantelli, 1979) but as our study has shown it cannot only be done, but the findings can be significant.

We would also suggest that the study of mass media in disasters ought to be better integrated with the research done on other disaster topics. For example, a number of the problems of mass media groups in disasters seem to be quite similar to the problems faced by most other emergency-relevant organizations (see several of the articles in Dynes, De Marchi and Pelanda, 1987). There very well may also be aspects unique or distinctive to the mass media area, and these too will have to be empirically established. These kinds of possible similarities and differences cannot be determined by speculations or popular beliefs but only by research. It is perhaps not unimportant to note that when we started the research reported in this paper, our speculative feeling was that we would find more differences than similarities. However, as we have indicated, the study findings strongly point in the opposite direction.

Some Other Implications

While a number of implications of our work have already been noted, we want to make explicit three major ones of a policy nature. They have to do with: (1) the consequences of the fact that common mythologies around the world about human and social behavior in disasters are partly rooted in news reporting; (2) how institutionalized built in social structural and cultural arrangements make any changes in disaster reporting very difficult; and (3) why disaster reporting in developing societies as well as those in non Western industrialized and urbanized societies is likely to develop in the same direction as we found in Japan and the United States.

Researchers outside of the United States and Canada have independently arrived at similar conclusions about popular and to some extent official beliefs about disaster behavior (some of the studies are reported in Drabek, 1986). For example, in almost all societies it is widely believed that human beings do not react too well in the face of major disasters; that they will panic, engage in anti-social behavior such as looting, psychologically break down, abandon work roles in favor of helping family members, etc. These and similar beliefs, systematic social science research everywhere has found to be primarily "myths", that is, widely and strongly held beliefs that have little standing in the empirical data brought to bear on the matters by social science disaster researchers.

From whence come the myths? Among obvious major candidates are mass media accounts of disasters (Kreps, 1980). While the relationship is a complex one and disaster reporting is far from

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being totally inconsistent with research findings, it does appear that the media do perpetuate the myths (see for disasters in American society, Wenger and Friedman, 1985; Fischer, 1989 and for those elsewhere see, e.g., Blong, 1985; Bolduc, 1987). This tendency partly stems from the use of a command post perspective, the diminution of the gatekeeping process, and the other findings we have reported. To the extent that mass communication systems elsewhere are similar to those in Japan and the United States in their reporting of disasters, they reinforce the myths.

However, it is important to note that as anthropologists have long noted, myths are not necessarily or always dysfunctional, i.e., have negative consequences. Our point is not that mass communication systems somehow are responsible for negative consequences as a result of their reporting, but only that they do reinforce mythological beliefs about disaster behavior. The question of the functionality or dysfunctionality of myths is another matter and it is possible to suggest instances of the former as well as the latter. But from a policy viewpoint it is first necessary to establish if the mass communication system do support mythological beliefs; we think this has now been done. So it follows that the consequences should be examined. Thus, the next step is to see in what ways the myths are functional and/or dysfunctional (some research hypotheses are provided in a similar parallel effort to ascertain the functionality and dysfunctionality of a command post perspective, Quarantelli, 1985). We might hypothesize the consequences are more negative than positive, but that should be systematically and empirically established (as has partly been done for everyday television news by Altheide, 1976; see also Fishman, 1980).

Another policy implication of our research is that it will be very difficult to quickly institute any significant changes in mass media reporting about disasters (assuming that it would be desirable to do so in some degree). The reason is simple: the reporting process in disasters is mostly a reflection of the very social structure of mass media organizations and of the subculture of the world of journalism (as is also true of everyday reporting, see Epstein, 1973; Tuchman, 1978; Ettena and Whitney, 1982). The reporters, editors and other staff members involved in news gathering have been socialized into a work world and occupational subculture. They are not operating outside of some social setting. Just the opposite, they are following the framework of their world which they have learned as a result of becoming members of mass communication organizations.

Social structures and subcultures of course are not static, and changes can be brought about in both. But alterations in the disaster reporting of journalists in the field today will not be significantly altered by just telling them of the existence of disaster myths or that they should follow different procedures in their coverage of disasters. Journalists will only consistently

act differently if they are socialized or resocialized into different behavior patterns.

This in turn requires structural alterations in mass communication organizations and in journalistic subcultures. For example, changes in disaster reporting could follow if, as a result of preimpact planning, there was a strengthening rather than weakening of organizational gatekeeping during the emergency time period. Similarly, there might be alterations in emergency time reporting if, in the curricula of journalism schools, some negative consequences of disaster myths were systematically taught such as officials failing to issue warnings about threats because of a mistaken concern about generating "panic". Likewise, changes in reporting could result if journalistic norms and values stressing speed of reporting and "beating the competition" were downplayed for those emphasizing accuracy and gaining a reputation as a legitimate source--in more popular terms, a New York Times rather than National Inquirer approach. These are merely examples of possible ways of trying to influence the structures and cultures within which journalists operate (for other possible examples see Wenger, 1985). Without such changes the existing institutionalized social and cultural patterns will continue to guide reporters and editors in their reporting of disasters.

Finally, to the extent that what we have seen in Japan and the United States is typical of Western ideas of mass media operations generally and in disasters specifically, it suggests what the future could bring on a more world wide basis. We might anticipate that disaster reporting in developing countries will more and more resemble that which we have observed in our study. This projection is based on the assumption that the mass communication systems in Western developed countries will provide the model for societies elsewhere.

Now the role that a national mass communication system should play in the transmission of "news" is of course a highly controversial matter at the international level. It is currently the basis of considerable dispute between many developed (primarily Western democracies) and developing countries and was also at the heart of sharp divisions regarding mass communication issues as these have been dealt with by UNESCO in the last two decade (for some of the issues see McQuail, 1981). This paper has no intention of addressing this divisive issue or forecasting how it might be resolved. But if for purposes of discussion we assume the mass communication systems of developing societies continue to develop towards a Western type model, it follows that their disaster news reporting will come to resemble that which occurs in the West and presumably as illustrated by what we found in Japan and the United States. There is the same implication for non Western type urbanized and industrialized societies such as in Eastern Europe as their mass communication systems is likely to become freer of governmental control in the 1990s.

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