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REPORT ON JAPAN-UNITED STATES SEMINAR ON
ORGANIZATIONAL AND COMMUNITY RESPONSES TO DISASTERS

by

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Since the end of World War II, social science research into natural disasters has emerged as a field of study. The bulk of this research is concentrated in two countries: Japan and the United States. Several years ago, initial contact was made between the two major groups involved, the Japanese scientists working with Prof. Kitao Abe of the Tokyo University of Foreign Studies and the American scientists working at the Disaster Research Center at The Ohio State University where Prof. E.L. Quarantelli is Co-Director. The result of the first contacts between Prof. Abe and Prof. Quarantelli led to an effort to exchange information about past research in both countries and a desire to see if joint or cooperative research could be undertaken in the future. The conclusion from these early contacts was that a common meeting of American and Japanese scientists would be a very fruitful way to synthesize past research and to plan future research. Consequently, support was sought and obtained from the National Science Foundation and the Japan Society for the Promotion of Science, to hold a five day seminar at the Disaster Research Center at The Ohio State University in Columbus, Ohio of the major social scientists in both countries engaged in disaster research. This paper summarizes the themes and conclusions of that seminar meeting held from September 11 to September 15, 1972.

Ten Americans and eight Japanese participants presented formal papers at the seminar (see attached list for titles). Half a dozen other Americans, almost all with some disaster research experience, attended as observers. In addition, one of the few Canadian social scientists with field research experience in the area attended as a third nation observer.

The first day was spent primarily in an effort to examine the history and current status of social science disaster research in the two countries. American research, triggered by post World War II concerns over possible nuclear war, started in the early 1950s. The hope was that lessons learned from peacetime disasters could be generalized to a wartime situation, an assumption which has been questioned. For a decade the work, although carried out primarily by sociologists, had an almost exclusive social-psychological emphasis, with the prime unit of analysis being the individual victim. In the 1960s, chiefly as the result of the formation of the Disaster Research Center (DRC) at The Ohio State University, research became focused on group aspects, i.e., on emergency organizations in a community context. Field research which in the early years concentrated almost completely on post-disaster responses, in recent years has looked also at pre-disaster preparations and planning. Up to the present time, with funding primarily provided by a variety of government agencies (but especially the Defense Civil Preparedness Agency and the National Institute of Mental Health), about 200 field studies have been carried out with about half of these being conducted at DRC since 1963.

In Japan, systematic social science research started in about 1961 and has increased somewhat in recent years. Almost all of the Japanese research has focused on earthquakes, in part because funding for such efforts has been provided by the Metropolitan Police Board of Tokyo which has a prime interest in that kind of disaster agent. Most of the research has been done by psychologists using survey methods (with some surveys including 9,000 to 10,000 households). Although three field studies of actual earthquake disasters have been conducted, yearly surveys since 1965 have focused on individual pre-disaster knowledge and expectations, planning and preparations, mostly in the Tokyo area.

During the seminar discussions and in post-seminar reflections, it became clear that there are some major contrasts in the history of disaster research in the two countries. Whereas the American research at least in the last decade has primarily focused on group or organizational aspects, Japanese research from the beginning has almost exclusively dealt with individual reactions and responses. The bulk of the researchers in the United States have been and are sociologists whereas in Japan psychologists have predominated by far. American research has depended heavily on case studies and usually qualitative field methods. Japanese research has been of a more quantitative nature depending as it does on surveys of samples of the general population. The research in the United States has covered the range of possible disaster agents from natural to man made, but in Japan only earthquake-associated phenomena have been studied. American research has focused heavily on post-disaster response whereas Japanese research has concentrated more on pre-disaster expectations.

However, it was noted during and after the seminar that there are also some similarities in the past research effort of the two societies. Research funding has not been abundant and has generally been supplied by government agencies with practical problems rather than basic research in mind. A great number of important research topics in both societies have remained totally unexplored and it is clear that the empirical work undertaken so far has not always been as directly linked to theoretical guidance from the social sciences as would be desirable. There has been almost no coordination of the social science effort with any of the far more substantial and extensive research being undertaken in the disaster area by physical scientists and engineers both in the United States and Japan. Interdisciplinary disaster research has not actually been undertaken on any scale in either country, although a variety of disciplines have been involved.

On the second day, at the request of the Japanese, the research being carried on in the United States was discussed. One session was given over to specific research reports, another to more theoretical statements. An effort was made to obtain some diversity of views, but since the overwhelming bulk of the current and recent research in the United States is by DRC trained personnel, the overall perspective presented was relatively homogeneous.

The empirical research reported spanned the range from studies of communities through organizations to families. The report on community studies focused around the concept of disaster subculture, an idea that all American disaster researchers with field experience have found to be a powerful tool for analysis. It was a concept, as later formal and

informal discussion revealed, that some of the Japanese participants thought might be of considerable value to them. That organizations change relatively little as a result of disaster experience was the theme of another empirical report, but some important qualifications regarding this point were noted in this and later sessions. Some very specific and detailed findings concerning the impact of disasters on families resulted in the presentation of the most concrete hypotheses advanced during the seminar. In later sessions the question was raised if such kind of hypotheses could be the basis of a joint cross-cultural research effort.

The theoretical material attempted to go from a discussion of emergent phenomena to organizational responses in different kinds of community emergencies to a model of community coordination through a discussion of societal level problems in disasters. Much of the discussion here, which spilled over into later sessions, revolved around the value of considering natural disasters as only one kind of community crisis and whether other events such as civil disturbances could be seen as part of a more generic class of emergencies. A general conclusion was that while from a theoretical point of view this was probably a valid way of considering the issue, practical and political considerations in both Japan and the United States inhibited the study of civil disturbances far more than they did research on natural disasters.

There were some problems with the American presentations on the second day. The legal/political and general pattern of organizational response to disasters in the United States was initially assumed rather than explained. Since along some lines there are sharp differences in

the two societies in these respects, this oversight created problems of communication. An effort to remedy this difficulty in the middle of the seminar by a straightforward factual description of the typical American response with respect to legal, political, and organizational matters, was only partially successful. Also many of the American papers were too heavily jargonistic using many sociological and social-psychological terms unfamiliar to non-sociologist non-Americans. Along some lines, this problem pointed up the lack of a standardized social science vocabulary around the world. Finally, the papers presented by the Americans perhaps elaborated too much detail so that the major points of the research conducted in the United States did not stand out as sharply as they should have. In retrospect, there was the feeling among some Americans that while the general thrust of the American research effort was well depicted, some of the more substantive conclusions and established findings were only partly communicated.

The third day was taken up with presentations by the Japanese participants. As in the case of the earlier American sessions an effort was made to present research reports first followed by more theoretical statements. Likewise, as in the American case, the point of view set forth was relatively homogeneous as almost all the American participants had worked as part of one general team on disaster research.

The initial research report was on rumor behavior in the aftermath of a disaster. The ensuing discussion in the seminar concluded that the picture presented regarding rumors was quite similar in Japan to what had been observed and reported in American society. Another

report covering three Japanese studies of immediate response to disasters noted similarity of response in the different situations. Again, the general response pattern of individuals did not appear to be drastically different from that uncovered in earlier studies in the United States. The last empirical report dealt with a pre-disaster study regarding expectations of response in a possible earthquake. Considerable discussion revolved around the conclusion that the Japanese sample projected on to others more dysfunctional behavior than they projected for themselves if they were to be involved in the same situation, and led to speculations about possible cross-cultural differences in the findings.

The theoretical papers of the Japanese participants dealt with the nature of community associations in Japan and their historical relationships to local crises, the attitudes of the population toward emergency organizations, and the possibility of developing a stochastic mathematical model for the analysis of rumor transmissions during a disaster. Considerable discussion centered on the issue of whether community associations in Japan were the counterpart of local organizations in the United States and the implications of this for disaster planning and response. The general conclusion was that there were some major differences in the two societies along this line, with the full significance being unclear until some cross-cultural research and analysis on the point is undertaken.

The American participants were impressed by the previously unknown to them extensive nature of the Japanese research, even though it appeared exclusive reliance was placed on survey methods. The

research in Japan was also seen as perhaps having more direct practical applications than most American studies, even though it did not appear to be strongly guided by social science theories. As in the case of the American presentations, initial discussion of some topics was handicapped by the American lack of familiarity about socio-political and organizational responsibilities in Japan for disaster planning, preparations, and response.

On the fourth day the seminar turned to an examination of cross-cultural research in general and associated problems, and to the issue of cross-cultural studies of disasters. Papers were presented by both American and Japanese participants. However, these sessions compared with the previous ones went far beyond the reading of formal papers and involved far more discussion.

Several different points of view about cross-cultural research in general were advanced. One major theme was that there were special problems in such kinds of research and even more specific difficulties in disaster research. The implication of this was that a special methodology is needed. A contrasting point of view was that cross-cultural research in almost any sense of the term is not different in any important way from research in general, and that disaster research posed no special problems. Although there was very extensive discussion, no definite conclusion was reached on the issue, but the general view was that while there are a number of definite practical problems to be overcome, there are no fundamental obstacles to cross-cultural research in the disaster area.

The last half day of the seminar involved setting up two panels, each having Japanese and American participants. One panel was to deal with possible pre-disaster research; the other with post-disaster research. Each was asked to address itself to a set of specific questions and to make recommendations for possible future research and joint activities by the social scientists of the societies involved. Among the questions each panel dealt with and answered were the following:

(1) What should be the object of study? The general answer was that the focus initially ought to be primarily on natural disasters and only secondarily on technological disasters such as air pollution. For a variety of reasons, there was general consensus that social science studies of typhoons/hurricanes would particularly lend themselves to cross-cultural research.

(2) What methods should be used? The panels felt that in part this depended on the research questions for which answers were sought. But there was also the feeling that if possible, quantitative techniques ought to be employed and that these would pose no particular problems in cross-cultural research for some specific research techniques are widely diffused among social scientists around the world.

(3) What questions ought to be asked? There were divisions on this in both panels cutting across national lines. Some participants felt research questions should be derived primarily from general social science theories. Other participants took the position that practical problems of disaster agencies and emergency planners ought to be the starting point for any research effort. There was general agreement

that cross-cultural research could not be undertaken without some agreement on this point by the potential researchers involved, and that in the long run, the most fruitful payoff, regardless of the starting point, was to be obtained by the development of basic and fundamental social science theory.

(4) What level of explanation should be sought? While there was general agreement that interdisciplinary explanations and analyses were desirable, doubt was expressed about the practical possibilities of such efforts. Some participants felt only explanations within a given disciplinary framework were achievable. A practical compromise solution was suggested that some specific disaster problems, such as those associated with the issuance and receiving of warnings, lend themselves to analyses and study from a variety of different disciplines. Again, the different viewpoints cut across national lines.

(5) What should be the nature of any cross-cultural research effort? A variety of different answers were advanced. At one end was the notion of a fully integrated joint team of social scientists from Japan and the United States studying together disasters in both societies. At the other end was the idea that agreement could be developed among Japanese and Americans to study roughly the same topics in their respective countries, and that possibly some understanding could be achieved about asking somewhat the same kinds of questions. In general, the opinion seemed to be that while there were some practical problems involved, their solutions were not that difficult if support could be obtained for studies and if careful planning ahead of time were undertaken.

A general overall conclusion was that while this seminar led to considerable exchange of information about disaster activities in the two countries, and gave insight into theoretical and practical problems of disaster research in the two societies, additional time and thinking are necessary before an actual cooperative effort between Japanese and American social scientists could be initiated. Thus, it was recommended that a second seminar be held. Its agenda should encompass the steps necessary for the actual development of possible joint and/or common research designs now that the necessary background information has been filled in for interested parties. The seminar concluded with an agreement that the two groups of Japanese and Americans would intensify information exchange among themselves, that attempts would be made to involve in such exchanges other researchers in other societies in the disaster area, and that each group would press within their respective countries for the development of further cross-cultural contacts and research. The Disaster Research Center at The Ohio State University agreed to try and act as a central clearing house for the internationalization of social science disaster research. The Japanese indicated that they want to host the next meeting in Japan.

LIST OF PAPERS PRESENTED

- Dr. Kinichi Machida, Research Director, Metropolitan Police Board, Tokyo, "Study and Research in Japan."
- Dr. E. L. Quarantelli, The Ohio State University, "Study and Research in the United States."
- Dr. Dennis Wenger, University of Delaware, "DRC Studies of Community Functioning."
- Dr. William Anderson, Arizona State University, "DRC Studies of Organizational Change."
- Dr. Thomas Drabek, University of Denver, "A Study of Family Responses in the Topeka Disaster."
- Dr. James Taylor, Menninger Foundation, "An Approach to the Analysis of Emergent Phenomena."
- Dr. George Warheit, University of Florida, "Organizational Differences and Similarities in Disasters and Civil Disturbances."
- Dr. Jack Weller, Franklin and Marshall College, "An Interorganizational Coordination Model."
- Dr. J. Eugene Haas, University of Colorado, "Research on the Socio-Economic Impact of Geophysical Hazards in the United States."
- Dr. Kitao Abe, Tokyo University of Foreign Studies, "Rumor Analysis in the Niigata Earthquake."
- Dr. Hideaki Ohta, Toyo University, "Evacuating Characteristics of Tokyo Citizens."
- Dr. Taketoshi Takuma, Tokyo Metropolitan University, "Immediate Responses at Disaster Sites."
- Dr. Ritsuo Akimoto, Waseda University, "Power Structure of Local Government in Emergencies."
- Dr. Kazuo Shimada, Sacred Heart College of Tokyo, "Community Organizational Principle for Volunteer Activities in Emergencies."
- Dr. Yasushi Taga, Shizuoka University, "A Probability Model of Rumor Transmission."

Dr. Russell Dynes, Ohio State University, "An American Perspective on Cross-Cultural Research."

Dr. Takao Sofue, Meiji University, "A Japanese Perspective on Research."

Dr. John Clark, University of Minnesota, "A Non-disaster Perspective."

Dr. Will Kennedy, San Diego State College, "A Disaster Perspective."

Dr. Takao Sofue, "The Japanese View."