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THE SOCIO-CULTURAL AND BEHAVIORAL CONTEXT  
OF DISASTERS AND SMALL DWELLINGS

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## THE SOCIO-CULTURAL AND BEHAVIORAL CONTEXT OF DISASTERS AND SMALL DWELLINGS

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Social scientists are often at a disadvantage in interdisciplinary conferences for several reasons. Some of those disadvantages relate to the role which others perceive they should play and other disadvantages relate to style of presentation. First, in reference to style, social scientists, in general, do not use slides and other visual imagery in their presentations. The reasons for this are not clear. I have observed, however, that ineptness with slide projectors is rather universal and not discipline related. But slides do provide a sense of "hard" reality to audiences when words seldom do. Therefore, slides give the audience a sense of apparent truth which perhaps is not deserved. I am not suggesting that pictures distort truth, although they can, but I am suggesting that they can capture well physical reality but reveal little of social reality. Certainly, here, attention to construction details, to aesthetics, to physical layout are important but there needs to be a reminder that a small dwelling is not just a structure - a house, but it is also a home. Being a home makes it in the location of family relationships, of generational ties, of socialization of children, and of the construction of meaning. These aspects are seldom seen on slides but that does not mean they are not important. They are, and perhaps those dimensions are more critical to restore after disasters than are broken roofs. Furthermore, slides of small dwellings often do not convey the linkages to the social reality of the large human

community. This often can be inferred by examining the background of the slide. But the human community is more than incidental background. The fact that such social reality is not easily portrayed does not mean that it is not critically important.

Other misunderstandings can arise concerning the appropriate role of social scientists in understanding disaster related issues. It is often assumed that social scientists are defenders of "people". In most discussions, people are "problematic" to disaster mitigation, preparedness, response and recovery. Given that assumption, there is the underlying premise that if social scientists could only solve the "people" problem, all else would be right with the world. Innovative technological schemes could now be implemented with considerable ease and these schemes, in the long run, would benefit the "people" even if they do not know it.

These rather persistent images underplays the contributions that social sciences can play in understanding disasters. While disaster can be studied in a number of ways, at its core, disaster means "social" disruption. That social disruption is only partial and somewhat incidentally related to damage to physical structures. Today, of course, we have a number of measures of physical agents and impacts. We can measure wind speed and direction. We can measure storm surges and flood stages. We have Richter and Mercalli scales to measure earth movements. We can do body counts and catalog injuries as well as delineate "injuries" to building structures and

other environments. When we measure all of these dimensions, none of them capture the most important impacts on social life. We have no good measures of broken social relationships, created by death, injury or relocation. We have few clues as to the costs of disrupted work patterns and their accompanying economic losses. We have no good measures of the consequences of the segmentation and disorganization of community life, nor do we even attempt to measure the costs of delayed and disrupted futures. In effect, all disasters are failures on the part of human systems where the physical infrastructure fails to protect people from conditions which threaten their well being.

#### ON THE IMPORTANCE OF UNDERSTANDING THE SOCIO-CULTURAL CONTEXT

By suggesting that "disaster" is, in effect, social disruption, this does not imply that if we could adequately measure that social disruption, there would be simple and effective solutions to "disaster problems", including that of post impact housing. But it does imply that the social sciences can provide one kind of understanding of disaster and to housing issues. Some of those understandings will, in fact, raise complicating questions about the implementation of certain "technological" and engineering solutions. For example, certain disciplines may ask the questions "How do we construct dams to make them stronger to protect flood plains?" while social scientists might pursue

another question "What are socially useful ways to use flood plains?" Obviously, these questions lead to quite different answers. At times, social scientists might contribute to changing the question to get more productive answers. For many years, agencies which monitor hazards have expressed puzzlement as to why people do not heed their warnings. But in recent years, certain agencies have made considerable progress when they reframed the questions in the following way "How can we, as an agency, issue warnings that people will heed?". Such agencies, then, have expanded their role to be concerned with risk communication, public understanding and message content, as well as increasing the accuracy of their monitoring through better technology.

In certain instances, the importance of the socio-cultural context is obvious but the solutions to problems of less developed societies is often assumed to be "development" and in particular the diffusion of appropriate technology. For example, disaster mitigation efforts in many developed societies have often focused on zoning restrictions and on the development of building codes. But in most less developed societies, the most disaster vulnerable areas are squatter communities, surrounding urban areas, populated by rural migrants drawn to marginal employment opportunities in the city. Given that situation, should rural reconstruction and land reform be seen as the major disaster mitigation strategy? Should building codes be enforced only among land owners and land lords? Or should conventional Western efforts of disaster mitigation be given low priority in the development scheme of others? After all, in

areas where there is major flooding on a fifty year cycle, what mitigation strategies should be implemented in population where the life expectancy is 40 years? These are difficult value questions which can be solved neither by infusion of technology nor by conceptualizations of social scientists.

On the other hand, the social sciences can contribute to understanding why "good ideas" often do not turn out so well when introduced in other societies. Disaster impact is often used as a rationale for the relocation of towns and villages to safer ground. Therefore, aims of disaster mitigation can be achieved combined with improvements in housing. Such projects are seen by their donors as contributing to "development" and to disaster mitigation, since they utilize construction techniques which make housing more disaster proof. Unfortunately, many such projects are less than successful in creating new communities. We know much about building houses but we know much less about building viable communities. What donors see as new communities are usually only collections of new houses, populated by people torn from their previous social networks. Donors are willing to repair structures but not to repair social networks. It is true that, in certain instances, communities develop from collections of new housing but generally only after the planned community is replanned by the residents. Donor generosity, in fact, can delay "recovery" since disaster recovery, in the final analysis, means that the social networks have been repaired. Speeding the repair of those social networks might be given the first priority in disaster recovery,

although most donors would not consider such an option concrete enough.

In the long run, social sciences will not be able to provide pat answers to problems such as these but it often can provide insight into why technically adequate solutions "fail" and how failures might be changed into "successes". In addition, the social sciences can point out how technological solutions to disaster vulnerability can also disrupt socio-cultural systems. Development projects, such as dam construction intended to increase energy and decrease floods, have resulted in extensive social costs, destroying established communities with little effort to maintain their social viability.

Ultimately, the contributions of the social sciences may be greatest in sharpening the debate on political solutions and on the direction of public policy. This does not imply an automatic rejection of technological solutions to disaster related issues, but points to the fact that the implementation of any solution takes place within a specific, political, economic and socio-cultural situation. Understanding that situation requires the contributions which the social sciences can make.

#### ON THE LIMITS OF CULTURAL VARIABILITY

One of the areas where the social sciences has contributed to important public understanding is the notion of cultural variability. This is an important insight to

overcome the eurocentric view which claimed "civilization" to be the central expression of "developed" societies compared with the rest of the "primitives". Certainly the understanding is important that there are many possible patterns of behavior and these had to be understood and value within their own system of evaluation, collectively called culture. On the other hand, that understanding has often been pushed to the conclusion that there are no similarities, or perhaps no universals between and among societies. Given that view, it is impossible to generalize about behavior across societies and thus the social sciences are only valuable in identifying the diversity of behavior but have nothing to contribute to understanding processes across societies.

Dealing specifically with disaster behavior, there has developed, within the last 40 years, a considerable volume of social science research, most of it, of course, in industrialized countries and much of it in the United States. (For a useful summary, see Drabek, 1986.) In examining that research, one is struck with the similarity of behavioral response to risk, to warning, to the emergency itself and to recovery. At the level of individual and family response in all societies, there is striking continuity. On the other hand, cultural differences are most frequently revealed in terms of the organizational structure and the political structure. Some societies are rich with community organizations which can deal with disaster; others are not. Some societies assume a helplessness and dependence on the government; others do not. Some societies expect a diffuse and decentralized decision making system; others reflect a



centralized and direct governance. For some societies, a disaster is a problem to be solved; for others, it is an opportunity to replace the problem solving structure in the society. In some societies, disaster response and recovery is an individual and private affair; in others, it is a corporate and governmental task.

The reason for raising this issues here is that, in thinking cross societally about disaster behavior and response, there is often a tendency to see the major contributions of the social sciences as having the intellectual tools and concepts to explicate cultural differences. It is argued here that there is great similarities in the social processes centering on the reaction of societies to disaster. The primary variations rest at the difference in social structure. Those differences can provide considerable understanding as to improving the social adaptability in all social systems.

#### ON THE INTERNATIONAL DECADE

The critical importance of understanding the socio-cultural context of disaster is especially important for the near future. The decade of the 90's has been identified by the United Nations as the International Decade for Natural Disaster Reduction (IDNDR). This calls for a worldwide effort to mitigate the effects of natural disasters and to reduce the vulnerability of human communities to destructive environmental forces. Such an effort internationally will have its counterpart in various national states

to provide a focus on efforts to reduce the negative consequences of disasters. To reach that important goal, it will be necessary to utilize all branches of knowledge, including the social sciences. In many places, much of the initial effort has been directed toward the development of new technologies which it is claimed will contribute to greater social and economic development. Development efforts carried out without regard to environmental consequences can expose human systems to even greater disaster vulnerability. Resources spent on costly technological solutions can draw scarce resources away from equally effective and less costly solutions. For example, investment in warning system may be directed toward the purchase of advanced electronic equipment rather than on the development of messages which can be understood and heeded. In any event, the International Decade does have the potential for focus both governmental and scientific attention on the reduction of the effects of natural disaster. It can lead to technological innovation and to social invention. But social invention is likely to have greater and longer lasting consequences.

#### REFERENCES

Drabek, Thomas E., (1986) Human Systems Responses to Disaster: An Inventory of Sociological Findings, New York, Springer-Verlag