Alan Taylor

"ASSESSMENT OF VICTIM NEEDS"

Paper Presented at a Conference

Disasters and the Small Dwelling

Oxford Polytechnic, Oxford, England

19 - 21 April 1978

Only Part of This Paper Will Be Delivered

at the Oxford Conference,

Disasters and the Small Dwelling

The Longer Text Is Included

for Those Who Would Like to See

A Fuller Treatment of the Subject

INTERTECT
P.O. Box 10502
Dallas, Texas 75207
U.S.A.

(214) 521-8921

INTRODUCTION

In this paper I propose to review the difficulties which rich-world relief organizations encounter in attempting to assess the needs of disaster victims in poorer countries of the world. After describing some problems and distortions which enter upon the assessments of need as a result of physical and cultural distance, we will look at the questions of data-gathering and the distribution of needs over time. The final part of the paper deals with some practical and definitional problems in agreeing on what need is, or should be.

USUAL METHODS

Assessing and interpreting need are steps prerequisite to any relief operation. Yet these processes are ill-defined and in practice often haphazard. Sometimes need is described as a simple lack of a commodity or facility thought to be required by victims — food, housing, medical care, etc. But more usually the need is expressed in terms of what the defining agency believes it can do in response to the situation. Thus the "need" becomes one for a particular type of food, a particular type of medical response -- usually curative rather than preventive, and for a particular type of house built in accordance with the agency's perceptions of what is desirable and what is possible.

ORGANIZATIONAL TRADITION

In any case, the needs which each relief organization understands and is willing to identify depend very much on the history and tradition of that particular agency. Traditional prescriptions for action are embodied in the philosophy, experience, organizational structure and sources of funding of each agency. The availability of a certain

type of resource speeds decisions in that direction. An agency staffed by medical personnel is likely to perceive problems in injury and ill health; an agency staffed by architects and engineers will see needs in emergency shelter and rebuilding; and an agency with access to government surplus food for distribution will see needs in feeding. In some instances, these patterns are so ingrained that, irrespective of any objective assessment of need or even of the express wishes of the local government, stereotypical responses are immediately triggered by news of a disaster event.

THE TRAP OF INAPPROPRIATE AID

Once relief or reconstruction aid programs have been launched, they tend to take on a momentum of their own. It may be next to impossible to modify or abandon a program in accordance with insight obtained en route. The reasons for this are several. It may be difficult to retool with more capable staff once those more readily available are in place. There may be pressure to follow up earlier investments with more funds so as to ensure that the initial allocations are not "wasted." It may be thought desirable to meet a public image or to fulfill promises, or apparent promises, made in the early stages of the operation. And finally, the simple inertia which any program carries makes for extra work and tedium in communicating the changes to the potential beneficiaries and others involved in the management of the program. The greater the resources attached to the program, the more difficult it is to admit that it was not the best plan which was approved.

STEREOTYPES AND EXAGGERATIONS

Yet standard prescriptions for action are rarely the best means for achieving the desired ends. If stereotypical solutions to inadequately understood problems do bring benefits, they do so by chance. By assuming that disaster victims' problems are self-evident and by expressing problems in terms of their perceived solutions, many other useful options are passed over. The resulting assistance is therefore far less valuable to recovery than it might otherwise be. Closely related to this, there is a widespread tendency among relief agencies to exaggerate the effects of a disaster and to minimize the ability of local people to cope with it. Exaggerations and misunderstandings of need, which are based on incomplete, biased, or unclear perceptions of the situation, have produced ineffective, wasteful, and sometimes counterproductive programs of aid.

Although the aid given may represent a rational ordering of priorities in terms of the donor agency's own values, each disaster community has its own unique needs, priorities and preferences, as indeed does each family and each victim. The important thing is to ensure that stereotypical or self-interested ideas of response do not dictate the problem to be addressed. An approach should be used in data-gathering which is therefore as open to influence by the victims as it is to that of the helpers.

There are a number of distortions which arise in the assessment of victim needs and which are directly traceable to cultural ignorance and ethnocentrism.

ISOLATION OF DONORS FROM VICTIMS

The first danger which besets would-be helpers from outside the disaster-affected community, is the tendency to assume that the victim culture which they are dealing with is homogeneous. The further removed the helpers are from the recipients, both spatially and by virtue of social and cultural differences, the less familiar are the helpers with the recipients' way of life. The greater difficulty is therefore experienced in distinguishing the differences in social structure, temperament, norms and values, which are relevant to the planning of an acceptable program of aid. In particular, attitudes toward honesty and public duty are important variables. Program norms which demand a degree of honesty on the part of the beneficiaries are not helpful in a society where the securing of one's own advantage at the expense of another is commonplace. The degree of previous contact which the community has had with the outside world -- often dependent on the existence of a road -- is also a guide to the way in which a relief program will be greeted. A program which attempts to blanket a culturally diverse area with one particular solution while taking no account of the cultural differences, can be expected to fail in at least some part of the area served. What is appropriate for a traditional culture may not be sophisticated enough for a more complex culture, and vice versa.

IMPORTANCE OF LOCAL REPRESENTATION

Following on from these observations, it can be appreciated that a factor of importance in determining the quality of intelligence information on post-disaster needs, is whether or not the donor institution has a representative on the local scene who is knowledgeable of, and accepted as

part of the community. The social network within which the donors operate and the social network within which the victims operate do not usually overlap. But it is at the interface between these two networks that the chain of relief makes connection with the need. The points of contact which are selected both in the donor agency and in the recipient community are therefore of crucial importance. Through its representative the relief agency must not only be able to identify needs which are in excess of the normal, but must also be able to identify the attitudinal, social and organizational obstacles which can impede the delivery of assistance. Only residence in the area, time, and a high degree of personal and cultural sensitivity can equip an agency's representative with both the personal contacts and the social understanding which enable his organization to mount a locally acceptable program of relief. The agency's ability to establish a free two-way communication with the recipients is therefore a key indicator of likely success in identifying needs and in helping victims to overcome them. In the cases where the victims' culture is radically different from that of the donor agency, this is doubly important.

LOCAL RESOURCE-FULNESS

The second danger of ethnocentrism is that relief officials consistently fail to recognize what one might describe as the natural relief mechanism existing in the disaster society. Victims are rarely the bewildered, resourceless and dependent beings that they are depicted as being in news bulletins and in fund-raising publicity material. Whether it be in the transport of victims to hospitals, in the evacuation of a city,

or in the provision of emergency shelter, it is the victims themselves who carry out most of what needs to be done. While a disaster event will cause loss and disruption, it is rare that victims will be totally incapacitated. Most will adapt to the new circumstances and restore their life by their own efforts. Indigenous social institutions, knowledge, skills and building materials are important resources which provide an immediate response capability far in excess of that which can be provided by formal relief agencies. Food supplies at home, in grocery shops and in wholesale warehouses are usually sufficient to maintain a community for several weeks; clothing is rarely needed on any large scale; and most medical supplies can usually be found at hospitals or in wholesale warehouses in or near the affected area. The ongoing social institutions which regulate ties of kinship, friendship and business, ensure that most victims are provided for within the fabric of the existing society.

HELP FROM THE FAMILY

It is the family more than any other social institution which springs to the aid of disaster victims and which provides them with what they need. The family is widely resorted to both in traditional societies and in the rural areas and small towns of more industrialized countries. Within the family unit, all sorts of help are available. Shelter, personal and psychological support and food are guaranteed. The physical dispersion of kin enables some part of the wider family to remain intact and provide aid to those who are affected. It is only in very tightly knit, endogenous tribal groups, that victims become totally dependent on non-kin aid when the community is badly hurt.

HELP FROM THE COMMUNITY

When familial assistance is unavailable or exhausted, victims turn to colleagues, fellow church members or others with whom intimate associations have been maintained. If the situation is desperate, more casual acquaintances may be called upon. Only if all of these services of assistance fail will impersonal, formal organizations be resorted to. Even then, familiar local bodies are more likely to be trusted than the specialist disaster relief organizations from outside of the community.

HELP FROM SYSTEMS OF PATRONAGE

In assessing need it is important to take into account the fact that in many traditional societies, a system of patronage is part of daily life. A patron may be a local dignitary or an employer who provides protection and favors in return for loyalty and service. A good patron can usually be expected to provide help in times of emergency. Thus, in some societies this will be one of the built-in social mechanisms which enable the victims to cope with unusual need in their own way. However, since the patron derives economic power and prestige from his position as protector and benefactor, the relationship is often characterized by an imbalance of benefits between the contracting parties. The patron may be able to exact a high price for acting as the unofficial banker of favors. In the long run, the relationship usually has the effect of tightening the economic and social bonds which disadvantage the recipient.

LIBERATION OR DEPRIVATION

Although the existence of a system of patronage may not necessarily be evident to outsiders, in providing help to such a society an aid organization has two choices. It can accept patronage as a valid social mechanism and therefore attempt to adjust the amount and type of extra

aid given; or it can deny the function of paternalism and continue as though the patronage system did not exist. In choosing the latter, the agency may liberate the unfortunates from their immediate need to call on their patrons. However, in the long run, they may also be weakening a social system which does provide a catch net to need, without at the same time providing anything permanent in its place.

WHOM TO LISTEN TO

The fact that many community leaders are cast in the mold of patron also, counsels caution for any relief organization which sets out to determine need. The question arises: Who should interpret the need? While local knowledge and opinions will be indispensable to the framing of a successful relief program, there will be difficulty in reaching a representative sample of victims at first hand. Whom then, does the relief official agree to listen to as spokesmen for the popular will? Existing community leaders or self-appointed spokesmen are likely to derive personal prestige and organizational power as a result of the implementation of their suggestions. An innocently intentioned relief agency may have considerable latent power in recognizing or creating new community leaders or in cementing the existing ones more firmly in power.

POST-DISASTER SURVEYS

Post-disaster surveys have become a basic tool of the relief agencies. Though attempts to discover the nature of the reality in which agencies intervene are welcome, the want of necessary professional guidance in information-gathering often makes the data much less useful than it could be. Information which is incomplete, inaccurate, unrepresentative of the

total picture, and even on occasion misleading, is more of a handicap than a help. Improperly designed and executed surveys may cause deficiencies in any of these respects.

QUALITATIVE ASSESSMENTS BEFORE QUANTITATIVE ASSESSMENTS

A more common problem, however, is that post-disaster surveys are often burdened with excessive statistical detail unsupported by an explanatory framework. The formulation of an effective relief program involves the subtle forging of perceived problems with a projection of ideas about what might be done to solve them. The information collected by relief organizations must therefore not only describe the existing state of affairs, but must also be helpful in assessing the viability of alternative courses of relief action. A dialectical, iterative investigation in which the potential beneficiaries as well as more disinterested observers participate, is usually far more beneficial for the purposes of defining needs than is any quantitative survey. Quantification is useful and may be necessary at a later stage when the needs have been hypothesized, but overenthusiasm for the questionnaire as a tool often obscures rather than enlightens a situation.

INCORRECT USE OF STATISTICS

A misguided and oversimplistic use of statistics can be as counterproductive as no quantification of the problem at all. The practice of obtaining guesstimates of the likely needs of each victim and multiplying these by the population presumed to have been affected, usually produces wild overestimates of the actual demand. Account needs to be taken of the reserves of food, medicines, clothing and building materials existing

within the community, and of the capacity of the victims to help themselves and each other. Rarely will everyone in the area be stricken, and of those who are, not all will wish to take advantage of the relief offered. The fact that other relief agencies will also be intent on providing aid should also be taken into account before plans are drawn to accommodate need in any particular area.

COORDINATION OF FACT-FINDING

Relief organizations generally undertake to carry out their own surveys of the affected area independent of the efforts of the many other groups which are attempting to do the same thing. However, rarely does any one agency have a full complement of resources at its disposal which enables it to obtain all the information useful to its program planning. The sharing of information between organizations can be extremely helpful in avoiding the multiplication of effort. Noncoverage of certain areas or types of need and the entering upon plans of action which are wasteful, unnecessary, difficult to implement or even harmful in their effects, can also be avoided.

Coordination of effort in collecting information on need can have other advantages too. A clear, well-defined, standardized, and relatively objective set of criteria, if used by all parties, would ensure that at least some of the information which is collected by different organizations is compatible and comparable. Without standardization it is not possible to compare data collected at different places by different organizations, or to compare data collected at the same place but at

different points in time. By cooperating together for the purposes of intelligence gathering, agencies can also avoid the situation where the repetitious interviewing of victims by representatives of different relief organizations results in the false raising of expectations among the people that aid will arrive in vast quantities. The uncoordinated arrival in a stricken community of a stream of eager but untrained and perhaps insensitive census takers, each with clipboard, pencil, and a long list of questions of inconspicuous relevance, serves often only to annoy victims whose time is precious. Additionally, it may demonstrate the extent of the donor agency's ignorance of the lifestyle and values of the people whom it regards as being in need of its help.

THE TIMING OF NEED

Each disaster has its own time scale. Needs which are current in the early days following impact will be relegated or superceded by other needs as the community works to right itself; as the inputs made by other relief agencies take effect; or as some or all of the stricken population moves to other areas. In disasters with sudden impact, emergency medical and shelter needs will be disposed of within the first few days. Employment and income recovery rapidly take over as priorities. Sometime later, the reconstruction of a permanent home can be given attention. In disasters of slow onset, for example famine, it may be more difficult to estimate the point at which a particular need will peak. The build-up and decline of the total problem may be obscured by short-term variations in the factors causing need. In any disaster, too, apparent needs are likely to expand as people become aware that the

agency is providing a corresponding service. Relief may therefore actually "cause" part of the problem which it claims to be addressing.

THE TIMING OF RESPONSE

In spite of these difficulties, relief agencies should attempt to ensure that in all types of disaster the aid which is given arrives at a time when the particular need addressed is current and, preferably, at the beginning of that period. There is usually little to be gained by sending medical teams to an area affected by a sudden disaster, even as little as three days after the event. Within that time, if local medical services exist at all, most of the victims will have been taken care of by the existing resources. If Western styled medical services do not exist in the affected area then it is doubtful whether emergency provision can do much good anyway. The dispatch of tents or other emergency shelters by an outside relief agency is another area wherein care should be exercised to ensure that aid given is not so late that it is superfluous to the needs which it purports to address.

UNNECESSARY HASTE

In spite of the importance of the correct timing of a response in relation to the timing of a need, a myth which pervades the organization of emergency relief is that great haste is necessary if lives are to be saved. In fact, rarely is the survival situation so critical that people will die if relief is not delivered immediately. But the felt urgency on the part of donors, fueled by anxiety over the continuance of a situation for which they believe they are responsible, justifies the rapid and often ill-considered injection of relief supplies into the victim society.

This approach minimizes the possibility of consultation with the victims themselves. Even those humanitarian aid organizations which normally encourage a participatory approach to decision-making, appear to sacrifice their principles when confronted with sudden concentrations of need in one place at one time. The effect of this self-centered and psychologically motivated desire to help, is to remove what little decision-making discretion the victim normally has over his or her own life. In their haste the "helpers" transfer the locus of power outside of the community being "helped."

THE ADVANTAGE OF A SLOW RESPONSE

Yet far from being a handicap in the delivery of worthwhile assistance, delays often improve the quality of the relief aid which is eventually given. A respectable period between an agency's discovery of a need and action to answer it allows time for alternative solutions to be considered. It also allows appropriate networks to be set up to distribute the goods and services in an efficient and equitable manner. Indeed, as the immediate situation is seldom important either to short-run or long-run consequences, the primary function of planning should be to delay impulsive reactions and help select actions which are most appropriate. Quite often these are of a long-term rather than short-term nature, and result in more development-oriented rather than relief-oriented responses.

AGREEING ON A NEED

One of the most intractable problems surrounding the delivery of emergency relief aid is that which hinges on the definition of emergency need. Strangely enough, while some governments are accused of exaggerating

the need for outside assistance, others refuse to acknowledge the existence of a disastrous state of affairs within their borders.

OVERESTIMATION OF DAMAGE

Initial estimates of loss of life and of the damage caused may turn out to be in excess of the truth as determined by later and more careful surveys. This is most likely to be true when the damage is conspicuous, and where the post-disaster confusion is great. Estimates of damage will differ depending on whether they are considered to be replacement values, restoration values, or the depreciated value of assets and property. Transfer payments (for example, the emergency purchase of locally grown food) which represent only a shift in the distribution of costs, are frequently but erroneously included in estimates of disaster magnitude. It has been said that in the more developed countries, except for remote and isolated places, initial damage estimates are generally excessive by a factor of two or three times.

COMPOUND EXAGGERATION

The exaggeration of impact is frequently accompanied by an overestimate of the aid needed. When knowledge is lacking, there is an innocent tendency to request too much in order to have enough. But in the less innocent competition to attract more than their fair share of any aid which may be forthcoming, many individuals tend to exaggerate the estimate of their needs in relation to what they believe them actually to be. This happens also at each level in the hierarchy through which the information passes — neighborhood, village, town, department, region, province, etc. The net result of this process of cumulative overestimation is usually

that information on needs which is collected more than a few days after impact is quite unreliable for the purposes of planning a program of aid unless cross-checked against initial figures and verified by an on-site investigation.

SNOWBALLING DEFINITIONS OF CALAMITY

The wider community tends to depend on the mass media for information about what has happened. When interviewed by reporters, in the absence of fact, officials offer guesses at what the situation might be. These guesses are then reported as fact and in a way which usually emphasizes the dramatic, unusual nature of the event. Organizations which feel that they should be involved in relief are then drawn towards the situation. The cumulative effect of their arrival and deployment at the scene again enhances the definition of the seriousness of the event, and so the snowballing process continues.

EXAGGERATION FOR POLITICAL ENDS

But apart from a lack of adequate information, there are other reasons why the estimates of need may be exaggerated. The most pervasive is that most political and administrative leaders operate with mixed motives. Highly altruistic humanitarian concern is frequently but often imperceptibly mixed with a keen sensitivity to political advantage. Politicians sometimes use very human and emotionally laden issues as the basis for their own political advancement. During a crisis leaders are offered more influence than they possess at normal times, and the control of additional resources which relief moneys and supplies represent can provide them with additional leverage.

DISASTER AS AN AID MAGNET

In this vein, it is often thought that a disaster can be used as a magnet with which to attract large amounts of foreign aid. The assumption is that the bigger the calamity can be made to appear, the more foreign aid and technical assistance will be made available. Occasionally, this view is compounded by an equally simplistic notion. The idea that the destruction wrought by the disaster and the arrival of large volumes of aid provides the opportunity for reconstruction along modern lines is very tempting for officials with high aspirations who are normally limited by the economy of their developing country. The fact that in these countries many technicians and administrators have acquired their advanced educations in the technologically more advanced parts of the world tends to reinforce this inappropriate identification with the methods and values of the rich. Developing country professionals are, consequently, inclined to set unrealistically high standards and targets for post-disaster reconstruction. In effect, they exaggerate the need. Yet the fact remains that even if granted on a large scale, foreign aid is usually insignificant compared to the total volume of damage done. In the long run, aid probably makes only marginal differences to the rate of recovery for the majority of the affected population.

THE ACKNOWLEDGMENT PROBLEM

An official denial of the existence of a disaster by a developing country government is one which attracts considerable media attention in the richer nations. The "acknowledgment problem," as it has come to be known, generally arises not after a sudden calamitous event, but in those types of disaster — drought, famine or epidemic disease -- in

which the onset is gradual. A sudden-impact disaster is generally presumed to be an act of nature. A disaster having a slow onset, on the other hand, is more obviously linked to the condition of underdevelopment and is more readily presumed to be the responsibility of the government. Yet a government may be too proud to admit that it is unable to feed its population effectively, or concerned that the bad publicity attendant on a "disaster" will adversely affect tourism or limit agricultural exports. Some may even wish to take advantage of the suffering to weaken or punish an ethnic or regionally based opposition group. Alleging that outsiders emphasize the negative aspects of a government's performance rather than its achievements, some governments have thrown up formidable barriers against foreign journalists. However, it is well known that advantaged groups generally attempt to discourage communication about the plight of chronically depressed and exploited peoples. Such action to limit information therefore tends to cast doubt on the image of the ruling power rather than protect it.

INADEQUATE COMMUNICATIONS AND STATISTICAL BASES

The problems of exaggeration and of acknowledgment share certain factors in common. Both may arise not only because the truth is distorted but also, in part, because the truth is not known. Poor communications can be responsible for the shortage of information. News from disaster-affected rural areas may filter through to the towns only very slowly, especially, for example, where communications are disrupted by landslides or floods. Even in the more developed countries which generally have elaborate record-keeping systems, it is extremely difficult to

obtain reliable statistics on what happens in a disaster; and in the developing countries the statistical base is much less adequate even for normal everyday operations. When a crisis places strain on the government's administrative machinery it is even more difficult to estimate with accuracy. Estimates may vary either positively or negatively. But if the evidence is uncertain, the figures are more likely to be computed with an eye to political purposes than they might have been otherwise.

WHEN IS A NEED A DISASTER?

The second factor which is common to both problems of exaggeration and denial is one closely related to the first. It is that without sufficient baseline data, it is hard to say what is abnormal and what is not. If one does not know, for example, what the normal nutritional status of the population is in a given area, it is not possible to say with any certainty whether unusual need is present or not. In many regions of the world the population is already on a very low nutritional plane. Though a similar nutritional state occurring in the population of a more developed country would undoubtedly be classified as a disaster, the application of "minimum needs" criteria may mean that the developing country's population is classified as being in a permanent state of disaster. Though perhaps true, this is not very helpful for the purposes of knowing when extraordinary emergency relief should be made available. In a progressive type of event, there are not necessarily any cues to indicate when the situation has become so serious that it should indeed be called a disaster. How severe does an outbreak of a particular disease have to be before it becomes an epidemic? Standards vary from doctor to doctor, from

community to community, and from culture to culture. There are no norms governing how concerned people should be given even a degree of objective evidence. But suffering is an extremely subjective experience, one which is culturally determined, and one which, to the would-be helper, is knowable only indirectly by imprecise and scattered observations. It is not surprising, therefore, that there are no guides to govern official reaction.

CONCLUSION All of these problems impinge at one time or another on the relief agencies' task of forming a picture of what is happening in a disaster. Unless the agencies are prepared and able to cope with them, however, there is little hope that they can get anywhere near to meeting their public commitment and their own stated objectives.

BIBLIOGRAPHY

BARTON, Allen H. (1969). Communities in Disaster: A Sociological Analysis of Collective Stress Situations. Garden City, New York: Doubleday & Co.

BRUNING, James L. (1964). "Leadership in Disaster." Psychology 1, #4: 19-23.

CALDWELL, John C. (1975). The Sahelian Drought and its Demographic Implications. Paper #8, Overseas Liaison Committee. Washington D.C.: American Council on Education.

DACY, Douglas C. and Howard KUNREUTHER (1969). The Economics of Natural Disasters: Implications for Federal Policy. New York: Free Press.

Disaster Research Center (1968). "A Prime Time for Disaster: Warning Systems Must Consider a Community's Many Rhythms." Civil Defense Reporter 1 (Oct.): 11.

DAVIS, I., F. CUNY, and F. KRIMGOLD, eds. (1977). Studies on the Provision of Emergency Shelter Following Natural Disasters. Study prepared for the United Nations Disaster Relief Office, Geneva.

DRABEK, Thomas E. and K. BOGGS (1968). "Families in Disaster: Reactions and Relatives." Journal of Marriage and Family 30 (Aug.): 443-451.

DUPREE, Herb and Wolf RODER (1974). "Coping with Drought in a Preindustrial, Preliterate Farming Society." Pp. 115-119 in Gilbert F. White, ed., Natural Hazards. New York: Oxford University Press.

DYNES, Russell R. (1970). Organized Behavior in Disaster. Lexington, Mass.: D.C. Heath and Co.

DYNES, Russell R. and E. L. QUARANTELLI (1973). "The Family and Community Context of Individual Reactions to Disaster." Preliminary Paper #10 prepared for the National Institute of Mental Health Continuing Education Seminar on Emergency Mental Health Services, Washington D.C., June 22-24.

FORM, William H. and Sigmund NOSOW (1958). Community in Disaster. New York: Harper & Brothers.

FRITZ, Charles E. (1961). "Disaster." In Robert K. Merton and Robert A. Nisbet, eds., Contemporary Social Problems.

GANE, Michael (1975). Report of Mission to Assess the Hurricane Factor for Planning Purposes in Fiji. Occasional Paper #9. University of Bradford, Disaster Research Unit.

GLANTZ, Michael H. (1976). "Nine Fallacies of Natural Disaster: The Case of the Sahel." Pp. 3-24 in Michael H. Glantz, ed., The Politics of Natural Disaster: The Case of the Sahel Drought. New York: Praeger Publishers

HAAS, J. Eugene (1970. "Lessons for Coping with Disaster." Pp. 39-51 in Committee on the Alaska Earthquake of the National Research Council, ed., The Great Alaska Earthquake of 1964: Human Ecology. Washington: National Academy of Sciences.

HAAS, J. Eugene, Patricia B. TRAINER, Martyn J. BOWDEN, and Robert BOLIN (1977). "Reconstruction Issues in Perspective." Pp. 25-68 in J. Eugene Haas, Robert W. Kates, Martyn J. Bowden, eds., Reconstruction Following Disaster. Cambridge, Mass.: MIT Press.

HINSHAW, Robert (1976). "Assessment of Economic, Social, and Political Implications of the Guatemalan Earthquakes and Relief Operation." American Friends Service Committee and Mesoamericanists, February 26.

HODDER, B. W. (1973). "Logistics of Transportation, Marketing, Storage and Aid." In D. Dalby and R. J. Harrison Church, Drought in Africa: Report of the 1973 Symposium. University of London, School of Oriental and African Studies, Centre for African Studies

KATES, Robert W. (1977). "Major Insights: A Summary and Recommendations." Pp. 261-293 in J. Eugene Haas, Robert W. Kates, Martyn J. Bowden, eds., Reconstruction Following Disaster. Cambridge, Mass.: MIT Press.

KATES, R. W., J. E. HAAS, D. J. AMARAL, R. A. OLSON, R. RAMOS, and R. OLSON (1973). "Human Impact of the Managua Earthquake." Science, N.W. 182: 981-990.

KIEFFER, Margaret (1977). "Disasters and Coping Mechanisms in Cakchiquel Guatemala: The Cultural Context." In DAVIS et al 1977.

KRIMGOLD, F. (1974). Pre-Disaster Planning: The Role of International Aid for Pre-Disaster Planning in Developing Countries. Avdelingen för Arkitektur, KTH Stockholm Skrift.

LEIVESLEY, Sally (1977). "Toowoomba: Victims and Helpers in an Australian Hailstorm Disaster." Disasters 1, #3: 205-216.

MILETI, Dennis S., Thomas E. DRABEK, and J. Eugene HAAS (1975). Human Systems in Extreme Environments: A Sociological Perspective. Boulder: University of Colorado, Institute of Behavioral Science.

MOORE, Harry Estill (1958). Tornadoes Over Texas. Austin: University of Texas Press.

MURLIS, J., M. BOWDEN, J. RIVERS, and J. HOLT (1976). Disaster Shelter and Rehousing: Physiological and Social Factors. London Technical Group.

O'KEEFE, Philip (1975). African Drought—A Review. Occasional Paper #8. University of Bradford, Disaster Research Unit.

QUARANTELLI, Enrico L. (1960). "Images of Withdrawal Behavior in Disasters: Some Basic Misconceptions." Social Problems (Summer): 68-79.

QUARANTELLI, Enrico L. (1960a). "A Note on the Protective Function of the Family in Disasters." Marriage and Family Living 22 (Aug.): 263-264.

QUARANTELLI, Enrico L. (1977). "Social Aspects of Disasters and Their Relevance to Pre-Disaster Planning." Disasters 1, #2: 98-107.

QUARANTELLI, E. L. and Russell R. DYNES (1972). "Images of Disaster Behavior: Myths and Consequences." Preliminary Paper #5, National Institute of Mental Health. Shorter and earlier version appeared as "When Disaster Strikes" in Psychology Today 5 (Feb.'72): 66-71.

RAMACHANDRAN, R. and S. C. THAKUR (1974). "India and the Ganga Floodplains." Pp. 36-43 in Gilbert F. White, ed., Natural Hazards. New York: Oxford University Press.

RIDING, Alan (1977). "U.S. Food Aid Seen Hurting Guatemala." The New York Times, November 6.

ROGERS, George W. (1970). "Economic Effects of the Earthquake." Pp. 58-76 in Committee on the Alaska Earthquake of the National Research Council, ed., The Great Alaska Earthquake of 1964. Washington: National Academy of Sciences.

SHEPHERD, Jack (1975). The Politics of Starvation. New York: Carnegie Endowment for International Peace.

STODDARD, Ellwyn R. (1961). Catastrophe and Crisis in a Flooded Border Community: An Analytical Approach to Disaster Emergence. Unpublished doctoral dissertation, Depts. of Sociology and Anthropology. East Lansing: Michigan State University.

TAYLOR, Alan J. (1977). The Intertect Disaster Management Training Package, Number 1. Dallas, Texas: Intertect.

TAYLOR, Alan J. (1977a). The US AID/Guatemala Lamina and Housing Materials Distribution Program: Ex-Post Evaluation Report. Guatemala City: United States Agency for International Development, Mission to Guatemala.

TAYLOR, Alan J. (1978). "Disaster Housing Aid: A Program Planning Model from Guatemala." Disasters (Spring).

THOMPSON, Paul and Charlotte THOMPSON (1977). "Post-Disaster Reconstruction of Housing in Latin America." In DAVIS et al 1977.

THOMPSON, James D. and Robert W. HAWKES (1962). "Disaster, Community Organization, and Administrative Process." Pp. 268-304 in George W. Baker and Dwight W. Chapman, eds., Man and Society in Disaster. New York: Basic Books.

ULLMAN, Richard H. (1977). "Introduction" to Stephen Green, International Disaster Relief. Washington: Council on Foreign Relations.

WHYTE, Anne U. (1974). "Global Summary of Human Response to Natural Hazards: Tropical Cyclones." Pp. 255-265 in Gilbert F. White, ed., Natural Hazards. New York: Oxford University Press.

WISEBERG, Laurie (1976). "An International Perspective on the African Famines." Pp. 101-127 in Michael H. Glantz, The Politics of Natural Disaster. New York: Praeger Publishers.

WISNER, Benjamin and Philip M. MBITHI (1974). "Drought in Eastern Kenya: Nutritional Status and Farmer Activity." Pp. 87-98 in Gilbert F. White, ed., Natural Hazards. New York: Oxford University Press.