

University of Delaware
Disaster Research Center

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DISASTERS AND MENTAL HEALTH:
THERAPEUTIC PRINCIPLES DRAWN
FROM DISASTER STUDIES

Charles E. Fritz

1996

DRC HISTORICAL AND COMPARATIVE DISASTER SERIES

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ACKNOWLEDGMENTS

I dedicate this monograph to Patricia Ware Fritz, my wife of over fifty years, whose steadfast support and buoyant personality have sustained my mental health during fifty years of disaster research studies.

The basic text of *Disasters and Mental Health: Therapeutic Principles Drawn from Disaster Studies* is the same as it was written in 1961. However, I have added a new Preface that explains the previous personal and research experiences that influenced my thinking on this subject 35 years ago.

This edition of the monograph has been reformatted to conform to the Disaster Research Center publication standards. This included completely retyping the manuscript and converting the footnotes and literature references into a contemporary style. I wish to thank Diane Murray of the Disaster Research Center for her excellent work in performing these tasks.

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April 1996

FOREWORD

The text in this report was written in 1961. This raises an obvious question of why it remained unpublished for 35 years? Also, why did the Disaster Research Center (**DRC**) decide to publish it at this time as part of its Historical and Comparative Disaster Series? To understand part of the reasoning behind the latter decision, requires some understanding of the answer to the first question.

Reconstructing the past is not always easy. However, as part of an oral history of the early workers in the disaster research field in the United States, we have for the last ten years been conducting interviews with those involved, as well as collecting many personal and organizational documents, including letters and other records. From such an array of relevant primary and secondary data, we think we have been able to ascertain what happened concerning the original manuscript prepared by Fritz.

In 1959, when both Charles Fritz and Harry Williams were the key members of the Disaster Research Group (**DRG**) at the National Academy of Sciences-National Research Council (**NAS-NRC**), they made a proposal that an edited book of readings on disaster topics be put together. They suggested entitling the book, **Man and Society in Disasters**. According to recent oral history interviews we had with them, these two researchers did all of the other initial work on the project. This included selecting all of the authors who were to be asked to write chapters, as well as suggesting what each chapter should cover. The paper by Fritz that is the subject of this volume was one of the chapters to be included.

However, in 1960 the situation changed. For unrelated reasons, both Fritz and Williams left the **NAS-NRC**, to accept jobs elsewhere. With their leaving, a decision at higher levels was made to terminate the operations of the **DRG** in the **NAS**. The staff person who was put on to phase out the **DRG**, also was given the responsibility for finishing the editorial work on an already fairly advanced manuscript of the book. However, although a volume was eventually produced and published, it was not entirely the originally envisioned book.

By 1960, as initially planned, Fritz had prepared a manuscript draft chapter entitled "Disasters and Community Therapy." That chapter never appeared in

the book, although documents show that the new editor initially acted as if there no question that it would be a part of the final volume. Several factors seem to have influenced some later editorial decisions. For one, there appeared to be a very strong unwillingness, for unclear reasons, to allow Fritz to acknowledge the support of the Society for the Investigation of Human Ecology that had provided him a small grant to finish the work on the chapter after he left the NAS-NRC. Also, after months when the work seemed completed, a new and rather unexpected demand was added. This was that the paper could only reflect the empirical work of the last decade and could not have the broader coverage of the literature that Fritz had already provided in his draft. The new requirement would have required a substantial rewriting of the draft chapter and would have changed the paper substantially. It would have also required additional time for the rewriting. In extensive correspondence between the parties involved, there was no agreement on what should be done. Fritz in his letters offered to make modifications in his draft. However, an examination of the extensive correspondence among the parties involved, revealed that little movement was ever made toward reaching any final agreement on what should be in the last version of the paper. Fritz's attempt to resolve the disagreement came to an abrupt end when in a December 8, 1961 letter, he was flatly told that his draft chapter was rejected for inclusion in the book and that there would be no further discussion about the matter.

The decision was probably an unwise one. There are undoubtedly several reasons why the book never became an important reference source in the disaster research literature, was and is seldom cited, and appears to be mostly unknown to current scholars. However, the absence of the chapter by Fritz probably weakened its impact in the area, given Fritz's reputation and the fact that he was one of the few chapter writers who actually had done much actual research on disasters, especially in the field.

In succeeding years, Fritz, published on related topics. Yet he never attempted to publish the draft chapter anywhere in any form. However, about a decade ago, we obtained a copy of the original manuscript. A reading of the text persuaded us that the paper should be published even 35 years after its writing.

For one, from a historical perspective, the paper is a good example of something of value appearing before or ahead of its time. That is, one of its major themes, that disasters are not necessarily destructive or damaging to the mental health of victims, was quite at variance with the prevailing ideas in the 1950s and 1960s.

Actually, even today, some current researchers have not grasped this fundamental point, and its related idea, that disasters can and do create a supportive social setting. Without denying the negative effects of disasters, Fritz argues and illustrates that disasters can also be positive and beneficial for both persons and groups. In our view, it is worthwhile documenting that this notion was one of the earliest generalizations advanced by one of the major pioneer social science disaster researchers of the 1950s.

A second reason for publication is to show that sometime it is not necessary to have much empirical data to be able to advance important generalizations. Fritz used a variety of disparate sources, from conflict and consensus kinds of crises, empirical and historical sources, as well as personal observations, to draw his basic conclusions. As he himself notes, present day studies and analyses can deduce from a much stronger empirical base than was available to him. They can capture distinctions that in the early days were not possible. However, what Fritz brought to bear was imagination and an ability to see common elements in diverse observations. Quantities of data can never compensate for lack of imagination, but imagination can sometime validly surmise or hypothesize important findings even from a relatively limited data base.

Also, Fritz in his paper does something that even today is not always done by social science disaster researchers. He roots his observations and analyses in the dominant sociological and social psychological ideas, both theoretical and empirical, of the times in which the paper was written. To be sure, this is more often implicit than explicit, but no reader would fail to identify the author as a social scientist, and probably a sociologist, an identification not always possible to make in contemporary writings on disasters. Often it is very difficult to tell if the author is even a social scientist of any kind. It is not that Fritz always accepts the social science "wisdom" of his time—he does not. But his writing reflects his thinking in a sociological framework. Recently we wrote that disaster researchers would do better studies if they were better social scientists, whatever the discipline of the researcher. Fritz clearly tries to be a good sociologist.

Finally, this paper by Fritz is worthwhile reproducing 35 years after it was written because apart from its general theme, there are a number of other ideas expressed that should be seriously considered by disaster researchers. We have almost never seen them expressed by anyone else anywhere, yet they involve

important implications for disaster studies. These range from Fritz's observation that:

No peacetime or wartime disaster in American history has ever produced the aggregate amount of death, destruction, pain, and privation that is experienced in a single day of "normal" life in the United States, but this fact is rarely recognized except by insurance actuarial specialists and other keepers of vital statistics.

to:

there is little systematic evidence to support the usual predictions that intragroup hostility will increase in disaster because of displacement of aggression onto "innocent" victims. Not a single minority group has been subjected to scapegoating activity in any of the peacetime disasters studied in recent years.

and

As social animals, people perhaps come closer to fulfilling their basic human needs in the aftermath of disaster than at any other time because they develop a form of life highly compatible with these needs. This conception of the fulfillment of the utopian prototypic image of society helps to explain many otherwise inexplicable phenomena of disaster behavior.

Certainly these, and other ideas in the text, suggest studies that as a whole have not been attempted and perhaps in many instances have not even been thought about. Of course, we should emphasize that Fritz is under no illusion that his observations are definitive and final ones. In fact, he explicitly states the opposite. However, we would argue that he has given all of us many good ideas that should at least be explored

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April 1996

PREFACE

Why do large-scale disasters produce such mentally healthy conditions? What therapeutic principles can we derive from a study of the natural human adjustments that develop among disaster survivors?

Those are the central questions addressed in the paper that follows—a paper whose content is exactly as it was written in 1961. Those questions appeared rather strange to readers at that time, especially among people who had never personally experienced a large-scale disaster or who had not conducted considerable field research in actual community or societal disasters. Even today, many people are likely to reject these questions as incredible because they believe that the deaths, injuries, physical destruction, and personal deprivations caused by disasters must inevitably produce pathological personal and social consequences.

Because my emphasis in this paper consistently focuses attention on the positive, beneficent, and therapeutic personal and social effects of disaster, it may be helpful to trace the history by which I arrived at this contrary perspective. The development of these ideas gradually emerged from personal and research experiences covering a period of about 18 years—from 1943 to 1961. The specific events and experiences cover five different periods:

- **As a participant-observer in wartime England during 1943 to 1946;**
- **As a Staff Member of the U.S. Strategic Bombing Survey during 1945 to 1946;**
- **As Associate Director of the Disaster Project, National Opinion Research Center, University of Chicago, from 1950 to 1954;**
- **As Research Associate, Committee on Disaster Studies and Assistant Director, Disaster Research Group, National Academy of Sciences-National Research Council, Washington, DC, from 1954 to 1959; and**
- **As Associate Professor, Department of Psychiatry, College of Medicine, and Director of the College's Behavioral Science Division, University of Florida, Gainesville, Florida, from 1959 to 1962.**

In the following sections, I summarize how my experiences during each of those periods contributed to the concepts presented in this paper.

Participant-Observer in Wartime England, 1943-1946

As a Captain in the U.S. Army Air Corps during World War II, I was stationed at seven different air bases and command centers throughout England from 1943 to 1946. During that period, I not only was in a position to observe the behavior of U.S. and other Allied military personnel, but I also became intimately acquainted with British individuals and families from diverse class, political, and cultural backgrounds. My access to British family life was greatly enhanced during those years by my courtship and subsequent marriage to Patricia Ware, a resident of Bath, England, who worked throughout the war as a nursery

school teacher. In 1941 and 1942, she and her family were subjected to frequent air raid alerts and shelter taking as German bombers passed over Bath on their way to striking targets in the nearby industrial and port city of Bristol. Then in May 1942, the City of Bath was subjected to three consecutive nights of bombing by German bombers and strafing by German fighter aircraft. Her father, who managed a wholesale florist business in London's Covent Garden, lived through the entire range of German air attacks on the City—from the heavy conventional bombings through the V-1 and V-2 missile attacks. My contacts with my fiancée, her family and other relatives, and many friends and acquaintances, enabled me to observe firsthand their behavior and to learn about their previous war-related experiences.

By 1943, the British had already endured five years of war. They had not only experienced the direct effects of the bombing and the damaging effects on people and the physical environment; they had also been subjected to severe shortages of housing, food, clothing, and essential public services. Those problems were compounded by the arrival of six to eight million American and Allied servicemen and the ensuing overcrowding and added strains on public services and the British economy. Under those conditions, one might expect to find a nation of panicky, war weary people, embittered by the death and injuries to their family members and friends, resentful over their prolonged life style deprivations, anxious and disillusioned about the future, and, more generally, exhibiting personal and social behaviors indicating a state of low morale and

esprit de corps. But those expectations proved to be totally false. Instead, what one found was a nation of gloriously happy people, enjoying life to the fullest, exhibiting a sense of gaiety and love of life that was truly remarkable. The traditional British class distinctions had largely disappeared. People who had never spoken to each other before the war, now engaged in warm, caring personal relations; they spoke openly with one another about their cares, fears, and hopes; and they gladly shared their scarce supplies with others who had greater needs. Despite the fact that American and other Allied servicemen might have been resented for adding more competition for scarce resources, they were warmly welcomed into British homes, where they found a home-away-from-home atmosphere that assuaged their loneliness for their own home and family. In the homes, in the pubs, in the work places, in buses and trains, in the streets—everywhere people met—there was an easygoing, friendly intermingling of people of quite different racial, ethnic, class, and cultural backgrounds. The British pubs, in particular, were a happy meeting ground for a diverse mixture of British men and women, American and other Allied servicemen, and refugees from France, Austria, Germany, Poland, Czechoslovakia, and other countries. In the evening, the typical pub resounded with the hearty sound of "cheers," as both friends and strangers toasted each other with their drinks and engaged in much bantering conversation, joke telling, and happy laughter. By the time the pub owner announced the pub's closing, with the usual "Time, gentlemen, please," the evening often ended with many of the participants having their arms

around each other, joining in the boisterous singing of sentimental and bawdy songs.

In light of the happy camaraderie and hedonistic, "live for today" philosophy that characterized life in Britain during wartime, it is easy to understand that the survivors often look back on this era with great nostalgia. Even today—over 50 years after the end of World War II—the survivors of that generation speak fondly of the wartime years. When I ask my wife's British relatives and friends to rate life in Britain today, they invariably reply that life during World War II was far better!

Staff Member, U.S. Strategic Bombing Survey (USSBS), 1945-1946

In 1945, I was assigned to the USSBS headquarters in Teddington, England, as a Staff Member. I was placed in charge of 400 photographers, photo laboratory specialists, engravers, and printers in producing 70 volumes of studies on the physical, industrial, economic, demographic, organizational, and morale effects of the U.S. strategic bombing of Germany. The USSBS was a special civil-military organization formed, in response to a directive from President Roosevelt, to evaluate the effects of the U.S. strategic bombing of Germany and Japan.

The U.S. Army Air Corps entered World War II espousing the doctrine that an enemy nation could best be defeated by precision bombing of strategic targets. These targets included key industrial plants (e.g., aircraft, automotive, chemical, iron and steel, and machine tool, factories); military and civilian

command, control, and communication facilities; bridges, railroad marshaling yards, maritime ports, and other transportation hubs. Some air force advocates even believed that wars could be won by air power alone. That strategic targeting concept contrasted with the mass bombing concept espoused by the British Royal Air Force (RAF). The RAF argued that laying down a dense carpet of bombs on military and civilian targets would be more effective than strategic bombing in defeating the enemy.

The central finding of the USSBS studies was that strategic bombing did not live up to the claim that bombing alone was decisive in defeating Germany. The RAF mass bombing techniques appeared somewhat more effective than strategic bombing; but, even when the U.S. and British bombing efforts were combined, the total bomb damage was not a major cause of the military collapse of Germany. Despite an enormous number of people killed and wounded, houses destroyed, people evacuated, and persons deprived of public utilities, the Germans quickly adapted to the aerial bombardment by taking a great variety of countermeasures. German industrial production was higher at the end of the war than it was before the war started. It was not until Allied and Soviet ground troops finally invaded and captured a major part of German territory, that Germany finally capitulated.

An interesting finding of the USSBS morale surveys of survivors in German cities was that people living in heavily bombed cities had significantly higher morale than people in the lightly bombed cities. Equally interesting was

the finding of the USSBS Medical Team on the psychological and psychosomatic effects of the bombing in Germany: The Team sent a questionnaire to German psychiatrists and directors of psychiatric institutions to obtain data on these effects. The consensual reply was that "neither organic neurologic diseases nor psychiatric disorders can be attributed to nor are they conditioned by the air attacks."

Upon completion of the USSBS studies on the effects of bombing on Germany, the organization moved to Japan to conduct similar surveys of the bombing effects on Japan. I did not accompany the move to Japan, but the published findings from the Japanese surveys yielded very similar results. Despite the enormous destruction by conventional bombs, fire bombs, and atomic weapons on Japanese cities, the Japanese people held out until the Emperor finally capitulated after the atomic bombing of Hiroshima and Nagasaki. It is worthwhile to note, however, that many of the survivors of Hiroshima and Nagasaki were willing to continue the war. It should also be noted that 10 days after the bombing of Hiroshima, the Mayor of the Prefecture of that City reported that important recovery measures were already underway—including the opening of banking operations the day after the bombing, the establishment of critical communications with the outside world, the clearing of railroad lines to other cities, and the return of 70 percent of the employees of the Mitsubishi Shipbuilding Company to work.

The great resilience of nations in recovering from disasters is manifest in

the speed with which both Germany and Japan rebounded from their wartime devastation. Within several years following the war, both countries were expanding their productive capabilities far beyond expectations and beyond their prewar rates of production.

Associate Director, Disaster Project, National Opinion Research Center, University of Chicago (NORC), 1950-1954

In 1950, the National Opinion Research Center secured funding from the U.S. Army Chemical Corps Medical Laboratories to conduct a series of field studies of peacetime disasters. Shirley A. Star, a sociologist and permanent member of the NORC staff, initiated the project, and I was recruited to serve as its Associate Director. The basic concept guiding this project was to establish a team of highly trained interviewers who would be prepared to move quickly into disaster-struck areas and conduct a sample survey of the victim population. In addition, interviews were to be conducted with a special informant sample of people from organizations that played a role in the preparedness, response, and recovery phases of the disaster. A team of 25 interviewers was recruited and trained to be ready to move into any disaster-struck area in the United States within 24 hours. The team, composed primarily of graduate students in the social sciences and psychology at the University of Chicago, were paid a monthly stipend to cover training time and to ensure their availability to move into disaster-struck areas on short notice. Master interview schedules for both the victim and special informant samples were prepared in advance to cover the key subject matters investigated by the project. In order to make the training as

realistic as possible, interviewers tested these interview schedules by interviewing people involved in real crisis events (fires, explosions, transportation accidents, snowstorms, tornadoes, etc.) occurring in or near the Chicago area. All pretest and actual disaster survey interviews were tape recorded to ensure reporting accuracy. During training sessions, the interviewer's tape recorded interviews were subjected to critical review by the entire team. The aim of these sessions was to increase the interviewers' skills and progressively improve the relevance and usefulness of the interview schedules.

The end product of the four years of NORC disaster studies was a three-volume report titled, *Human Reactions in Disaster Situations*, completed in June 1954. That report, based on the careful analysis of over 1,000 tape-recorded interviews collected in six major disasters and nearly 70 lesser crisis events, contained the most systematic information on human behavior in disasters ever conducted to that time. As part of the project, the team screened over 2,000 bibliographic references pertaining to the social and psychological responses to disaster and abstracted over 200 of the most pertinent of these references. Comparing the state of knowledge prior to the NORC studies with the new field research findings, it became clear that previous studies of disaster were sorely deficient. Except for a few notable exceptions, the literature was loaded with gross stereotypes and distortions. In earlier accounts, emphasis was placed primarily on the pathological aspects of personal and social responses to disaster. Panic, hysteria, aggression, neuroses, looting, scapegoating, and other bizarre,

uncontrolled, maladaptive, and antisocial forms of behavior were assumed to be frequent or common responses to disaster. Enrico (Henry) Quarantelli, a member of the NORC team who had conducted a careful study of the literature on panic, found that, contrary to expectations, panic proved to be an extremely rare response in disasters. When the new field research information was applied to other stereotypes, they too began to topple like toy soldiers. Disaster victims rarely exhibit hysterical behavior; a kind of shock-stun behavior is a more common initial response. Even under the worst disaster conditions, people maintain or quickly regain self control and become concerned about the welfare of others. Most of the initial search, rescue, and relief activities are undertaken by disaster victims before the arrival of organized outside aid. Reports of looting in disasters are grossly exaggerated; rates of theft and burglary actually decline in disasters; and much more is given away than stolen. Other forms of antisocial behavior, such as aggression toward others and scapegoating, are rare or nonexistent. Instead, most disasters produce a great increase in social solidarity among the stricken populace, and this newly created solidarity tends to reduce the incidence of most forms of personal and social pathology. In brief, the NORC studies laid to rest many of the ghosts that haunt the attic of popular thought. It provided an act of intellectual debris clearance and began the focus on the real behaviors and problems that should be addressed in programs of disaster mitigation, preparedness, response, and recovery.

Research Associate, Committee on Disaster Studies (CDS), and Assistant Director, Disaster Research Group (DRG), National Academy of Sciences-National Research Council (NAS-NRC), Washington, DC, 1954-1959

In the Autumn of 1954, I joined the NAS-NRC Committee on Disaster Studies, as a Research Associate. The Committee, composed of 12 experts in the behavioral sciences and medicine, was a committee of the NAS-NRC Division of Anthropology and Psychology. It was established as a result of a request made of the Academy-Research Council by the Surgeons General of the Army, the Navy, and the Air Force, that it "conduct a survey and study in the fields of scientific research and development applicable to problems which might result from disasters caused by enemy action." The function of the Committee was to aid in developing a field of scientific research on the human aspects of disaster. The Committee maintained a clearinghouse on disaster research, published a roster of scientific personnel in the field of disaster research, and issued periodically a newsletter. It also made modest grants to encourage research in disaster studies, advised with responsible officials on problems of human behavior in disaster, and from time to time issued reports on the results of disaster research. Its activities were supported by a grant from the Ford Foundation, and by special grants from the National Institute of Mental Health of the Department of Health, Education, and Welfare, and from the Federal Civil Defense Administration. Harry B. Williams served as the Committee's Technical Director. Other staff included myself, another researcher concerned with the psychiatric aspects of disaster, and a support staff of four other people.

A large part of my work for the Committee was to review disaster research proposals submitted to the Committee for funding and to recommend their acceptance or rejection. For the proposals actually funded, I assisted the grant recipients in organizing their project, in selecting hypotheses to be tested, in developing their interview schedules and other research instruments, and, on occasion, in providing consultation to them during actual field research operations. I also reviewed and edited manuscripts for publication in the Committee's Disaster Study Series and frequently consulted with governmental and private agencies involved in disaster mitigation, preparedness, and response plans and programs.

In 1957, the Committee on Disaster Studies was replaced by the NAS-NRC Disaster Research Group, with Harry B. Williams as Technical Director and myself as Assistant Director. The DRG continued to carry on many of the functions of the Committee on Disaster Studies, including continuing publication of the Disaster Study Series and encouraging other organizations to participate in disaster field research. But it also began to undertake research projects under its own auspices and placed greater emphasis on the translation of research findings into useful guidelines for civil defense and other agencies charged with responsibilities in disaster preparedness, relief, and recovery.

Together, the Committee on Disaster Studies and the Disaster Research Group proved successful in broadening the base of disaster research by encouraging other research organizations to undertake field research studies.

They were influential in refining the theories and concepts about human behavior in disasters and also in progressively improving the methodology and techniques of disaster research. Studies became increasingly focused on identifying key problems in human behavior that had been overlooked or disregarded in previous research. For example, the twelve studies published by the CDS and the DRG between 1956 and 1960 included a comprehensive review of human behavior in extreme situations, together with suggestions for further research; a study of people's perceptions, interpretations, and communications in response to the explosion of a fireworks warehouse that produced a mushroom cloud similar to an atomic bomb detonation; the development of a space-time model of human behavior in disaster, tested in a community struck by a devastating tornado; a projection of the social effects of wartime evacuation of American cities, based on studies of large-scale population evacuations carried out in World War II and in foreign and domestic peacetime disasters; a psychiatric study of the responses of children who survived the collapse of a movie theater struck by a tornado, in relation to how the parents handled the child's experience; a review and analysis of existing knowledge on emergency medical care in disasters; a comparative analysis of Mexican and U.S. community responses to a major flood on the Rio Grande River; a review and guide to methodological problems of field studies in disasters; a review of existing knowledge of **convergence behavior** in disasters, showing that the convergence of people, messages, and supplies **toward** the disaster area creates serious problems of social control in every

large-scale disaster; a study of the effects on a community—already overwhelmed by a flood—of a false rumor that a huge dam above the city had broken by the weight of flood waters; the family and community as determinants of the responses of children in two rural schools struck by a destructive tornado; and the papers given in a symposium on human problems in the utilization of fallout shelters—based on both field and laboratory research studies. In addition to these published studies, the CDS and DRG also produced many unpublished manuscripts and supported research by others that was subsequently published under other auspices.

By August 1959, when I produced a comprehensive inventory of all disaster field studies, I found a total of 144 studies of peacetime disasters, accounting for nearly 9,000 interviews or questionnaires obtained in airplane accidents, earthquakes, epidemics, explosions and fires, floods, hurricanes, mine disasters, snowstorms, tornadoes, toxicological events, and miscellaneous other crisis events. Together with over 7,000 interviews obtained by USSBS in the conventional bombing of Germany and the combined conventional and atomic bombing of Japan, the total number of interviews and questionnaires collected in both peacetime and wartime disasters totaled over 16,000.

It would, of course, be misleading to suggest that all of these field studies provided an adequate test of the concepts and ideas presented in the following paper. Some of the studies were focused on problems that had no relevance to our subjects; others, though somewhat relevant to our subject matter, were based

on inadequate observations and samples that made them scientifically suspect. In general, however, the best conceived and methodologically sound studies supported the view that the personal and social effects of disasters were much more benign than had been anticipated either by popular thought or by previous theoretical formulations. It was clear that many previous theoretical formulations contained a fatal flaw: the direct extrapolation of findings from routine crises or small-scale accidents to large-scale disasters. Disaster field research showed that large-scale public disasters produce a unique frame of reference for human behavior—a frame of reference so different that other lesser crises are incomparable. Paradoxically, however, that uniqueness has a universal character: there is a striking similarity in the behavior of disaster victims, regardless of place, time, or culture. Disaster sufferers in the 1906 San Francisco earthquake and fire, in a tornado in Arkansas, in a flood in the Netherlands, in the bombing of Berlin, in the atomic bombing of Hiroshima, and in many other disastrous events, respond in like manner when confronted with comparable conditions. This universal character of disaster behavior suggested to me that we were approaching a central component of human nature and that a careful analysis of the conditions and mechanisms by which disaster-struck communities and societies cope with danger, losses, traumas, and privation, might help to isolate and identify some universal features of social therapy.

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and Director of the College's Behavioral Science Division,
University of Florida, Gainesville, Florida, 1959-1962**

I carried this interest in disaster-derived social therapy with me when I joined the faculty of the University of Florida College of Medicine. My basic appointment was in the Department of Psychiatry, but I was also asked to establish a new Behavioral Science Division that would serve both that Department and other parts of the College of Medicine.

The Department of Psychiatry's inpatient treatment facility consisted of one wing of the Medical Center hospital. From the beginning, it was established as an open ward, with a strong emphasis on group therapy, modeled along the lines of the "therapeutic community" concept that had become popular in the 1950s. But the Department was not bound by any particular psychiatric doctrine; it encouraged a wide range of research experimentation, including an emphasis on group therapeutic mechanisms.

In developing plans for a number of research projects to be conducted in the psychiatric ward, I had occasion to review the literature on the "therapeutic community" and related social therapies. It soon became apparent to me, as it had to others, that the different approaches to therapy had many features in common, regardless of the doctrinal approaches that espoused them. It also became apparent to me that the situational characteristics of disasters and the human adjustments to them produced a therapeutic milieu that gave cognizance to virtually all the therapeutic knowledge acquired by these different doctrinal approaches. In other words, disaster-struck communities and societies naturally develop therapies that quickly and effectively overcome the losses, traumas, and

privations of disaster—without the intervention of mental health care professionals. Those thoughts led me to the belief that a further analysis of the disaster field research data might produce information that had transfer value in the treatment of mental disturbances under non-disaster conditions. That belief provided the stimulus for the following paper.

Thirty-five years have passed since I prepared this paper. One might well ask the questions: "Would you revise the paper if you were writing it today?" My answer is "Yes" and "No." I would certainly try to bring it up to date by referring to the several hundred disaster field studies conducted in the U.S. and other countries since that time. And in so doing, I would hope not only to provide more recent information, I would also try to add greater specificity to the concepts and propositions that I have posed. But I have seen nothing in the more recent studies that would change the basic framework of my analysis. On the contrary, many of the disaster field studies conducted since that time provide confirmation that the ideas contained in my 1961 paper should receive greater attention from the mental health community.

In closing this introduction, I would like to reiterate some cautions that the reader should keep in mind while reviewing this paper. The analytical framework that I have proposed is intended to be heuristic—to stimulate interest in the subject matter and to encourage further research. I have no desire to start a new school of therapy or develop a new doctrinal dogma. Rather, I seek to stimulate rigorous critical examination of the ideas I have presented and to point to some future research that deserves attention.

INTRODUCTION

Viewing disasters as pathological events is traditional. In Western thought, at least, the term "disaster" has become identified with the negative pole of most of our evaluative dichotomies such as good-bad, true-false, beautiful-ugly, pleasure-pain, organized-disorganized, rational-irrational, functional-dysfunctional. As a consequence, we have come to view the occurrence of disaster as inevitably and irrefutably "bad."

This mode of thought is so thoroughly entrenched in both popular and "scientific" thought that the very word "disaster" automatically evokes images of panic, hysteria, looting, anarchy, social disorganization, aggression, scapegoating, neuroses, and other similar pictures of human nature and society in the process of disintegration.

Disaster research conducted during the past ten years has progressively undermined many of the more blatant myths about human behavior in disasters: the notions that disaster survivors inevitably or typically engage in panic, looting, and scapegoating or become helpless, hysterical, and neurotic simply do not stand the test of critical research scrutiny. Yet we continue to cling to frameworks that reflect the pathological point of view and in numerous subtle ways this view influences our thought and investigative processes about disaster as a human experience.

Disasters are, of course, occasions for profound human misery. They produce death, destruction, and physical privation—experiences that elicit great personal pain and suffering among the survivors. But the exclusive preoccupation with these physical effects and corresponding behavioral "problems" have led us to ignore some of the further positive consequences of disaster for the survivors, both as individuals and as members of groups, communities, and the larger society. Despite all the visions of hell that can be mustered in the popular and scientific imagination, disasters have always produced many beneficent effects on surviving personal and social systems. Contrary to the extrapolations and predictions derived from many existing theories of human behavior, most of the behavioral pathologies of everyday life fail to increase or actually decline in disaster. Nations and communities typically demonstrate amazing toughness and resiliency in absorbing and coping with the disintegrative effects of disaster. And disaster-struck societies not only quickly rebound from disaster but often reconstruct and regenerate their social life with added increments of vitality and productivity. These are central facts that stubbornly resist explanation or fail to receive the detailed attention that they deserve within existing theoretical frameworks.

This paper will focus central attention on these beneficent results of disaster and on the manner in which disaster-struck communities and societies exert therapeutic recuperative effects on their members. It is written in the belief that this focus is presently needed as an antidote to the overworked

metaphors of pathology. Disasters are not only characterized by "death," "destruction," "disintegration," and "disease," they also provide conditions for "vitality," "reconstruction," "integration," "growth," and "health." A consistent focus on the therapeutic features of disasters and disaster adaptations may lead us not only to a better understanding of this form of crisis but may also contribute to our knowledge of the essential conditions for mental health and effective social therapy in everyday life.

ANALYTICAL FRAMEWORK

The general framework of analysis used here is an **ideal-typical one**. It is not designed to describe and represent the effects of a particular disaster but rather to attempt to abstract common elements from a wide range of disasters, both contemporary and historical, domestic and foreign, wartime and peacetime. Unique features and outcomes are neglected in favor of an emphasis on changes that appear to be basic and universal.

The basic ideas developed in this paper are intended to be heuristic in nature. They are designed to clarify and systematize observations that are often neglected in treatments of disaster and thereby to stimulate further thought and research. Although the empirical base for these ideas has been drawn from a wide variety of disasters, the most systematic findings of disaster research are limited, for the most part, to the single impact type of peacetime disaster. The ideas and propositions developed here are assumed to transcend this type of disaster and to have wide applicability to all types of disaster, but the exact limits

of this applicability can only be determined by further critical study and research effort.

The general model of disaster used here is the "big" community or societal disaster—an event so encompassing that it involves most of the prevailing social system, so destructive that it disrupts the ongoing systems of survival, meaning, order, and motivation (1). Crisis events of this type produce a referential framework for human behavior that has certain unique features—features that do not characterize "accidents" or other kinds of crises occurring within the context of an undisturbed, intact social system. The explication of the nature of this change in the referential framework and of its effects in structuring social responses to disaster comprises an essential part of the subsequent analysis.

In describing the typical therapeutic responses of disaster-struck societies, it is assumed that the disaster survivors are permitted to make a natural, unimpeded social adjustment to the effects of the disaster and also have the opportunity to interact freely with one another. Significant differences in the responses described here may be expected if outside forces or authorities intervene in this adjustment process to superimpose external controls, to prevent or inhibit interaction among the survivors, or systematically to manipulate the informal group structure that emerges in the community of survivors. This assumption of unimpeded social interaction by the survivors underlies the entire subsequent analysis and is an important one in accounting for differences between the behavioral model presented here and observed responses in a number of

particular disasters that have been studied.

In accordance with the general emphasis on basic and universal features of disaster, cultural and personality differences will be ignored in favor of an emphasis on disaster as a general human experience. Any particular disaster, of course, happens in a specific culture, to a specific community or group, and to specific individuals. Some responses to disaster are clearly affected by these cultural and personality differences. But disasters also exert influences that transcend these differences. They undermine many of the cultural and personal distinctions of everyday life and force people to make critical choices under similar conditions. They thereby reveal ordinarily obscured facets of a common human nature. The present analysis assumes that it is desirable to understand these universal elements in human response to disasters before proceeding to the study of cultural and personality variables.

DISASTER AS A CONTRAST TO "NORMAL" CONDITIONS

The distinction between "disaster" and "normal" conditions is implicit in most treatments of disaster behavior. The everyday, ongoing life of the society is usually equated with the "normal," and those conditions that result from disaster are viewed as "abnormal" and pathological. However, in our haste to draw this distinction, we often conveniently overlook the many sources of stress, strain, conflict, and dissatisfaction that are imbedded in the nature of everyday life. From the imagined perspective of a subsequent disaster, this everyday life looks rather stable and serene, and we choose descriptive terms such as

"peaceful," "organized," and "equilibrated" to contrast it with the presumed disorder and chaos of disaster.

The relative invisibility of everyday crises and the high visibility of disaster contributes heavily to the perpetuation of this contrast in human thought. During every single day in the United States, for example, over 4,000 people die from accidents and organic disease. Additional thousands, perhaps millions, are daily experiencing the pain and privation associated with the loss of intimates, with injury or illness, with interpersonal and intergroup conflicts, with social and material deprivation, or with failures to meet social expectations and personal aspirations. Yet these potential stress-producing events have a kind of "random incidence" (Wallace, 1956). They are not sufficiently concentrated in time and place to threaten the basic integrity of the community or society as a whole. This fact, combined with the general tendency for people suffering stress to privatize or "hide" the effects of stress from public view, make the everyday crises of life much less visible to the observer than disasters. No peacetime or wartime disaster in American history has ever produced the aggregate amount of death, destruction, pain, and privation that is experienced in a single day of "normal" life in the United States, but this fact is rarely recognized except by insurance actuarial specialists and other keepers of vital statistics.

The traditional contrast between "normal" and "disaster" almost always ignores or minimizes these recurrent stresses of everyday life and their personal and social effects. It also ignores a historically consistent and continually

growing body of political and social analyses that points to the failure of modern societies to fulfill an individual's basic human needs for community identity.

From the writings of Rousseau through those of De Tocqueville, Proudhon, Marx, Comte, Tonnies, Max Weber, Durkheim, Le Bon, Brooks Adams, and Figgis, to those of Buber, Frank, Fromm, and many other contemporary social analysts, we find a consistent emphasis on social atomization and social alienation as the root causes of the social and psychological pathologies of everyday life. There is today a veritable torrent of writings that emphasize the metaphors of "alienation," "meaninglessness," "normlessness," "isolation," and "self-estrangement." Robert Nisbet, in *The Quest for Community* writes:

At the present time, in all the social sciences, the various synonyms of alienation have a foremost place in studies of human relations. Investigations of the 'unattached,' the 'marginal,' the 'obsessive,' the 'normless,' and the 'isolated' individual all testify to the central place occupied by the hypothesis of alienation in contemporary social science.

In the studies of the aged, the adolescent, and the infant; of marriage, the neighborhood, and the factory; of the worker, the unemployed, the intellectual, and the bureaucrat; of crime, insanity, alcoholism, and of mass movements in politics, the hypothesis of alienation has reached an extraordinary degree of importance It is more than a hypothesis; it is a perspective (1953:15).

The dissolution of medieval society and its characteristic forms of association—the family, the village, and the guild—and the subsequent failure to develop satisfying substitutes for these associational forms, has established the

central problem with which most of the classical sociological analyses have dealt. Homans has effectively summarized the relationship between the shattering of traditional primary group bonds and the production of mental disorders in modern societies:

The development of civilization has meant technical change, economic expansion, and warfare, usually all three. All have the effect of breaking up old social units without putting anything in their place . . . In the old society, man was linked to man; in the new agglomeration—it cannot be called a society—he is alone.

Now all the evidence of psychiatry . . . shows that membership in a group sustains a man, enables him to maintain his equilibrium under the ordinary shocks of life, and helps him to bring up children who will in turn be happy and resilient. If his group is shattered around him, if he leaves a group in which he was a valued member, and if, above all, he finds no new group to which he can relate himself, he will, under stress, develop disorders of thought, feeling, and behavior. His thinking will be obsessive, elaborated without sufficient reference to reality; he will be anxious or angry, destructive to himself or to others; his behavior will be compulsive, not controlled; and, if the process of education that makes a man easily able to relate himself to others is itself social, he will, as a lonely man, bring up children who have a lowered social capacity. The cycle is vicious; loss of group membership in one generation may make men less capable of group membership in the next. The civilization that, by its very process of growth, shatters small group life will leave men and women lonely and unhappy.

No harm would be done if new groups appeared to take the place of the old ones, new groups with some of the

characteristics of the old. And we know that in fact such groups are always forming. The seed of society is always fertile. Yet it may be that at times the new growth does not keep pace with the rot, and that there is a net increase in the number of isolated individuals, superficially attached to the bare skeleton of normal organization but lacking the old feeling of belongingness (1950:456-457).

As Homans suggests, the atomizing process in modern societies is never total or complete. Indeed if it were, the problem of recognizing the "rot" of civilization would be greatly simplified. It is precisely the partial or dissonant quality of atomization throughout a large-scale society that makes the disintegrative tendencies so difficult to recognize and attack in everyday life. Even when the overall society fails to provide a general sense of community identity and consensus, substitute forms of community are continually being forged in daily associations. There is a constant strain in human societies to overcome the social differentiations that develop as a natural consequence of the division of labor and separation of functions in bureaucratic social systems. The latent desire to act as a full human being—to free oneself from the cultural constraints and inhibitions associated with formal statuses—is constantly manifested in the formation of informal groups that cut across formal lines of authority and prestige. Spontaneous associations of this type as well as the traditional association of family, ethnic group, and religion, provide many people with the essential sense of community.

Many other people, however, find themselves estranged from the traditional groups which exercise continuity in the life process, and they have

been unable to find substitute satisfaction in the many voluntary associations or informal groups formed within the larger structure of the society. With the increase in mobility and social differentiation of the population, both the scope and the potency of primary group association declines. As the society becomes more and more fragmented into specialized social groups, it becomes increasingly difficult for the individual to find a common base of sympathetic identification and communication with fellow human beings. The individual's life becomes segmented into many specialized selves, and the opportunity for conflict between and among the different parts of the self correspondingly increases. The declining potency of primary group life also means that the individual's opportunity for "total involvement" and continuity of experience is reduced. Organizing a life around limited formal purposes and segmentalized preoccupations, the individual loses the general sense of mission, or the feeling of progressive flow in life experience. In the newly emerging nation states of Africa and Asia, the process of detribalization and atomization is just beginning; in Western nations it is well-developed.

It is against this backdrop—rather than the images of order and equilibrium in everyday social life—that we can best understand and appreciate many of the characteristic responses of human beings to disaster. Disasters provide a stark contrast to the social conditions of everyday life, but this contrast is not only the one envisioned by most of our current theories and perspectives. As we shall see, social life in the aftermath of disaster fulfills many of the

essential human needs that are missing in the everyday life of modern societies. We shall also see that when human beings recognize these needs, they naturally develop mechanisms of social therapy that prevent or ameliorate many of the normally expected responses to crisis and stress.

DISASTER AND THE EMERGENT "COMMUNITY OF SUFFERERS"

An obvious but often overlooked fact is that a disaster creates a new "community of sufferers" whose membership is recruited from fortuitous involvement in the dangers and privations imposed by the disaster agent. This emergent community develops an interactional system uniquely its own—a system that does not have primary reference to the preexisting social system, but to the situations and experiences produced by the disaster. Both its membership and interactional pattern emerge in the process of individual and collective activity aimed at comprehending and coping with the effects of the disaster.

The emergence of this community of sufferers is posited as a universal feature of disasters where the survivors are permitted to interact freely and to make an unimpeded social adjustment to disaster. Its persistence in time and its total effect in changing the preexisting social system are variables determined in large part by the scope and destructive power of the disaster, by the possibility of continuing or recurrent danger, and by the power of the remaining societal components to superimpose either the preexisting system or a variant system on the emergent community. In general, however, this community persists in potent and active form long enough to reinstate basic societal functions and to achieve at

least minimal life stability among its membership. Practically speaking, in most large-scale peacetime disasters, it persists actively for periods of several weeks or months following the disaster; in wartime, or in areas of frequently recurring peacetime disaster, it may last for years as an active force (2). It frequently continues to exist as a less potent associational and identificational unit long after the time needed to restore life stability to its membership.

It should be reemphasized that this community of sufferers is recruited from the fortuitous involvement in the disaster and, therefore, that it does not necessarily correspond to any preexisting geographical or social limits of community. The assumption that the preexisting boundaries of a community or society are socially realistic ones for studying human behavior in disaster can be grossly misleading, because the disaster community of sufferers often involves many people who have had little or no previous history of interaction (including people who live in widely separated parts of the nation or world) and, at the same time, it excludes many unaffected people living within close geographic proximity to the primary sufferers. Studies of **convergence behavior** (Fritz and Mathewson, 1957) and the sequence pattern of public involvement in disasters (Schatzman, 1960) graphically demonstrates the incompatibility between the preexisting definitions of "community" and the realistic social unit of study and management in disasters.

The community of sufferers goes through several distinct stages of development. It is formed when the survivors learn of the self-transcending and

encompassing nature of the disaster and begin to communicate with each other about it. During the integrative phase, characterized by a strong feeling of mutual suffering and in-group solidarity, it reaches its greatest degree of influence and potency as a therapeutic system of interaction. Thereafter it wanes and begins to disintegrate, as people return to normal pursuits and the process of social differentiation begins to manifest itself. This disintegration progresses until there is only a residual left in the memories of the participants and a corps of people who meet and interact only occasionally for ceremonial purposes. This waxing and waning of the community of sufferers produces various subtle changes in the behavior of the survivors that cannot be discussed systematically here. The subsequent analysis is concerned only with the integrative stage of development. The structure and forms of interaction adopted by the community of sufferers during this stage can be shown to be both individually and socially therapeutic in nature and effect, in the sense that they:

1. Resolve and ameliorate preexisting personal and social conflicts that might endanger the present and future continuity of social life;
2. Attenuate or prevent the usual disorganizing individual and small-group responses to danger, trauma, loss, and privation;
3. Reduce or prevent self-aggressive and antisocial behavior arising from the losses and privations imposed by the disaster; and
4. Re-motivate the actors in the system to devote their energies to socially reconstructive and regenerative tasks.

In the following sections, some of the evidence in support of each of these therapeutic effects is reviewed.

Resolution of Pre-Existing Conflicts

The conflict-resolving power of disasters has been widely noted in both intuitive writings and in the disaster research literature. In the Halifax, Nova Scotia, explosion of 1917, Samuel Prince in his study noted that "the common danger constrains great numbers to overlook any differences, to minimize many of their antagonisms and to combine their efforts" (1920:64). Dominik Wegierski, who experienced the World War II German bombing of Cracow and then fled with other refugees toward the interior of Poland, described the following unifying effects of the bombing:

Common danger made everybody forget overnight all old quarrels. The country forgot about its real and imaginary grudges, it forgot about the division between manor and cottages, and it welcomed with Samaritan help the people of the towns. Men who were very unpopular in the country—tax collectors, policemen, foresters, and other minor officials—now found a warm hospitality in the same houses which they could hardly have entered before the war without risking at least a dog-bite. Even the Jews, an alien nation universally disliked, received willing assistance and help (1940).

On the basis of his studies in the Waco and San Angelo, Texas, tornadoes, Moore points to the resolution of conflicts as a characteristic feature of the emergency period:

. . . persons and institutions submerge their particular aims in a common effort. Old rivalries and conflicts

are forgotten, or at least become subliminal, in the face of what seems to be an overwhelming task. Almost complete selflessness and great generosity are the emotional climate of this time (1958:313).

Many specific examples of the resolution of preexisting conflicts and the strengthening of social relationships can be found in the literature. During the American Civil War, the steamship "Sultana," carrying over two thousand Union soldiers from New Orleans to St. Louis, exploded near Memphis, Tennessee, killing about 1,700 people. Rescue of the survivors was accomplished mainly by southerners, including a Confederate soldier (Terrio, 1948). Some of the U.S. Strategic Bombing Survey interrogation interviews indicated that rural-urban frictions in Japan were decreased by the World War II bombings. Klausner and Kincaid compared the social characteristics of 231 evacuees and 183 hosts in the Farmington, Connecticut, flood of 1955. Assuming that the normal cultural distinctions might have determined the selection of evacuees and hosts, the investigators compared them in terms of length of residence, rural-urban origin, political party, objective socioeconomic status, subjective class identification, and religion. They found that:

All the social statuses that ordinarily act as structural divisions in New England communities tended to disappear during the crisis. Evacuees distributed themselves almost at random among hosts of various religious, social status and political background. The only exception to this was that church-attending Catholics and Protestants tended more to find their shelter with other churchgoers of their own faith (1956:58).

They concluded that "the crisis accompanying a disaster is a strongly integrating force in the community. It demands a redefinition of roles in which the divisions of status and culture give way to humanitarian or universalistic considerations" (Klausner and Kincaid, 1956:128).

In the National Opinion Research Center (NORC) study of the White County, Arkansas, tornado of 1952, all persons who reported changes in the quality of social relationships with kin, neighbors, friends, or other people, reported that the relationships were strengthened; out of a strict probability sample of 139 people in impact areas, not a single respondent reported the breaking or weakening of a relationship with anyone previously known. Perceived changes in people were also measured and these, too, were overwhelmingly favorable in character: about 53 percent of the impact sample reported that they noted changes in people following the tornado and, of these, 37 percent reported that they felt that people were more friendly, cooperative, considerate, kinder, etc.; 12 percent reported that people were more religious; and an additional 10 percent reported a variety of changes in which they perceived people as acting "better" than previously or than was expected. Only 6 percent of the cases perceived any kind of negative change in people following the tornado (Marks, Fritz, et al., 1954).

The breakdown of racial and minority group barriers, and the acceptance of minority group members into new social roles, has been noted in both historical and contemporary accounts of disaster. In the Philadelphia yellow

fever plague of 1793, it is noted that the elders of the African Society, an Afro-American organization led by Absalom Jones and Richard Allen, were the first to volunteer their services to the Mayor of Philadelphia for relief activity. The Mayor accepted their offer of aid, and the African Society subsequently played a major role in the relief activity among the whites as well as the blacks (J. H. Powell, 1949). In the yellow fever epidemic in Memphis, Tennessee, in 1878, black police and black militia united with the white military organizations for the first time in patrolling the streets and guarding the tent camp near the city where thousands of refugees had congregated (Carter, 1949). In the Marysville, Tennessee, flood of 1937, it is reported that "the question of racial identity was lost in the scramble for survival," as whites sought refuge in the homes of blacks (3).

The temporary breakdown of customary social restraints (4) between whites and blacks is also noted in the Vicksburg, Mississippi, tornado (Perry, Silber, and Bloch, 1956), the Arkansas tornado of 1952 (Marks, Fritz, et al., 1954), and the Louisiana hurricane of 1957 (Fritz, 1957). In 1951, an airplane crashed into a crowd of spectators in a small Protestant community in a western state, that is, Flagler, Colorado. A Catholic priest became one of the major leaders in relief activity following the crash, and there was a noticeable rise in the status of the Catholic minority—a group that had traditionally been the object of considerable discriminatory behavior by the Protestant majority in the area (Marks, Fritz, et al., 1954).

The resolution of family conflicts and the strengthening of family ties is also a commonly noted feature of disasters. Six weeks after the Chicago fire of 1871, it is reported that the applications for divorce were reduced by 80 percent of the number that had existed before the fire (Colbert and Chamberlin, 1871). Somerset Maugham (1941) noted that wartime bombing strengthened rather than weakened the British family. Richard Titmuss (1950) documented the strong sense of solidarity among British families during the bombings and explained the failure of the evacuation policy by the strengthened cohesion of the family resulting from the war. Helmut Schelsky's study (1954) of 167 German families who had undergone severe bombing and the postwar experiences of denazification and unemployment found the families in general more cohesive as a consequence. The strengthening of extended family or kinship ties has also been noted in numerous recent disasters (Fritz and Mathewson, 1957; Klausner and Kincaid, 1956; Wallace, 1956; Young, 1954).

Evidence on the resolution of personal conflicts is widely scattered throughout the disaster literature. Perhaps the most coherent body of evidence on this subject is contained in the frequent references to the remission of preexisting neurotic and psychosomatic symptoms among disaster-struck populations. In the 1917 Russian Revolution, for example, it was said that "obsessional" psychoneuroses became extinct (Brown, 1941). Mira, commenting on his psychiatric experiences in the Spanish Civil War said:

Depressed and neurotic patients whom I had looked after in private found relief in working

for some public service—for example, social work. There was no noticeable increase in the average rate of suicide. I had the impression that many depressed and other mentally ill people were better when confronted with the actual demands and situations that arose during the war than when they were concerned with their own conflicts (1939:1219).

Gillespie (1942) noted with surprise the number of people whose chronic nervous conditions disappeared during the World War II air attacks on Britain. Denny-Brown reported that "some chronic neurotics of peacetime now drive ambulances or fire tenders and complain no longer of their nervous symptoms" (1943:644). George Franklin, reporting on a total of 700 patients under his care in Britain during the blitz, said that the number of neurotics was very much less than in peacetime, the number of cases of epilepsy and suicide declined drastically, and those obviously neurotic appeared to improve (Schmideberg, 1942).

The remission of neurotic symptoms has also been noted in peacetime disasters. Following the Worcester tornado, J. W. Powell (1954) noted that the neurotics with specific interpersonal conflicts got "better"; in his study of the Elizabeth, New Jersey, airplane crashes, he reported that a patient with nephritic hypertension and one with migraine headaches remitted their symptoms following the crashes. Dramatic improvement in persons having a variety of physical ailments is documented in several disaster research reports (Fogleman, 1958; Marks, Fritz, et al., 1954). Christenson found that the illness rate of

refugees of the Hungarian Revolution fell somewhat during the period of acute upheaval in Hungary and the movement of refugees to the United States (Society for the Investigation of Human Ecology, 1959).

Attenuation or Prevention of Expected Responses to Stress

The incidence of various social and personal behavioral pathologies might be expected to rise in disaster as a consequence of the greatly increased occurrence of danger, trauma, privation, and loss. Yet the relevant evidence indicates that most of these pathologies fail to occur, decrease following disaster, or show no significant increase over the predisaster period.

One of the major ghosts in the attic of popular thought about disaster is the occurrence of "mass panic." A few citations from the historical and contemporary literature may help to place this ghost in its proper resting place. Frank Loesch, for example, gave the following account of his personal experience in the Chicago fire of 1871:

We all realized that haste was necessary to get away somewhere out of reach of the flames which were shooting high above the blazing business district and by the light of which we were moving about inside as well as outside the houses, but frankly I saw no evidence of disregard of other's rights in the confused moving to and fro . . .

...It was the best-natured mass of people I was in the midst of. The women were more sober-minded than the men. Losing a home was more serious to them, but endless badinage passed back and forth between the men concerning the suddenness and inconvenience of the moving, and the ignorance of

a destination or abiding place. I never heard a crying child except in one instance. The children as a rule considered it all a wonderful lark (1925:11,15).

Jack London, the writer, made some firsthand observations of the behavior of San Franciscans during the early period following the earthquake and fire of 1906:

...remarkable as it may seem, Wednesday night, while the whole city crashed and roared into ruin, was a quiet night. I passed Wednesday night in the path of the advancing flames, and in all those terrible hours, I saw no one woman who wept, no one man who was excited, no one person who was in the slightest degree panic-stricken . . . Never, in all San Francisco's history, were her people so kind and courteous as on this night of terror (quoted in Bronson, 1959:62).

These observations can be matched in many reports of disaster, both wartime and peacetime. Referring to the British experience during World War II, Denny-Brown said:

It was anticipated that any densely populated area which was subjected to military bombing would be the scene of mass panic and mass hysterical phenomena, as well as mass destruction. Yet, bombing of civilian population has failed to produce any sort of mass panic or nervous manifestations (1943:641).

Janis, reviewing the observations on behavior of the survivors of the atomic bombing of Hiroshima and Nagasaki, concluded that "the evidence available on overt behavior does not provide substantial support for claims that overt panic,

disorganized activity, or antisocial behavior occurred on a mass scale during the two A-bomb disasters" (1951:43). Ikle reported that "findings from Hiroshima, Nagasaki, Hamburg, and other areas of large bombings in World War II do not indicate that serious mass panic occurred at any time" (1958:15). These findings have repeatedly been substantiated in peacetime disaster studies. In the systematic NORC sample study of the White County, Arkansas, tornado, for example, not a single case of panic was found; moreover, only two percent of the total population showed any form of uncontrolled emotional expression during or immediately following the impact period (Fritz and Marks, 1954).

Almost all persons who directly experience a disaster or who are closely identified with disaster victims suffer some form of acute physiological or emotional stress response (Fritz and Marks, 1954; Janis, 1951), but the evidence suggests that these responses are of relatively short duration and do not usually result in chronic neurotic symptoms. There apparently is no significant increase in either the traumatic or non-traumatic neuroses in disaster. Most of the evidence suggests, in fact, that there may be an actual decrease in the incidence of all forms of emotional illness. Again the wartime studies provide the most coherent and relevant body of evidence.

According to Gillespie, "One of the most striking things about the effects of the war on the civilian population has been the relative rarity of pathological mental disturbances among those exposed to air raids" (1942:147). Wilson (1942) noted that of 134 cases of acute emotional reaction to air raids admitted to

a first aid center "in an area housing a highly emotional population," only six people returned for subsequent treatment. Vernon (1941) reported that of 1,100 persons treated in a London public shelter, only 1.4 percent showed any obvious psychological disorders. Harris (1941) found that air raids were a chief cause of breakdown in only 23 out of a total of 435 admissions to an observation ward in a refugee-reception center. Atkin (1941) analyzed 300 consecutive admissions to Knowle Mental Hospital, London, during the height of the blitz period (September, 1939 to April, 1941). He found that in 46 (15.3 percent) of the 300 admissions, air raids were given as a causative factor, but in only four (1.3 percent) were they regarded as having a major influence. Brown concluded that "The incidence of genuine psychiatric air raid casualties has been much lower than might have been expected; the average previously healthy civilian has proved remarkably adjustable" (1941). He noted that, in contrast to the military, the civilian war casualty received no benefit from being an invalid:

A civilian is not a member of any organized conscript body from which he can escape by invalidism; there is for him no immediate prospect of pension; there is no medical board to be considered. In fact there is no motive for a continuation of symptoms any longer than he can help. This probably accounts for the excellent prognosis of the civilian air raid psychoneuroses and emotional-shock states if adequately and early treated (1941:691).

Neustatter (1946), who studied 750 psychoneurotics who were stationed in London during ten weeks of continuous V-1 and V-2 missile bombing of the city,

found that only 7.2 percent were made seriously apprehensive by the bombing. He concluded that the bombing "had little effect on the group as a whole." Glover (1942) noted that the number of "bomb neuroses" treated in the London Emergency Region averaged little more than two per week during the first three months of the air blitz and that only one "genuine case" was reported from the practices of fifteen psychoanalysts at a meeting held several months after the blitz had begun. The German experience with bombing closely paralleled that of the British. The United States Strategic Bombing Survey (USSBS) Medical Team questionnaire canvass of German psychiatrists and directors of psychiatric institutions (USSBS, 1945) produced a "universal reply" that "neither organic neurologic diseases nor psychiatric disorders can be attributed to, nor are they conditioned by, the air attacks." A comparable USSBS survey of German specialists on psychosomatic disorders led to the general conclusion that "in view of the tremendous exogenous stimuli that offered a fertile ground for the development of these disorders their absence among the population is striking." Janis (1950) concluded from this and other evidence that the belief that there would be a high percentage of the bombed civilian population who would break down mentally and become chronically neurotic was disproved during World War II as a result of the British and German experience.

The visions of hospitals and other medical centers overflowing with patients suffering from psychotic, neurotic, and psychosomatic illness have never been fulfilled in disaster. During World War I, Bonhoffer noted a diminution

in the number of people seeking medical advice, not only in German luxury sanatoria but also in prisons (Wittkower and Spillane, 1940). Mira reported that during the Spanish Civil War the amount of psychiatric illness did not call for the provision of more psychiatric beds than had been available in time of peace and that "it was noteworthy that the group of neurotics, psychopaths, and mildly insane people who usually fill outpatient departments were not seen during the war" (1939:1219). In the heavily bombarded English community of Coventry, Massey reported that there was a decrease in the number of people attending psychological outpatient clinics and that there seemed to be no increase in neurotic and acute reactive illness (Hemphill, 1941). In Bristol, England, which "had months of unfulfilled expectations of raids, severe attacks by day, numerous minor and some 'blitz' raids," the admissions to the Bristol Mental Hospital in 1940 were the lowest in five successive years. Voluntary admissions, in particular, showed a marked drop when compared with previous years. Hemphill (1941), the investigator, concluded that the war proved beneficial "to persons of a certain mental constitution." The findings in Bristol were found to be supported on a national level by Stokes (1945), who reported that the total admissions to Britain's mental hospitals in 1940 were less by eight percent than in 1938, and that there was a further decrease in 1941. Following the war, Titmuss (1950) confirmed these findings for Britain during the wartime period and found that for most indicators of mental disorders the statistics showed a decrease rather than an increase.

Reduction or Prevention of Self-Aggressive and Anti-Social Behavior

Many theories derived from the study of human behavior in normal settings would lead us to expect an increase in self-aggressive and other-aggressive forms of behavior as a result of the increased privations and losses suffered by disaster victims. Existing data indicate, on the contrary, that the incidence of most forms of self-aggressive and antisocial behavior actually decline in disaster.

Suicide rates have often been accepted as a gross index of the amount of self-aggressive behavior present at a given time in society. From Durkheim's classic study in 1897 to the present time, all investigations of suicide have shown that suicides decline during times of disaster, including war and national revolution. Durkheim's computations uniformly demonstrated this decline in suicide during all periods of revolution in Denmark, Prussia, Bavaria, Saxony, and Austria. His wartime series showed the same effect. For example, the war between Denmark and Saxony in 1864 produced a 16 percent decline in suicides; that between Austria and Italy in 1866 dropped the rate by 14 percent in both countries; and the Franco-Prussian war of 1870-71 produced similar results in both France and Germany. Durkheim noted that this decline persisted for a considerable time after the occurrence of the disastrous event, and he offered the following explanation of his findings:

These facts are . . . susceptible of only one interpretation, namely, that great social disturbances and great popular wars rouse

collective sentiments, stimulate partisan spirit and patriotism, political and national faith, alike, and concentrating activity toward a single end, at least temporarily cause a stronger integration of society. The salutary influence which we have . . . shown to exist is due not to the crisis but to the struggles it occasions. As they force men to close ranks and confront the common danger, the individual thinks less of himself and more of the common cause. Besides, it is comprehensible that this integration may not be purely momentary but may sometimes outlive its immediate causes, especially when it is intense (1951:208).

Durkheim's findings on the decline of suicides in times of war have subsequently been supported for all industrialized nations of the world for which data are available and for numerous individual communities (Dublin and Bunzel, 1933; suicide, *Encyclopedia Britannica*, 1955; suicide, *Encyclopedia of the Social Sciences*, 1934; Faris, 1948; Ferrocuti, 1957; Halbwachs, 1930; Loomis, 1950; Lunden, 1947; Metropolitan Life Insurance Company, 1942; Porterfield, 1949; E. H. Powell, 1958; Schmid, 1928). Studies of attempted suicide illustrate the same trend. In Britain, for example, cases of attempted suicide among women (recorded by the police in England and Wales) decreased by 32 percent during the year of the air blitz (1941), as compared with the prewar rate (Titmuss, 1950).

Although suicide rates have never been a primary object of study in peacetime disasters, it is worthwhile to note that not a single case of suicide is reported in the various disaster studies conducted since 1950.

We have already noted a number of observations suggesting that antisocial

or other-aggressive forms of behavior decline in disaster. The systematic data on this subject are admittedly more sparse and scattered than those contained in the suicide studies, but the general weight of evidence indicates that most forms of antisocial behavior decline under disaster conditions. Porterfield (1949), for example, computed indices of both suicide and homicide in the United States during the period from 1910 to 1946. He found that both indices showed a downward trend in World Wars I and II. Exner noted that crimes against the person decreased following World War I (Durham, 1943). Titmuss (1950), commenting on the behavior of the British during the World War II bombings, said that there was generally much less disorderly behavior in the streets and public places than before the war. Fritz and Mathewson (1957), reviewing all the available evidence on looting and other forms of exploitation in disaster, concluded that the predictions of significant increases in looting, stealing, profiteering, mob violence, and crime have rarely, if ever, been fulfilled in disaster. They point out that these forms of behavior are quantitatively insignificant when compared with actions aimed at mutual aid, restoration, and reintegration.

Although the topic of "scapegoating" is often given prominence in the psychoanalytically oriented treatments of disaster (Janis, 1951; Wolfenstein, 1957), there is little systematic evidence to support the usual predictions that intragroup hostility will increase in disaster because of displacement of aggression onto "innocent" victims. Not a single minority group has been

subjected to scapegoating activity in any of the peacetime disasters studied in recent years; on the contrary, as we have previously noted, most minority groups actually experience a greater degree of acceptance and integration in disaster than in so-called normal times.

Verbal criticism of national leadership and domestic authorities—the most frequently cited evidence for the expression of intragroup aggression in wartime (Janis, 1951; USSBS, 1947a, 1947b)—is not in itself evidence of an increase in scapegoating or intragroup hostility. Such criticisms are frequently simply an expression of the democratic process, aimed at correcting obvious inadequacies in future defensive or restorative capability. Based on her study of public responses to three successive airplane crashes in Elizabeth, New Jersey, Bucher (1954) has shown that "blame assessment" is not an automatic by-product of disaster deprivations, nor is it necessarily an irrational process. Disaster-struck populations attempt to assess the causative factors in disaster, the remedial action needed to prevent recurrence, and the groups or agencies that are responsible for this remedial action. The outcome of this assessment process, however, does not usually involve the focusing of blame, resentment, or hostility on fortuitous or irrational targets. Bucher found that many persons were attempting to determine responsibility for the Elizabeth airplane crashes, but only a minority of them showed any resentment against those whom they held responsible. The process of blame assessment, she discovered, is essentially a future-oriented response to disaster; agents who are blamed are not blamed for the disaster just past but for

the disaster that may occur in the future if the appropriate protective measures are not taken.

Social Reconstruction and Regeneration

Despair, depression, and demoralization might be viewed as expected products of the intense and widespread loss and privation of disaster. Yet every modern disaster-struck community and nation has not only been quickly restored, but the inhabitants have often proceeded to reorganize their social life with added vitality, integration, and productivity.

Even during the period of greatest destruction and deprivation, people show a remarkable tenacity and sense of hopefulness. Studies of evacuation during World War II, for example, showed that people would rather risk the danger of bombing than endure family separation and life in unfamiliar surroundings. Over 60 percent of the British government-sponsored evacuees had returned to their cities within four months after the war began (Ikle, 1958), and most of the other evacuees had returned before the war ended.

The evacuees returned in hundreds of thousands during the winter of 1944-45 to a dilapidated London, to damaged and uncomfortable homes, and to the accompaniment of rockets. They knew—or thought they knew—that the war was ending. They could not wait for the Government's plans to mature; they were in a hurry to rejoin their families and get a good place in the housing queue (Titmuss, 1950:434).

In his survey of the rebuilding of bombed cities in Western Europe, Grebler (1956) notes that even where cities were virtually destroyed, they have

been rebuilt on the same site as before the war. The process of return and rebuilding begins almost immediately following a disaster. Cassino, Italy, for example, was completely reduced to rubble, its inhabitants scattered over the countryside and in distant cities, yet:

Within a few weeks of the end of active battle, people drifted back to live in caves, cellars, and dugouts, without food or means of livelihood, in an area infested with malaria and 550,000 mines . . . their action symbolizes the power of the city over people, even when all the physical features have disappeared (Grebler, 1956:463-464).

In the atom-bombed city of Hiroshima, the evacuation of survivors was converted into a mass convergence response within twenty-four hours following the attack, and in both Hiroshima and Nagasaki a high proportion of the population returned to take up permanent residence in the rubble of their homesites within a few months following the explosion. Within three months the population in each city was back to about 140,000 (Janis, 1951). Four years after the atomic bombing in Hiroshima the writer Norman Cousins found the city had been almost completely rebuilt on a temporary basis and that its people were "alive" and "vital":

As you stand you wonder why people would ever come back to the city again, to this place of compressed agony. The answer is all around you. You could see it in the brisk, life-loving walk of the young people. You hear it in the full laughter of children. The answer you found was that there are deeper resources of courage and regeneration in human beings than any of the philosophers had dared

to dream. The answer you found was that the greatest force on this earth—greater than any device yet conjured up in the laboratories—is the will to live and the will to hope (1949:31).

Studies of peacetime disasters show that the victim population has a similar high morale and motivation to return to the disaster-struck areas and to rebuild. In a sample of 116 victims of the Flint-Beecher, Michigan, tornado of 1953, about 90 percent of the respondents indicated that they intended to remain in the community. The investigators found no statistically significant differences between those who said they would stay and those who said they would leave on the basis of injuries to self or family, property damage, feelings of deprivation, rural or urban residence, neighborhood or community identification, or concern for personal safety. Seventy-five percent of the people in the sample said they felt that they were fortunate to have emerged as well as they did, and only eight percent felt that they were more unfortunate than their neighbors. In general, the victims foresaw a "better" community, with more neighborliness and solidarity, better housing, increased religious activity, and other "improvements" (Form, Nosow, Stone and Westie, 1956). In the Waco and San Angelo, Texas, tornadoes of 1953, Moore (1958) found that the majority of the victim families were highly optimistic about the future of their cities, and that those who were dispossessed and forced to move from their homes were more often optimistic than those who were not forced to evacuate their homes. Seven to nine months after the tornadoes, it was found that only 2.8 percent of a sample of 282 people

in Waco and 3.3 percent of a sample of 150 in San Angelo had left the city. The community-forming and integrating character of disaster is noted in the Lake View section of San Angelo, which was not only struck by the tornado of 1953, but also by a second severe wind and hail storm thirteen months afterward:

Friendships have developed between neighbors who were only speaking acquaintances before they met common problems forced upon them by tornado and hail storm. In fact, it is almost the unanimous belief that Lake View has come of age as a community in its own right and as a part of the larger city. Rudiments of a strong community seem to have existed prior to the storms, but no event had welded the families together into a cooperating unit. When tremendous problems of common concern and of actual rehabilitation and survival were thrust upon Lake View, cooperative efforts to meet these served to intensify feelings of community pride. This was simply and well expressed by the common, "We're happy here, even though we did have a tornado" (Moore and Crawford, 1955:5).

The rapidity with which disaster struck populations recuperate from disaster and restore their community is a commonly noted fact in both historical and contemporary accounts. The Chicago fire of 1871 devastated an area of three and one-half square miles, burned the homes of 98,500 persons, and destroyed 17,450 buildings. Within 10 days after the fire, 5,497 temporary business structures had been erected, and within a year 100,000 men were constructing 10,000 permanent buildings (Asbury, 1948). The San Francisco earthquake and fire of 1906 destroyed an area of 490 blocks or 2,831 acres, including the homes of 250,000 people and 28,000 business buildings. Within

three years the burned area was rebuilt and the assessed value of the city was half again as much as it had been before the fire (Bronson, 1959).

The remotivation of the actors within the system and the consequent total concentration of societal energy on the goals of survival and recovery usually results not only in rapid reconstruction, but often produces a kind of "amplified rebound" effect, in which the community or society is carried beyond its preexisting levels of integration, productivity, and capacity for growth. The Halifax, Nova Scotia, munitions ship explosion of 1917 killed over 2,000 persons and devastated a major portion of the city. Prince's study of this event (1920) showed that within less than three years the damaged area had not only been rebuilt, but every index of economic activity and population growth indicated a dramatic increase over the predisaster period. It was also noted that the immediate unifying effect of the disaster was continuing to operate in the form of greater cooperation among people and greater interest in civic affairs.

During World War II, Allied aircraft bombed over 150 communities in Germany. Approximately 22,000,000 German civilians, or roughly one-third of Germany's pre-1939 national population of 69,800,000 were subjected to bombing. As a result, about 305,000 people were killed, 780,000 were wounded, 1,856,000 homes were destroyed, and 4,885,000 people were evacuated from the cities. After the war Germany was also subjected to a highly disorganizing period of denazification and the further reduction of its industrial capacity through reparations to the conquerors. Despite this, West Germany had exceeded

its 1936 rate of industrial production within five years after World War II: by 1950, the index reached 113 percent; by 1952, 144 percent; and by 1954, 170 percent (Davidson, 1959). Japan had over 66 of its cities subjected to saturation bombing, resulting in over 900,000 deaths and 1,300,000 injuries, yet:

No one would have foreseen the recovery which actually took place, an amazing one even for the industrious Japanese. Less than ten years after 1945, when the Japanese surveyed with despair their crippled industrial plants, they were proudly saying that the "post-war was over," meaning that output had gone far beyond the point of mere recovery. In 1957 an index of industrial production stood at 277.3 as compared to a norm of 100 for 1934-1936 (Keene, 1959:116).

Even Hiroshima has been permanently rebuilt and is now a rapidly growing city:

Physically, Hiroshima is a greater city than it was before the war, with expanded industries and a new university, besides the cultural growth centered around the World Peace Memorial Park and its institutions. The population has increased by more than half, to 380,000. Growing by 25,000 souls yearly, Hiroshima will soon be Japan's tenth city (Trumbull, 1957:129).

The Soviet Union, which had an estimated nine to twelve million civilian casualties in World War II, has had a similar remarkable spurt in productivity and vitality of growth in the postwar years.

Similar examples can be found in the study of recent peacetime disasters. For example, a tornado in Udall, Kansas, in 1955, leveled the town and killed or injured 53 percent of its population, yet:

In less than a month and a half after the impact of the disaster, a new Udall, in the new format of a modern suburban American town, was rising from the rubble where scores of persons died . . . Leaders in the "new" Udall . . . are excited about the unique opportunity of starting all over again. They have visions of creating an idyllic commuter's suburb for residents working in Wichita, Kansas. The town is to have a dial telephone system, something they did not have before . . . Homebuilders . . . estimate the population of the new Udall at approximately 1,000; others feel that this figure is conservative. (The pre-tornado population was 610.) ...Deposits in the local bank had increased from \$504,000 before the storm to about one and a quarter million dollars as a result of the victims depositing their insurance claims (Hamilton, Taylor and Rice, 1955:67-69).

THERAPEUTIC FEATURES OF DISASTER

The therapeutic effects of disaster are usually subsumed under such broad rubrics as "morale" and "social solidarity," but these terms have been used in such a global and static manner that they often obscure many of the important phenomena and processes that comprise them. It is useful to take a fresh look at these old concepts and to attempt to specify a little more clearly the particular features of disasters that have therapeutic functions.

Situational Therapeutic Features

An essential feature of disaster is that the threats and dangers to the society come from outside the system and their causes can usually be clearly perceived and specified. This contrasts with many other crises

where the threats arise within the system and it is difficult to isolate and identify a widely agreed upon cause. A disaster creates fear, whereas many other forms of crisis create anxiety. As Kris (1944) points out, real danger is, on the average, faced better than vague apprehensions; the fantastic or imaginary elements of anxiety are deflated by the impact of the concrete situation. In disasters the source of pain and suffering is objectified and specified as external to the system; it is defined as something "out there" rather than "in here." Thus they give people a concrete source of worry and concern toward which action can be directed. The further fact that the threats and dangers in disaster are real and present and endanger human survival gives them a degree of clarity and urgency unlike the vague threats and tensions of everyday life.

The remedial needs in disaster (rescue, clearance of debris, rebuilding, etc.) are immediate and imperative needs that are also clearly specifiable in the external environment and toward which social action can be directed to produce readily discernible results. In many other crises, people have conflicting definitions of need and of the manner in which it should be met. The resulting accommodations or compromises to these conflicts often leave needs unfulfilled and solutions inadequate. Even when needs are clearly recognized, the period between recognition and fulfillment may be so long and so complicated by frustrating delays that the solution is not subjectively satisfying. In disasters, needs and need fulfillment are so closely related, so evidently imperative for human survival, and so widespread

in import that consensus is readily achieved. As a consequence, the needs are attacked en masse, and the concrete results of this collective action are quickly and readily discernible. Disasters thus lead to social change rather than requiring the individual or small group to bear the burden of "readjustment" to an intact unchanged society.

Disaster provides a form of societal shock, which disrupts habitual, institutionalized patterns of behavior and renders people amenable to social and personal change. The essential effect of shock is to arrest habitual repetitive patterns of behavior and to cause a redefinition and restructuring of the situation in accordance with present realities. Shocking or traumatic events tend to demonstrate the inapplicability or insufficiency of previous modes of behavior and to render persons suggestible to changes that will permit ongoing action to be reinstated. A shock, therefore, always contains the seeds of change, especially when accompanied by a change in the objective conditions of life involving a removal or obliteration of the stimulus support for old habits of action.

Slotkin (1952) points out that stress-producing situations tend to fall into one or the other of two broad categories: **frustration**, in which the external situation prevents achieving the goal toward which an ongoing activity is directed; or **trauma**, in which the situation provides stimuli that are intense enough to disrupt the performance of ongoing activities. Trauma or shock is the characteristic stress of disaster; indeed the "shock-stun" response has been noted

so frequently as an initial reaction that it has become almost synonymous with the term "disaster." Frustration, on the other hand, is the common form of stress encountered in everyday life. In their stress experiments, Funkenstein, King and Drolette (1957) found that trauma tended to produce the same emotions in all their subjects whereas frustration produced differences in response in accordance with preexisting personality characteristics. They concluded that traumatic situations were not characteristics of the stresses of everyday life.

Trauma-induced changes are much easier to take when they are widely shared, as they are in disaster. In the stresses and traumata of normal life the individual or small group is usually forced to make compensatory changes that are not shared by the larger referential social system. In disaster, the institutional structure, as well as individual habit patterns, is disrupted and rendered amenable to change; thus the resources of the entire referential society are brought into play in coping with the needed changes.

Disaster provides an unstructured social situation that enables persons and groups to perceive the possibility of introducing desired innovations into the social system. Although the perception that the "old" and "stable" form of life is gone or modified by the disaster initially tends to be disorganizing in nature, the breaking of the "cake of custom" is often perceived by many groups in the society as desirable once the immediate problems of rescue, medical care, and subsistence become solved. Changes and adjustments made during the emergency period give proof that the restructuring or changing

of the social system is possible. People see the opportunity for realizing certain wishes that remained latent and unfulfilled under the old system. They see new roles that they can create for themselves. They see the possibility of wiping out old inequities and injustices. The opportunity for achieving these changes in the culture lends a positive aspect to disasters not normally present in other types of crisis.

Hocking has noted that there is in every man "a lurking yen toward some sort of revolution," and that disasters release him from many of the inhibitions and petty concerns of everyday life:

...while war and catastrophe are dreaded by every voice of reason, there is a minority whisper welcoming the crisis. Here comes the desired revolt from the commonplace and its assumed scale of importance. Here comes the exhilaration of a major struggle, the vanities and false fronts of pseudo-essential routines. We recover our normal size as the jinni released from the bottle. In every upheaval we rediscover humanity and regain freedoms of which we had robbed ourselves through our possessions and habits. We are cured of myopia and the petty bookkeeping with private gains. We relearn some old truths about the connection between happiness, unselfishness, and the simplification of living (1941:316).

Culturally derived discriminations and social distinctions tend to be eliminated in disaster because all groups and statuses in the society are indiscriminately affected; danger, loss, and suffering become public rather than private phenomena. This feature gives disaster the characteristics that distinguish it from other forms of crisis. In everyday

social life, people can point to real or assumed injustices and inequalities in the rewards and punishments meted out by the society. In most accidents and other recurring life crises, the victim often feels unjustly discriminated against, since there are always individuals or groups in the victim's frame of reference ("non-sufferers") who have been spared. The victim therefore feels the need to explain having been singled out, as an individual or as a member of a particular group, for special punishment or suffering, and this search for a causative agent often results in aggression toward self or others.

Since the dangers in disasters come from outside the social system and indiscriminately affect persons of all groups and statuses, there is a temporary breakdown in social class, ethnic group, and other hierarchical status distinctions, and a general democratization of the social structure. The reference changes from "only I have suffered" to "all of us have suffered; we are all in it together." This is the basis for the widespread feeling of community and equality of suffering found in disasters. William James made the following observations about his experience in the San Francisco earthquake and fire of 1906:

Surely the cutting edge of all our usual misfortunes comes from their character of loneliness. We lose our health, our wife or children die, our house burns down, or our money is made away with, and the world goes on rejoicing, leaving us on one side and counting us out from all its business. In California everyone, to some degree, was suffering, and one's private miseries were merged in the vast general sum of privation and in the all-absorbing practical problem of general recuperation. The cheerfulness, or, at any rate, the steadfastness of tone, was

universal. Not a single whine or plaintive word did I hear from the hundreds of losers whom I spoke to. Instead of that there was helpfulness beyond the counting...

It is easy to glorify this as something characteristically American, or especially Californian . . . But I like to think that what I write is a normal and universal trait of human nature (1911:224-225).

As if in answer to James's last comment, Ignazio Silone writes about the behavior of survivors in an earthquake in Messina, Italy:

In 1915 an earthquake of exceptional violence destroyed a large part of our province and killed, in thirty seconds, about fifty thousand people. I was surprised to see how much my fellow-villagers took this appalling catastrophe as a matter of course. The geologists' complicated explanations, reported in the newspapers, aroused their contempt. In a district like ours, where so many injustices go unpunished, people regard recurrent earthquakes as a phenomenon requiring no further explanation . . . An earthquake buries rich and poor, learned and illiterate, authorities and subjects alike beneath its ruined houses. Here lies, moreover, the real explanation of the Italians' well-known powers of endurance when faced with the cataclysms of nature. An earthquake achieves what the law promises but does not in practice maintain—the equality of all men (1952:92-95).

The breakdown of the formal status system and conflicts and animosities associated with it are also one of the major social benefits that accrues from war:

Society attains its maximum sense of organization and community and its most exalted sense of moral purposes during the period of war . . . With the outbreak of war there is a termination of many of the factionalisms and sectarian animosities which ordinarily reflect the moral

perplexities of modern politics. In their place comes what the English philosopher L. P. Jacks has so aptly called "the spiritual peace that war brings." ...However deeply man may continue to hate the devastation and killing and mutilation of war, he cannot, being human, forget altogether the superior sense of status, the achievement of humanitarian goals, and, above all, the warming sense of community that comes with war (Nisbet, 1953:40-44).

The losses and destruction engendered by disaster automatically establish transcendent goals with which the individuals can identify and relate their own actions. The overriding goals of survival, rehabilitation, and reconstruction are inherent in the nature of the disaster situation. The common struggle to overcome the dangers and privations of disaster and to restabilize social life provides a sense of mission and direction to human activity that is not usually present in everyday life, which often fails to provide people with long-range societal goals that continually challenge individual and small group effort. As Eric Hoffer has said:

The measure of a nation's potential virility is as the reservoir of its longing. The saying of Heraclitus that "it would not be better for mankind if they were given their desires" is true of nations as well as individuals. When a nation ceases to want things fervently or directs its desires toward an ideal that is concrete and limited, its potential virility is impaired. Only a goal which lends itself to continued perfection can keep a nation potentially virile even though its desires are continually fulfilled (1958:148).

Therapeutic Social Adjustments

The foregoing situational characteristics of disaster facilitate the emergence of the therapeutic mechanisms that human societies naturally develop under

disaster conditions. Human societies have enormous resilience and recuperative power when they are confronted with direct and clear challenges to their continued existence. Under conditions of widespread crisis and stress, they spontaneously develop and practice principles of effective social therapy. During the World War II bombing of Britain, Vernon (1941) noted that "the public discovered sound psychological principles unaided by the psychologists," and he concluded that "most social and emotional adjustments to disaster conditions are better carried out by those who do not know about their psychological basis."

Pre-existing values, norms, and future goals are sloughed off and viewed as irrelevant; values and norms are emergent rather than preordained. In everyday life many human problems stem from people's preoccupation with the past and the future, rather than the present. People worry about their past conflict relations with their associates or their past failures to meet social expectations. They develop anxieties about their future ability to meet their responsibilities or to achieve socially approved goals. Many of these worries about the past and anxieties about the future are unrealistic when judged from the perspective of present realities, but they play an important role in the social and psychological pathologies of everyday life.

Disasters provide a temporary liberation from the worries, inhibitions, and anxieties associated with the past and future because they force people to concentrate their full attention on immediate moment-to-moment, day-to-day needs within the context of the present realities. The blanking out of the past and

future frames of reference and the development of a new frame of reference based on present realities have adaptive functions for both personal and social systems. It speeds the process of decision-making, facilitates the acceptance of change, and provides individuals with a satisfying sense of correspondence between their perceptions of reality and their overt behavior. The emergence of new social norms and values that are fitted to present realities also makes for a more universal and a more satisfying conformity than can be achieved in the usual formal social structure, which often contains "impossible" standards of behavior or standards that cannot be adapted to specific situations. The close correspondence between individual impulses and group norms has often been identified with signs of a healthy society: "We may feel that a society is healthy when the impulses of individuals and the expectations of the group coincide. Both are always present and related mutually to one another" (Homans, 1950:329).

The persistence of these present-oriented frames of reference is, of course, primarily dependent on the continuation of disruptions in the social life. When there is a continuation of threat and danger, the hedonistic "live-for-today" orientations tend to persist. Titmuss points out the importance of this hedonistic type of orientation in maintaining British morale and vitality during World War II:

Events showed that most people had a greater capacity to adjust themselves than had been thought possible: a tough resilience to the changed conditions of life imposed on them. Nor was it realized that there would be such a

widespread and spontaneous development of ways of keeping up morale; friendliness, the constant talk about bombs, the attitude of "if it's got your number on it," and a preoccupation with apparently frivolous activities like going to the pub as usual or having a permanent wave.

There were also compensations about this civilian war . . . Certain responsibilities were pushed off or postponed. Others were assumed, but of a different, a more vivid, a shorter-lived nature. There were sensations of a new virility, of paradoxical freedom, and of a rather bawdy 'live-for-today' philosophy. New tolerances are born between people; offsetting the paleness of worn nerves and the lining of sorrow there occurs a marvelous incidence of smiles where smiles have never been before: an unsettling vista of smiles, for one wondered how unsympathetic life could have been before, one was ashamed to reflect that it had needed a war to disinter the state of everyday comradeship (1950:350).

This last statement leads directly to the central therapeutic adjustment of disaster.

The widespread sharing of danger, loss, and deprivation produces an intimate, primarily group solidarity among the survivors which overcomes social isolation, provides a channel for intimate communication and expression, and provides a major source of physical and emotional support and reassurance. The capacity of human societies under severe stress to contract from a highly elaborated set of secondary group organizations to a kind of universal primary group existence is probably their central built-in protective mechanism. This mechanism seems to account for the resiliency of groups and society in the face of disaster and their ability

to regenerate a more complex social life. The reversion to the primary group mode of existence might be likened to the antibodies which are formed in the human body to attack disease and to return the body mechanism to a state of equilibrium, but Charles H. Cooley's analogy (1909) of the primary group as the nucleus from which all social organization grows is probably a more useful metaphor.

The social disorganization that occurs in disaster is essentially a social disorganization of secondary group life—a disruption of the complex structure of social differentiations and culturally defined communication networks among human beings. Except momentarily, it does not disorganize primary group life. On the contrary, this is strengthened and is both more pristine and more widely based than in ordinary social life. It is not simply a withdrawal into the usual primary groups of family, neighborhood, clique, or friendship, but the quality of interaction in these groups and in the entire community of sufferers approximates more closely the characteristics of intimate, personal, informal, sympathetic, direct, spontaneous, and sentimental interaction set forth in the concept of the primary group.

The breakdown of culturally prescribed barriers to intimate communication and interaction provides some major benefits and gratifications to the survivors. The constraints against direct emotional expression and intimate communication are removed. Forms of expressive behavior that are normally circumscribed or inhibited by cultural taboos are not only tolerated but

are openly discussed and sanctioned. The entire society talks much more openly and freely about intimate feelings of fear, guilt, shame, despair, hope, love and other important sentimental concerns of human life. This stands in contrast to the daily life of modern societies, in which people have increasingly reduced the opportunities for intimate communication by drawing more and more areas of life into the secondary-group fold. Thus life is increasingly characterized by interactions between social roles rather than by interactions between persons. As a consequence, the speech of everyday life has encouraged emotional concealment and inhibition rather than emotional expression (Frida Goldman-Eisler, 1949).

Jourard has posited a close relationship between what he calls the "healthy personality" and "self-disclosure." "The healthy person is one who engages in full and honest self-disclosure in interpersonal relationships and communications." One can therefore gauge the health of a relationship by "the breadth of the topics of conversation, the range of feelings that are openly expressed, and the range of activities that are shared. In each case the broader the range, the healthier the relationship" (1958). If we use these criteria of judgment, it is clear that life in disaster-struck societies is more "healthy" than that which customarily prevails. As Deutsch has said: "In organizations or societies the breaking of the cake of custom is creative if individuals are not merely set free from old restraints but if they are at the same time rendered more capable of communicating and cooperating with each other and with the world in which they live" (1952:378).

The opening of the channels for intimate communication and expression enables people to confirm the fact that others are basically like themselves. That people respond in like manner to the fears, dangers, privations, and uncertainties posed by the disaster, largely regardless of previous stations in life, is greatly reassuring—especially for those who had previously felt marginal, detached, isolated, or uncomfortably different from others. The "outsider" becomes an "insider," the "marginal man" a "central man." People are thus able to perceive, with a clarity never before possible, a set of underlying basic values to which all people subscribe. They realize that collective action is necessary for these values to be maintained and that individual and group goals are inextricably merged. This merging of individual and societal needs provides a feeling of belonging and a sense of unity rarely achieved under normal circumstances.

Thus, while the natural or human forces that created or precipitated the disaster appear hostile and punishing, the people who survive become more friendly, sympathetic, and helpful than in normal times. The categorical approach to human beings is curbed and the sympathetic approach enlarged. In this sense, disasters may be a physical hell, but they result, temporarily, in the fulfillment of the utopian image.

Many preexisting invidious social distinctions and constraints to social mobility are removed; there is a general democratization of the social structure and the development of a system of societal rewards based on achievement rather than ascription. Judgments of

human action in disaster tend to be framed not in terms of what a person **represented** in the preexisting society, but in terms of what the person **needs** and **achieves** in the disaster aftermath. Sufferers receive a massive dose of love and reassurance from the other survivors. The community of sufferers offers proof of its concern for individual suffering not only by symbolic acts of sympathy and kindness, but also by providing the physical aid needed to minimize the objective basis of punishment and privation. Inequalities in the distribution of goods and services and other tangible rewards are temporarily eliminated and people are compensated in terms of disaster-induced need rather than formally ascribed status. Similarly, the persons who achieve high prestige in disaster-struck societies are usually those who contribute the most in relieving the stress of disaster or who, despite personal suffering, continue to make positive contributions to the social goals of relief and recovery. The clear-cut emphasis on need and achievement as the basis for the distribution of scarce societal resources and rewards constitutes a liberating and reassuring experience for the disaster survivors.

A small group of the most extreme sufferers are singled out and socially recognized as a reference point for the assessment and comparison of disaster losses and privations. A new, relative standard for judging the severity of privation and suffering emerges in disaster, and this standard takes its point of departure from the individuals and families who have experienced the most severe losses and privations. This means that most other

sufferers can always point to an objective case of someone who is much "worse off" than they, and it helps to account for the fact that disaster-struck populations almost always minimize their losses and privations when compared with normal standards. For example, a tornado in Judsonia, Arkansas, with a population of about 1,000 people, killed thirty-five persons, injured nearly 400, and either destroyed or made unlivable virtually every house in the community. Approximately three weeks following the tornado, a random sample of the population was asked a series of questions about their overall sense of deprivation. Over three-quarters of those interviewed reported that they had not suffered great deprivation. When asked to compare their deprivations with others, over half felt that they were less deprived than others, and not a single person reported feeling more deprived than others (Marks, Fritz, et al., 1954).

As profoundly dramatic events, disasters absorb people's attention, provide a medium for the build-up and release of emotions, and become collective representations or symbols by which past, present, and future happenings are compared and rated. Disasters produce most of the cathartic effects of drama that have been noted since the time of Aristotle. They are gigantic sociodramas that grip people's attention, heighten the sense of importance of human action, facilitate emotional identification, and provide a socially sanctioned opportunity for acting out basic human emotions. Much of the dramatic effect of disasters results from the fact that they compress social processes into a short time span, making them more visible than in normal

times. Events that usually take years to be enacted are played out in a matter of days, weeks, or months. They usually occur within a definite dramatic structure—introduction, climax, and denouement. In rapid succession, people see the community or nation endangered, destroyed, and restored. They see old social institutions die and new ones formed. And they often witness the swift fulfillment of social changes that were only vaguely hoped for in the pre-disaster period. This rapidity of social change provides a dramatic quality to disasters, which not only makes them more vivid than other forms of crisis but also facilitates the actors' insight into the interrelationships between themselves and their society.

Since disasters become collectively designated as important historical events, they have a special place in the social framework of memory. They provide major reference points by which previous and subsequent events are compared and rated. Willard Waller noted that through a death in the family the ideal image of the deceased may become a sentimental rallying point. He expressed this in the statement: "The family loses a member but gains a collective representation" (1938:513). Disasters are much more important collective representations, because they are widely and publicly shared. **B.D.** (Before Disaster) and **A.D.** (After Disaster) become important markers in the life of the society as well as in individual life. A restudy of a Midwestern river town conducted more than 15 years after a severe flood in 1937 showed that the disaster was still a salient fact in the life of the community. People tended to date

events in terms of the disaster; their memories of the happenings in the flood remained vivid; they still identified many of their fellow inhabitants in terms of the kind of social role (rescue worker, helper, etc.) that they played in the disaster (5).

The continuing public recognition of the disaster as an important juncture in human experience also provides a form of social absolution: people are permitted to make a clean break with the past and to take a fresh start in reorganizing their lives.

SOME IMPLICATIONS FOR THEORY AND RESEARCH

These disaster findings and perspectives suggest a number of key problems for future theory construction and research.

Disaster As a Unique Form of Crisis

It is often assumed that all forms of crisis and stress can be arrayed on a single linear continuum, ranging from minor to major, small to large, mild to severe. W. I. Thomas (1909), for example, used the term "crisis" broadly to refer to any interruption of habit, and he ranged the various types of crisis on a continuum from momentary individual interruptions of attention to widespread social catastrophes. This assumption of linearity is useful insofar as it encourages behavioral scientists to look for similarities and differences among the many different types of crisis. It becomes misleading, however, if it is additionally assumed that the findings derived from the study of one form of crisis can be extrapolated without change to other forms of crisis. The direct extrapolation of

findings derived from clinical studies, from small-scale experimentally induced crises, from individual family crises, or from "accident" type situations to disasters accounts for many of the serious predictive errors that have been made in the past about behavior in disaster. Disasters differ from other forms of crisis, because they produce a new and different referential framework within which people perceive and judge their experiences. Most other crisis events cannot, therefore, be used as a direct analogue of the disaster situation.

For conceptual purposes, it appears useful to distinguish at least three different frames of reference within which crisis or stress may occur: (a) a **disaster-struck (totally disturbed) social system**; (b) an **accident-struck (partially disturbed) social system**; and (c) an **intact, ongoing (undisturbed) social system**. There are various dimensions along which these three contexts can be distinguished—for example, the degree to which the pain, injury, or punishment can be viewed as originating within the system or is externally induced; the degree to which a given stress corresponds with or transcends existing invidious social distinctions in the system; the extent to which conventional cultural solutions can or cannot be applied readily to the situation; the extent to which the phenomena of loss and individual suffering can be hidden from public scrutiny; the size of the social unit within which pain and suffering is shared; and the extent to which the larger society recognizes the suffering of the victims by compensatory changes in the system of social rewards.

Systematic comparisons among crises occurring within these three

different referential contexts are needed to establish more precisely the limits of similarity and dissimilarity in behavioral response. Such studies might compare the responses of people suffering similar forms of loss or privation (death in the family, personal illness or injury, loss of property) in disasters, in accidents, and in more routine or recurrent circumstances at similar time periods following the event. The ideas developed in this paper suggest that the behavior of members of the community of sufferers in disaster will differ from that of persons suffering comparable losses and privations in a nondisaster context in many ways, including: lesser tendency to deny the existence of a crisis; lesser preoccupation with matters of guilt and other self-punitive mechanisms; lesser tendency to project blame on fortuitous targets; lesser tendency to inhibit memory recall of the event; more intense, but briefer period of mourning and more open expression of grief response; greater tendency to underestimate one's own deprivations, both in terms of pre-existent standards of value and in terms of how others have suffered; greater optimism about the future; and greater flexibility and adaptability in subsequent interpersonal crises.

This emphasis on the uniqueness of disaster as a form of crisis should not, however, obscure the need for a clearer focus on the commonalities of human adaptation to crisis. Many of the positive adaptive mechanisms noted for disaster can be seen in miniature form in the less dramatic crises of life. Unfortunately, the persistent emphasis on pathological effects and adaptations in past studies has obscured the recuperative, revitalizing adaptations that people naturally develop

in the process of coping with stressful events. The future development and expansion of social medicine and social psychiatry will largely depend on a more adequate knowledge of these positive adaptive actions and how they may be utilized in large-scale preventive and therapeutic programs.

Unshared Stress As a Central Factor in The Aetiology of Illness

Selye's work on the physiology of stress (1950, 1956) suggests that every stress experience has an ultimate deleterious effect on the human organism. When applied to social and psychological stresses, however, this generalization seems to require important qualification. Whether a given threat or danger to the organism produces deleterious or beneficent effects appears to depend not only on the particular cultural and personal definitions of stressful events, but also on the extent to which the reference society or group shares the stressful experience and makes social, as well as individual, adaptations to it. As we have seen, widely shared traumata and stresses, even those which severely threaten the integrity of the organism, often lead to new and higher levels of personal and social functioning than existed prior to the stress-provoking experience.

Modern societies have perhaps become "sick" societies not because the stresses of life have become more intense or numerous, but because they become absorbed by the individual as an unshared experience. With increasing atomization and formalization of social relationships, the recurrent crises and stresses of life become increasingly absorbed by smaller units of social action. This leads to a vicious disintegrative cycle: as the units of stress-absorption

become increasingly atomized, they take on the character of random incidence; thus the stresses and their effects become less detectable by the society as a whole. The society consequently makes fewer social adjustments to the stress-provoking events, and increasing numbers of people become ill or debilitated by their effects. The cycle can be broken only when people socially recognize the nature of the stress and make compensatory changes in the structure and interactional system.

The problem of unshared stress can be studied at many levels of generality and specificity. At the general societal level, for example, it may be hypothesized that pathological or debilitating stress responses occur most frequently in areas of life experience where the reference society fails to provide the necessary cultural supports or compensatory social rewards for the punishment or privation suffered by the stressed individuals. Such stressful events are especially characteristic of major turning points in the life trajectory of human beings (for example, changes in age, marital status, and dependency status), shifts in social mobility (movement to new communities, changes in career lines, changes in class and social status, etc.) and of serious loss and privation (death of intimates, illness, injury, unemployment, etc.). Future studies should attempt to identify the general areas of stress experience in which the society fails to provide cultural supports for individuals and small groups and to relate these to studies of health and illness. At the more microscopic level, the problem of unshared stress can be studied in relation to personality and social role characteristics, particularly

the ability or inability of people to engage in "self-disclosure"—to share fully their innermost thoughts and feelings with others (Jourard, 1959).

The Personal Community As a Unit of Study

As Henry (1958) points out, an important function of social structure is to provide everyone with a personal community, a group of people on whom one can rely for support and approval. The accumulated evidence of the social sciences suggests that the ability to withstand crisis and stress—to persist in the face of danger, loss, privation, or other adversity—is intimately associated with the strength and quality of personal community ties. When these ties are strong, supportive, and responsive to the individual's physical and emotional needs, the capacity to withstand and overcome stress is heightened. When the personal community ties are weak or non-existent, or when they become inflexible and unresponsive to the individual's needs, the capacity to cope with stress is weakened or minimized.

The concept of the personal community is an operationally useful one for future studies of health and illness. If the individual's security and integrative system is closely associated with the strength and quality of the personal community, it is clear that these personal communities should be a prime unit of study in future investigations. Unfortunately, past studies have generally assumed that peoples' personal communities coincide with certain geographical limits, with such demographic categories as race, religion, and socio-economic status, or with such limited social circumscriptions as the family, neighborhood, or peer

group. These are unrealistic assumptions in modern urban societies, where people's personal communities often transcend time and space and the traditional categories or groups that have been used in the study of human behavior. Future studies should begin with empirically derived circumscriptions of the meaningful and significant persons in the subjects' social world, and attempt to relate the characteristics of these real personal communities to problems of prevention, etiology, and therapy.

Relationship Between Health and the Utopian Prototypic Image

The disaster findings noted here suggest that a person's view of the "good society"—the implicit or explicit, conscious or unconscious view of what human society can and should be like—is universally based on an abstracted image of the most satisfying, need-fulfilling primary group relationships. This image becomes the prototype by which a person judges the state of the social world and the person's own individual state of well-being within that world. When the perceived social reality does not coincide with the ideal image of the primal group values, a person becomes uncomfortable, dissatisfied, disturbed, or ill. When the perceived reality closely fits the ideal image, a sense of well-being, contentment, happiness, euphoria, or health is experienced.

By virtue of the common nature of primary group interaction throughout the world, these utopian prototypic images appear to have some universal content characteristics. The ideal image always contains the notions of a personal community in which the individual achieves a total sense of acceptance,

recognition, and response in terms of love, affection, and a sense of security and belonging through the identity of individual and group goals. The specific form of these images—for example, what constitutes action perceived as accepting, affectionate, and loving—will vary in relation to the cultural context of norms and values within which the person becomes socialized, as well as in relation to differentiated individual experiences.

As social animals, people perhaps come closer to fulfilling their basic human needs in the aftermath of disaster than at any other time because they develop a form of social life highly compatible with these needs. This conception of the fulfillment of the utopian prototypic image of society helps to explain many otherwise inexplicable phenomena of disaster behavior, including the sense of well-being on the part of the disaster-struck populations; the high degree of morale in the face of danger, loss, and privation; the common tendency to minimize deprivations; the rapidity of recuperation; the fact that disaster-struck communities tend to resent relief and control agencies that attempt to superimpose the pre-existing standards and values of life; the "paradise lost" type of disenchantment and disillusionment that may set in when people realize that the satisfying gains in interpersonal communication and solidarity cannot be sustained; the tendency for neurotic and psychosomatic symptoms to reappear with the re-establishment of the usual social differentiations and distinctions; and the basic sense of nostalgia that people frequently have about disaster times.

Future studies might explore the need satisfactions provided in the

community of sufferers and relate these to the immediate and later behavioral responses to disaster and its aftermath. The general hypothesis would be that the utopian prototypic image exercises a major influence on the manner in which people respond to the various events associated with disaster and that the degree to which the image is fulfilled or denied will be related to the presence of negative or pathological responses.

On a more general level, the existence, form, content, and significance of utopian prototypic images might be explored in future studies, both under disaster and non-disaster conditions. It is assumed here that these images are universal in nature, that they are derived from a continuous series of primary group relationships, and that they exist as a kind of general, inchoate, philosophical matrix within which people make judgments about their life conditions and experiences. The image probably rarely refers to a single, concrete social relationship, but rather to a gestalt developed during the earliest period of childhood and successively modified throughout life as a result of numerous primary group contacts. Cross-cultural studies of people's views of the "good society" related to measures of health and illness would help clarify the existence and nature of these images and also serve to test the explanatory value of this concept.

Universal Features of Social Therapy

The situational therapeutic features of disaster and the natural spontaneous techniques of group therapy developed in the community of sufferers might be

translated into the following therapeutic action directives:

1. Utilize the device of shock for disrupting dysfunctional habit patterns and for demonstrating their inapplicability to present needs.
2. Objectify the nature of the crisis and the threat which it poses to the integrity of the personal and social system. Convert anxiety into fear.
3. Clearly specify the remedial needs as ones that require social, as well as individual, adaptation and physical manipulation of the external environment, as well as symbolic manipulation of the intrapsychic processes.
4. Slough off dysfunctional pre-existing interactional norms and values and permit norms and values to emerge in response to present situational imperatives.
5. Establish transcendent goals, which continually challenge individual effort and provide people with a sense of mission in life. Provide people with work roles that clearly and meaningfully relate to societal goals.
6. Democratize social relationships by eliminating invidious social distinctions and material blocks to social mobility and achievement.
7. Change the reward structure of the group so that social recognition and reward are based on crisis-induced need and the achievement of social goals, rather than on pre-existent ascriptive status.
8. Eliminate formalized role relationships, free the channels for intimate communication, and provide positive social sanctions for spontaneous, direct, informal, sentimental communication and the emotional sharing of experiences.

9. Utilize a few extreme sufferers as a social reference point for enabling others to assess their pain and privation within a relative context.

10. Dramatize the crisis or stress as **an event**, utilize it as a socially recognized juncture in life experience, and provide social absolution for guilt-ridden actions that preceded the event.

Many of these techniques of social therapy are also reflected in the tenets and practices of the world's religions, of primitive shamen, of individual psychotherapy, of utopian socialist communities, of naturally formed communities of sufferers (for example, Alcoholics Anonymous), and of artificially created therapeutic communities in mental hospitals (Jones, 1953; Schwartz, 1957; Wilmer, 1958). Further study of the effects of similarities and differences among these various therapeutic approaches may speed the process of developing a set of universal principles of social therapy.

The Need For the Concept of Human Nature

In a larger sense, the findings and perspectives noted here point up a central gap in our current theories of human behavior—the absence of systematic knowledge of the nature and requisites of "human nature." Currently available studies and observations show a remarkable similarity in the response of human beings to disaster in all times and places. This similarity suggests the value of returning to the concept of human nature as a central one for ordering and interpreting the phenomena of human behavior.

Somewhere in the combined growth of the centralized state, capitalist economics, the philosophy of individualism, and the growth of the concept of "culture," we began to lose the idea that "man is the measure of all things" and began to substitute the idea that existing economic, political, and social systems are the measure of all things human. We have been so preoccupied with the collection of materials to demonstrate the enormous difference between cultures and between individuals that we have overlooked the commonalities among human beings. Although there have been occasional recrudescences of the idea of a stable and universal human nature, the social sciences have largely ignored this concept in both their theory and their research. Thus the social scientist today is in the peculiar position of having little or nothing to say about the nature of human nature *per se*, because the subject has not been a primary object of study.

There still appears to be merit in developing and maintaining a clear distinction between "human nature" and the "human condition." The current tendency to equate "normal" either with the statistical average or with the prevailing cultural pattern has had the effect of obscuring one of the central problems that gave birth to the social sciences: What forms of social life are most compatible with human nature? This is the explicit or implicit problem contained in most of the classical analyses of society. As Joseph Wood Krutch points out, it is still a challenging problem for future study:

...in a world which has so definitely rejected all transcendental sanctions for either codes of behavior or

standards of values, "nature" and "human nature" seem to be the only possible place to look for a norm which is not merely an average or a concept of an "ought" which is more than a description of usual conduct. The question whether or not there is such a thing as human nature therefore remains for us the grandest of all living questions and makes it necessary for us to ask whether the usual negative answer really is justifiable and permanent or whether we shall some day swing again in a different direction and discover evidence now neglected that human nature really is something in itself and does provide certain absolutes, valid at least in the human realm (1959:174).

FOOTNOTES

1. In more formal terms, the guiding definition of "disaster" used here is: "an event concentrated in time and space, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented." (This is adapted from an unpublished paper of Robert Endleman, "An approach to the study of disaster," written for the Disaster Research Center Project at the National Opinion Research Center at the University of Chicago in 1952).

2. It should be noted that the subsequent analysis of the community of sufferers is not dependent on the actual length of time in which it persists as a potent social force. It is concerned with what this community accomplishes, regardless of whether its life span is a matter of days, weeks, months, or years.

3. From John C. Dancy, personal communication, November 29, 1957.

4. It is highly probable that changes in intergroup relationships would persist for longer periods of time and have greater significance in the aftermath of disaster were it not for the frequent tendency of outside authorities to superimpose preexisting patterns of behavior on the community of sufferers. Racial segregation, for example, is often reinstated by hospital authorities, relief officials, and other outside persons regardless of the sentiments of the victims. In a study of Hurricane Audrey, a prominent Louisiana relief official reported to the author that he was shocked to find blacks and whites indiscriminately sharing the same eating facility in one of the communities that had been isolated by the tidal surge. The facility had been established in a private home by informal leaders in the disaster-struck community. The relief official said that he told the informal leaders that "we can't have that sort of thing going on," and he took immediate steps to insure that the usual pattern of segregated eating facilities would be reestablished.

5. From Robert W. James, personal communication, July 21, 1958.

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