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INDIVIDUAL AND ORGANIZATIONAL RESPONSE
TO THE 1985 EARTHQUAKE IN
MEXICO CITY, MEXICO

1990

Russell R. Dynes
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Perhaps nowhere in the world do two countries as different as Mexico and the United States live side by side...Probably nowhere in the world do two neighbors understand each other so little.

Alan Riding
Distant Neighbors, p. ix.

PREFACE

This volume summarizes a 24 month field project that was undertaken by the Disaster Research Center (DRC) and that ran from June 1986 through May 1988. As such, it highlights the general findings and major themes of our work. Therefore, we do not present all the detailed findings from our study or all the special analyses that were done. All the results from that more specialized effort are provided in other publications.

While individual and organizational responses to a major urban earthquake--the prime focus of this volume--occur in all such disasters, the research being reported is relatively unique in several respects. First, the research represents one of the few truly cooperative cross-societal disaster studies ever undertaken by social and behavioral scientists. The work involved dozens of Mexican nationals and dozens of citizens of the United States. Second, systematic social science research in the immediate aftermath of a major earthquake especially in a very large metropolitan area is almost nonexistent. Therefore this is a rather pioneering piece of work. Finally, the research findings in the pages that follow challenge some widely held views both about the response in the Mexican disaster itself and about how it is thought people and groups will react to an earthquake in a large urban area.

In this volume, we follow standard DRC policies in reporting any descriptions or analyses of our data. We do not identify particular individuals or officials, and in many cases do not even name the specific organizations we looked at in our research. The only exception is when the information about groups or persons has already been published by others and is in the public domain.

Our report follows the traditional DRC and scholarly policy of citing references and otherwise documenting what is reported. But almost all of the statistics and examples used in the volume were computed from or derived from primary data in the Center's files. All such material not referenced can therefore be presumed to have been derived by DRC from its own data base

This publication, is intended for many audiences. It is primarily aimed at disaster policy makers, disaster planners, and disaster researchers. We also think what is said can benefit many others ranging from social and behavioral scientists abstractly interested in responses to collective stress situations to many operational personnel concerned with the specifics of dealing with human and social responses to earthquakes. We think the account might also interest those citizens of Mexico who underwent the very stressful situation of a major disaster.

Part I of the report provides a general introduction to the study by presenting some background material. First, we briefly describe some of the sociophysical aspects of the earthquake and its impact in Mexico City. Next the nature and sources of the data we obtained and analyzed in our study are discussed. We conclude this section with an overview of the Mexican political and governmental scene as this provides the general social context in which the impact occurred and where the organized response developed.

Part II of the report specifically describes the postimpact organizational behavior in Mexico City. We lead into this with a description of the very complex preimpact governmental structure in the metropolitan area of the capital and the general lack of prior disaster planning, both of which significantly affected group and agency response to the earthquake. To set the context for what follows we then present a brief factual chronology of events in the two weeks after the earthquake. This leads into a portrayal of some of the major organizational responses in the first three days after the impact. Initial governmental actions are particularly depicted as well as the responses in selected but important public and private sectors. This is followed by a description of the organized responses of key governmental and private groups for the rest of the two week emergency period. Some longer run organizational consequences of the disaster are also indicated.

In Part III we narrow our focus to the human beings involved. Two major population surveys are used to describe the behavior of individual citizens in Mexico City after the disaster. The first survey, undertaken less than three weeks after the earthquake, allows us to depict the impact consequences of the disaster on individuals and households, the mass communication behavior of the victims, their volunteer behavior, and the attitudes and evaluations that the population had about governmental and other impact-related activities. The second survey, done about a year later, permits us to discuss the longer run earthquake problems as seen by citizens, their attitudes about the handling of disaster related problems, and what people learned from the experience of the disaster.

Part IV , more analytical than descriptive, first sets forth the major research findings or themes of our study. We then discuss the similarities and differences between the organizational and individual responses found in Mexico City and what have been observed in disasters elsewhere. We conclude with an indication of some implications of our work for future research studies.

The history of the study and its collaborative nature, the field data obtained and the kinds of analyses undertaken, and copies of the survey and interview instrument used, are presented in three appendices.

ACKNOWLEDGEMENTS

As with nearly all DRC publications, what is reported represents a collective product. Many staff members at DRC and personnel in Mexico contributed directly or indirectly to the end product.

At DRC much of the initial and some of the later work was carried out by graduate students in sociology at the University of Delaware. These included Bruce Crawford, Michele DiPalo, Barbara Friedman, Laura Ketter, Sarah Kingsley, Michael Hackett, John Linn, Dorothy Lockwood, Lynn Snowden and James Wright. DiPalo and Friedman also went to Mexico to help train the Mexican students who were to do the organizational interviews in their own country. We acknowledge their assistance.

A very important role was also played by Professor Thomas James, a member of the faculty in the sociology department at St. Lawrence University, who in 1988 spent part of his sabbatical leave at DRC. While at the Center he did much of the actual computer analyses of the survey data. He also contributed to some of the substantive analyses. In addition, we also appreciate the work of Professor Alan McCutcheon, a DRC staff member, who helped in the initial computer processing of the survey data the Center obtained from Mexico.

The support staff of DRC also played a crucial role in many phases of the work. Margie Simmons, the Center's Office Coordinator at the time of the study, solved many major and minor administrative and logistic problems that often cut across two different societies and various bureaucratic systems. She also supervised in a very efficient way the production of this report. We thank her very much for all she contributed.

We also want to credit several undergraduates who helped with various aspects of the study effort. Among them were Elaine Denning, Michele Klein and Stewart McKenzie.

A special debt too is owed to certain of our Mexican colleagues without whose involvement and assistance there would have been no data gathered and, therefore, no study. We would especially like to thank persons associated with the Instituto de Investigacion de la Comunicacion and also with the Facultad Latinoamericana de Ciencias Sociales (FLACSO). In the former we would like to name Dr. Jose Ruben Jara Elias, and Alejandro Garnica Andrade. These two researchers were responsible for supervising the survey data collection and were significantly involved in the construction of the survey instruments. In the latter organization our thanks go to Dr. Jose Luis Reyna, the Director of FLACSO. In addition, the actual interviews of organizational officials were undertaken by Luisa Bejar, Guido Bejar, and Maura Rubio. They performed admirably in an often difficult research setting.

In addition, certain officials in the Mexican government were very helpful in providing us with an understanding of their society and their governmental structure. They patiently provided answers to our many questions and offered useful suggestions and ideas on how we might proceed. They undoubtedly prevented us from making some dangerous blunders during the course of our work. Among those we would especially like to thank for their courtesy and assistance are Juan Carlos Padilla, the General Coordinator of the Civil Protection System, and Julio Cesar Margaine of the Secretariat of Government. Of course these officials are in no way responsible for whatever is expressed in these pages. They had no control over the study, no access to the primary data, and they will not have seen any of the research findings until this volume appears.

Last but not least, we wish to acknowledge the help of hundreds of Mexican citizens and those officials who provided the primary data for our study. Many while still struggling to recover from the earthquake, took precious time to answer a lengthy survey questionnaire or a long interview guide. We hope that our report, partly based on the information they provided will help others to better prepare for and respond to future disasters.

The National Science Foundation provided the funding for the study under Grant # ECE-8610904. Their liaison research officer, Dr. William Anderson was very supportive of the work from its inception to its conclusion. As usual, the foundation and its staff made no attempt to influence the research in any way but simply indicated that high quality scientific work was expected. Such kind of unrestricted support is not true of all agencies in all places, so we wish to express our appreciation for their traditional policy.

Finally, since ours was the final decision on much of the data gathering and on all of the data analysis and report writing, any faults, shortcomings and errors in this volume are our responsibility alone.

Russell R. Dynes
E. L. Quarantelli
Dennis Wenger*

*When the first draft of this report was written in early 1988, Prof. Wenger was still on the staff of the Disaster Research Center at the University of Delaware; he subsequently moved, where he presently is, to the Hazard Reduction and Recovery Center at Texas A & M University.

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