AN EXPLORATORY RESEARCH AGENDA FOR STUDYING THE POPULAR CULTURE OF DISASTERS (PCD): ITS CHARACTERISTICS, CONDITIONS, AND CONSEQUENCES









Japanese wood prints on disasters







An Exploratory Research Agenda for Studying the Popular Culture of Disasters (PCD):

Its Characteristics, Conditions, and Consequences

by

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and

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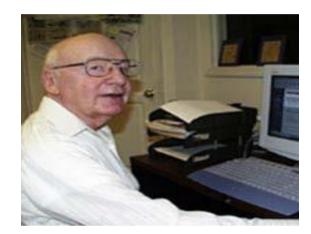
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ACTIVITIES OF THE DISASTER RESEARCH CENTER (DRC)

The final draft manuscript of this book was written at DRC in February 2011. The work done and the data used were by writers and professionals linked with the Center or who had indirect access to it. As such, this is basically a DRC produced publication.

The Center was the first social science research center in the world dedicated to the study of disasters. It was established in 1963 at the Ohio State University. An initial tendency to view disaster questions primarily in a sociological framework evolved into a later use of a broader social science orientation. DRC moved to the University of Delaware in January 1985 where the social science framework was used even more and in this last decade the Center's work has become even more multi-disciplinary with the formal infusion of ideas, faculty members and projects out of the civil engineering area.

The Center currently has approximately 50 members. This includes a number of graduate and undergraduate students. Their training is considered an integral part of DRC's mission. The Department of Sociology and Criminal Justice offers a graduate concentration in Collective Behavior, Social Movements and Disasters as well as an undergraduate concentration in Emergency and Environmental Management. The School of Urban Affairs and Public Policy has just initiated a new interdisciplinary graduate degree program in Disaster Science and Management.

DRC has conducted more than 680 field studies throughout the United States and internationally in such countries as Japan, Italy, India, Mexico, Iran, Turkey, and Sri Lanka. The Center currently has research cooperative agreements in place with crisis-oriented organizations in China, Sweden, India, and the Netherlands. In the past, it has worked cooperatively with disaster researchers from such countries as Germany, Japan, Canada, the former Soviet Union, and Mexico.

The Center specializes in field and survey research to study natural and technological disasters as well as other community wide crises such as large-scale terrorist attacks, and university student disturbances, as well as "race" riots. Studies obtain interview/observational/documentary/ statistical data on the mitigation, preparedness, response, and recovery phases of such socially disruptive occasions. This kind of research, through the use of modeling and theoretical analyses, provides behavioral and engineering knowledge and understanding that can be applied to developing more effective policies and programs for coping with disasters and catastrophes.

Funding for the Center's research has been obtained from a variety of sources including: the Earthquake Engineering Research Institute (EERI), the National Institute of Mental Health (NIMH), the Federal Emergency Management Agency (FEMA), the Japanese NHK Foundation, the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA) Sea Grant Program, the Ohio Council of Churches, the U.S. Department of Defense, the Social Science Research Council (SSRC), the U.S. Geological Survey, the National Association of Broadcasters, the Multidisciplinary Center for Earthquake Engineering Research (MCEER), the Public Entity Risk Institute (PERI), the Air Force Office of Scientific Research, the U.S. Department of Transportation, the Health Resources Administration, the Law

Enforcement Assistance Administration, and the University of Puerto Rico Mayagüez (UPRM) Sea Grant Program.

Recent titles of Center projects include the following: Interaction between Building and Occupant during Collapse; New Methods for Measuring, Monitoring, and Evaluating Postdisaster Recovery; Technology, Weather Forecasts, and Warnings: Integrating the End-user Community; Collaborative Research Proposal on Improvisation and Sensemaking in Sudden Crisis; Learning from a Large Scale Flood Exercise in the Netherlands; Scientific Insights on Preparedness for Public health Emergencies; Resiliency of Transportation Corridors Before, During, and After Catastrophic Natural Hazards; Integrated Optimization of Evacuation and Sheltering for Hurricanes; Multi-organizational Collaborative Leaderships; Modeling Postearthquake Fire Spread; Infrastructure Security and Emergency Preparedness; FEMA's USAR Task Force Deployments: Implication for the Emergency Response; Contending with Material Convergence: Optimal Control, Coordination and Delivery of Critical Supplies to the Site of Extreme Events. Investment Planning for Regional Natural Disaster Mitigation; Post-earthquake Water Supply Restoration; Population Compositions, Geographic Distribution, and Natural Hazards: Vulnerability in the Coastal Regions of Puerto Rico; Characterization of the Supply Chains in the Aftermath of an Extreme Event: The Gulf Coast Experience; Development of a Performance-based Seismic Design Philosophy for Mid-rise Woodframe Construction.

The Center maintains its own databases and serves as a repository for relevant disaster related materials collected by other organizations and researchers. DRC's specialized Resource Collection which contains the world's most complete collection on the social and behavioral aspects of disasters – now numbering more than 56,000 items – is open to both interested scholars and agencies. Visitors are welcomed. This premier collection includes documents and publications not readily available, if at all, elsewhere.

DRC has its own book, monograph, preliminary paper and report series with over 1,300 publications, many of which can be freely downloaded online. Our book on the popular culture of disasters was in fact initially produced in a shorter, less well documented and as a not-up-to-date version, in July 2010 as DRC Working Paper No. 92. This book will be listed in the book and monograph series within the DRC publications as DRC Book No. 35.



THE LOCATION OF DRC AND CONTACT SOURCES

THE DISASTER RESEARCH CENTER AT THE UNIVERSITY OF DELAWARE 166 GRAHAM HALL NEWARK DE 19716-7399

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For inquiries regarding other DRC programs including its Masters and Ph.D. programs, contact Gail Kracyla at prissy@udel.edu

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Acknowledgements

First, the authors want to acknowledge our use of the ideas of all non-DRC persons that we have mentioned by name in the text. Without their prior work, this book could not have been started in the first place. However, as is usually the case, we found the contributions of several persons need to be specifically noted. Professor Charles Scawthorn in the Department of Urban Management in Kyoto University provided a wealth of detailed information about disaster memorials both by his publications and email communications. His very informative personal reactions to specific memorials and how to find them could not have been given to us by anyone else. We were very fortunate to have his perspective and thank him for all his help.

Assistant Professor Yasamin Izadkhah of the Risk Management Research Center, IIEES, in Tehran provided a translated song as well as a photo of children singing about what they had learned on how to act in an earthquake. This information was conveyed through her email communications with Ian Davis. Without her help we would not even have known about this disaster related-educational activity and we thank her for her assistance.

Professor David Alexander of CESPRO, University of Florence, was another enthusiastic contributor of photographs and ideas. In January 2011 he organized a study tour with Ian Davis to examine recovery from two Italian earthquakes that occurred in Irpinia in 1980 and L'Aquila in April 2009. The visit revealed several disaster memorials from both earthquakes and of some recent poignant actions by disaster survivors in L'Aquila to draw the attention of authorities to their frustration in not being allowed to return to their homes from which they had been excluded on safety grounds

Pat Young, the DRC Coordinator of the Resource Collection, was her usual efficient and effective self in doing all the editing and technical work necessary to produce this final electronic book. Moreover, her work went beyond that; she provided substantive ideas on how certain topics might be approached. We thank her very much for all she did, going far beyond what her formal job description required.

It should also be noted that co-author Ian Davis contributed heavily to the non-DRC illustrations in this volume. His contributions are noted throughout the book.

Finally, we want to thank Professor Tricia Wachtendorf, a core faculty member at DRC, as well as Professor Jim Kendra, the current DRC Director, for their willingness to let us use in this book about a dozen photographs they had taken around the World Trade Center in the early days of 9/11.



Charles Scawthorn



Yasamin Izadkhah



David Alexander



Pat Young



Tricia Wachtendorf



James Kendra

PREFACE

In this preface we provide approximately five dozen visual examples of the processes and products that we argue constitute the core of the popular culture of disaster (PCD). The illustrations are drawn from a wide variety of disasters and catastrophes in different time periods and cultural settings. These depictions are the kinds of phenomena we try to more generally describe and analyze in the text that follows, where we also particularly indicate what still needs to be researched in later studies. This suggestion of future research prompts our emphasis in the title of this book that we are presenting ideas for an exploratory research agenda more than a massive compilation of established findings and systematic data rooted observations.

All the items in this preface were obtained by DRC personnel and are either copyrighted by the Center or are in the public domain. For expositional purposes, we divide the material into three categories:

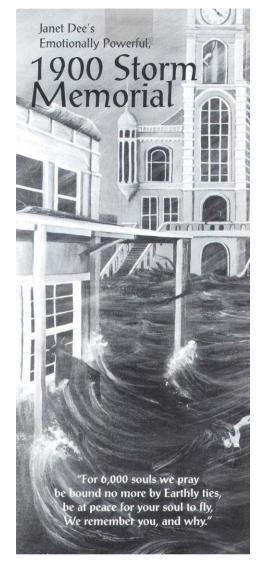
- A. Material from the "museum" in the DRC library. The very earliest items were collected in the first years of the Center's existence. None of this material was obtained as part of a specific field study by the Center.
- B. Items obtained as the direct result of DRC field work, although DRC has never had PCD as a major focus of its work.
- C. PCD related material obtained in the course of the very extensive work over months that DRC undertook on the 9/11 occasion. We separate out category C from B because it was what we saw in 9/11 that convinced us that PCD ought to be the focus of the kind of effort we attempt in this book.

Non-DRC persons provided the bulk of the other illustrations or photographs interspersed throughout the text. There is an identification provided for each item as well as the name, if known, of the specific non-DRC provider. The authors thank every individual and/or organization for their contribution to this book.

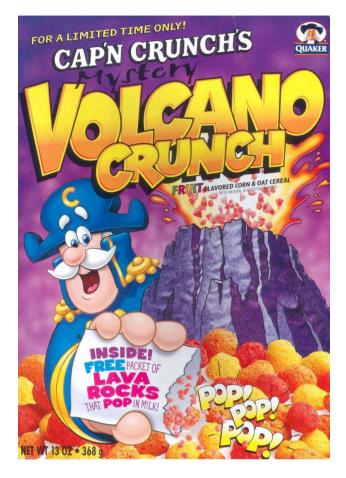
A. MATERIAL FROM THE DRC MUSEUM COLLECTION



Examples of disaster related bumper stickers - some humorous, some not



Brochure for 1900 Storm Memorial in Galveston, Texas



The once popular children's cereal that evoked the natural hazard

Hurricane Blues

Great big winds and Great big waves and a lot of rain Make a hurricane.

Great blg winds and Great blg waves and a lot of rain Make a hurricane.

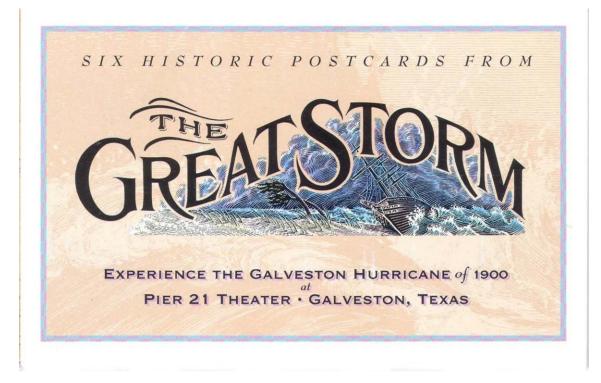
Hurricane, that's hurricane, I said, hurri, hurri, hurri, hurri Hurricane.

Hurricane, that's hurricane, Hurri, hurri, hurricane. And when a hurricane is coming your way, Listen to the grown-ups and do what they say. Yes, when a hurricane is coming your way It's time to listen to the grown-ups and do what they say.

Hurricane, that's hurricane, Hurri, hurri, hurri, hurri, Hurricane.

Hurricane, that's hurricane, Hurri, hurri, hurricane. Hurri, hurri, hurricane. Hurri, hurri, hurricane....yeahi

Song lyrics to the tune "Hurricane Blues"



Postcards depicting the 1900 hurricane that struck Galveston, Texas



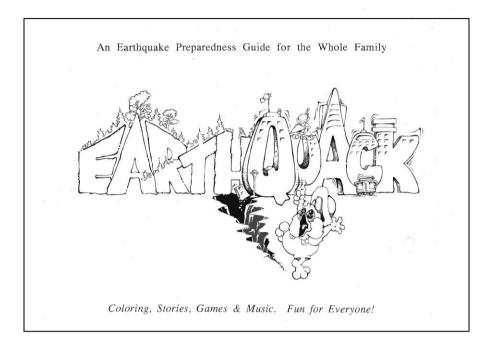
Souvenir pen containing ash produced from the May 18, 1980 eruption of Mount St. Helens

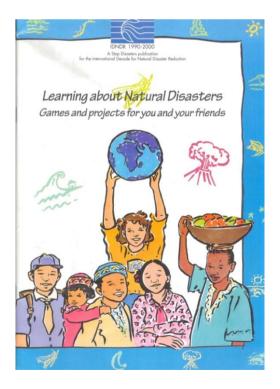




Some disaster games highlight the dramatic side of disaster survival such as the examples above

Examples of international tools to aid disaster preparedness instruction for children.





Covers from children's books teaching skills for disaster preparedness.



"Earthquake in a Can" – this unusual item shakes when a small battery is inserted inside.

Only 7" high, this sandbag was a miniature version of the common sandbags used during the 1983 Salt Lake City flooding. It was sold as a commemorative memento of the event.





Fundraising toy-like bank from China – used to encourage donations to support disaster response and recovery.

B. IMAGES FROM DRC FIELD WORK - Hurricane Katrina

Part of a sign painted on the front of an undamaged store in Louisiana reads as follows:

Dont Try. I Am Sleeping Inside With A Big Dog, An Ugly Woman, Two Shotguns, and a Claw Hammer

Additional writings on the store front clearly confirm that the overall meaning was a warning against any attempts at looting. The first nine photographs that follow depict graffiti and other signs usually painted in the immediate post-disaster on both damaged and undamaged residences.





Graffiti "threatening" looters will be shot.





Additional references to looters.





Additional references to looters.

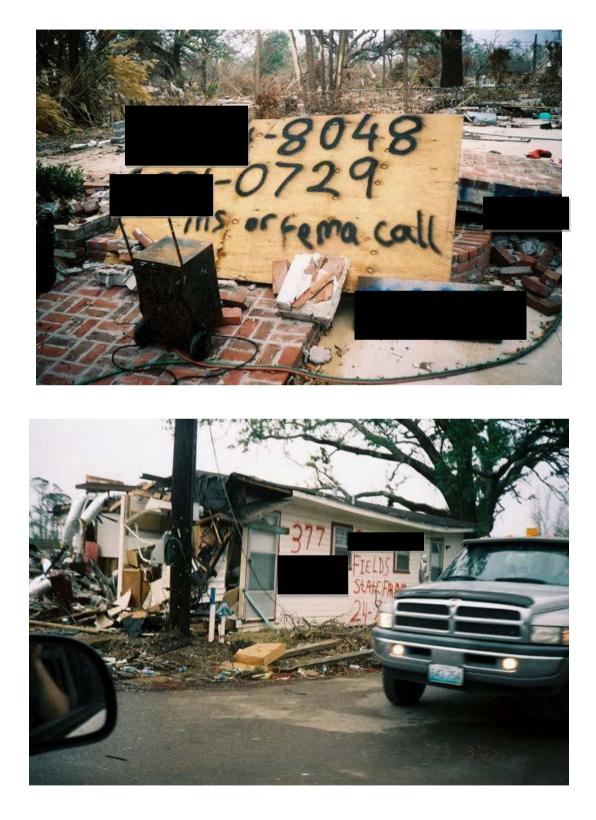


OOTERS WILL BR CHOT!!

However, while such signs are frequently transmitted by mass media sources, numerically they are rare at disaster sites. We might speculate they are used because they are in line with the myth that looting is widespread in disasters, and because they are rather dramatic in content - a specific threat to kill someone.

Far more frequent are informational signs. The following six photographs show or provide information on where the residents who have left can be located or found (or information about rules for entering sheltering areas, etc.). To maintain the privacy of these disaster victims we have blacked out or otherwise distorted names or other informational data.









ATTENTION ALL GUESTS: FOR SAFETY and Security Reasons we are asking that everyone Be identifiable as our quest By wearing a wrist Band THese WILL BE GIVEN OUT AT THE FRONT Desk. Please Be Prepared To Sthow Proof of Registration. THANK YUL -HOTEL MgT



But when all is said and done the following photograph shows what predominates.



This is far more typical of the appearance of most houses and storefronts – note the lack of graffiti, although signs that the building has been searched are common.

B. IMAGES FROM DRC FIELD WORK - 2004 Indian Ocean Tsunami





Memorial garden remembering those lost to the tsunami.



Tsunami memorial



"Memorial train" – replica of Sri Lankan train on which approximately 1,500 people perished during the tsunami.

C. PCD MATERIAL FROM 9/11



Children's drawings as part of in-school program. Later hung on wall near the World Trade Center site.







Typical every day scene at a fire station near Ground Zero.



Makeshift memorial at Wall Street near the New York Stock Exchange.





This banner was signed by citizens of Santa Barbara and later hung near Ground Zero.



Typical tower-like memorial scene modeled on the Statue of Liberty.



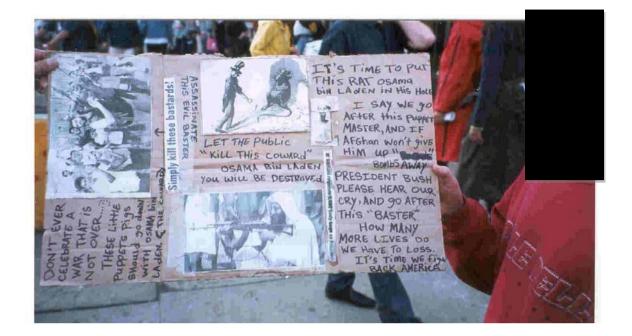


This banner was signed by concerned citizens and later hung near the World Trade Center site.





Another tribute to fire fighters.



There were public displays such as the above following the terrorist attacks of 9/11 but more common was what is depicted in the following two photos.





A makeshift public memorial – note the text on the two balloons – "Sorry" in the foreground and "Hope" in the background. Also in the background is a group of people stopping at the memorial.

CHAPTER 1: INTRODUCTION

This book advances a research agenda for a little studied topic, namely the popular culture of disasters (PCD). We systematically although selectively outline some possible fruitful topics and questions that researchers might address. However, **no effort** is made to present a full and total research agenda for the future. Instead, our focus is on those issues that at the present time might have the **greatest potential**. We regard these issues as being the most worthwhile, in the short term, to develop our understanding and knowledge.

An awareness and recognition of the importance of the PCD is **not** a new theme. Charles Fritz articulated the issue when he wrote more than half a century **ago** that: "The folklore and [popular] culture of every society reflects the powerful role that disasters have played in the life of the people. Man's struggle to preserve life and establish effective social organization in the face of danger and adversity has provided one of the dominant themes in the folk tales, literature, drama, music, and art of every society" (1952:2). For example, art history has produced numerous images of the epic struggles of people against the powers of violent nature ranging from epic floods to semi-apocalyptic destructive forces such as volcanic eruptions. This genre has produced noteworthy works of art in different societies and time periods, such as by the Japanese artist, Hokusai (1830) who painted 'The Great Wave' nearly two centuries ago. The painting depicts the struggle of Japanese fishermen with a cresting tsunami, with Mount Fuji in the background. (Wisner, Blaikie, Cannon and Davis, 2004: xi-xii.).



Photo by Ian Davis. Reproduced from a newly printed woodcut of 'The Great Wave' purchased in Kyoto in June 2006.

In addition, we should note that more than a century ago, American authors on popular topics **started** to write about disasters. The illustration below depicts how the topic was discussed. [Copied from an actual book copyrighted 1900. This illustrates the typical title page of most popular books on disasters published by non-scholars in the middle of the 19th century into the early 20th century.]

THE GREAT GALVESTON DISASTER

CONTAINING A

Full and Thrilling Account of the Most Appalling Calamity of Modern Times

INCLUDING

VIVID DESCRIPTIONS OF THE HURRIANCE AND TERRIBLE RUSH OF WATERS, IMENSE DESTRUCTION OF DWELL-INGS, BUSINESS HOUSES, CHURCHES, AND LOSS OF THOUSANDS OF HUMAN LIVES

THRILLIG TALES OF HEORIC DEEDS; PANIC-STRICKEN MUL-TITUDES AND HEART-RENDING SCENES OF AGONY; FRANTIC EFFORTS T O ESCAPE A HORRIBLE FATE, SEPARATION OF LOVED ONES. ETC

Narrow Escapes from the Jaws of Death

TERRIBLE SUFFERING OF THE SURVIVORS; VANDALS PLUNDERING BODIES OF THE DEATH; WONDERFUL EX-HIBITIONS OF POPULAR SYMPATHY; MILLIONS OF DOLLARS SENT FOR THE RELIEF OF THE STRICKEN SUFFERERS

BY PAUL LESTER

Author of "Life in the South-West. Etc., Etc.,

With an Introduction by

RICHARD SPILLANE

Editor "Galveston Tribune" and Associated Press Correspondent

PROFUSELY EMBELLISHED WITH PHOTOGRAPHS TAKEN IMMEDIATELY AFTER THE DISASTER

PHILADELPHIA. PA. INTERNATIONAL PUBLISHING CO.

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To some degree the popular approach is understandable. The **social sciences** were not fully established in universities until after World War I (e.g. the development of sociology really did not begin until the 1920s). So there was no body of scientific literature that could be used to discuss the social dynamics of disasters. However, in the last 70 years or so, the social sciences have flourished and are well established around the world. We document these statements in an article that Quarantelli wrote in 2008 and published in 2009. The title of the paper was "The Earliest Interest in Disasters and Crises, and the Early Social Science Studies of Disasters, as Seen in Sociology of Knowledge Perspective." It was started before our book and was done independent of the work we put into this book.

The **exact** wording of the first two pages is reproduced below.

Today, the social scientific study of disasters is a very flourishing area. There are around five dozen research centers and institutes in the world, as well as hundreds of researchers whose major professional work is focused on disasters and collective crises. These groups and scholars have conducted field studies numbering in the four figures and have written thousands of publications. The result of such activities is a body of findings, setting forth many data-rooted propositions about individual. well group, organizational and community behaviors in disasters and catastrophes. Major inventories of these findings have been set forth in monographs, books, handbooks and encyclopedias. In addition, this area of study has its own infrastructure in the form of newsletters, journals, websites and professional associations as well as regularly scheduled domestic and international meetings. Multidisciplinary research involving the non-social sciences is increasing, and within the social sciences disciplines such as management science, political science, public administration, social geography and sociology, more researchers are involved and more studies are being conducted than ever before.

Is everything perfect? Most everyone would say, of course, no. Recently there have been critical reviews and evaluations (e.g., National Research Council, 2006; Tierney, 2007) which have identified significant issues and problems that the field will have to deal with if the future is going to be better than the present. That granted, the present is markedly better than the past. Today, as just indicated, the field has never been more active and promising.

It might be asked, from whence has come this vibrant researchrelated activity? It has not been the result of a slow development over a very long period of time. Almost all of what we have just mentioned came into being only since the early 1950s. At least in terms of continuous and systematic scientific activities, the area is barely half a century old. However, disasters and crises were of major interest to human beings and their societies much prior to the last five decades. In fact, this essay initially looks at the very earliest happenings with respect to disasters and ends with the institutionalization of disaster research in the 1950s and 1960s. Thus, we start a very long time ago in prehistory, and conclude with the establishment in 1963 of the Disaster Research Center (DRC), the first social science research center anywhere in the world focused on disasters and catastrophes.

What has just been described supports the idea that, at the present time, there is a body of scientific knowledge that can be used and applied to a variety of issues and questions. Actually, in the pages that follow in this book, we **use** that knowledge to discuss very many aspects of disaster phenomena. However, little such usage can be found with respect to PCD.

By any criteria that could be used, PCD has been one of the **least** studied topics that disaster researchers have addressed. In fact, prior to the late 1990s, very few publications can be found specifically focusing on any aspect of PCD in the literature produced by social scientists, historians, and those interested in the humanities and the arts. For example, as late as 1991, the Center for Popular Culture at Bowling Green University – the major organization in the world focused on popular culture – communicated to us that, in their extensive library and archives, they had only a total of nineteen entries under the label of disaster, and that a review of disaster novels in 1989 "showed very little on disasters and related topics in other popular culture collections in the country" (Joe Perry, personal communication). A recent inquiry about the current holdings of this Center found that few additional PCD items have been collected.

Why this lack of relative attention? Clearly it cannot be because of the absence of a usable scientific base. Many **other** topics have been extensively studied.

Much later in this book, primarily in Chapter 12, we discuss in detail what has handicapped the study of PCD. A primary reason is because in many academic and research circles there is an intellectual bias against the value and importance of "popular" culture. It is simply seen as less worthy of attention, for example, than political or even "high" cultural questions and issues.

However, in less than the last decade there have been, for instance, at least one special issue on the topic in a professional journal (in Volume 8 of the March 2000 issue of the *International Journal of Mass Emergencies and Disasters*), a chapter on community commemorations after disasters by Eyre in the *Handbook of Disaster Research*, 2007, articles in professional journals (simply as examples, a 2007 article by Gentry and Alderman on personal tattoos as memorials of surviving Hurricane Katrina, and another article in 2008 by Ward and Alderman on the graffiti-like messages written on the plywood to cover windows and doors during a hurricane), and at least eight full sessions with multiple papers on the topic of PCD at professional social science meetings in the United States alone. In addition, during this time period there appeared a number of stand-alone papers presented as part of larger collective behavior, mass culture or mass media non-disaster sessions (e.g. Couch and Wade, 2001 with the title of "I want to barbecue Bin-

Laden" and Riad (n.d.) "The Hurricane Andrew story as told through graffiti"). And justifications and reasons for studying PCD could and have been addressed (e.g. see Wachtendorf, 1999, Couch, 2000).

So there has been a movement towards using a social science approach to PCD. To be sure, just as obviously noticeable in the last paragraph, what has been done so far has been unsystematic and not very theoretical in orientation. It does **not** offer a framework to guide research on PCD. But the very expression of relevant ideas encouraged us to take the next step, namely setting forth a selective framework to use to embark upon studies on the conditions, characteristics and consequences of PCD. The next chapter in this book sets forth the historical background and starting point

CHAPTER 2: THE HISTORICAL BACKGROUND AND A STARTING POINT

What accounts for the more recent systematic although still limited attention to the topic? It is important to note that while there has been little of a published nature around for reading, informal conversations about the topic in the past **frequently** surfaced in and around professional meetings involving disaster researchers. For example, as veteran field researchers told "war stories," a not infrequent common observation was that, although engulfed in the tragedy and sorrow that prevailed in disaster settings, there were often jokes and humor in the conversations and actions of survivors and relief workers. But for several decades, this passing recurrent observation was the extent of the explicit attention given to it by disaster researchers.

However, as far as the authors can remember, at a now otherwise long forgotten meeting in the middle 1990s, four veteran disaster researchers (Ian Davis from Great Britain, Wolf Dombrowsky from Germany, Russell Dynes (see page 133 where Dynes is quoted regarding people's mistrust of authority) and E. L. Quarantelli from the United States), after corridor- and perhaps bar-conversations, agreed that PCD deserved to be more **systematically** addressed. There was collective agreement that we should attempt to obtain funding to organize an international professional conference with sole focus on PCD. Davis informally suggested a possible agenda, but following an apathetic response to 'soundings' taken with certain funding agencies, the matter was shelved.

But at a later professional meeting in Canada in the late 1990s, after another conversation, Dombrowsky and Quarantelli revived the idea of doing something together of a concrete nature on PCD. As a result, in the summer of 1998, Quarantelli sent an email message to his master list of several hundred disaster researchers around the world, as well as to about two dozen professional web sites that were focused on disaster and popular culture topics. The message asked anyone **interested** in PCD to let Quarantelli know of their interest.

The following message was **usually** explicitly included with the request that if anyone had an interest in PCD, they should contact Quarantelli.

If you are interested in any serious way with the popular culture of disasters, let me know about your interest. With a few other professional colleagues, we intend to see if we can generate discussion and maybe some writings about that topic. Our general view is that at least initially an inclusive approach to the phenomena should be used. The following are examples of what we have in mind, although you are completely free to suggest your own examples: disaster jokes and humor; board games and puzzles with disaster themes; newspaper anniversary issues; flag flying and wall and flower displays; folk legends and beliefs about disasters; songs and poems created at times of disastrous occasions; reactions to false predictions such as the Browning one in the United States and some in China; disaster novels and films (as well as spoofs of the latter); Great Flood myths; on-site graffiti;

certain kinds of relevant photographs; and these days, video pictures, disaster calendars, memorial services with particular foci; ballads about mine and maritime accidents; cartoons and comic strips with disaster themes; survivor buttons, hats and clothing; and World Wide Web chat rooms that develop around disaster occasions.

Approximately 125 expressions of interest were received. A copy of the message in the *Natural Hazards Review* evoked the most responses, about 50 in all. This was somewhat surprising because while the journal is multidisciplinary, it has a strong physical science orientation. A similar message in the newsletter of the *University of Colorado Natural Hazards Center* in November 1998 produced about 40 replies. Overall, two-thirds of all responses were from social scientists and the rest were mostly from scholars in the arts and the humanities. Dombrowsky for his part set up a web site that was intended to be an open forum for anyone interested in PCD. However, although it became fully operational, for a variety of technical reasons this web site was rarely used and was eventually taken down.



Wolf Dombrowsky

The saved messages and communications transmitted in this 1998 effort have been placed in a PCD **archive** housed in the Special Collections in the DRC Resource Collection at the University of Delaware.

It should be noted that the majority of respondents to the inquiry by Quarantelli **merely** expressed an interest in PCD, mostly indicating a desire to be placed on a mailing list. However, several of those that responded offered examples of what they considered to be aspects of PCD. In a very few instances, the descriptions and/or questions were so good and relevant that we partially incorporated these features into our text. In all cases, the name of anyone providing any such material is noted because they should be credited for their initial formulations. We want to thank any such persons for their scholarly contribution to the development of the topic that is at the core of this book.

This book, co-authored by two of the key figures mentioned above, is still another attempt to give some impetus to the further development of research and study on PCD. It is based on the premise that every social system that experiences a major disaster or catastrophe (for the distinctions between the two kinds of crises see Barnshaw, Letukas and Quarantelli, 2008) produces directly and indirectly some PCD. The questions that can be asked and the issues that

can be addressed will vary somewhat depending on the **basic framework** employed. However, we acknowledge that others who are interested in describing and analyzing PCD, as we imply later in the book, could employ other frameworks other than the one that we advance in the next chapter. In fact, since disaster theory development has generally benefited from the use of different perspectives (see Perry, 2007) we hope our book will spur others to approach PCD with **perspectives** that are different from ours.

Why is a framework of any kind needed? It should be noted that there is no paucity of examples of different forms of PCD. Much raw data is available, often in electronic form and sometimes in extensive on-line collections. Let us illustrate their nature and where they can be located on web sites. What about natural disaster related cartoons? See http://www.cartoonstock.com/ directory/N/Natural_disaster.asp. What about space-shuttle disaster related jokes? See http://www.duckshit.com/space-shuttle-jokes/space-shuttle-jokes.html. What about disaster movies? See the Internet Movie Database at http://www.imdb.com/fine?s=kw&q=disaster &x=12&y=9. What about some alleged PCD aspects of disasters which, instead, appear to be urban legends? See http://www.disasternews.net/news/article.php?articleid=2477& printthis-1.

What about the 9/11 attack on the World Trade Center in New York in 2001? It is certainly the **most** well known, observed-in-real-time, and studied "disaster" that has ever happened (Melnick, 2009: 65 says it is the "most photographed day in history"; although these days the 2010 Haiti earthquake and the 2011 Japanese catastrophe may have become contenders for that title). A major data source exists in the September 11 Digital Archive (http://911digitalarchive.org) which contains more than 150,000 items including 40,000 first hand stories, and 15,000 images, many involving PCD content. Kirshenblatt-Gimblett (2003) notes and details a multitude of formal and informal efforts by museums, artistic groups, photographers, archivists, mass media outlets, etc. to collect and record everything possible about the 9/11 occasion, with particular emphasis on PCD related items. And there are still other separate web sites devoted to 9/11 oriented comic books, to poems, and to songs as well as other PCD material, with almost all providing linkages to other sources. Additions have been made throughout the years. For example, recorded voices of survivors that visitors could hear were added in August 2009 to the various collections of the National 9/11 Memorial and Museum located at 20 Vesey Street (Newman, 2010).

For the most part, such raw materials as found in these kinds of data sources are totally **unanalyzed**. To be sure, now and then some researcher does set forth a model and a series of propositions about the PCD involved. See Ellis, for example, who elaborates in a very sophisticated way in "A Model for Collecting and Interpreting World Trade Center Disaster Jokes" (available at http://www.temple.edu/isllc/newfolk/wtchhumor .html) and "Making a Big Apple Crumble: The Role of Humor in Constructing a Global Response to Disaster" (available at http://www.temple.edu/english/newfolk/bigapple/bigapple1.html).

However, for the great majority of cases, there is often just a simple listing like the 32 jokes in "Space Shuttle Jokes" which are presented without any interpretative discussion (http://www.duckshit.com/spac-shuttle-jokes/space-shuttle-jokes.html). An Australian web site (http://www.warrenfahey.com/ disaster-7.html) lists without any additional commentary more than four dozen one- or two-line jokes about deadly plane crashes around the world. In short,

there are numerous empirical data sets easily available which, upon inspection, almost beg to be analyzed. A case could be made that some scholars or organizations ought to be specifically encouraged to develop master lists of the location of data sets especially for other catastrophes, as has been done with respect to the 9/11 material.

In addition to the study of PCD becoming an important academic field, there are obvious **connections** between the expression of popular culture and the development of public awareness of disaster risks. For example the United Nations International Strategy for Disaster Reduction (UNISDR) would have such an interest. There are two reasons for this link: first, officials who devise or develop public awareness materials, will find it essential to closely examine the range and nature of spontaneous expressions, since they are vivid indications, or windows into the way people of varying ages and cultural backgrounds deeply relate to disasters. In many of these expressions it is possible to clearly detect the aspirations, concerns and angst of disaster victims. Sometimes these are collectively described as the 'deep structures of society.'

Second, many examples of PCD such as the disaster songs and other disaster related information tools designed for children described in Chapter 11, **are** public awareness materials.

What Quarantelli specifically listed as **possible** PCD actions and/or processes in his message (reproduced earlier on pages 37-38) sent to those with **possible** interest in PCD, he thought that at most he had produced a rather heterogeneous laundry list. His intention was to generate thinking about the topic. We only had a **vague**, almost intuitive feeling, to put it in the most charitable way possible, that there was some **common** dimension or factor that cut across the great majority, if not all, of the specific products or processes named.

Now if we were able to start afresh, in retrospect we might have added as well as eliminated some from the list we used. In retrospect, some of the choices were a little odd, both in terms of what was included such as reactions to false predictions, and what was missed such as barely mentioning the usual widespread and almost ubiquitous memorial services. But we were stuck with the original list we put together.

Yet in one sense, this listing appears to have been the first semi-systematic attempt to characterize what could be thought of as the major characteristics of PCD. In short, it forced us to characterize what could be thoughts of as the major characteristics of PCD. And in one sense, this listing appears to have been the first semi-systematic attempt to characterize what could be thought of as the major characterize attempt to characterize what could be thought of as the major characterize attempt to characterize what could be thought of as the major characterize attempt to characterize what could be thought of as the major characterize attempt to characterize what could be thought of as the major concepts in the area. That was a historical turning point.

However, a prior step is to see if we have relevant ideas about existing theoretical notions that could be used to **develop** a basic framework. Obviously we already know what we found in the next chapter, namely, Chapter 3. Under the title of *different conceptions of disasters and different disaster typologies*, we did not find **enough** to build a basic framework. However, it was worthwhile to learn what we did find and it helped us in part to eventually build a basic framework later in Chapter 5. If we had not examined that literature, we could not have documented our case as well as picking up valuable cues for the proposed framework.

CHAPTER 3: DIFFERENT CONCEPTIONS OF DISASTERS AND DISASTER TYPOLOGIES

To understand how and why DRC in the last decade or so got involved in the empirical study of PCD requires a brief explanation of the ideas that very **loosely** guided how the Center worked from its very inception. No master plan was ever in place. We did not operate with a fixed theoretical scheme. We did not use only one standard methodology in our data gathering. It could be said that eclecticism was our implicit guiding scientific philosophy, and that has remained in place for the most part to this day.

Thus, when DRC was established in 1963 at Ohio State University, to the extent there was any explicit reference in project proposals it said, more or less, that the Center was going to study in the field something called "disasters". Ouarantelli as a major figure in those projects and a key decision maker in the work remembers thinking it was far from clear what that was intended to be covered. There were some passing and unexplained remarks that disasters might be overt manifestations of certain natural as well as technological hazards. There were no references of any kind to riots, civil disturbances or terrorist attacks. Yet about four years later, DRC was doing more field studies of civil disturbances than other categories such as disasters; 62 field studies in all. There had been a major expansion of the Center's focus with little conscious decision making. To passing inquires from some of the brighter graduate students around, the most that Quarantelli remember anyone saying was that "the Center was going to be able to compare whatever we were studying in "riots" and "disasters. It was only three decades later that an article was written comparing similarities and especially differences in the two social settings, e.g. that looting typically occurred in riots and not in disasters in Western-type societies; that hospital organizational activities were markedly different in the two settings, etc. (see Quarantelli. 1993); not exactly a rush to judgment.

There was **no** orthodoxy or party line. Some ideas were often but not always given preference, For example, in-depth and in-person interviews with non-standardized questions and samples were favored, except when a statistically chosen sample was contacted in brief phone contacts. Extensive and intensive participant observations by trained DRC field workers were undertaken unless we did content analyses of newspapers. Preference was typically given to the study of informal emergent groups, unless we focused on high level officials in government bureaucracies. As to the focus of attention, actual concrete data were almost always given preference over even the most elaborate of theories, but even in this there were occasional exceptions.

The same kind of rough and tumble procedures were more or less followed after Quarantelli (as described in Chapter 2) had generated his laundry list of probable PCD items and processes. After the 9/11 terrorist attack, DRC had launched very intensive studies of certain organizational issues such as the evacuation by water of lower Manhattan as well as decision making by key officials, etc.

PCD was never an object of research attention in that situation. However, because they had been trained to try to always take photos of on-going disaster scenes, DRC personnel had occasion to

take numerous photographs of spontaneous memorials, street posters and signs, informal tributes to firefighters etc. And these photos were put together with many others that existed in the DRC Museum that were from natural disaster settings. Ian Davis in a visit to DRC got involved with the on- going study and intention to put some publication together. He in turn provided even more relevant photos, especially memorials from different places in the world. So in a fundamental but roundabout way, particular the photos triggered a start to a book and became its heart and core. What was done was **data driven**, and not initially derived from any theoretical considerations. It was an inductive not a deductive approach.

This chapter is **only** needed because there is no one conception of disaster and disaster type that is widely known and accepted. As the title of the chapter indicates, there are multiple uses and usages in the social science literature. Given that, it would be totally arbitrary for us to apply one conception to PCD as if it were a matter of consensus. It is not. And after looking at all the conceptions we are not convinced that a particular conception is significantly more meritorious for descriptive and analytical purposes than any other.

However, we think our presentation is worthwhile for at least several reasons. First, anyone interested in PCD should know what possible relevant literature exists. While we do not mention all possible sources, we note and allude to a rather large number. Second, in a number of places in the book, we do talk about different formulations used directly or indirectly by others as well as by the authors of the book. In short, we do not pretend we are fully consistent in our remarks. For example, in one chapter we present the *collective behavior* theory of social behavior; in another we talk of the *organizational theory*; and in still another of *network theory*. To put it mildly, these formulations slice "social reality" in drastically different ways with very little overlap in questions and answers.

We will first discuss different conceptions of disasters. This will be followed by a presentation of disaster types. It should be noted that one of the authors, Ian Davis, presents in a following chapter (4) in the words of his title, *A New PCD Classification Scheme*. A number of social science disaster researchers use what they think are worthwhile noting in descriptions and analyses. Since we agree with some of them, we additionally discuss them in the last part of the chapter.

CONCEPTIONS OF DISASTERS

About three decades ago, Quarantelli (1982) decided to look at the usage of the term "disaster" as it was either **explicitly** or **semi-explicitly** used in the literature. This involved looking at both theoretically oriented writings as well as empirically oriented ones. The intent was to see if certain formulations were more common than others, and if we could identify instances of formulations that loosely hung together or formulated a kind of a category.

This is what we found:

In ideal type terms, disasters have been equated with:

- 1. Physical agents;
- 2. The physical impact of such physical agents;
- 3. An assessment of physical impacts;
- 4. The social disruption resulting from an event with physical impacts;
- 5. The social construction of reality in perceived crisis situations which may or may not involve physical impacts;
- 6. The political definitions of certain crisis situations; and
- 7. An imbalance in the demand-capability ratio in a crisis occasion.

(See Quarantelli, 1982 for an extended discussion of each of the seven perspectives and the limitations of each one.)

Nearly 30 year later after that exercise, and not having learned any better, we approached the question again as reflected in the book, *What is a Disaster? Perspectives on the Question* (1998). However, we used a somewhat different approach. Referring to ourselves as an editor, we asked about a dozen very well known self-styled disaster scholars and researchers to write a chapter for the book. Only slightly doubtful about what we had found, we made another try seven years later. But we made some changes. Ron Perry was asked to be our coeditor (Perry and Quarantelli, 2005). We altered the title slightly to *What is a Disaster? New Answers to Old Questions*. Again more than a dozen very well known scholars and researchers wrote original chapters. In both edited books, authors were individually critiqued but were given the right to provide their written reactions to whatever was said about their own contributions. To help everyone to reflect on what they were doing, a photograph of Rodin's famous sculpture, *The Thinker*, was reproduced on the front cover of the 2005 book. Not altogether surprising, that photograph did not seem to have a significant impact. We hope, however, that the photographs and illustrations in this volume will have a more significant impact.

In both edited books, Ron Perry wrote that there were clearly major substantive differences between different chapter authors. The reactions ranged from several statements that seemed to infer that the question asked was meaningless to consider in the first place, to several authors who clearly indicated that whatever they wrote solely provided the *right* answer.

Quarantelli had found little agreement and consensus in his 1982 review. The two edited studies, done about 30 years later and explicitly focused on the question of definition and conceptualization, surfaced even more divergence and difference of opinion. To generate a basic framework for handling PCD issues and questions from such a mixture of opinions and ideas is impossible. On the other hand, we would be amiss not to note that there was a great deal of worthwhile "stuff" and challenges and new perspectives in practically every chapter. Judged in that light, the two edited books were **significant** contributions to the social sciences literature on disasters, if not PCD.

We now turn to disaster typologies. Initially we will make two brief comments. However, the bulk of this section will be given over to an exposition and illustration of what to this day is the

most complex and sophisticated disaster typology ever put together, even though it was published over 40 decades. See Barton (1969).

The first point to make is that there are almost as many typologies as there are explicit discussions or conceptualizations of the term *disaster*. Interestingly, typologies are often discussed independent of the term *disaster*.

The first scholar to develop a typology was Lowell Carr in *The American Journal of Sociology* in 1932. He had a four-fold typology namely:

An instantaneous-diffused type An instantaneous-focalized type A progressive-diffused type A progressive-focalized type

However it turns out that not only has Carr been forgotten, but to his credit he acknowledges in his article that earlier Queen and Mann (1925) actually developed a rough descriptive typology.

Barton, in 1969, developed by far the most complex and sophisticated typology produced to this very day (see also Barton, 1989; Barton, 2005). Barton talks about collective stress situations, only about half of which would be understood as disasters today. Looking at the first table below, one can see the dimensions that he used to cross classify total scope of impact with time duration. It is important to note how a particular "disaster" such as an earthquake can end up in different categories. This scheme creates a complex challenge for understanding.

TOTAL SCOPE	SUDDEN ONSET		GRADUAL ONSET	
OF IMPACT	(Little or no warning)		(Warning possible)	
	SHORT DURATION IMPACT		SHORT DURATION IMPACT	
	Low	High	Low	High
National				
Regional				
Social Category				
City				
City-Segment				
Small				
Community				
Organization				

 TABLE 1. A Typology of Collective Stress Situations

TOTAL SCOPE OF IMPACT	GRADUAL ONSET (Warning possible) LONG DURATION OR REPEATED IMPACT		CHRONIC DEPRIVATION LONG DURATION (By definition)	
	Low	High	Does not apply	
National				
Regional				
Social Category				
City				
City-Segment				
Small				
Community				
Organization				

TABLE 2. A Typology of Collective Stress Situations Continued

In table two above, the scope of impact categories remain the same. The time duration at the top address both "Gradual Onset" and "Chronic Deprivation" in relation to "Long Duration". None of what Barton categorizes in this table would be classified as "disasters" by present day disaster researchers. Once again, this scheme also creates challenges to understanding. If one considered all of Barton's categorizations, one could pictorially map out a full range of social stress situations. We think that this would be a worthwhile exercise because it would allow us to characterize a huge variety of collective stress situations. This should be done. However, while Barton's name is recognized by almost all disaster researchers, unfortunately few have attempted to apply his scheme in any way. We think that the use of Barton's social map could be useful even in PCD.

We now turn to a discussion of various terms that others and ourselves think are worthwhile addressing. A fundamental question would be where do **conflict** occasions fit into description and analyses of the characteristics of PCD? As is well known, there is a major division among self-styled disaster researchers on whether or not conflict situations (e.g. civil disorders and riots, revolutions, terrorist acts, war itself, etc.) ought to be treated within the same conceptual framework used for natural and technological disasters, or ought to be treated as a relatively different subtype within the larger category of collective crises. Views on this differ drastically and dramatically as can be seen in discussions about the question, for example, in writings by Rosenthal, Boin and Comfort (2002), Barton (2005) and Boin (2009) as well as the dispute in the United States about the respective and clashing views of the *Department of Homeland Security* (DHS) (with a strong conflict orientation) and the *Federal Emergency Management Agency* (FEMA) (which has a mostly but not exclusively natural disaster orientation).

Much of the distinction has to do with the argument that natural and usually also technological disasters are consensus type of crises, and that conflict occasions are not. Although the view that the two **ought** to be partly separated for research and theoretical purposes seems to be slowly

gaining dominance, it is nevertheless apparent that a clear resolution about this conceptual issue is currently nowhere in sight.

An indication of how divisive the issue is can be seen in the following photograph. In the early 1990s, the UN decided to have, in the words shown in the page below, the phrase *International Decade for Natural Disaster Reduction*. Note the limiting word **natural**. Attending the 1994 meeting in Yokohama, Quarantelli asked why the program title was phrased as it was. Off the record we were told that collective crises involving conflict were basically different from natural disasters. Therefore the program title was limited in way that it was. It is ironic that there was "conflict" over "conflict."



国際防災の10年-IDNDF

International Decade for Natural Disaster Reduction

1990s

We feel that given the unsettled nature of the larger question, for the time being students of PCD **should** look at conflict occasions (or "willful disasters" as the US *National Academy of Sciences* (2006) called them in a recent state-of-the-art review of disaster and hazards research). Recent surveys indicate that in 2008, about a fifth of all countries around the world had episodes of domestic civil strife and/or attacks on the established order by enduring groups of dissidents used to being violent (Harbom and Wallensteen, 2009). Data from such events and information about such groups will eventually help lead to more understanding of the similarities and differences between PCD in the conflict and in the consensus kinds of collective crises.

On the other hand, this book does consciously **exclude** looking at war phenomena as "disasters". The authors do this for several reasons. For one, very contentious issues have surfaced when the problem has been directly addressed (see, for example, the sharp verbal clash between Dombrowsky and Hewitt in *What is a Disaster? Perspectives on the Questions* edited by Quarantelli, 1998). Also, very recent major publications in the disaster area such as handbooks (e.g., the *Handbook of Disaster Research* edited by Rodriguez, Quarantelli and Dynes, 2007) and the just mentioned *National Academy of Sciences* state-of-the-art review (2006) seem to almost deliberately avoid giving specific attention to war phenomena as disasters and hazards. Other scholars have argued that treating wars as disasters raise very puzzling conceptual issues such as that, along one line, war phenomena seem to assume that there can be "disasters" within "disasters."

We do **not** question that there are popular culture aspects of war phenomena, as there are of many other collective phenomena. For example, recently there were politically oriented cartoons that appeared on such web-based news outlets as CNN.com (see http://insidethemiddleeast. blogs.cnn.com/2011/01/30/egypt-insists-on-changing-history-cartoons/). These addressed the civil unrest of the recent Egyptian revolution. However, rather than opening the proverbial Pandora's Box, we leave this definitional or classification issue for others to address elsewhere and later.

In conclusion, we should note that **any** attempt to discuss the question regarding the social "causation" of the social conditions responsible for PCD or **any** other phenomena are very complicated. This is because any such attempt immediately raises philosophical questions such as assumptions about the nature of reality, what paradigm is being used, and so on. Given the inclinations of those scholars and researchers who venture into such intellectual exercises, very strong and often different opinions will emerge, with some taking the position that only they know the "TRUTH." That said, we believe we should present in this book some of the varying positions, leaving to the future further exploration of the problem.

CHAPTER 4: A NEW PCD CLASSIFICATION SCEME

Davis has devised a more elaborate classification system that suggests all PCD can be sorted into one of **seven** categories. Items 1 to 3 below include key aspects of social response or official recognition, while items 4 to 7 are more concerned with artistic expression, entertainment or commercial enterprise. However, despite their seeming contrasting nature, a case can be made that all constitute rich expressions of popular culture. After listing the seven possible categories we will provide some examples of each form of PCD.

The categories are as follows:

1. Spontaneous **grass roots expressions** by individuals or collectivities (e.g. drawings by children, disaster jokes, personalization of disaster shelters to create a 'sense of place' or identity and 'protest demonstrations' by survivors).

2. Professionally assembled products specifically aimed at **communicating practical information** such as how to protect or recover from disasters (e.g., a disaster museum or a public information poster).

3. Professionally created **memorials to disasters**.

4. Professionally created **celebrations or indications of the power of natural disasters** (e.g., the depictions of volcanoes and tsunamis by Hokusai in Japan in 1830 or the vivid storm scene in Benjamin Britten's 1942 opera *Peter Grimes*).

5. Professionally assembled products intended as **entertainment** (e.g., card games, video games, disaster movies or radio plays)

6. Professionally assembled **products derived with commercial intent but unrealistic or simplistic** (e.g., media attention to exotic but wholly impractical post-disaster shelters or utopian relocation plans. (See Davis, 1978 and also Rybczynski, 2005)

7. **Governmental Reconstruction following Disasters.** On the surface this category would not qualify as PCD, but aspects of reconstruction can qualify as PCD material

Category 1. Spontaneous Grass Roots Expression – Examples

These rather uniform and featureless prefabricated houses were built in Romagno al Monte in about 1981 following the Irpinia, Italy earthquake of 1980. The creative owner of the house illustrated below must have decided that the entrance to the dwelling left much to be desired, so a porch was added. Probably this was to give some additional shelter from the elements, but it is also a clear expression of a need for 'identity' or 'personalization' as manifest in the inclusion of a balcony for a barbecue (see second picture). Note also the addition of a satellite dish, plantings and a window box.







The last photograph above indicates some cooperation between two house owners. Perhaps the neighbor of the house with the added-on porch decided it was a good idea so borrowed the design or both houses could also possibly have been owned by the same family.

In another spontaneous expression following the L'Aquila earthquake in Italy in 2009, survivors tied green ribbons to metal barriers in memory of their friends and families who died (see photographs below).



Photo by Ian Davis



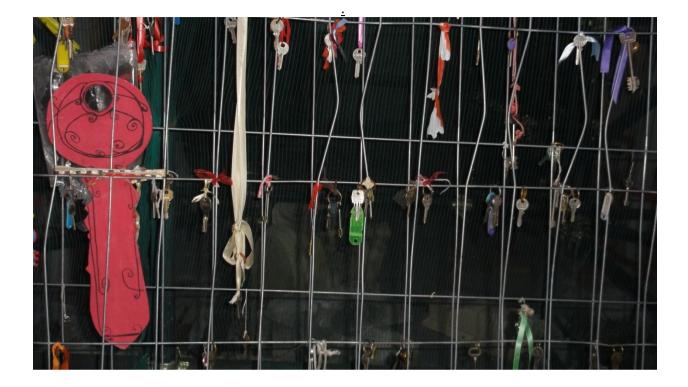
Photo by Ian Davis



Photo by Ian Davis

Each green ribbon represented a death, the "309" indicating the total number of deaths in the L'Aquila earthquake. The green color was chosen to represent one of the colors of the national flag, perhaps as a symbolic message to shame the central government into action to support the survivors

In the center of the Italian town of L'Aquila, the authorities designated a 'Red Zone' where the earthquake damaged buildings were considered too dangerous for occupation, given the occurrence of continued aftershocks. The residents were initially moved to tents and later to temporary accommodation. As a form of community protest at being denied access to their houses for eighteen months while little was happening to reconstruct their dwellings, they tied their door keys to the metal barrier as a symbolic protest – see the photos below.









The photo above depicts a monument to the seventeen people who died in the village of Villa St. Angelo as a result of the L'Aquila earthquake. The symbolism of the abstract shape of the monument is unclear, but it probably is a representation of a burning candle.



While the creation of the monument in Villa St. Angelo must have been the work of a professional sculptor or stonemason, it is obvious that the crude inscription in front of it, 'Villa Vivre' (or 'Villa will Live') constructed of rough stones set on a grass bank, is the spontaneous work of local people, perhaps by children.

Category 2. Professionally Assembled Products to Provide Practical Information – Examples

Throughout this paper there are numerous references to products that range in scale from the board games described in the photographs from the DRC, and David Alexander's collections (See photographs following the Preface) to the scale of a vast disaster museum described in Chapter 10.

Category 3. Professionally Created Memorials – Examples

Disaster memorials are described in detail in Chapter 6. Such memorials are created for a rich diversity of reasons: political patronage; superstitious beliefs in the protection they may offer

from future events; religious fervor; collective outpourings of grief or for thanksgiving from those who survived and *tangible* places, rather like graves, where the names of those lost (often for perplexing or *intangible* reasons) are lovingly created, maintained and visited by grieving relatives. They also provide focal points for annual services or ceremonies of remembrance.

In secularized societies, such as the United Kingdom, the role of 'sacred places' seems to grow in importance with the decline in traditional religious belief. But memorials may not just be in the physical form of paintings, sculpture, architecture, or urban design; memorials can occur, as noted below in all forms of artistic expression such as poetry, drama and music.

Category 4. Professionally Created Celebrations of the Power of Natural Hazards – Examples

Examples can be found in newspapers of works of art that celebrate the 'awe' of extreme hazard events, such as the 'Great Wave' described at the outset of Chapter 1. There are also descriptions throughout the text of music (popular and classical) being used to educate, console and celebrate disaster recovery.

The set of three fragmented ceramics illustrated below have been hung on the wall of a community building which was constructed as a gift from the German government to the village of Onna, a suburb of L'Aquilla. During the visit of the G8 leaders to L'Aquila in July 2009, just three months after the earthquake, Angela Merkel, the German Chancellor, promised to rebuild Onna. Her reason for selecting that particular village relates to the fact that earlier residents had suffered a massacre during World War II when the retreating German army machine gunned local residents as a brutal collective reprisal for attacks from local resistance forces.

(On YouTube.com it is possible to see the video of Angela Merkel and Silvio Berlusconi visiting Onna in July 2009.)





Category 5. Professionally Assembled Products Intended as Entertainment – Examples

The most obvious example is that of the ubiquitous disaster movie, designed to scare viewers with a totally 'safe' disaster experience on their television or computer screens or local cinema screen. These are described in Chapter 9.

However, another type of disaster movie was created with an aim that went well beyond mere entertainment into the world of biting satire. This was produced to wide critical acclaim after the L'Aquila earthquake of April 2009. This was a biting satire to present to the cinema-going Italian public with the title 'Draquila L'Italia che Trema', a pun on Dracula merged with L'Aquila with the added words 'Trembling Italy'. It was intended as a protest against all corrupt politicians, officials and contractors who were sucking the blood out of the disaster victims in the earthquake recovery. A film news piece from the Web site MUBI noted the following:

"Announcing his boycott of the Cannes Film Festival on Saturday, Italian Culture Minister Sandro Bondi has, of course, only drawn attention to satirist Sabina Guzzanti's *Draquila: l'Italia che trema* (*Draquila: Italy Trembles*), a film that might otherwise have been overlooked once the churn of festival coverage gets going in earnest.

As Lee Marshall notes in his review for *Screen*, *Draquila*, slated for a Special Screening out of competition, is an "indignation-fuelled investigation of Italian prime minister Silvio Berlusconi's self-serving exploitation of the L'Aquila earthquake emergency. Like her surprise 2005 Italian indie box office hit *Viva Zapatero!*, this one will preach mostly to those in Guzzanti's own left-leaning, anti-Berlusconi camp — but it's a big camp. And in *Draquila*, Guzzanti proves for the first time that she can put her put herself and her comedy shtick to one side in order to let earthquake survivors, magistrates, relief workers and urban planners tell a chillingly sordid story of political corruption and opportunism."

http://mubi.com/notebook/posts/1800

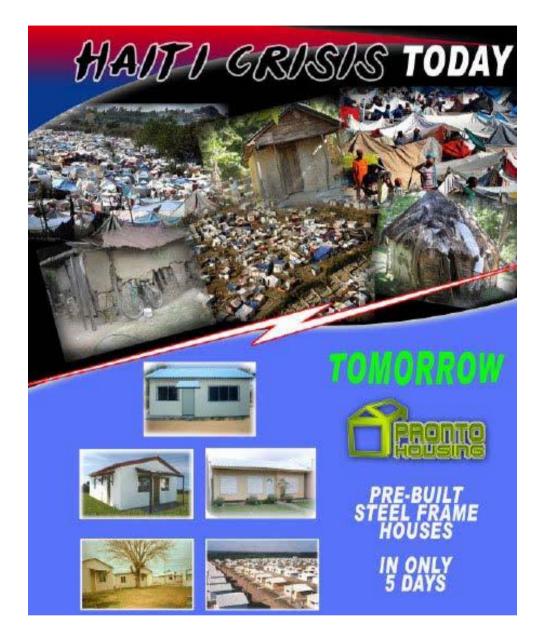
A trailer of the film can be obtained from www.ropeofsilicon.com/movie/draquila-italy-trembles/trailers/7348

The movie can be downloaded with English subtitles at http://www.torrentdownloads.net/find/draquila+with+english+subtitles



Category 6. Professionally Assembled Products Derived With Commercial Intent – Examples

Following the Haiti earthquake many intrepid inventors of disaster shelters and temporary houses descended on the scene in the hope of enticing agencies to promote their novel products. The authorities designated a field for each creator to erect their product for public view. In addition, an enterprising (and entertaining) Web site was established titled 'Shelter Inventions' where twenty six exotic disaster shelters could be seen in all their inventiveness and variety (and alas – general impracticality). Three examples are illustrated below including the Pre-Built Steel Frame Houses which the sales brochures confidently declares can be provided in only 5 days. Alas, if only reconstruction were so simple! For additional information, visit http://shelterinventions. blogspot.com/







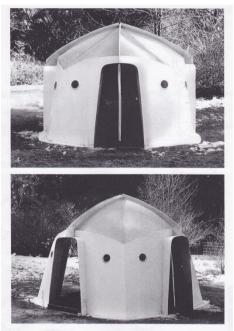


The next set of images relates to a post-Haiti earthquake initiative by a shelter inventor, Harry Skinner, who lead an organization called "Recovery Huts" (www.recoveryhuts.com).

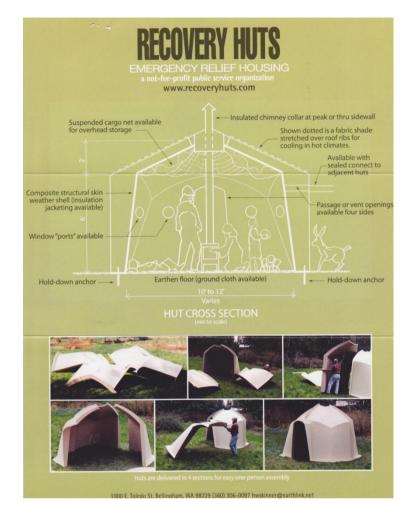
This structure is presented in promotional literature in the following manner, contrasting spontaneous shelters (*implicitly regarded as inferior*) with the recovery huts (*implicitly regarded as superior*).



THESE?



OR THESE?



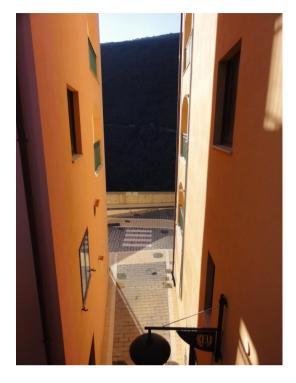
It is significant that while there is certainly no shortage of inventive designs for shelters, and every major disaster seems to fan the flames of creativity of intrepid inventors, the 'take-up' of such designs by NGO's, governments and international agencies with actual purchase and application of such items seems to be a thing of the past. Perhaps the last time such bizarre designs were used was in the village of Gubal, following the Killari Earthquake of 1993. The Seventh Day Adventist Relief Organisation (ADRA) donated ferro-concrete dome structures on the grounds of such domed structures being safe from earthquake impact. However the design was a failure for two reasons: firstly due to the difficulty residents had in sub-dividing the internal space into rooms to achieve some privacy and second, on technical grounds due to severe leakages during monsoon rain conditions. These failures became apparent during a long term longitudinal evaluation led by Ian Davis in February 2011.

Category 7. Governmental Reconstruction Following Disasters – Examples

Two contrasting approaches, or individual advocates, are frequently in evidence in reconstruction situations. One is to **conserve** what existed to provide cultural continuity, while the other contrasting (and often conflicting) approach is to aim to capitalize on the disaster

recovery opportunity for widespread **reform**. Both processes are essential in effective reconstruction and wise officials will seek to balance them to achieve reconstruction that grows from the pre disaster context while grasping a unique opportunity to initiate essential reforms to "build back safer and better". This is not the place to discuss this dilemma in any detail. However, the photographs below indicate an example of the balance being struck in the reconstruction of the small town of Salvitelle in Campania, Southern Italy following the 1980 earthquake.

The town Mayor of Salvitelle, Domenico Nunzinta, who was also an architect, decided that the reconstructed houses in Salvitelle should conform to the general urban form and fabric of the historic town (**conserve**). But as a visual indication of the reconstruction their wall renderings should adopt bright colors. The internal structure of all the reconstructed dwellings was built using seismic construction techniques (**reform**).



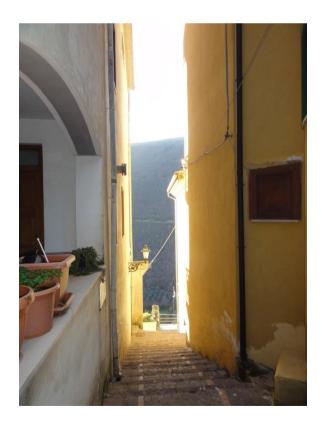




Photo by Ian Davis

The value of the formulation in this chapter and the extent to which the seven categories will be used in future research will inevitably be decided by others. As noted in different chapters in this book, this kind of confirmation, rejection or modification is typically used for the development of most theories, typologies, models, hypotheses, etc. that anyone will advance.

CHAPTER 5: A TENTATIVE BASIC FRAMEWORK

Introduction

As indicated earlier, the overall goal of this book was to initiate a **start** on the development of a social science approach to PCD. It must be stressed that this exercise is but the **initiation** of such an effort. We emphasize this in the title of the book, as well as by the qualifications and questions we append to many of the comments, observations and examples we provide in the text.

That said, we do think we have made **substantive** headway on the topic. Additionally, suggestions for how others might proceed in the future are scattered throughout various parts of the book. To be sure, readers of the book will have to be the ultimate judges of what has been written.

Another possible contribution is what we provide in this chapter. As was earlier detailed and documented in Chapter 3, there **is no** widely accepted theoretical model or paradigm about disasters or disaster typologies. That being the case, we have built on acknowledged specific ideas of others in the literature and have outlined a basic framework for describing and analyzing PCD. It is a framework that can be used **tentatively** to organize such raw or empirical data as already exist or could be gathered.

Apart from the tentative nature of what we present, we also want to emphasize that we do not have a totally detailed framework. It needs to be fleshed out more. While we think that we probably touch on all important points or factors that should be involved in a framework, it is essentially still in outline form.

In the next section, we briefly note the three major components that can be used to designate PCD, namely what DRC called the 3 Cs a **long** time ago – conditions, characteristics and consequences. We follow in the next section with a brief noting of what can be designated as the three major dynamic components applicable to PCD, namely the Production, Distribution and Consumption processes. The chapter ends with a general discussion of activities that indicate how they can complicate or compound trying to develop a worthwhile framework that is useful for description and analysis for PCD.

The 3 C Model

An often-used framework for studies on disaster topics was developed by researchers at DRC in the early 1960s. Essentially this framework assumes that the most worthwhile questions that can be asked fall into one of three categories: (1) The social **characteristics** of the phenomena being studied, (2) the social **conditions** that help generate such characteristics, and (3) the social **consequences** of whatever those characteristics. Sometimes referred to among DRC researchers as the "C Model for Research and Analysis," it has proved valuable in looking at disasters when the focus is on the social nature of the phenomena (although hardly the only viable framework that can be used, as can be seen in widely varying answers advanced by different chapter authors

such as David Alexander, Allen Barton, Arjen Boin, Neil Britton, Philip Buckle, Susan Cutter, and Wolf Dombrowsky, to the question of what is a disaster in a book edited by Perry and Quarantelli, 2005).

The temporal sequence of the Cs would be: the conditions, the characteristics and the consequences. However, in terms of exposition it is much clearer to start with the characteristics, followed by the conditions, followed by the consequences. Therefore, this is the expositional order we use especially in chapters nine and ten.

It was and remains our view that a very specific formulation about the nature of PCD need not be totally agreed upon at this time. That said, there is a need to ask what the common elements are that cut across varying activities. In short, what is the essential nature of PCD?

Perhaps a way to move further on the problem is to ask first what could be meant by the social characteristics of PCD. This is almost certainly the most basic question that can be asked since we are asking what is the distinctive or most identifiable feature of PCD. So far, very few scholars and researchers have even explicitly addressed this very difficult but nonetheless crucial question (a notable exception would be Couch, 2000). However, we think that even those few that have proposed an answer would admit that only some preliminary work on the issue has been undertaken. There is a need to go much further.

The Three Processes

We were fortunate in finding that three other students of the relationship between culture and behavior had written **relevant** ideas for our purposes. In one of the most relevant articles on PCD Couch (2000) wrote the following:

My framework for studying the popular culture of disaster begins here, with the recognition of the inherently social nature of disasters...the sociality of disasters may be nowhere better expressed than in the popular culture of disasters, the "stuff" making up our data found at the disaster scene (2000:27).

In what has to be considered as a memorable word ("stuff"):

In studying this stuff, it is useful to employ the insights gained from studying other types of culture. We might begin by employing the three levels of analysis suggested by Johnson for studying culture (Johnson 1986-1987, p.72; see also Denzin 1991, pp. 12-13, 18).

Couch then goes on to recommend three processes which we have made central to our book in chapters 6, 7, and 8.

The production, distribution, and consumption of cultural texts. This level of analysis looks at the fields within which cultural texts about disasters are produced, distributed, and consumed.

Couch gives such examples as the structure of the movie industry, what makes a story newsworthy, the way in which jokes about disasters circulate through networks, why there are many songs about shipwrecks and train wrecks but few about airplane crashes, depictions of heroes, villains and panic in disaster movies, and the cultural artifact used such as television, music or museum exhibit. In the body of the text of this book we actually describe and try to analyze a number of similar instances of PCD. In numerous cases we must admit we are left with more questions and hypotheses than answers.

A major advantage of this kind of framework is that it simply involves organizing or ordering principles. These are **independent** of any substantive and/or particular topical ideas that rest or are derived from particular theories, models, schemes or paradigms. As such, no automatic bias is built into the formulation.

These are different processes that involve different actors and activities. Our view is that a focus on these three social processes better captures the dynamic nature of PCD than do alternative analytical models as a framework for description and analysis. On the other hand, as the photograph below illustrates, it is not always easy to characterize something as produced, distributed, and/or consumed. How would one characterize these illustrations in those terms?





General Discussion

We have briefly set forth the dimensions of a tentative framework. However, in writing several drafts of the book, we were forced to address questions and problems not neatly in our framework. We deal with them in the rest of this chapter. Most of them involve making a choice or a comparison that if treated in a different way would lead to a somewhat different perspective on the nature of PCD.

What about the **naming** of disasters? A further tantalizing line of possible initial research could concern the names given to specific disasters, since these may possess powerful and subtle cultural significance. Thus, there was the official decision of Japanese authorities to rename the 1995 *Kobe Earthquake* (the initial label used) the *Great Hanshin-Awaji Earthquake*. This step may well have been taken because of the location of the earthquake epicenter, but it also conveniently removed the association of the disaster from Kobe, perhaps for understandable psychological and economic reasons. On the other hand, hurricanes, volcanic eruptions, cyclones and typhoons, as far as we know, have **never** been renamed. What accounts for the difference? Who makes the decision to change names, using what rationale, and is there ever any resistance (e. g. the expansion in 1906 of an earthquake in *San Francisco* to include a major fire in the name appears to have been pushed by local business interests who did not want the city to be identified as an earthquake prone community)?

An example of a name change for political expediency following a disaster occurred in the United Kingdom. In the early1950s the UK government commissioned the building of the first nuclear power station in the world in *Windscale*' in Cumbria. In October, 1957, a major nuclear accident took place there resulting in a fire and radiation leakage. This was the world's worst nuclear power station accident until the accident in the United States at Three Mile Island in 1979. When the Windscale site was rebuilt, the government decided it would be expedient to rename it *Sellafield*' to avoid public fears. This governmental deception was so successful that, to this day, few people realize that *Sellafield* and *Windscale* are one and the same place.

We made an interesting observation about the March, 2011, catastrophe in Japan. It is clear that Western mass media outlets are having considerable difficulty regarding what to call the occasion because it involves three separate agents – earthquake, tsunami, and nuclear plant hazards. Sometimes contrary to the usual application of a single name, both the names of the city and of the prefecture where the event occurred have been used. We are not aware in previous crises that there has been such difficulty in assigning a label. In any case, it certainly would be worthwhile to ascertain what is going on in this situation and whether we may be faced with similar situations in the future.

And what accounts for the unofficial and spontaneous "consensus" that has led to the attack on the *World Trade Center* being called "9/11"? Was it primarily a mass media production on the lines of the ubiquitous use of 24/7? Or does it reflect a collective desire to give an abstract title to this occasion? If so, what is being achieved by using a label which now seems to be recognized all over the world? Clearly the issue of what collective crises end up being labeled would seem worthwhile studying, as well as why most disasters are simply given a geographic designation. Although the naming of hurricanes in the western hemisphere has been adopted for practical reasons, for political leaders it is convenient to disconnect the event from its center of impact. Thus in future years 'Katrina' may be remembered without being labeled with the organizational failures of local officials in the New Orleans area. On the other hand, despite the fact that the 1995 *Kobe Earthquake* in Japan was formally renamed the *Great Hanshin-Awaji Earthquake*, the two buildings built to memorialize the disaster explicitly make many references to the city of *Kobe*. That being the case, the hypothesis we propose needs to be revisited; it may apply only for certain collective crises.

Besides the aforementioned distinctions in PCD production between spontaneous and planned production, between production in conflict and consensus crises, there are as well **mixed** official sources and grass roots citizen input products, and official productions, as well as informal designations. While logic and theories and research findings can be used to support drawing a distinction between unplanned emergent activities by "amateurs" and planned traditional actions by professionals, actual instances are sometimes not that clear cut.

For example, in coastal *Mississippi* after *Hurricane Katrina*, the *Pascagoula* high school choir recorded on CDs a song with the title "Downtown got run over by Katrina" which is a parody of a 1979 classic called "Grandma got run over by a reindeer." The choir sold 2,000 CDs at five dollars each with the proceeds being used for future choir events and to help members' families displaced by the hurricane. Survivors in the impacted area reported frequently hearing the

recording on commercial radio (see Kim, 2006 - http://www.disasternews.net/news/ article.php?articleid=2477&printthis=1). This is not a totally isolated happening after disasters. They are not totally spontaneous, unplanned emergent activities by amateurs. Does this represent a **mixed** type for analytical purposes (what we called "semi-folk art" earlier)? Or should the distinction between the two activities be maintained and treated as **ideal types** (as sociologists might argue, these are what would be if the phenomena existed in a pure form).

From a research perspective rather than a descriptive viewpoint, a worthwhile initial step might be to undertake a large-scale **comparative** study. For instance, research might be pursued that cuts across different kinds of collective crises. As an example, it might be useful to take a conflict occasion such as the terrorist attack in *Mumbai*, India in 2008 and a *Kobe* scale earthquake in a major metropolitan area, and compare the production of popular culture in both crises. This would involve in part examining both the more spontaneous and the more professionally produced items and material. Thus, the researcher could look at a range of products such as graffiti, amateur and professional songs, novels/plays, cartoons and comics, children's drawings, TV documentaries, disaster related T-shirts, video games, real time online photographs and poems, newspaper headlines, circulating jokes and humorous items, occasionrelated Web sites, etc.

In addition, if possible, what is depicted in these media might be contrasted with more **social science** analyses of the same occasion. Joe Scanlon (1999), for example, roughly compared the content of four novels, one short story and a children's book about the *Halifax* explosion with what social science research (including his own studies of the occasion) had reported about the disaster. The questions to pose are generally: where are there differences and similarities, and along what lines? If well done, such a study would be a good first step towards spelling out the notable features of PCD, as well as giving clues towards identifying the primary generators of PCD.

Within the classification system we are using, it is easy enough to note popular culture products and processes without doing any systematic study, for example, in the terrorist attack on the *World Trade Center*, popularly known as 9/11. In fact, Quarantelli in 2003 started an unfinished paper with the title of "Popular, traditional and semi-folk art in the aftermath of major disasters and related crises: The example of 9/11." In the abstract prepared for that paper, it was noted that in the aftermath of the attack there was a massive production of popular and traditional art as well as many "artistic" items that do not fit well into those two categories. For want of a better term, it might be called "semi-folk" art to indicate its **noncommercial** source and its **non-mass media** circulation system (e.g., informal wall memorials, graffiti, poems on the Internet, drawings by children, self-produced oral histories, informal tributes to those killed, signs and slogans hanging from buildings, etc. (see also Motion, 2001 and Pomerance and Usborne, 2001)).

We now begin our substantive discussion of the production process in the following chapter.

CHAPTER 6: THE PRODUCTION PROCESS

The production of PCD **can** be approached in different ways. For example, several writers on this topic have already indicated that in some way or other, a clearer distinction has to be made between PCD that emerges in a spontaneous way from direct participation in a disaster occasion, and that which is professionally assembled. It does not take any research to recognize that what a survivor in an actual crisis setting might film almost in passing with her/his camera is rather different from what a movie studio produces in filming a fictitious story line. There are fundamental differences in origins, intentions, what is depicted, relationship to social "reality", intended audiences, locales used, etc. to mention a few. If, then, there are significant differences, they have to be systematically depicted and studied, rather than just anecdotally mentioned.

A case can be made that at one level, all PCD phenomena are valid objects for research, and should be studied even if such a simple example as this:



However, in this chapter we will focus primarily on *memorials*, whatever forms they may take. An additional case can be made that because of their sizes, durations, occasionally their semipermanent nature, and often their symbolic meanings, they are worthy of special attention as in this chapter. In terms of quantity and quality, we also happen to have been able to collect a set of photographs that are especially worth displaying in this chapter.

We have been fortunate as authors of this book to have been in communication with Charles Scawthorn, someone who seems to know more about disaster memorials than anyone else in the academic world. He has provided us with his insights and his knowledge as well as photographs from his long time interests and studies on disaster memorials (mostly communicated to us by way of emails between himself and Ian Davis). He is also very knowledgeable in the area of seismic risk assessment (see Scawthorn, 2009). However, the questions or issues we raise now are our own and do **not** necessarily reflect Scawthorn's views.

Let us allude to some of his more salient observations, at least from our perspective, about the topic. For one, he has noted that even some major disasters or catastrophes have not left memorials in their wake. Unknown and surprising to us, he indicates that there is no formal memorial for the *1906 San Francisco Earthquake and Fire*. He does report that there is a party every year which includes some survivors at the *Lotta's Fountain* on the anniversary (April 18) of the catastrophe. See the photo below of such a party that Scawthorn attended. While clearly the *San Francisco Earthquake and Fire* is noted as being the focus of a commemoration at a particular locale, to us it is **not** quite the kind of physical entity which is manifested in other memorials.



At a more general level, in our opinion this raises several broader questions. Are there other major disasters as well as catastrophes around the world where there is no formal memorial of any kind? If so, why not, although making a case for the negative is always difficult. But we are wrong to assume there are no memorials of crisis occasions that happened centuries ago. For example, the Coliseum in Rome suffered extensive damage in the fourth or early fifth century and a memorial inscription has been recently discovered during excavation work. This memorial was not to commemorate the disaster but rather a decidedly solid stone of political self-advertisement to remind the public at the time who paid for the repairs to be undertaken. Why and when was the practice originated as well as by whom?



Photo by Ian Davis

The translation of the above Latin inscription is as follows:

"Decius Marius Venantius Basilius, Senator of the rank of the most famous and illustrious, Prefect of Rome, ordinary Consul restored the arena and the podium which were destroyed by the violence of a terrible earthquake, at his own expense"

The restoration work, financed by the Prefect of Rome, took place in 484 or 508 AD.

Almost twelve hundred years later, following the Great Fire of London of 1666, there was a desire to commemorate the event and the rebuilding of the city. Therefore from 1671-1677 the 'Monument' was built on the assumed site where the fire originated.

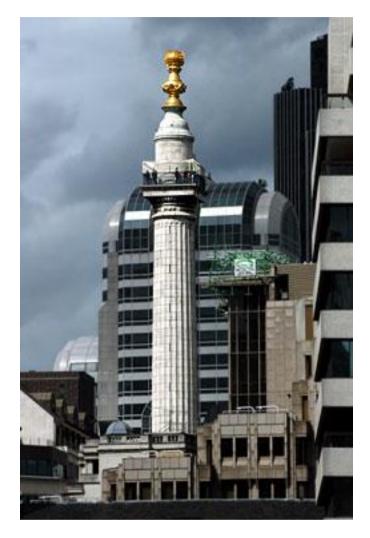


Photo courtesy of copyright-free-pictures.org.uk

The fire began in a baker's house in Pudding Lane on Sunday 2nd September 1666 and finally extinguished on Wednesday 5th September, after destroying the greater part of the City. Although there was little loss of life, the fire brought all activity to a halt, having consumed or severely damaged thousands of houses, hundreds of streets, the City's gates, public buildings, churches and St. Paul's Cathedral. The only buildings to survive in part were those built of stone, like St. Paul's and the Guildhall.

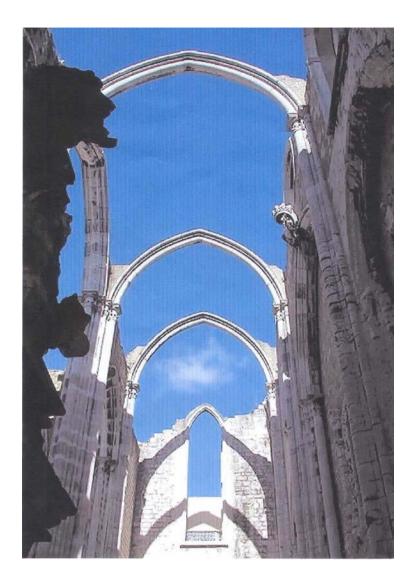
As part of the rebuilding, it was decided to erect a permanent memorial of the Great Fire near the place where it began. Sir Christopher Wren, Surveyor General to King Charles II and the architect of St. Paul's Cathedral, and his friend and colleague, Dr Robert Hooke, provided a design for a colossal Doric column in the antique tradition. They drew up plans for a column containing a cantilevered stone staircase of 311 steps leading to a viewing platform. This was surmounted by a drum and a copper urn from which flames emerged, symbolising the Great Fire. The Monument, as it came to be called, is 61 metres high (202 feet) - the exact distance between it and the site in Pudding Lane where the fire began.

The column was completed in 1677, and in accordance with Wren's original intention, was at first used as a place for certain experiments of the Royal Society, but vibrations caused by ceaseless traffic proved too great for the success of these experiments and they were discontinued; thereafter the Monument became a place of historic interest, unique of its kind, providing visitors with an opportunity to look across London in all directions from a height of about 160 feet, being the level of the public gallery.

City of London Web Site http://themonument.info/history/introduction.html

These are just two examples of what is likely to be a broad repertoire of disaster memorials scattered across the planet and the centuries. Gradually as information is collected it will be possible to ask why and when the practice originated as well as by whom? It will also be interesting to review the diverse practical and symbolic functions of such memorials. In the selected examples we have included we have noted a church built in Venice as a memorial of deliverance from a plague, but also as a place of worship; a monument in London to a massive fire and subsequent reconstruction, but also to function as a scientific laboratory and a series of memorials to earthquake victims in Gibellina, Sicily which were also created with the intention of generating tourism to an economically deprived region.

In line with the time reference we imply, Scawthorn reports that during the 1755 Lisbon earthquake, the Carmo Convent collapsed. As indicated by the photo below provided by Scawthorn the ruins have been preserved, and seemingly are open to tourists and other interested parties.



We ask, are there any other such similar kinds of memorials anywhere else? As we indicate later, initial efforts to preserve some of the ruins of the *World Trade Center* as a result of *9/11* did not succeed. So asking the question in a reverse way, what accounts for those relatively few memorials that incorporate something concrete from the physical destruction of a major disaster or catastrophe?

Scawthorn also provide some examples of memorials that are intermixed with other sites. For instance, there are low-key memorial facilities in **Sumida Park** in Tokyo which include the **Kanto Earthquake Memorial Museum** and also memorials to the Korean victims of the vigilante killings that occurred, as well as a memorial to the victims of air raids on Tokyo during World War II. This is interesting because we are aware of memorials elsewhere where bitter disputes have broken out as efforts have been made to strictly limit a proposed memorial only to direct victims; a case in point being 9/11. Maybe one could speculate that the difference

between American and Japanese cultures accounts for that end result. However, we suggest that it might be best if **all** cases of major disputes over who is being memorialized were carefully studied first. We suspect that more is involved than simple cross-cultural differences.

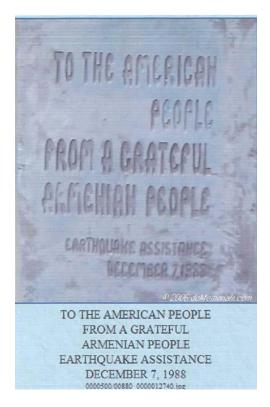
Among other examples of memorials that Scawthorn mentions are several instances that raise for us the question as to whether or not they are each special or highly distinctive. For example, the *Tangshan Earthquake* memorial (see photo below) is actually located in **Tianjin**. But is this the only such instance?



To us, if this is the only such situation around, a unique and particular set of circumstances could explain what happened. In the 1980s, Quarantelli obtained informal and off-the-record interviews from representatives of a key organization that undertook the initial reconnaissance by the Chinese government (involving two Politburo members) of what had happened in *Tangshan*. A very detailed report was written but to this day has never been made public (in fact there has never been any acknowledgement that it exists). While the overall crisis seemed to have been actually very well handled, it was clear to us that there were some political problems regarding *Tangshan* and other nearby impacted cities. If the archives in Beijing are ever opened up, our speculation here might be answered.



Scawthorn also provides two photos (see below) from the 1988 Armenian earthquake.



Text from the base of the monument.

In English, the inscription states "to the American People from a Grateful Armenian People, Earthquake Assistance." Is this the only instance where victims of a disaster built a memorial to outsiders who helped them? We should establish if that is really the case. Is this really a oneof-a-kind? Perhaps not, because on page 20 of this book appears a photo that DRC field researchers had taken in *Sri Lanka* of the thanks expressed to outsiders who helped at the time of the 2004 Indian Ocean tsunami. Although not identical in content, it is still comparable. In any case, there must be some special circumstances involved, given the rarity of such memorials.

Apart from Scawthorn, another somewhat distinctive use of memorial poles is described in a paper by Japanese and Indonesian researchers (Iemura, Pradono, Husen, Jauhart and Sugimto, 2008). They had found that the local population had very low knowledge of the height of a tsunami like the one that had hit their area in the famous Southwestern Asia tsunami in December 2004. One idea set forth by the researchers was to build 85 poles with the height of the tsunami on them throughout the city, especially along evacuation routes. In the more exact words of the authors:

The poles have many important purposes: (1) to encourage people to be prepared for the next one, (2) to keep [alive] the memory of the tsunami attack, (3) to educate [the] generation [about] the important lessons from the tsunami, (4) to mourn the...people [who died], (5) to keep accurate data of tsunami height for future planning, (6)... to [have signs indicating where to escape]...[showing] tsunami height, (7) to encourage local people to live with hope and ease under tsunami risk, and (8) to be a symbol of Banda Aceh as the tsunami-attacked city.

This report on how to use memorial poles to help the population and community prepare for any future tsunami is an interesting **mixing** of research results and very applied planning. But is this an example of a very distinctive and customized approach that would likely be impossible anywhere else? We should note that there is a separate report by other researchers on the same happening. An article on the study noted these findings: "The major finding is that the unique device of 85 tsunami height poles was brought from the outside to Banda Aceh city so that people may remember the impact of the tsunami over a longer period of time when awareness is likely to reduce. As local people gradually understood the significance of the poles, the number of local cooperators increased and the project's impact improved significantly" (Sugimoto, Iemura, and Shaw, 2010).

In terms of the last question, it is possible to note that memorials are very widespread and have a long history. Moreover, they constitute a vital part of artistic heritage since public art, in the form of architecture, sculpture, painting or music, has often been commissioned to form memorials of disasters. To illustrate, we now describe two historical Italian examples of memorial commissions: one in architecture and fine art, the other in music.

One of the grandest baroque churches in Venice, celebrated in countless paintings and photographs, is *Santa Maria Della Salute* (Madonna of Health), which is situated at the head of the *Grand Canal*. See photo below.



Photo by Ian Davis

This famous church was consecrated in 1687 as a token of gratitude to the *Virgin Mary* to celebrate the end of the devastating plague in 1629-1630. Within the church there is a painting created in 1510 by *Titian of Saint Mark* that depicts Saint Cosmos, Damian Koch and Sebastian. This graphically depicts two holy physicians pointing to plague scars that Saint Roch is showing on the body of Saint Sebastian. The painting refers to an earlier plague that ended in 1510. Thus the entire church and the painting it houses give thanks for delivery from the Venetian plagues.

Following the major earthquake that struck Naples in 1731 when over a hundred thousand died, a subsequent earthquake (or aftershock) followed in 1732. These events prompted the survivors in Naples to select Saint Emidio as their patron saint. Saint Emidio was popularly believed to have protected the town of Ascoli Piceno from an earlier earthquake in 1703 when, despite widespread damage and loss of life, this town had been untouched. This time the communities in Naples decided on a musical memorial to take place on the last day of the year when the second earthquake had occurred, December 31st, 1732. So they commissioned the 22-year-old Giovanni

Battista Pergolesi to write a '*Mass for San Emidio*,' a collective thank offering to God and the Saint for all who survived the disasters. Pergolesi's graphic choral Mass contains many references to human fragility as well as frequent expressions of thankfulness (see Pergolesi).

Related to this is the fact that during World War II German troops fled the town of Ascoli. They intended to blow up bridges in their wake to halt the advance of the Allied forces, which were in hot pursuit. But at the precise time of their evacuation severe earthquake tremors occurred, preventing the bridges from being destroyed. Yet again the faithful of Ascoli believed this was due to Saint Emidio's on-going intervention to protect their town. It is interesting that something that had its roots over 300 years before, still had consequences. When does something that at one time could be considered an example of emergent PCD, become so traditional that it becomes problematical to view it as PCD? On the other hand, when something has roots going back for centuries, perhaps that observance is something so distinctive that it deserves the special attention of researchers.

One of the most dramatic examples of a memorial sculpture was the one constructed in Gibellina in the *Belice valley of Western Sicily* following an earthquake in 1968, which killed 270 people. In an extraordinary response to the event, an international sculpture competition was convened in the municipality, and the winning entity transformed the ruin of the town into a vast environmental sculpture several hundred meters in length that is clearly visible from a distance of 50 km. This was in the form of a gigantic concrete sarcophagus that David Alexander has described as a "bland white labyrinth that traces out the winding streets of the town that it replaces" (2000: 184).

(This very unusual memorial is presented in the following pages in five colored photos provided by an Italian Architect, Franco la Cecia). On the other hand, it raises an interesting question: why was such a memorial erected for what was essentially a rather **minor** disaster, certainly when compared with the crisis occasions in Venice just described above?



Photo by Franco la Cecia



Photo by David Alexander

The lines, set in the concrete on the face of the gigantic memorial represent the original street pattern of Gibellina before the earthquake. The abstraction of these streets, as paths, or a labyrinth, or a collective tombstone that people can wander through, can be seen in the following photographs.

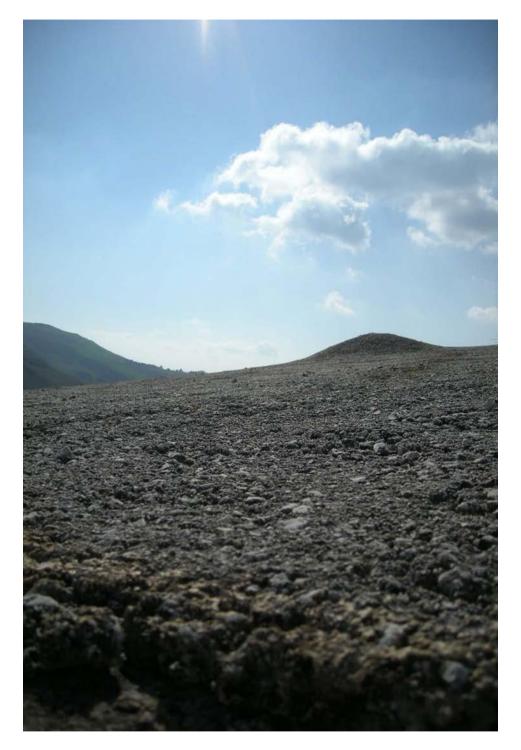


Photo by Franco la Cecia

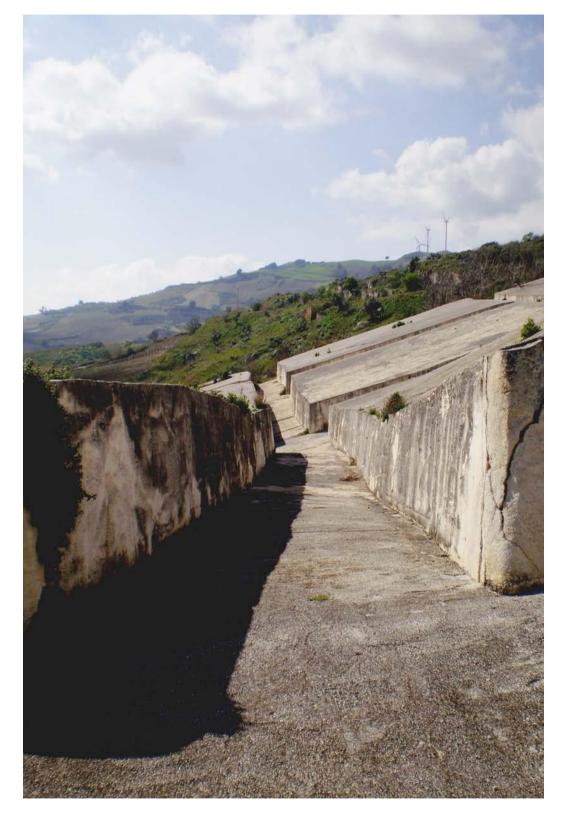


Photo by Franco la Cecia

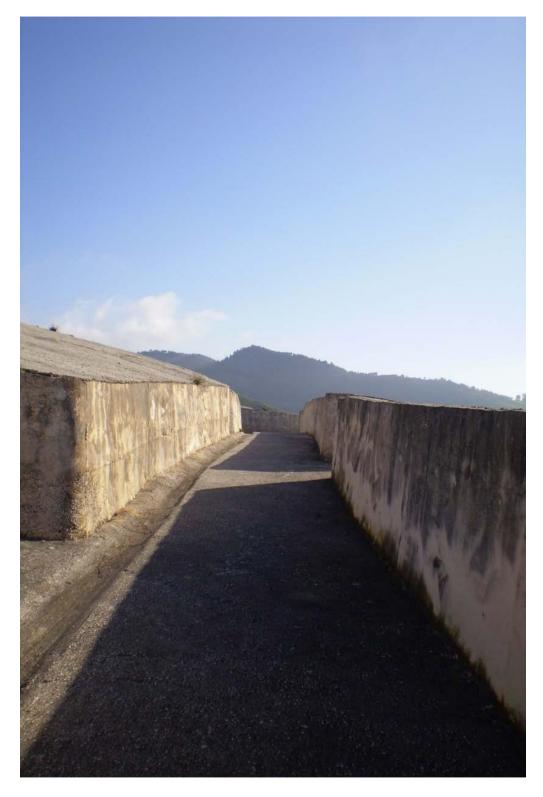


Photo by Franco la Cecia

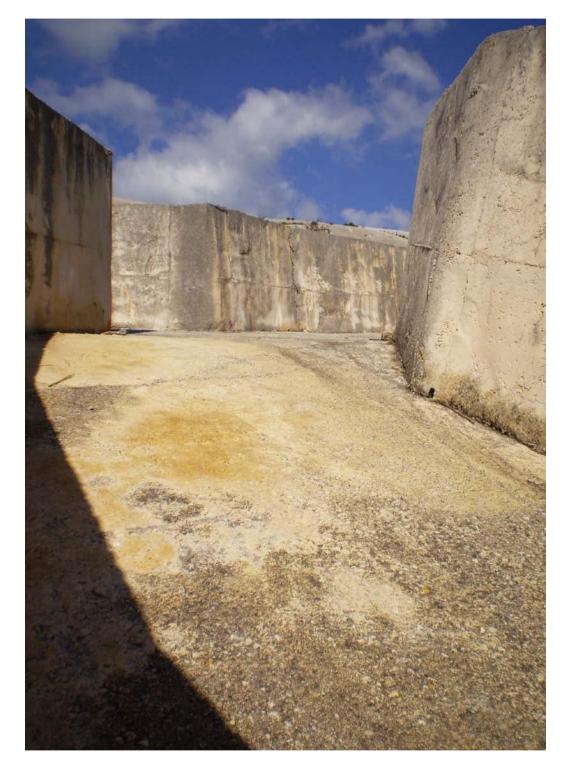


Photo by Franco la Cecia

(Anyone wishing to reproduce these photographs of the earthquake monument in Gibellina, Sicily should request permission from Franco la Cecia, the photographer who kindly allowed us to use these images – francola.cecia@gmial.com)

In Gibellina, the enterprising town mayor has commissioned various sculptures commemorating the disaster in addition to the vast concrete street pattern shown above. These are also seen as a way to stimulate tourism interest. David Alexander has noted the following example:

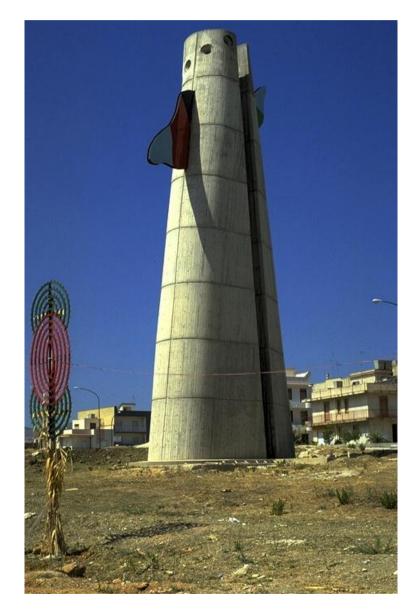


Photo by David Alexander

As noted earlier in this book, a subsequent Italian earthquake that occurred in 1980 in Irpinia resulted in 2,914 deaths. The event is remembered in a variety of monuments. The following photographs indicate examples from the towns and villages.





Earthquake memorial in Sant Angelo de Lombardy

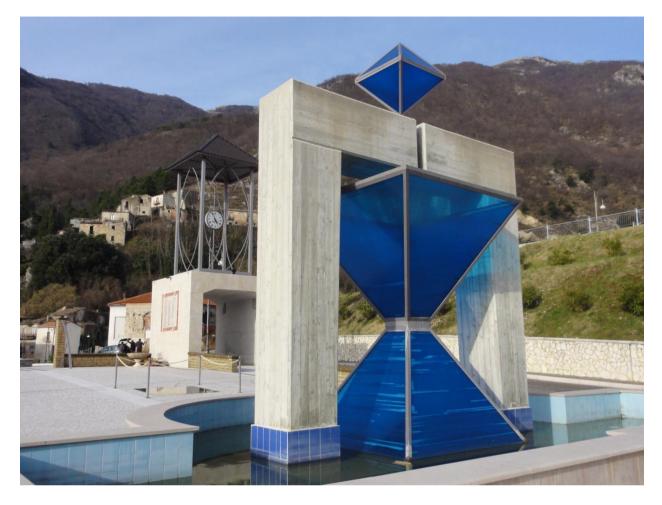


Photo by Ian Davis

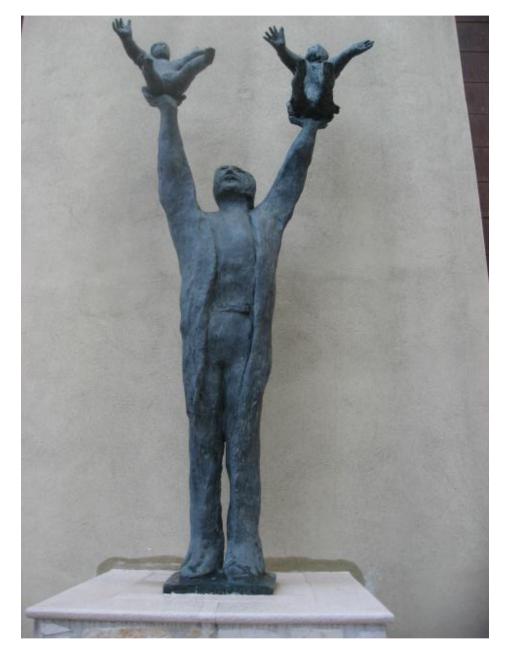








A pair of earthquake memorials in Senerchia



Above is a sculpture outside the reconstructed church in Balvano. 65 church worshipers were killed when the church collapsed during the evening service. Pope John Paul II visited the site the following day and this sculpture may elude to his compassionate concern, or to the security of God upholding those who perished in the church.

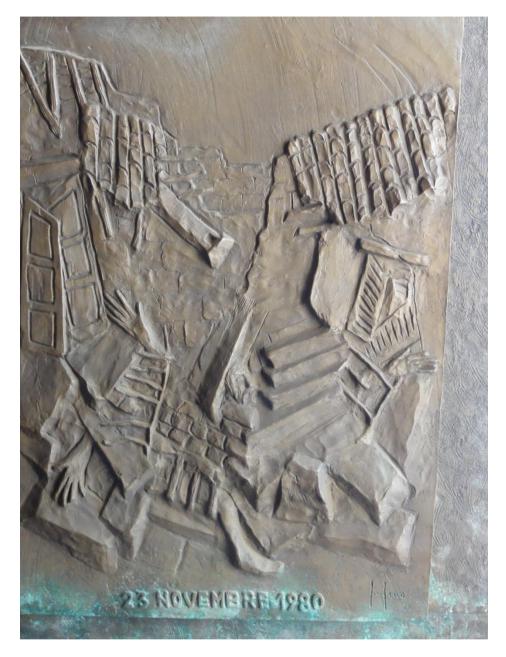


Photo by Ian Davis

Metal relief sculpture on the door of the rebuilt Sanctuary in Leoni

We now turn to a discussion of the distribution process in PCD. It seems to be afforded less attention than production, but if it did not occur, many PCD products and processes would never be seen.

CHAPTER 7: THE DISTRIBUTION PROCESS

PCD is not only socially produced and consumed but it is also **distributed**. While we have some vague ideas on how to address the production and consumption processes and have given examples previously in this book, we are somewhat more certain about some aspects of the distribution side. For instance, the starting point we suggested earlier about looking at the more voluntary production as compared to the more professionally produced objects also seems to differ in their distribution systems. The latter, for instance, would seem to depend on the existence of market mechanisms.

If the last statement is true, perhaps one fruitful research path might be to try to get some picture of the distribution pattern that is involved. In particular, it might be worthwhile to look at **network** links. While descriptions and analyses of networks have been around for a long time, the topic has only recently come to the fore in the social sciences (Miller, 1998; Barabasi, 2002; Buskens, 2002; Buchanan, 2003; Watts, 2003; and for very current information on network studies see http://www.orgnet.com/sna.html). Interestingly, it has come to greater prominence because of two factors: (1) the recognition that many contemporary terrorists are linked together more via networks rather than as members of clearly existing groups; and (2) the essential nature of the *World Wide Web* or the *Internet* is that it is a vast network devoid of most social group features as sociologists think of them (e.g. boundaries). In some ways, the world as a whole has recently come to have fewer group and more network characteristics (Castells, 1996).

Given that, we are suggesting that it would be worthwhile to try to do research that would give us some descriptive understanding of the formal and informal distribution **networks** that are involved in PCD. Some might think that distinguishing the characteristics of any phenomena is primarily to be found in terms of the objects and processes that are produced. In our view that is too narrow an approach. Phenomena can also be depicted in terms of the distribution patterns they use. Some researchers ought to start systematically looking at the distribution characteristics of PCD.

Some worthwhile ideas on how to proceed are offered in a recent book by Melnick (2009) with the title of 9/11 Culture: America Under Construction. A variety of 9/11 related cultural artifacts – film, music, photographs, memorials, comic strips, literary fiction, recorded stand-up comedy routines, bumper stickers and T-shirts, telethons, and poetry – are used to probe how pre-impact American cultural agents and audiences incorporated the imagery of 9/11. Of necessity this required a discussion not only of organizations but of the formal and informal networks involved in the process. If nothing else, this book illustrates how any analysis of PCD distribution has to be extremely complex.

In terms of what we have just written in the last paragraph, perhaps a very good topic for systematic description and analysis might be the memorials and shrines that are almost inevitable in all but the most minor of disasters and in all catastrophes. Apart from their omnipresence in collective crises of the kind in which we have an interest, there are **two** other reasons we would give high priority to looking at them in trying to understand the distribution patterns of PCD. They cover a very wide range of phenomena from immediate short-run spontaneous acts by

individuals to highly planned actions extending over years by organizations, both public and private. Also, there already exists a somewhat scholarly and popular body of literature both of a theoretical and descriptive nature on the topic, although it is uneven on the full range of relevant issues and questions.

There already have been scholars such as Eyre (2007) and Grider (2001) who argue that the memorializations of the **future** will necessarily be different in significant ways from those of the past. The last writer has stated that she "would like to share with the scholarly community...knowledge of this increasingly widespread phenomenon, including...associated 'cyber-shrines,' or online photos of material shrines, memorial web pages and online condolence message boards and virtual candles" (2001: 1). How many of our readers know what a "**virtual candle**" is? Perhaps there is a generational difference in the age of those who may be involved in any answer given. Grider notes that among others, she has studied "spontaneous shrines" with respect to the *Oklahoma City* bombing, the shootings at the *Columbine High School* and 9/11.

Eyre (2007) has written even more extensively and in a very sophisticated manner on the topic of what she calls "Remembering: Community Commemoration after Disaster" (the title of her major essay). She states that her objective is to set forth the "key issues associated with the nature, meaning and purposes of community remembrance after disaster" (2007: 441). Grounding her remarks in social science studies of death, she explores both traditional and emergent "expression of grief and remembering after disaster from spontaneous to more organized displays" (2007: 441).

This leads her to discussing the role of **religion** in the process as well as the **political** input in the development of official memorial services and other anniversary events. Her conclusion discusses how the establishment of permanent memorials increasingly provides **empowerment** to those affected by disasters, and the likelihood that this will be increased by the greater use of the *Internet* in the future (a recurrent theme in much of the PCD literature). The future will differ from the past. One might be able to understand the vast gulf between the past and the present and even more so the future, by thinking about the following observation. There were 80+ books published in 1906 that focused on the earthquake and fire in *San Francisco* that year. But put all together, they are miniscule in total number compared with the amount of detail on the Internet that is generated by a catastrophe today, be it for example *Chernobyl*, the *Pacific tsunami*, *Hurricane Katrina* or the 2010 *Haiti* or *Chilean earthquakes*.

It could be argued, and is consistent with the empowerment idea mentioned in the last paragraph, that controlled landscapes, architecture, sculpture and painting can provide survivors with a "**sense of place**" that offers them a tangible setting for grieving, mediation or for giving thanks for their delivery. As far as we know, however, no one has studied whether survivors actually often react in the ways we have discussed. Are some PCD aspects more likely than others to evoke the tangibility we suggest? On the other hand, is it possible that for some disaster victims, the reaction might be a recollection of a very bad memory of a very bad experience, namely personally recalling a major disaster or catastrophe? Clearly there are important issues here that need to be researched especially since they would seem to have implications, in the long run, for disaster relief and recovery policies

These ideas advanced by us and other scholars are particularly worth considering given our assumption of the distribution in **time** and **space** of certain PCD phenomena. One observer noted with respect to the aftermath of 9/11 that, "As the collective memorial shrines that dotted the city in the fall have come down, expertly painted commemorative murals have gone up. Ad hoc open-submission gallery shows are being supplemented by others more polished and selective. A scholarly exhibition on the World Trade Center opens at an uptown museum next week. And a gathering of architectural proposals – perverse, utopian, poetic – for a new World Trade Center is drawing crowds in Chelsea" (Cotter, 2002: 1). This transition did not happen as a result of some master plan or overall governmental imposition by fiat. Very large numbers of individuals and groups, emergent and traditional, without any collective control or planned coordination, roughly ended up behaving somewhat similarly. To argue that it was simply a return to the traditional misses the point that a phenomena of some kind occurred on a **massive** scale that requires an analytical explanation and not just a descriptive statement. Even more important, how common is this transition in other kinds of PCD apart from shrines, memorials and outdoor murals?

In one sense, another distinctive aspect of shrines and memorials is their **geographic** spread. Within two years after 9/11, Hampson (2003) notes that hundreds of memorials focused on that event had been erected with hundreds more in the planning stage. He also observes that they were erected in cities and villages everywhere around the United States. The city of *New York* actually instituted the practice of sending pieces of steel debris from the fallen towers to those who wanted them for memorial purposes. About 215 governmental entities, public and private agencies, and non-profit groups eventually were given a piece (Hampson, 2003: 2) as long as they paid for the cost of transportation. Again, there are all kinds of research questions which can be asked about this specific kind of PCD distribution. Does the same kind of distribution process occur for other PCD things and activities? If so, we suspect that there may be informal networks at play in the whole process.

Several other disaster researchers have made some interesting observations about the **memoralization** process. In recent years, through the *Internet*, virtual memorials have been created. A web site was set up by and for the 2004 Asian tsunami survivors and the bereaved to provide the opportunity for them to retell their stories and to share messages and pictures (http://www.tsunamistories.net/). Other observers have even questioned the durability of what are supposed to be permanent memorials. A good example is that "after the excursion boat *General Slocum* caught fire and sank in the East River in 1904, memorials were erected in Manhattan and Queens to the more than 1,000 passengers who died. Both are largely ignored today, and few people even know of the disaster" (Hampson, 2003: 4). Actually an enterprising local reporter at the time of 9/11 searched for and found details of the ship disaster – including that, given the population base, it was numerically a far worse disaster than 9/11 – and contemporary statements said it would never be forgotten. But the reporter found that the memorials had been neglected and that even people in the surrounding neighborhoods were unaware of their existence.

However memoralization can escalate long after the event. For example, on March 26, 1911, the Triangle Shirtwaist Factory burned, killing 146 garment workers, almost all of them Jewish and Italian immigrants. Since that time, there have been publications and some union-linked acknowledgement of the disaster. But in 2004, Ruth Sergel, who lives in the neighborhood where the fire occurred, read a book about the occasion, "Triangle: The Fire that Changed America," which listed the names and addresses of all the victims. On March 25, 2004, accompanied by numerous friends, Sergel made the rounds of the neighborhoods where the deceased had lived, leaving an ad-hoc memorial in chalk on the sidewalk in front of each person's former residence, including their name and their age at the time of their death. They even indicated the former residences of the six formerly unidentified victims. In each subsequent year, the project has grown, attracting more and more participants and serving as the starting point for what has become a full range of memorial related activities such as concerts, plays, readings from various related texts, and the tolling of memorial bells. There is even a formal coalition that has formed to perpetuate the "communal memory" of this event (see Greenhouse, 2011). The coalition has even gone beyond the usual practices utilized for this type of memorial activity by providing access through such social media outlets such as YouTube, Facebook, and Twitter. This is in stark contrast to what we reported above regarding the General Slocum.

Both occasions discussed in the two paragraphs above would merit follow up as well as the question regarding whether there is any **similar** pattern for other PCD phenomena such as relevant poems, books, films, etc.

However, we would now like to present some of our own general impressionistic observations about **musical** aspects of PCD that seemed to emerge particularly after the *Haitian* earthquake (we leave aside the open question regarding how typical a catastrophe this particular occasion was – for example, it could be argued that the extremely extensive mass media attention using all the newer and digital technologies was the first ever of its kind). Our impressions were derived mostly from print reports and the selective viewing of different kinds of presentations that appeared on the Internet, including what bloggers discussed.

Let us note three general observations about the PCD musical aspects that emerged with respect to what happened in *Haiti*.

First, has there been an effort to create (for want of better words) an international **symbolic** song for catastrophes? For example, could the song *We Are the World* become an enduring PCD feature of major disasters? It was originally recorded in 1985 to benefit famine relief in *Africa*. It was produced in a rewritten version and using mostly new singers for a new video under the title of *We Are the World 25 for Haiti*. The day after it became available it was viewed on *YouTube* over four million times and became the Number 1 single on *iTunes*. However, the very same author who cites the figures just mentioned has also written:

Eras change. In 1985 rock ruled pop. In 2010 rock is barely on the map, and R&B and hip-hop define pop. Where the first *We Are the*

World headed into its finale with fervent, improvisatory call-andresponse duos. . .the anniversary switches over to rapping, with solo spots...for some serviceable rhymes: 'Someone to help you move the obstacles you stumbled on/Someone to help you rebuild after the rubble's gone'(Pareles, 2010).

There are several interesting implications in the last two paragraphs. Are supposedly international symbolic songs like *We Are the World* going to change content depending on the larger context? There is no rubble in famines but much in earthquakes. Are the internal dynamics of a genre going to affect PCD content and style? It is correct to say that "eras change?" What kinds of future disasters or catastrophes will evoke a third version of *We Are the World*? We hypothesized that the 2010 *Chilean earthquake* would provoke a third version. It did not. Why not? Perhaps the answers lie in the relative scale of casualties and the related scale of media exposure.

Actually we have found a case in the state of Delaware where more than 100 local musicians played over an eight hour period in a *Concert for Haiti* where 90 percent of the funds raised went to the Delaware Relief Medical Team which had already made four trips to *Haiti*. It turned out that the same organizers and many of the same local musicians had held eight *Wave of Relief* concerts to help victims of the Indian Ocean tsunami in early 2005. Later that year, another eight shows were held following *Hurricane Katrina*. Each concert raised about \$24,000 (Cormier, 2010:B5). If we assume the statistics from Delaware (which given its population size would be on the very low side) can be extrapolated to the other 49 states, we are talking of millions of dollars, hundreds of thousands of volunteers and participants, and dozens of musical gatherings. For a very few examples of somewhat the same kind of activity in the classical musical area, see Kozinn, 2010.

There are numerous questions that should be asked. The last paragraph provides only a few very simple figures. Does any of this kind of PCD ever get counted in **disaster relief and recovery efforts**? Why do people get involved; what do they get out of their involvement? Since it clearly does not occur across-the-board, what kinds of disasters and catastrophes evoke these reactions? Apart from the United States, we are aware of anecdotal accounts of similar responses elsewhere. Which societies respond in roughly the same way musically?

Second, what we have written above understates the degree to which music is an integral part of PCD in the sense that we are using the term here. For example, at least in the state of *Delaware*, many high schools have held *Haiti* oriented dances. In one instance, six Catholic high schools jointly participated in a *Shake the Quake* dance. While the music played was typical for such kinds of traditional events, the proceeds from ticket sales were designated for the relief effort in *Haiti*. In short, if the earthquake had **not** happened, almost the only significant differences would have been the use of another name for the dance and the use of proceeds from ticket sales for other purposes. Nevertheless, to the extent that it was called what it was and that proceeds from ticket sales contributed to the disaster relief, the participants became *Haiti* oriented.

In itself, the particular example just described is, in the grand scheme of things, of no significance except perhaps to some of the participants involved. However, when it is easily possible to find many additional similar cases outside the educational area, a **different** position has to be taken. For example, we find such headlines as "*Haiti* Fundraiser Next Week" (with text stating that it involves a *Rock-n-Blues* fundraiser in a fire company hall, using local musical talent to send the Delaware Medical Relief Team to *Haiti*). Another headline reads, "Bear Concert and Shoe Drive to Help Haiti Relief Efforts" (with text stating that local bands and musicians will be featured in a Delaware church setting). A cursory look at other states found many such similar announcements. In short, as said earlier, adding together the cumulative number of PCD occasions, participants, volunteers, musicians, etc. makes it clear that significant figures are involved. We think that a full population survey would give us a somewhat different picture of the "mass assault" that Barton (1969) a long time ago hypothesized really occurs in disaster relief. Studying **just** formal organizations or even networks of them will miss the more informal and smaller scale PCD involvements we have been describing in the last few pages of this book.

Third, why had there been neither outside nor inside musical PCD with respect to the 2010 *Chilean earthquake*? So far, we have not seen a single instance of musical concerts, etc. of the kind that abounded for disaster relief for *Haiti*. Clearly there is some **selective** process at work. Also, there was a sharp drop off in musical PCD after the month of February, except at colleges and universities in *Delaware*. The latter were continuations of what had been done in previous weeks and again there were impressive figures. At the University of Delaware more than \$30,000 were collected towards the goal of raising \$50,000 to rebuild the *Villa Hospital* in *Haiti* (Starkey, 2010:B2).

Perhaps if some researchers systematically looked at some recent major disasters or catastrophes, clues might be found regarding what is at play in what we have described in the last few paragraphs. Are there distinctive patterns? On the basis of anecdotal accounts from Europe, it appears something similar happened in some other societies. If something different surfaced elsewhere, what was it? If there was no PCD musical response at all, what might be operative?

We turn again to the *Haiti* scene. The authors of this book found some of what we will describe among the more interesting PCD aspects we have found in our research. **Three** general observations are set forth.

First, we did see several cable and network television images of *Haitians* collectively singing and dancing in street scenes just several days after the earthquake impact. However the accompanying commentary indicated that only traditional folk songs and dances were involved with no specific reference to the earthquake. Since we know of and make reference elsewhere in the book to the fact that sometimes songs spontaneously emerge that allude to whatever the local disaster is, the lack of this happening in *Haiti* puzzled us. It is possible that there were such occurrences but we simply missed seeing them. Our coverage of what we saw, to put it mildly, was hardly a valid scientific sample of whatever was televised.

However, if our observations were valid, a question can be asked: Is there something about *Haitian* culture or the nature of this particular catastrophe that precluded the emergence of spontaneous local songs? At the very least, and more broadly, we think it suggests **content** analyses ought to be made of the nature of all songs that are sung in all major disasters and catastrophes, and is something that ought to be specifically examined (for example, our later suggestion that if religion is strong in an impacted area, even spontaneous songs will have a religious theme).

Second, we found very clear instances, particularly in the later stages of the recovery period, of artistically produced PCD activities not only being widespread but also being use to **educate** disaster survivors. The best example in one paper, the British newspaper *The Independent*, carried the title: "*Hope in the Soap that has Haitians Glued to the TV*" (see http://www.independent.co.uk/news/world/americas/hope-in-the-soap-that-has-haitians-glued-to-the-tv-2034067.html).

We summarize from this report. Under the Sky (the name given to the show) is about the daily life of a fictitious family of middle-class Haitians who, because of the devastating earthquake, have been forced to live in a tent like the million and a half survivors who actually do. The show is filmed in a makeshift studio at the edge of a real refugee camp and is shown every night on outdoor screens to audiences that number 10,000 (however all statistics from Haiti are somewhat suspect; for example it was reported for a long time that there were 250,000 deaths until a year later when death totals were changed to 316,000 without any substantive explanation for the change (see Archibold, 2011). It is interesting to note that there was not a single movie theater in Haiti prior to the earthquake (Brubaker, 2010). The Haitian film director, with some financial support from the UN (about \$6,000 for each episode), has a conscious goal of educating survivors as well as entertaining them. But there is a conscious light-spirited tone in most episodes. The director is quoted as saying he "is adamant that there will always be a place for pratfalls and slapstick and old men getting their feet caught in rat traps." Regarding the people in Haiti, he says, "they love comedy…even with conditions as they are, people still need to have a laugh, so I try to help them with that."

However, most of the plot stories have been about **serious** topics such as faking ID cards, the importance of reporting sexual abuse, and how to keep rats at bay. Other episodes have shown how refugees can assess whether it is safe to return to their damaged homes. Another episode focuses on refugee camp etiquette; since the family lives in a place without doors, visitors decide to announce an impending arrival by politely shouting "knock, knock." Still other episodes have addressed issues such as how to deal with boredom, domestic violence, and the prevention of AIDS.

By almost any criteria that could be used, these shows have been very popular with audiences coming back to look at frequent replays of episodes they have already seen. The mixing of serious issues with some humor appears to be readily accepted. While there is clear **success** in this particular case of being informative as well as entertaining, there is a question of how well it would work in other crisis settings. It would be an overstatement to say that this program is being shown to a captive audience, but what else might these particular survivors be doing with

their time? In **most** post-disaster settings, survivors can and do work at repairing their damaged residences or taking steps to find new living quarters. However, what happened in *Haiti* can still be useful if thought of as a partial way to help survivors rather than a complete solution. Furthermore, it may be the case that there may be more Haiti-like post-disaster situations than we believe is the case. It would be worthwhile finding out.

Third, there are **two** different artistic communities, one inside *Haiti*, the other outside. The inside one suffered huge losses. Not only were artists, gallery owners, etc. killed, but "Thousands of paintings and sculptures... were destroyed or badly damaged in museums, galleries, collectors, homes, government ministries, and the national Palace" (Brubaker, 2010:2). Internationally known murals and Haiti's 66 year old building with its local primitive art collection were reduced to rubble. But survivors salvaged what they could and started to paint again, for example local scenes and people. Unlike many of the rest of the survivors who really could do nothing as we mentioned in the previous paragraph, artists could record what had happened, contributing to new PCD aspects in *Haiti*. There is an interesting research question here. How often does an artistic world show more resilience in the aftermath of a catastrophe than much of the rest of the general population? We might note that in the aftermath of *Hurricane Katrina* in Louisiana and Mississippi it took a while for systematic efforts to be made to salvage the area's "cultural heritage."

We should note that when the authors were finishing the draft version of this book, they were contacted by Franklin McDonald who had read DRC Working Paper No. 92, the earlier truncated version. From the country of Jamaica, McDonald is a very well known crisis planner and highly respected disaster manager. He communicated to us that especially in the Caribbean there were many songs circulating about hurricanes in that area. He sent us copies of some as well as sources from which certain of the songs could be downloaded. For example, there are a dozen or more such clips available on YouTube. In particular a song with the title of *Wild Gilbert* (name of a major hurricane that hit in 1988) had not only been a Number 1 Hit Song but had been used to make residents of the area **aware** of hurricanes and the damage they could inflict. In short, such songs served an educational goal as well as being entertainment.

Because of the need to meet deadlines on our book, the authors were **not** able to do any analysis of the content and information in the sources McDonald recommended. Clearly some study of such material ought to be undertaken including addressing what kind of singers are involved, what motivated their interest, who made decisions on the content as well as doing research on what listeners of such songs really learned about hurricanes. We want to thank McDonald for telling us about this kind of PCD and providing some actual examples.

CHAPTER 8: THE CONSUMPTION PROCESS

Finally we suggest that the third part of a system approach ought to also be looked at, namely the **consumption** patterns. There are some clues on how to go about this from studies done on the mass media, or more accurately the mass communication area. For example, some content is consumed by individuals in relative social isolation (such as in most reading activities). Other content is collectively viewed or used (telling jokes require others). Still other content is not directly viewed but gets used through secondary interpersonal interactions. Whether or not such a framework can be utilized to characterize the consumption patterns of PCD is far **less** important than our feeling that researchers ought to start depicting the consumption pattern of PCD. Attending a candlelight vigil or prayer and interfaith services would seem to be a different consumption or user way than a person writing a poem in a diary or salvaging a physical reminder of one's destroyed home in a closet.

As an example of what happens at times, Tiemann wrote the following in her response to the inquiry about her interest in PCD:

While there is some written text, 'The Human Response to the Flood of 1997: Graffiti, T-Shirts and Songs" was a multimedia presentation and not a formal paper...In our presentation we first set up the social situation of the flood and then showed slides of the post-flood graffiti, the t-shirts and the murals that emerged after the flood. While the slides were shown, we played two of the three songs that a local radio station played for weeks. They were Billy Joel's "The River" and Bruce Springsteen's "My Hometown"... These songs and sound bites from Bill Clinton, Pat Owens (the mayor), and others as well as the air raid sirens, and other flood sounds plugged into them.

(Kathleen Tiemann, personal communication).

This is an example of a **novel** way of depicting the consumption pattern of PCD as done by a researcher. A similar "show" involving film clips, dramatic readings, song and dance, disaster t-shirts, and photo displays was apparently undertaken at a session during the 1998 Hazards Workshop in Colorado, and we have heard unsubstantiated stories about other later similar presentations. What triggers such PCD activities? Who gets involved and why? How common are such complex consumption patterns?

More important, among other things, this example suggests that perhaps researchers of PCD might be able to better communicate and illustrate their research results than can be otherwise done. We say this seriously because as has been written elsewhere, most social science presentations on observations and findings seldom go beyond what *Guttenberg* was able to put together. However, Jacobson and Colon (2006) make a very interesting use of graphic design including comic book drawings and style to present a more popular version of the very formal *9/11 Report*. Since the chair and vice-chair of the *9/11 Commission* wrote a very laudatory foreword to the book, saying it would reach a different audience than their formal report,

apparently it is something worth doing. More recently, Neufeld (2009) has also used comic book formats and drawings to depict individual and group behavioral reactions in the New Orleans area to Hurricane Katrina. These efforts do raise a question regarding whether **more** use could be made of PCD aspects to **supplement** more traditional and formal reports on disasters and catastrophes. It is time to take advantage of the innovative ways that the newer technologies allow and which were not even available a decade ago. In a very simplified way, our very extensive use of dozens of relevant photos in this book is inching towards going beyond the traditional printed text and statistics used.

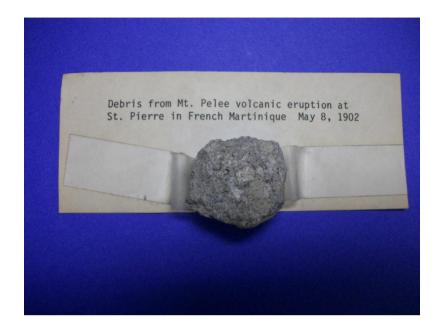
Apart from what researchers have already done, survivors of disasters also show some **innovative** consumption patterns after a disaster. For example, another person responding to our inquiry about their interest in PCD reported the following after a 1997 flood in Grand Forks, Iowa:

One particularly unique example for Grand Forks was a musical production recorded on CD...During the summer of 1997 the staff (at least 10-15 teachers, musicians, alumni, etc.) wrote and developed a full-length musical, complete with text, dance sequences and original music (score and lyrics) on the flood. It was performed probably half a dozen times in our University's 2,200 seat auditorium to full crowds...it had a cast of about 50...and was something of a benchmark in the city's healing process (since obviously most of the kids and staff were flooded). (Paul Todhunter, personal communication).

We know this was not a one-of-a-kind happening since we have heard of other similar happenings. And even if rare in absolute terms, it still requires some explanation. If nothing else, it illustrates that consumption patterns of PCD, to put it mildly, can be rather complex.

A process often involved in PCD is the collection of "relevant" items. Persons who are not direct victims of a disaster impact sometimes collect PCD items from a specific disaster. In its most rudimentary form this can involve randomly collecting "souvenirs" from earthquake or hurricane impacted areas. There is no reliable data on who collects what or for what purpose except that there is an unstudied impression that such souvenirs are not kept for long (along with an unresearched idea that direct disaster victims seldom collect "souvenirs"). However, some limited early studies have shown such collecting behavior sometimes is mistakenly interpreted as looting, an observation advanced by the pioneer field disaster researchers in the *United States* in the 1950s.

One PCD topic that has been ignored for the most part so far is the buying of **souvenirs**. Yet souvenirs have been gathered for more than a century. Note the photograph below as evidence of this practice.



Another example would be the following:



Sometimes there is the selling of "false" souvenirs to tourists visiting disaster sites. Cowan (2009) describes the commemorative booklets and other documents being sold around the 9/11 site that were full of incorrect statements. How much of this goes on generally after disasters? Far more important, who are the people that buy souvenirs? Are souvenirs of disasters more likely to be sought for certain kinds of collective crises than other types? What is done with purchased souvenir items? In short is the PCD aspect here just simply the buying of souvenirs? Is the usage or consumption pattern simply confined to that action?

Perhaps more important are those who try on their **own** to gather almost literally everything in sight after a major catastrophe. As reported by a journalist, "[His] post-9/11 odyssey took him from Battery Park to the Bronx, where he ventured into churches, bodegas, union halls—any place that he could gather flyers, posters, brochures, event programs, public announcements and other ephemera related to the terrorist attacks and their aftermath in New York City...He ended up living near ground zero for months...collecting pieces of glass and bags of dust, as well as photographs, canceled checks, tax receipts, charred business cards, floppy disks and pieces of computers that had spewed from the Twin Towers" (Lee, 2005). Like some known others, this gatherer worked by himself, with no funding and with no manifest short-run purpose except than to amass a private collection. How many such private collections there are, and what happens to them is totally unknown. As said earlier, far more raw data relevant to PCD is around than is generally realized. Furthermore, far more such private collections can be expected in the future especially given the newer digital technologies which will allow far better storage and long duration in existence than in the past.

Of more immediate value and accessibility is the fact that in the 1960s, a "disaster" had to be extremely **minor** for the local American community via its public library system not to make an attempt to build a collection and/or an archive of the crisis occasion. This fact was observed during DRC's first decade of its field studies. Some such collections are massive and are of value to any researcher interested in the occasion. However, since the gathering of such data is usually totally unstructured, the quantity and quality of what is stored is usually very uneven. Additionally, for whatever reasons, PCD items seem to be gathered particularly by librarians. When do local American libraries get involved and how much **use** is actually made of what they collect? Does this happen in other societies? Are the criteria used for the selection process different elsewhere? If they are, in what significant ways do they differ?

As an example of a concrete local operation, one might consider the recently opened exhibit at the Louisiana State Museum titled "Living with Hurricanes, Katrina & Beyond." This exhibit is of significance for several reasons: first, it goes beyond Katrina and deals with the Louisiana Gulf Coast's hurricane history. An article from the [Wilmington, DE] News Journal notes the following exhibit details:

Galleries and connecting areas move visitors through four major presentations: New Orleans' relationship to storms; first-hand accounts of people and predicaments of survival they found themselves in; a forensics gallery exploring the paths Katrina and Hurricane Rita took that year and the science of how the levees failed; and a final section on recovery and the technologies emerging since to combat the destructive forces of nature (Foster, 2010).

Second, the exhibit is made up not only of collected interviews but also of various **artifacts**. Again, according to the article, objects on display include an ax kept by a survivor in case she needed to escape from her flooded attic, a piano which was removed from the residence of Fats Domino and had been destroyed beyond repair in the flood waters, and a section of wall on which one resident had kept a daily diary of post-hurricane events, written in black marker. Finally, of particular note, the exhibit opened in October 2010 – over five years after Hurricane Katrina impacted the New Orleans area.

At an even higher level and peopled by professionals, there are regular staff members of museums and similar institutions. In the United States alone there are about 17,500 museums (see Rice, 2011). What do we know of the PCD material gathered by such organizations? Are some items considered more "relevant" for the collecting process than others? As noted earlier, the *Center for Popular Culture* did not pay much attention to collecting any PCD material. Until recently, both the DRC library and the library at the *Natural Hazards Center* in Colorado paid only cursory attention to the topic of "popular culture." The term was not even used as a classifying keyword for their library holdings. There do appear to be some selective criteria at work regarding what is or is not gathered.

There are some **puzzling** aspects in what some gatherers focus on and which seem at variance with what might be expected. Especially with respect to jokes and cartoons, there is the occasional surfacing of explicit items which can only be called obnoxious, obscene, semi-pornographic and outright pornography. These matters are obviously beyond the personal expertise of the authors of this book, but we can make some observations although the examples cited will be at the edge of and not beyond public use in a professional publication. For example, in Space Shuttle Jokes referenced earlier, one joke of a risqué nature (there are several of this type) is recounted as follows: "Q: What do both Christa McAuliffe and Donna Rice have in common? A: They both went down on the challenger." Noticeable is that many readers of this question-and-answer quotation can make no sense of the names and behaviors unless they have a historical knowledge going back several decades ago to the two real human beings and the political and mass media circumstances that were involved. On the other hand, the collector of the joke said he/she found it still circulating in early 2009, so maybe the fairly clear sexual reference is more important for being recognized and remembered through time than the historical context of the joke.

Nevertheless, given that astronauts have hero status in American and many other societies, what can be involved in this kind of **variance** from how they are portrayed in these jokes? (For a number of very "nasty" and widely circulated jokes about the civilian school teacher, *Christa McAuliffe*, killed in the *Challenger* explosion, see Smyth, 1986: 245; for example, "What was the last thing to go through Christa McAuliffe's mind? Her ass." A web site about the humor circulating regarding tornadoes around Oklahoma City noted that a particularly ribald sign in a

yard prior to a visit by President Clinton made a particularly crude joke likening the tornado to Clinton's sexual behavior (www.unwind.com/jokes-funnies/politicaljokes/disaster.shtml). The US Secret Service apparently had the occupant of the house take the sign down although its authority to act on such a matter is unclear. (Indirectly this example raises the question of the **legal** status of most graffiti, wall drawings or photos, flower displays in streets, etc.; are they the legal property of anyone?)

It could also be argued that along one line most PCD aspects (for consensus but not conflict disasters), if not positively portrayed, are at least neutrally depicted. **Negative** depictions are not only rarer, but when publically displayed, are often selectively screened. There are films and photographs that exist of human beings engaging in rare panic flight, trampling on others, etc. in fires in American night clubs and other sites. But what is televised publically or printed in a newspaper is almost always a fraction of what the television station or news room has available on those negative behaviors. Many simply become the "out takes" or the "morgue" files in the organization archives, never seen by anyone other than the persons who initially took the film or photograph. Melnick notes that there appear to be few public PCD items that show "people behaving badly in a moment of crisis," (2009:72). To say that this simply stems from norms of good taste begs the question. Where and how do such norms develop?

Let us look more closely at when and how deviation from such norms occurs. For example, live television pictures of contemporary scenes from the *Haiti* earthquake showed fights between survivors over food distribution, and the breaking into warehouses and the taking without permission of many items, etc. In fact, many veteran disaster researchers were struck by the mass media's (and bloggers') frequent depiction of **negative** images in their reporting of the behaviors in the aftermath of that earthquake. It is certainly not consistent with Melnick's (2009) observation in the last paragraph. One could speculate that the negative images portrayed simply reflected the social "reality" of this particular crisis. It happened in Haiti. Or could the negative coverage be a major reflection of racial and social developmental stereotypes? Or is something else of a rather different nature involved? Clearly studies are needed to advance ideas on the surfacing of negative aspects of PCD. How common are they? What kinds of social occasions generate them?

Our overall related general point is that some PCD artifacts and ideas that are gathered may get only limited public exposure. What is limited? What accounts for what is done? What gets out despite it being perceived as going beyond accepted limits? What is publicly suppressed? While dozens if not hundreds of people jumped or fell to their deaths from the *World Trade Center Towers*, "Photographs and film clips of people in the air were (and are) accessible to anyone with an Internet connection, but the centralized media outlets, both print and broadcast, quickly stopped offering any visual reminders" (Melnick, 2009:80) of that part of the occasion. Our guess is that there are some fundamental issues about **death** and **life** involved into which someone should look. It probably is no accident that the handling of dead bodies was until very recently neglected as a topic for research as PCD. To be sure, the 2004 massive tsunami in southwest Asia did trigger both extensive academic and practical interest in the handling of mass casualties. But only a few, such as Grider (2001) and Eyre (2007), have explicitly noted that certain aspects of the reactions to mass casualties, such as memorializations and spontaneous shrines, should be treated as manifestations of PCD.

A starting point to initiate research on the selectivity process might be to study mass media "**gatekeepers**", those who make the final decision on what is or is not publicly used. In the mass communication literature this usually refers to key editors in newspapers and magazines and to certain directors or producers in television or cable outlets. A rare and detailed **example** of what occurs is provided by Hoyt (2009), the public editor of the *New York Times*, on what was or was not published by that newspaper with respect to its coverage of the 2004 *Indian Ocean tsunami*, *Hurricane Katrina*, and the *Haitian earthquake*. He writes:

Every disaster that produces horrific scenes of carnage presents photographers and their editors with the challenge of telling the unsanitized truth without crossing into the offensive and truly exploitive.

He notes that his newspaper:

Ran a dramatic front-page photo of a woman overcome with grief amid rows of dead children, including her own [lost in the tsunami]. The Friday after the disaster [the *Times* published] a gruesome scene from the central morgue in Port-au-Prince [of] a man mourning the death of his 10-month old daughter, lying in her diaper atop a pile of bodies.

When Hurricane Katrina hit New Orleans the Times did publish a front-page picture of a body floating near a bridge where a woman was feeding her dog.

On the other hand:

A picture of a dog eyeing a corpse is out, as are stacks of bodies without context.

To us, these statements raise a series of questions about "truth," "context," "offensive," etc. Would not these vary in different societies and cultures? The norms of what is acceptable to publish in a newspaper vary greatly between cultures. What is acceptable in one country is not in another. Thus many a Latin American, or Indian newspaper, or TV newsreel will routinely contain horrific images of dismembered dead bodies following a road accident, air crash or natural disaster. Even more important is the question, so what? Does it make any difference to readers or viewers? It is relatively easy to note probable selectivity, but to the extent it is part of PCD, study on this topic has barely started.

It is easy to note that there is a consumption process of PCD. A lot is gathered in selective ways. But an unknown is never used. But beyond accepting that solidly research-based knowledge and understanding is meager, we have tried to suggest and to provide clues and ideas that future studies might use in more systematic efforts to address this particular aspect of PCD.

Chapter 9: SOCIAL CONDITIONS FOR PCD

Social phenomena come out of other social phenomena, at least in the broad sense of the term "**social**". This is a meaningful assumption to almost all social scientists and historians. Thus, in this part of the book we will suggest four different paths that researchers might pursue in their efforts to ascertain the social conditions for the appearance of the PCD.

There are a great number of theoretical frameworks and models in the social sciences and history that attempt to explain why human beings and groups act in the ways that they do. This is **not** the place to discuss the various combinations of social conditions advanced as accounting for the social characteristics of the observed social phenomena whatever they may be. Instead, in this chapter, we single out **four** theoretical notions that strike us as particularly worthwhile to apply to PCD. There are other possible frameworks and formulations that could be used (Enarson, 2000, for example, uses both a feminist and cultural studies perspective which provides a very good analysis by focusing in part on flood quilts – textiles which convey women's reactions to a 1997 flood – which otherwise would not have been observed or would have been seen as insignificant in other frameworks). But we see those we discuss as good starting points for beginning to look at the social conditions associated with PCD.

1. Hardly anyone would dispute that one major characteristic of PCD is that a substantial amount of it involves new, novel or emergent behavior and products (in contrast to **traditional** ones). As we have already mentioned several times, recently some of those interested in PCD have contrasted such phenomena with more professionally created products. This suggests a particularly useful way of looking at the more emergent qualities of PCD.

Within the discipline of sociology, a major subspecialty is called "**collective behavior**" (in more recent literature it is, unfortunately, often labeled "collective action"). The very essence of this approach is the argument that emergent social phenomena represent an effort to deal with crises that **cannot** be dealt with by traditional norms and values. Thus, crowds and riots, fads and fashions, hysterical episodes and crazes, and in recent times, much of the emergent behavior that surfaces at times of disasters and other crises, are seen as instances of collective behavior and explainable as the development of new and non-traditional ways of acting (for a general discussion of collective behavior, see Marx and McAdams, 1994).

Given this, we think that there should be more systematic collective behavior studies of the conditions that lead to the more informal products and processes of PCD. There are clues in the specialized literature which suggest looking at what distinguishes innovators, the role of opinion leaders in small groups, the informal division of labor involved if the phenomena is to survive, which new norms are likely to be acceptable, the social limits of what can be done, and even how traditional norms and beliefs affect emergent behavior, etc. For example, how do popular songs written by amateurs get informally circulated after disasters, is there a selective or screening process involved, etc.? While as long as 35 years ago Kenneth Westgate had a chapter on popular songs in his Master's thesis, almost nothing has been well researched since that time about the conditions that lead to the informal writing, singing and circulating of disaster related songs. Fordham in England and Scanlon in Canada have documented the existence of folk songs

of mine and ship disasters in their respective countries. And in 2007 a three-disc volume of 70 remastered ballads with a 32-page booklet on disasters and other happenings was produced (see King and Sapoznik, 2007; see also www.tompkinssquare.com for additional information on these sound recordings). However, the **generating** conditions for such PCD song production still need to be identified.

A major **advantage** of using a collective behavior framework is that there are many hypotheses and models about necessary and sufficient social conditions that are derived from rather different phenomena, which could be tested in studies trying to understand what generates the PCD. There is no need to invent the intellectual wheel again.

For example, what happened immediately after the planes hit the *Twin Towers* in the 9/11 occasion can at one level be described and analyzed in collective behavior terms as a complex mixture of mass, crowd, fad, public, and other types of elementary emergent behaviors (many of the newer conceptual formulations of elementary forms of collective behavior advanced by Lofland, 1990, would seem particularly applicable to the 9/11 occasion). Matching what DRC field researchers saw and recorded in person, Kirshenblatt-Gimblett well describes what could be observed:

Grassroots responses to the trauma have been spontaneous, improvised, and ubiquitous. Every surface of the city – sidewalks, lampposts, fences, telephone booths, barricades, garbage dumpsters, and walls – were blanketed with candles, flowers, flags, and missing persons posters. These posters – wedding or graduation photographs from a family album accompanied by intimate details of identifying marks on the body – hung in suspension between a call for information and a death notice. They quickly became the focal point of shrines memorializing the missing and presumed deceased. The shrines appeared in parks, subway stations, firehouses, police stations, hospitals and on stoops. Large crowds gathered spontaneously for vigils. (2003: 11-12).

An-elementary-forms-of-collective-behavior-approach a la Lofland would be a very good perspective to take to understand this kind of PCD. Of course far more descriptive accounts of a variety of such behaviors in different cultural and social settings are needed. Once these are obtained, a move to a more analytical level could be very fruitful. Detailed descriptions are necessary, but going above that level eventually is also necessary.

2. A second research arena, as already noted several times, concerns professionally produced and distributed products and activities that are of a non-emergent nature. Involved in many such cases are formal **organizations** with elaborate bureaucracies. Simple examples would be the groups that produce disaster films (fictional and documentary), novels, plays, even certain kinds of disaster souvenirs, etc. Again as in instances using the collective behavior literature to set up studies of emergent behavior, it is possible to use the social science organizational literature to

do research on the more traditional aspects of PCD (a very up to date summary on organizations is provided in a handbook edited by Adler, 2009).

If one proceeds in this way, apparently simple enough questions and "obvious" answers will quickly become more complex. At one level, for instance those studios producing disaster films or publishing houses putting out disaster novels (Raines, 1987) might be thought of as being motivated by possible financial gain. But the fact of the matter is that the vast **majority** of all kinds of films and novels never return the cost of producing them in the first place (and documentaries are all but certain to generate financial losses). So why are disaster films and novels produced by organizations? Who and what influences what is done? Some rare popular journalistic accounts of such disaster films as *Earthquake* indicate that a variety of bureaucratic and artistic considerations get woven together in very complex ways to influence the final product (Fox, 1974). In short, there are a variety of structural factors in organizations that strongly affect what might or might not be initiated, the final version of what will be produced, and how the product might be distributed.

At one level, it might be thought that the content of PCD would strongly reflect the context in which it appears. However, one Australian journalist responding to our inquiry about an interest in PCD wrote "Given the place of fire as disaster in the Australian pyche [*sic*], there have been few attempts to capture this in our literature (popular or otherwise). Yet there is a strong tradition of fire in children's literature and also in poetry" (John Schauble, personal communication). This was written about a decade ago. Given the massive fires in recent years that have directly endangered Sydney and other Australian cities, has the situation changed? But at a more general level, does disaster film **content** reflect or not reflect the social **context**?

There are also some aspects that would lend themselves in principle to quantitative analyses. For instance, are disaster films more or less likely to be considered and produced than other content topics? Are there really waves or periodic episodes of disaster films? Why is the label of "disaster" movies so **broad**? The first six films listed in the *Internet Movie Database* are *RED DWARF* – a TV series on the adventures of the last human being alive stranded three million years in the future; *FROM THE EARTH TO THE MOON* – a dramatized portrayal of the *Apollo* manned space program; *DR. STRANGELOVE OR HOW I LEARNED TO STOP WORRYING AND LOVE THE BOMB* – a fictional account of the start of a nuclear war; *VARIOLA* – a documentary on an epidemic outbreak in Belgrade; *WHEN THE LEVEES BROKE* – a TV miniseries documentary of the US government role in and response to *Hurricane Katrina*; and *PLANETES* – an animated Japanese science fiction TV series. This listing appears to reflect the use of a very heterogeneous "classification" criterion. But for research purposes on PCD at least initially, this is not necessarily an impediment to pioneering studies.

In 1998 Davis reviewed a sequence of eight disaster movies created from 1932-1998 and noted some of the stereotype images that recur throughout the genre. He noted the following typical 'plots': stranded animals or children at the mercy of impending flood waters, etc.; corrupt officials who create vulnerable conditions for quick money; suppression of reports of technical failures that may result in catastrophe; sacrificial acts of relatives who would rather die than impair the safety of their loved ones; and varied coping strategies and heroic experts predicting

disaster, but whose warnings were ignored by the population or their elected officials (Davis, 1998). Most of these stereotypical images can be found in the literature on disasters, but rarely in such concentrated forms. But to what extent are public attitudes to disasters being actively shaped by such depictions, especially when they are false images?

In our current media soaked society the same TV viewer may, within the same evening's viewing, observe live TV coverage of a recent disaster, (which may be fictionalized in the way selective camera work occurs, or where highly selective reporting is employed in the desire to attract prime time attention by news editors). Then they may casually switch to a channel to view a disaster documentary or a fictionalized disaster movie or even engage in a simulated disaster game on a Play Station. So we have identical hazards filling our TV screens, some occurring in live transmissions, some recorded for documentaries and some being pure fiction. Fact and fiction are thus merged as entertainment material, and even the 'factual' reporting may not resemble what actually transpired. Thus, within such 'shifting sands,' how can research be best conducted to assess the impact of the following typical sources: live TV disaster coverage, documentaries of disasters, disaster movies and disaster games, in framing public perceptions of risk and general attitudes to disasters?

A further more ambitious **cross-cultural** research question would be to compare the way Hollywood and Bollywood depict disasters, and assess their relative impact on attitudes in Western and Asian countries? Given the scale of cinema attendance in South Asia, what effect does this have on the mass audiences in the highly disaster prone countries of India, Bangladesh, etc.? Of course there is a question of how much newer technologies will eclipse traditional movies in the future.

It occurs to us that the possibility of using even greater special effects might be one factor that might influence efforts to create disaster films (for clues on what might be involved see the popular journalistic book by Annan, 1975). If so, will the technological **revolution** that is changing film and book production likely lead to more disaster content products in the future (witness how science fiction films in particular have recently been produced by the coming to the fore of the digital and other very high tech developments)? Our basic point is that even in a market economy (and there is considerable variation in that around the world), there are both **incentives** and **limitations** for products created by structural components of organizations (see Hesmondhalgh, 2003, which is a very detailed description of what are called the cultural industries and recent organizational and technological changes in them).

Along another line, the social science literature about organizations strongly suggests that there are always internal conflicts **between** the more creative and the more bureaucratic components of formal groups. How does this play out with respect to PCD? What compromises in content have to be made? Does this vary from one media to another (for example, some old time publishing houses are consciously determined to maintain traditional literary standards)? Are there some kinds of organizations that step in when more traditional groups do not want to venture into a particular realm? At a purely impressionistic level, it appears to us that comic books and cartoons about disasters do not seem to be produced by traditional publishers. The driving force behind newspaper or magazine anniversary issues of disasters is not clear to us. A

number of them, at least in the *United States*, appear to be printed by one specialized publisher. What inter-organizational agreements exist? Do such issues sell and what financial gains are there, if any?

In 1998, David Morton, then the librarian of the *Natural Hazards Center* in Colorado, informally communicated to us that it was his strong impression that "documentary" types of disaster films and TV series had only surfaced starting in the late 1980s. If so, the question is why? Has the trend continued? Has the content changed in any way? Has the newer technology available only in the last few years affected the content?

These are but a very few questions that deserve attention. Case studies and statistical analyses along these lines are badly needed.

3. In addition, it needs to be noted that there are some serious **methodological** problems that have to be addressed if valid research is going to be undertaken. Quarantelli once attempted to identify all "disaster" films produced in the United States, both by film studios and by television production companies. Even leaving aside the not insignificant problem of what the content has to be to deserve listing as a "disaster" film, simply finding the names of such films proved very difficult in other ways as well. Until recently there was no central depository or library with such information, but now as was mentioned previously there is an *Internet Movie Database* (http://www.imdb.com/find?s=kw&q=disaster&x=12&y=9). However, even those films found on a list do not necessarily physically exist any longer for content analyses (for these and other methodological issues, see Quarantelli 1985, 1990).

We are not trying to discourage studies by our notation of methodological problems. Just the opposite is the case. The field of PCD is in serious need of some very basic studies. In this section of our book we have noted the value that there would be in taking an organizational approach to studying the conditions associated with the production of some aspects of PCD. That there are research problems, including methodological ones, should be seen as a challenge rather than a barrier. It is also not amiss to note that unlike the case of the emergent instances of PCD where often there is no material product or the product is very ephemeral, many professionally produced products often physically exist or are stored away in libraries or archives, etc. That is **one** advantage of doing the latter kind of studies. In his historical studies of disasters, Scanlon (2002) has shown how much data are around and that they can be found with persistent effort. What he has done in his historical studies could be applied in the PCD area.

In the last two sections of this chapter, we have primarily discussed the structural aspect, emergent and traditional, of PCD. We now turn to another very important social science idea, the concept of culture (in the **anthropological** rather than artistic sense). As many readers of this book may know, culture in this sense has had a marked resurgence in use in the social sciences generally (see, for example, Webb, 2007, but the importance of the concept for collective behavior studies was suggested as far back as Weller and Quarantelli, 1973).

There are several aspects we want to note here. There appears to be a definitional and conceptual problem in that the word "culture" is used in the anthropological sense as well as part of the phrase, the "popular culture of disaster." And the two usages, while overlapping, are far from being identical. We return to this issue later to a certain degree. This is a significant issue that will have to be better handled by scholars than it has been up to now.

However, for our purposes at this point, we will focus primarily on culture in the anthropological sense. That is, culture has reference to a cluster of norms, values and beliefs of groups ranging from tribes or clan groupings to transnational civilizations (a general discussion of the concept can be found in most anthropological textbooks). The concept is related to but different from social structure according to almost all social scientists.

Our goal here is to indicate how culture in the sense just indicated ought to be used far **more** in the study of PCD than it has been. We will make several suggestions.

As to our first idea, why and how do certain cultural aspects operate in the creation of PCD? For example, certain religious values have to be in existence for certain activities to come into being after disasters or crises (Eyre, 2007). Memorial services and flower displays would seem to make little sense without some **religious** beliefs, at least in most societies (see Clarke, 2009 for an excellent handbook summarizing sociological research on all aspects of religious behavior). But do such services and displays come into existence in all societies? Our impression is that this is not always the case. If not, when and why do they appear?

Or at even a broader intellectual level, do not many aspects of PCD rest on some belief in the supernatural? For example, Svensen (2009) appears to argue that as far back as the *Middle Ages* in Europe much disaster related folklore during those times was rooted in the religious belief that actions could be taken to prevent those collective crises from happening. A worthwhile study might be to look at societies with rather **different** religious beliefs and to see how such beliefs might be correlated with certain kinds of pre- and post-disaster PCD products and processes. Schmuck (2000) notes how the char dwellers in parts of *India* interpreted the frequent flooding they undergo in a semi-religious framework and in a radically different way than that of secularly oriented engineers from Western societies, reflecting different basic cultural beliefs. Specific cross-cultural studies of any kind in the disaster area are relatively rare but definitely worthwhile. They would seem to be especially useful for research on PCD if the religious components of culture are explicitly taken into account.

Along another line, it could be very worthwhile to try to correlate cultural norms about **jokes** and **humor** with certain post-disaster happenings (Thorson, 1985). As anyone who has ever operated in a cross-cultural context has experienced, much humor does not translate well, if at all, across cultural boundaries. If so, this is something that should be studied with respect to PCD. The only systematic comparative study we found was one by Kuipers (2005) who looked at pictorial jokes about 9/11 on American and Dutch web sites and found that about 85% were on both sites. But while verbal jokes abounded on the American sites, they were virtually non-existent on the Dutch sites.

At one level, it would seem that one function of humor is in allowing disaster survivors to cope with the stresses involved. In many ways, *Sandy Ritz* has done a great deal of work on this topic; see also Wooten, 1995 about the inherent value of such a focus. Again it is not amiss to note that there are professional associations and journals that focus on the humor and jokes that exist in different cultures. For some reason, while it also deserves study, the topic has been mostly **ignored** by disaster researchers except for a handful who see it as a good coping mechanism for people who are undergoing great stress (e.g. Moran, who has written extensively on the topic, see 1990 and Moran and Massam, 1997; Kanrev, 1996; Kim, 2006, but for an exception to this function of disaster humor, see Couch and Wade, 2001).

A passing comment by a former *Red Cross* official suggests that there may be certain sensitivities to humor in a disaster context (noted in a personal but anonymous communication). He noted that "several years ago, it was common in disaster operations for T-shirts commemorating the job to be printed and made available to workers...that policy has ended, and I think it was the proper choice, although I admit that I enjoyed the sometimes humorous T-shirts that now are unworn." He further noted that, "although this may be a way to mitigate the stresses among the workers, eventually all go home. For the victims, the consequences of the disaster remain. There is nothing funny about it. For them, it has not been an event to celebrate, and it is not unlikely that these shirts, jokes, and posters which serve to humor us, offend the people we seek to bring comfort to." Although not intended as such, actually there are about half a dozen hypotheses in these remarks that should be systematically studied so that the role and functioning of joking/humor in disaster contexts and for different social actors can be established.

While humor can certainly be seen as a coping mechanism, it is far from clear who actually jokes, and about what, and in what context? There seems to be very few, if any, taboos. Contrary to what some disaster relief workers say, "I very much doubt there would be any sense of humor about the Oklahoma City bombing (quoted in Kim, 2006). However, we know that not only was there concealed humor among rescue workers at the Oklahoma City bombing but it also happened at the *World Trade Center 9/11* site. There were widely circulating jokes about the *Challenger* explosion disaster (see Smyth, 1986). There are even jokes about ethnic cleansing and mass exterminations, such as have occurred in Serbia, Cambodia, and Sudan within the lifetime of most readers of this book. For other extreme crises that have been joked about see Dundes and Hauschild (1983).

However, we would argue that nonetheless a case might be made that the prevalence of certain kinds of humor and certain contexts might be a good indicator of **community morale**, something over and above individual psychological coping. There is much to be studied about disaster jokes and humor and their functions, but we have to learn this through systematic studies going far beyond the casual impressions of even experienced field workers and researchers.

In fact, as just noted, it could be hypothesized that certain other aspects of PCD such as survivor buttons, hats and caps, clothing and on-site graffiti might also be used as an index of community morale as well as reflecting certain pre-impact cultural norms and beliefs (see Hagen, C., M.,

Ender, K. Tiemann and C. Hagen, 1999; Riad, n.d.). If we really knew pre-aspects could be used to predict some of the post impact appearances of some features of PCD, this might actually have a practical application. In an odd way, such knowledge might be helpful to those undertaking disaster relief and recovery efforts. If research were to show that the **symbolic** buttons, T-shirts and other clothing, etc. contributed to community morale in some cultural contexts, should not relief and recovery personnel provide survivors with such items? In certain contexts such items might be far less harmful than some traditional relief provisions!

4. We turn now to the last aspect of social conditions that we want to discuss. It would be worthwhile to compare more systematically the results from researchers using different perspectives or frameworks.

Notable are the differences in the exposition between authors with a **historical/art** background and those who write from a **social science** perspective (we noted this earlier when we alluded to the Melnick (2009) book). The non-social scientists tend to depict whatever aspects of PCD they deal with in considerable detail and with a tendency to stress the uniqueness of whatever is being described and analyzed. The social scientists instead treat whatever they deal with as mostly a case study or simply a sample of similar products and processes from which generalizations about PCD might be derived.

The two general perspectives just mentioned raise questions about any effort to explain the conditions associated with the actual appearance of PCD. Are the conditions unique to each product and process, or are there general circumstances involved? Most scholars will recognize this as a very long-standing **difference** between the discipline of history and of the social sciences. Again, this is not the place to address this general problem in detail.

However, it does suggest to us the possible value of future studies of PCD having co-researchers from **different disciplines**. What would an historian and a sociologist working together find? In fact, how would economists, political scientists, geographers and psychologists approach PCD? In what ways would they differ; in fact, would they study the same features or aspects about the social conditions involved? What would they find and how similar and different would their research results be in relation to what is set forth elsewhere in this book.

It is worthwhile noting some ongoing work by Paul Oliver, who is an acknowledged authority in two cultural fields: popular music and vernacular architecture. In his classic text: '*Blues fell this morning*' (Oliver, 1990), he discusses popular songs that emerged from the devastating 1927 flooding of the *Mississippi River*. In one passage, Oliver vividly describes the poignant lyrics of angry blues songs written by black disaster victims who encountered racial prejudice when they were unfairly allocated aid from the Red Cross relief supplies store in comparison with the aid provided to white victims (see Barry, 1947 for a historical description of this event which supports Oliver's contention).

However, others have also studied that catastrophe with different emphases and have reached somewhat different conclusions. In one sense that is almost to be expected when competent scholars study something. But the more general point we are raising is the need of **more**

comparative studies about PCD including different researchers within the social sciences as well as historical versus social science studies.

Paul Oliver has also described his encounter with graphic children's murals painted on the walls of buildings following the 1968 earthquake in Sicily. He writes:

I sought to find out why the children of Gibellina painted pictures of an event which they might have been expected to want to forget. Some were realist and literal in terms of their depiction of specific incidents that lurked in the child's memory. Others were of the disaster seen from near or beyond the epicenter; still others were abstractions that conveyed the drama and the horror of the event.The question remained as to the underlying messages that the paintings conveyed. (2006: 187)

That is an interesting comment. Some of that topic is examined in more depth in Chapter 11, *Children: Producers and Users of PCD*.

In addition it can be argued that the sequence of architectural competitions and public participation in the selection of the architect and design for a replacement building complex of the *Twin Towers* can also be regarded as a process of popular cultural expression, some emerging from official sources and some emerging from the grass roots level. The statements from the competing architects in promoting their designs were rich in self-projection partly concealed by heavy symbolism, reflecting a **diversity** of cultural values and aspirations. These were then amplified and modified in the rhetoric from the assessors of the competition on the lines of: "These are designs not only for our time, but for all time...they must transcend the present, to speak to our children...to send an immortal message" (John Whitehead, Chairman of the *Lower Manhattan Development Corporation* in 2004 at the website, www.ananova.com). In selecting from the short-listed designs, careful note was taken of the opinions of thousands of New Yorkers who visited the exhibitions of proposals and their views recorded.

Research on the history of this competition could usefully reflect on the range of stakeholder interests and influence in the overall process of selecting the approved design by Daniel Libeskind. Was this a question of "form following finance", or "form following failure", or in the alternative expression made by the architect Robert Venturi some years ago, a product of "form following culture"?

It seems to us that the area of disaster reconstruction as an expression of popular cultural values could be an extremely rich environment for research by sociologists, physical planners and architectural historians (Davis, 1983).

CHAPTER 10: THE SOCIAL CONSEQUENCES OF PCD

As in chapter 9, the issue of the social consequences that will follow from the social conditions of PCD is very complicated. Rather different viewpoints can be and are advanced. What some see as important, others ignore. Our basic position is that we will selectively set forth **some** current views, leaving other researchers in the future to continue to deal with the problem.

The consequence or effects of PCD are clearly **multifaceted**. This is especially clear when the effects at different social levels are taken into account. The consequences may be for individuals, groups, organizations, communities and/or societies. We illustrate with five different examples of what researchers might explore.

We will preface our remarks, however, by noting that some scholars have argued that certain aspects of PCD should be examined beyond a **societal** level. Ritter and Daughtry (2007), for example, pull together twelve different essays from around the world including *Afghanistan*, *Peru* and *Senegal* that discuss how 9/11 influenced musical compositions, many of a PCD nature. Even more specifically, Fialkova (2001) suggests that the *Chernobyl* nuclear disaster had worldwide consequences that went far beyond the *Soviet Union*. She writes: "despite its name, Chornobyl [*sic*] folklore is by no means local. Its global proliferation is due to different processes: spontaneous generation of jokes in different countries and languages, migration of narrators, telephone and mail communication, written media, and television programs. It has been distributed on diverse occasions, in a variety of languages, and by people of different ethnic origins" (2001: 181). It should be noted this was written before much of the computer and high tech information revolution which by any criteria can only accelerate the mega multiple global proliferation of popular culture acts and processes in all future disasters and catastrophes.

Another example of what Fialkova is talking about is the sinking of the *Titanic*. It is one of the most written about disasters in history. In fact, there is a book whose title is *Titanica: The Disaster of the Century in Poetry, Song and Prose* (Biel 1998). But more important, the very name *Titanic* is probably one of the most recognized words and has been around for over a century. Untold millions in different societies currently have instant recognition that it references a disaster. Obviously there should be research on why only a very limited number of disasters (like the *Titanic*) and catastrophes (like *Chernobyl*) attain this exalted world level and enduring status – clearly it is not because one is a disaster and the other is a catastrophe.

1. Our initial example of a research possibility below the supra level in the two examples just discussed is the following. What is the impact of the imagery of popular culture on the perceptions of crisis managers, and thus on the subsequent nature or quality of disaster management? As can be seen in other areas of disaster behavior, planners and managers are themselves affected by what they believe happens (correctly or incorrectly) before, during and after disasters. For instance, and a true example, if they mistakenly believe that panic flight is widespread in crises, they may be very reluctant to issue disaster warnings (as was the case of the massive flood that engulfed *Florence, Italy* in 1966; more recently a similar incorrect concern was expressed about the issuance of warnings about a global pandemic).

Studies are needed on which aspects of popular culture are particularly **salient** among crisis planners and managers. What, if any, features are actually incorporated into planning and managing? Is there evidence of the practical implications of the negative and/or positive influence of this impact in actual disaster planning and managing? If that is the case, what aspects of PCD affect the thinking and perception of crisis planners and managers? It should be noted that there is a need to understand the operation of these processes before and after as well as during disaster impact. For example, does the widespread existence of many wall and flower memorials in the aftermath of a disaster effect in some way what might be done during the recovery period? And do these memorials prolong the psychosocial recovery process or assist in bringing closure?

2. Second, what are the effects of popular culture on the various segments of the population that are exposed to PCD? Rather than thinking of the public in general, as is frequently done, it is much more sociologically relevant to think of different **segments** and **subgroups** that make up any population. Are there ethnic, religious, social class, lifestyle, or politically oriented differences, etc. that affect how aspects of the popular culture of disasters have differing consequences?

For instance, do survivors of disasters with religious convictions use popular culture in different ways than non-religious victims? It seems fairly certain that religious beliefs seem to affect the informal songs that frequently surface after disasters. Note the basic theme of the following excerpts from a song and a poem written 35 years apart and in two different localities.

No one was killed in Doniphan that day But oh, there were many not far away As we are left homeless we gladly say Oh, how we thank God He was with us that day

(The above is from a song circulating in northeast Arkansas after tornadoes struck in 1952; obtained by the NORC field team studying the disaster)

Next is a sentence from a letter to the *West Memphis Evening Times* of December 24, 1987 (p. 4), which reproduced a poem by Gwen Hepler on "The Tornado". The letter says:

"I am so thankful to be alive, and amazed and glad that God saw fit to spare so many lives considering what terrible damage was done"

Apart from the religious area there might be significant political differences in the production and use of PCD, and as such also in the consequences. For example, are political activists more or less likely to be affected by the popular cultural aspects of disasters; if so, in what ways? Is there any tendency among any social groupings to pay more attention to and give more weight to the citizen generated aspects of popular culture as compared with those that are generated by professional groups (such as film makers and writers)? Political activists tend to live in different social worlds than those who are just not interested in political matters and issues. Our overall point is that researchers should think of the **differential** effects that might result from the fact that the populations involved were different even before a disaster impact instead of thinking of consequences simply across-the-board.

3. Third, are there differences in the ways in which different communities might be affected by the popular cultural aspects of disasters? They are neither all the same nor are they a table rasa. For example, in some localities the social climate might be very secular whereas in others it might be very religious. In certain localities there may be a disaster subculture because of the frequency of disasters occurring in those places. Are PCD products and processes produced, distributed and consumed in different ways in communities accustomed to many disasters compared to localities where disastrous occasions are very rare? McLeese (2008) notes how the pre-impact culture and history of *New Orleans* affected how musicians in the area developed their music after 2005, which often involved *Hurricane Katrina* in one way or another.

4. Fourth, in what ways if any does the existence of PCD affect how a **society** as a whole might react to disasters? Some social phenomena have societal-level effects. This may also be true of disasters with regard to PCD. A good recent example was *9/11*. It generated a vast output of PCD. For instance, on the anniversary date a year after it happened, the *Washington Post* had two full pages out of twenty four on memorial services just in the capital area; the *New York Times* had a 12-page section listing "cultural events surrounding the week of 9/11"; and the *Wall Street Journal* listed numerous events from coast to coast. In every subsequent year to the present, articles have also appeared in professional journals referencing the event (e. g. Kuipers, 2005).

Before continuing to look at possible societal-level effects of PCD, we should note that such effects are not fixed forever in time and space. Disaster researchers and scholars have described actual changes through time. Fialkova mentions that while the original folklore about the catastrophe at *Chernobyl* consisted of various genres, some, such as jokes, have endured for at least 15 years; in contrast, children's games generated by the crisis have disappeared (2001: 182). Somewhat in the same vein, Smyth (1986) also observed that there appeared to be a peaking of when some jokes such as those about the *Challenger* explosion were most widespread. Andersen (1974) notes that in the two years after the 1971 *Los Angeles earthquake*, the widespread oral folklore that immediately followed "no longer has oral currency" (1974: 336).

But possible changes can be thought of in three broader senses. First, there is change in the sense of something appearing that did not exist before. For example, while graffiti in social situations has existed for a long time in American society, its appearance on buildings and in disasters areas generally is only about a decade old (Hagen, C. G. Ender, K. Tiemann an C. Hagen, 1999). The pioneers in disaster research starting in the 1950s did not appear to have seen or remembered such graffiti. As is widely known, long-term memories can be very vivid, but Quarantelli, for example, has absolutely no such recollections. We perused at least eight popular histories of disasters such as the one about the hurricane that hit Galveston (title page was reproduced on page 33 of this book). There was no graffiti of any kind depicted in either the

black and white photos of many on- scene sites, nor mentioned in descriptions or eyewitness accounts.

This raises a series of research questions. When and why did graffiti on buildings or ruins start to appear? Is there any indication of how this PCD phenomena spread (it could be argued that at the present time, the various high tech means available as well as cable news in certain social systems inform disaster survivors of the existence of such graffiti and encourage them to participate in the activity)? Does graffiti appear in all types of disasters including conflict as well as consensus ones? Is graffiti more likely to appear in certain societies than others? What about other possibly more subtle differences; we have a very vague impression that perhaps it is more likely to appear in working class neighborhoods at least in the American scene. Finally, as we suggested in the last photo on page 19 of this book, which simply depicts the ruins of a building, is it still not the fact that the great majority of houses or ruins do **not** have any graffiti on them?

Dynes suggests that institutionalized distrust of authority exists at least in current American society. He wrote:

It would seem that the notion of institutional trust or distrust might be a contributing variable to explain disaster graffiti. Are there more expressions of hostility toward government agencies or insurance companies now than 30 years ago? Are there differences in the ratio between instrumental vs. expressive messages in graffiti? Are the messages different between middle class vs. lower class neighborhoods and/or ethnic neighborhoods? Does the availability of kin resources decrease institutional trust? Are there regional differences in institutional trust reflected in disaster graffiti? From a mental health view, is disaster graffiti an adaptive response? (Dynes, 2000, p. 3)



Russell Dynes We are grateful to him for his thoughts on this and other PCD related matters.

Another example of possible **significant** changes in some contemporary PCD is mostly anecdotal but consistent with larger existing cultural trends. Gentry and Alderman (2007)

suggest that the placement of graffiti on buildings and ruins is being at least partially replaced by tattoos on the bodies of survivors. Several photos in their article clearly show bodily tattoos relevant to the disaster experiences of two such persons, but copyright laws preclude our including those photos in this book. More important, any social observer knows that tattoos on every conceivable (and inconceivable) body part started to spread among young people in the last decade or so in a number of different societies around the world. There are a variety of disaster-related research questions here that should be addressed such as how widespread is the activity, what are the major themes of the tattoos, who is most likely to participate, and perhaps most importantly what is the significance of the activity to the participant as well to observers? If nothing else, tattoos are very difficult to remove; it is nothing like removing graffiti from buildings and ruins. Thus there is a probable change here that is far more than an extension of previous PCD behavior.

Finally we want to discuss here an example of a change we could partly study directly ourselves. The following photograph is one that was collected along with the other 9/11 photos presented in this book on pages 22-31. It is a scene from the *University of Delaware* campus, showing hundreds of yellow ribbons in a garden setting.



Several days after the 9/11 attacks against the United States occurred, discussions started among faculty, staff members and students as well as community members regarding whether some visible means could be established on the campus to encourage people to express their feelings about what had happened. As might be expected, memories are not fully clear on who initially said and did what. But three days later, people started inscribing their thoughts on yellow ribbons with the streamers being tied together in an area that came to be known as the 9/11 Ribbon Garden. Eventually the garden included more than 4,000 messages, written in more than a dozen languages, that people could read (Thomas, 2002). After ten days, the activity was terminated, but volunteers from the campus and community collected and transcribed the messages and made certain they were preserved. In fact, a year later, 350 of the messages were read aloud to a candlelight anniversary memorial service.

It is of interest that when *Hurricane Katrina* occurred, some on campus remembered what had been done for 9/11. A university administrative official was quoted as saying:

We came up with the idea for this garden when we reflected on what we could do at the University to support Hurricane Katrina in a way that would be representative of the campus and meaningful to the students...We thought back to 9/11, when we did a similar garden in which members of the University community wrote and read messages written by others...and...remembered what a good opportunity...had [been] given students to reflect on individuals less fortunate than themselves (Hutchinson, 2005).

Started on September 16, 2005, approximately 2,500 ribbons had been written a week later and the garden closed on September 23.

A series of research questions clearly could be asked, but since we had given very little thought to looking at this particular phenomenon before starting this book, we decide to see if there was any literature about "yellow ribbons". We searched **both** the Yahoo and Google sites. That exercise proved to be very interesting. There is a substantial amount of writing on that term or closely related terms. We arrived at two conclusions.

1. Most of what exists has **not** been produced by scholars or researchers but by laypersons and/or popular – sometimes ideologically oriented – writers. It is not surprising therefore that there are huge differences on what is reported. Thus we are told by some that yellow ribbon activities have been undertaken for about four centuries, rooted in the yellow sash that *Oliver Cromwell's* Puritan army wore (see Finley, 2004 - http://endtimepilgrim.org/yellowrib.htm). By others we are told that their use only spread after the 1991 *Gulf War* when large number of *American* troops were sent overseas to the *Middle East* or maybe in 1981 at the end of the *Iranian* hostage crisis (see Emery, 2004 who entitles one of his articles "Yellow ribbon 'tradition' is of recent origin, folklorists say"- http://urbanlegends.about.com/cs/historical/ayellowribbon.htm). Another folklorist, Parsons (1991 - http://www. loc.gov/folklife/ribbons.htm), examines a variety of possible origins such as the folk song "Round her neck she wore a yellow ribbon" which has been around in some form for 400 years, a movie that John Wayne starred in (1949) with that

title, a book on prison reform that stemmed from a folk tale about a "whole tree that is white with ribbons" that circulated in the 1960s among young people active in church groups, and a number of other actual and unfounded beliefs that may have led to a focusing on the symbol of wearing a **yellow ribbon** to indicate someone is waiting for a loved one to return from a dangerous situation.

2. There is almost **no** writing that discusses any relationship between disasters and "yellow ribbon" displays. In fact, there is none at all that looks at the *American* scene. However, we did find two cases – unexpectedly one was in *Australia* and the other in *China*.

The *Chinese* case is somewhat unusual because it led to the public display of yellow ribbons. The May 12, 2008 *Sichuan* earthquake catastrophe killed at least 70,000 people. The collapse of schools, hospitals and factories in a number of localities prompted widespread questioning about how rigorous building codes had been. That thousands of those killed were children in collapsed schools led to open protests by parents with the government trying to prevent discussion of the possible problem. On the second anniversary of the catastrophe a prominent artist posted an *Internet* audio project in which volunteers read the names of nearly 5,000 children who had been killed. However, at the same time the government allowed, if not supported, the open display of yellow ribbons seemingly as a gesture of support of parents who had lost their children. Given the authoritative nature of the society, the information for outsiders is rather murky about who did what, and when. But that yellow ribbons were publically displayed as a gesture in connection with the loss of the children was openly mentioned several times in a press release by the Chinese Embassy in Washington, D.C., lending credence to the report.

We first found a specific linkage between disasters and yellow ribbons in, of all places, an open or public *Facebook* entry. In part it said the following: "I am urging everyone to show their support for the victims of the devastating Victoria bushfires by wearing a yellow ribbon. The yellow ribbon signifies support for the fire fighters, emergency workers and volunteers and solidarity with those have lost their lives and thousands who have lost homes and possessions. The yellow ribbon symbolized the nation coming together to support those who had suffered and those who were helping" (http://www.facebook.com/group.php?gid=49842087786). Later we found emails sent out by organizations making the same appeal.

Clearly we have in the yellow ribbon displays some **new** PCD phenomena, whether in China, Australia or the United States. Where did they start? Did some organized groups take the lead in promoting the activity? What connection, if any, does the widespread use of yellow ribbons in a non-disaster context have in facilitating the acceptance of them in a disaster context? In what societies has the display of yellow ribbons occurred? Are there particular kinds of disasters and/or catastrophes that are more likely to generate such displays? How do participants in such displays view their actions? What does the activity mean to them? Are public authorities possibly leery of such displays since the displays could perhaps be seen as implicitly anti-establishment? The possible questions are almost endless for what on the surface now seem likely to be very recurrent PCD phenomena in at least the near future.

But apart from the kind of possible changes we have discussed, to return to what we had been focusing on, why do some crises seem to have societal-level system effects and which are they? Whatever is involved does **not** rest on the number of people killed. There have been far more casualties in crises that have evoked far less PCD attention (let us leave aside the influence of myths such as that 9/11 had the largest number of civilians killed in crises in US history, which ignores the facts that over 12,000 plus died in the *Galveston Hurricane* of 1900 and that 11,000 plus were killed in the *San Francisco earthquake* of 1906). In fact, the six American natural and boat disasters which have involved more than 1,000 casualties are almost totally unknown; even disaster researchers are seldom able to name all of them or mention some that are not part of the list. It would be interesting to study systematically the degree to which they generated PCD, if at all.

What disasters capture worldwide attention and why? Relatively recently, the *Tangshan earthquake* in *China* in 1986 killed at least a quarter of a million people, but is almost unknown in the larger world outside of a few disaster research circles. On the other hand, the destruction of both space shuttles, the *Columbia* and the earlier *Challenger*, were major news stories and appeared to have evoked "gallows" humor (for a general sociological discussion of such humor, see Obrdlik, 1941-1942) in many places around the world. In these particular instances it might be argued that knowledge stemmed from modern mass media attention involved; however, this does not take into account differences in pre-media historical memories and also begs the question of why media attention is clearly very selective not only of crises but of practically any other phenomena that is defined as "news" and reported.

In fact, it might be worthwhile to ascertain why certain disasters get **embedded** in the popular thinking of the societies in which they occurred. Why do a great many Americans "know" about the *Great Chicago Fire* (but not the one in *Baltimore*), as well as the *San Francisco earthquake* of 1906? Do the *Great Fire of London* of 1666 and the Great Plague of London in the preceding year of 1665 fall into the same category? What disasters are remembered in story and legend and in which societies?

5. Finally, what aspects of PCD get institutionalized? As we discussed earlier when we presented some general observations by Scawthorn, it is common for plaques to be set up at disaster sites, many of an official nature but some of a more informal kind. But at other times, there occurs a massive attempt to memorialize a disaster with particular efforts to incorporate PCD productions, especially those of a spontaneous rather than professional nature (see Eyre, 2007). In the pages that follow we will discuss two examples, one from Japan and one from the United States.

A very good example of this occurred in the aftermath of the *Great Hanshin-Awaji earthquake* in *Japan*. The national and local government has spent over 113 million dollars (US) to build and equip two museums to memorialize the earthquake that occurred in and around *Kobe, Japan*. They are the responsibility of the *Disaster Reduction and Human Renovation Institute*. One museum is concerned with memories of the earthquake, while the other considers the disaster recovery of the area (for more information see *The Great Hanshin-Awaji Earthquake Memorial: Learning from the Great Earthquake, Creating a Splendid Future*, 1995).



Photo by Ian Davis

The Earthquake Museum in Kobe, Japan The precise time of the earthquake '5.46 am' is depicted on the face of the building.

The *Disaster Reduction Museum* has a **dual** goal. The first is to raise the awareness of citizens concerning ways to reduce disaster risks. The second is to preserve the memory of the earthquake and its impact as a major cultural experience in the life of the city, and to transfer this "live experience" to present and future residents of *Kobe* and visitors from elsewhere. Evidence of the immense public interest in these issues can be deduced from the fact that by April 2004, exactly two years after the *Disaster Reduction Museum* was opened, and a year after the *Disaster Reduction Museum* was opened, and a year after the *Disaster Recovery Museum* was opened, more than 786,000 people had visited these facilities.

The museum houses about 160,000 primary artifacts that have been carefully collected, documented and placed in thousands of boxes labeled with the identity of the owners. It became **official** policy from October 1995 on to collect such material. The artifacts include the letters of victims, diaries, notebooks, children's paintings, poems, songs, video films, press reports, and about 20,000 taped interviews with survivors, as well as particular earthquake relevant objects (including a broken clock, burned coins and a smashed motorbike). Some of the interviews are

currently being published. The documentation of the experience of living in temporary housing may be the first attempt on a massive scale to record the reactions of the occupants to the experience of living in prefabricated housing following a major disaster. This contributes to cultural history, as well as providing visual evidence in support of future shelter policies.

The museum has a **research** emphasis also, providing help to visiting researchers, and it also has its own research teams studying various related topics (one being to study the "verified results of the Great Hanshin-Awaji earthquake"). It would appear that the creation of this collection is the most ambitious attempt yet undertaken by any public authority following any disaster to document and disseminate the cultural experience of the event. As such it is an interesting initiative where the often unnoticed and frequently undocumented popular culture aspects of a disaster have been gathered by the government for purposes of promoting future safety measures. For more details about this museum see the leaflet issued by the museum (The Great Hanshin-Awaji Earthquake Memorial 1995). A useful web site provides general information in English on the Disaster Reduction and Human Renovation Institute (see www.dri.ne.jp/html/ english/index.html).

In 2007 the United Nations International Strategy for Disaster Reduction (UNISDR) recognized the achievements of Professor Yoshiaki Kawata of Kyoto University in his role as the driving force in creating this museum, and his further initiatives in promoting an international movement to create similar 'living disaster museums' throughout the world to raise public awareness of disaster risks. He thus became the first Japanese citizen to be awarded the prestigious **Sasakawa Award for Disaster Reduction**.

A co-author of this book (Davis) participated in a *Disaster Reduction Forum* in *Kobe* in 2004. He concluded that there were **two** major key research questions in relation to PCD that might be usefully pursued. The first would be to study material from this unique resource to compare and reflect on the different "messages" that could be derived from the official and unofficial cultural expressions that have been collected. The second would be to monitor the public acceptance and overall effectiveness of the Japanese experience in documenting and disseminating the cultural experience and in reducing risk.

In 2010, as this book was being finalized, there were no signs of any desire to reduce the intensity of homage to the disaster victims of 9/11. For example, on July 2nd 2010, Joe Daniels, the President and CEO of the 9/11 Memorial Foundation, wrote to all the subscribers to the monument fund with a description of a 'trans-America' 9/11 'flag stitching' restoration project being undertaken by victims of natural disasters:

(Partially quoting from the letter included on the web site 9/11 MEMORIAL) Today, the New York Says Thank You Foundation – a non-profit organization founded after 9/11 – donated a powerfully symbolic American flag to the Memorial Museum's collection. Destroyed in the collapse of the World Trade Center and stitched back together by tornado survivors in Kansas, the flag reinforces our commitment to persevere and rebuild in the wake of tragedy.

On this year's 9/11 anniversary, as in years past, the 9/11 Flag will travel with the New York Says Thank You Foundation to a town struck by natural disaster, where Foundation volunteers will help the community recover. After that, the flag will tour the country for a series of "stitching ceremonies" in which service men and women and veterans will help restore the flag to its original glory once more.

Joe Daniels, joe@national911memorial.org

For more information on the National September 11 Memorial and Museum see http://www.national911 memorial.org/site/PageServer?pagename=New_Home&cvridirect=true

At another level, the question could be asked, why did this **social change** occur as manifested in the institutionalization in a museum of many PCD aspects of a particular disaster? Although discussed even in the earliest literature on disasters (see Prince, 1920; Carr, 1932; Sorokin, 1942), clear-cut social change from disasters has not been a major research issue in the professional literature. But when does social change directly occur? Was there something distinctive in Japanese society that led to the establishment of the museum? If not, is this an organizational emergence that will occur elsewhere in the future?

As we shall show, the process is more **complicated** than might seem at first glance. It might be thought that social **support** for setting up a formal crisis-related memorial would be widespread after most major disasters and catastrophes. In general that seems to be true, especially right after impact. That can be seen in the immediate aftermath of 9/11 after the terrorist attack on the World Trade Center. There was widespread public talk that some sort of memorial should be considered. But the discussion was not very concrete as to what might be done and that discussion rather quickly died out. In fact, public attention turned to the **larger** issue of what and who should be involved in the overall general reconstruction process. That turned out to be very contentious.

About five years ago there was a serious effort and some degree of planning to build a *Memorial Center*, an interpretive museum to be located very close to ground zero of the 9/11 attack (Dunlap, 2004). This generated varying kinds of different conceptions as to what might be done as well as outright opposition to some of what was proposed.

The general idea of a memorial again resurfaced later. In a brief *New York Times* article Newman (2010) reported the following. He noted that the *9/11 Memorial and Museum* had released a 3D *Google Earth* model of plans being developed for the 16-acre ground zero area. There were "planned memorial pools with their 30-foot waterfalls," a symbolic "1,776 foot face of the One World Trade Center" (the number being meaningful to many Americans as the year in which the United States was more or less conceived), as well as a transportation hub. The article suggests that it is merely reporting planning that had occurred, and that if the work is done, part of the ruins and recollections of 9/11 **might** materialize.

As of August 22, 2010 construction was actually underway. Ilnutzky notes that while construction had started, "it is still a construction site" and some planned feature details were still uncertain. The museum, which will cost about \$45 million itself, occupies about 120,000 square feet underneath the eight acre memorial plaza and is scheduled to be opened in 2012 (Ilnutzky, 2010: F5). The massiveness of what is involved as well as the detailed nature of the whole effort is well illustrated by her noting that the walls, exhibition spaces, stairs, pools, parapets, saved building ruins, artifacts, etc. are well linked with "an access path that allows the events of 9/11 to unfold" (Ilnutzky, 2010: F5). A more current newspaper report six months later indicated that construction is still going on but is not yet completed. For example, at the time of publication, the building stood at 680 feet, less than half of its intended 1,776 foot height. The point is that the **whole** enterprise as well as particular details involves a close working relationship between architects, artists, engineers, building personnel, etc.

From the perspective of PCD, there are all kinds of research questions that might be asked. Who took leadership roles, if anyone? How were different points of view reconciled? What issues arise in such a complex and complicated enterprise? What had to be compromised? Elsewhere in this book we discussed what enters into the production of PCD artifacts and processes. For example, does the creation process of movies, graffiti, disaster songs, and memorials differ? If we are really to understand what is involved in PCD there is a need to make **systematic** and **comparative** studies.

A newspaper story by Dunlap (2010) has an even more detailed description of all that has been planned and started than Ilnutzky (2002). However, Dunlap makes a number of references about the difficulties and problems in developing the whole complex. For example, he writes, "Despite setbacks and public cynicism, the puzzle that is the new World Trade Center complex is being pieced together – rapidly. For years a barren pit, the site is now a hive of activity, with 2,000 workers building two skyscrapers, a huge train station, an eight-acre memorial and an underground museum" (Dunlap, 2010:1). He further notes, "Two years ago, it was difficult to imagine how the Port Authority of New York and New Jersey, which owns the site of the trade center and is building most of it, could ever finish the eight-acre memorial in time for the 10th anniversary of the attack, on Sept. 11, 2011. Today, it is difficult to imagine what would stop them (though, given the site's tortured history, the possibility shouldn't be completely dismissed)" (Dunlap 2010:1).

That some of what we discuss about resistances or opposition to memorials is present elsewhere should be noted. For example, an effort started in 2004 in *New Jersey* to memorialize 744 residents of that state who died on 9/11 has met with and is meeting with resistance and opposition and there is a general belief that it might never be built (Hughes, 2009). It seems fairly clear that many more permanent memorials are talked about than are actually planned and more plans exist than are actualized in a monument. What is involved? Why are there **not** more disaster memorials than there are?

CHAPTER 11: CHILDREN: PRODUCERS AND USERS OF PCD

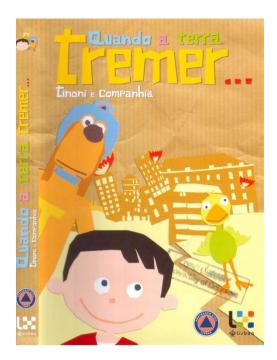
This chapter focuses almost exclusively on children. In part, this is because almost all societies do pay a lot of attention to preparing their young ones for collective threats and dangers, as well as noting how they react to them when they occur. In fact, even semi-developed social systems have established a separate **social institution**, the educational one, with organizations called schools, and specialized social roles called teachers. This social institution is a distinctive set and cluster of activities and people, being only **one** of about a dozen that social scientists have singled out as an integral part of community life and social settings. Two Handbooks summarize the recent literature on the sociology of education; see Hallinan, 2000 and Apple, Ball and Armando, 2010.

As it happens, and of course it is not accidental, that children and education have become the object of attention also of teachers and researchers interested in PCD. Many topics, objects, and facets of PCD have not been widely attended, although this book probably has surfaced a number of them that many readers may not have thought about them before. However, children as producers and users of PCD have not been slighted, as we will try to illustrate in this chapter.

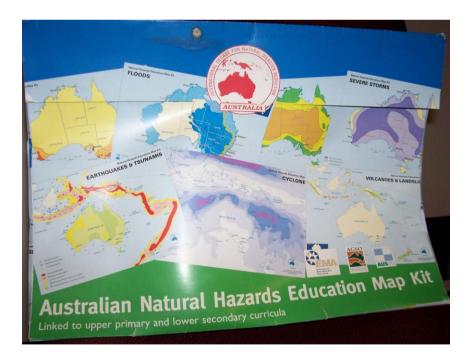
The following presentation is roughly divided into three parts.

The first part of the chapter discusses and illustrates educational activities of a PCD nature on the part of schools that have younger students. The second part deals mostly with what has been learned, by research or by chance, on how such students react in a PCD manner when exposed to a disaster or catastrophe. The last part of the chapter discusses half a dozen cases of what might need to be taken into consideration when trying to train students for a disastrous occasion.

Disaster preparedness instruction for children is undertaken in many rather different societies around the world. Below is the cover of an instructional video created in Portugal to teach students about how to react in earthquakes.



Below is the cover of an instructional kit prepared in Australia to teach children about natural hazards and possible subsequent disasters in that society.



The kinds of educational activities involved, the work that needs to be undertaken, and what partly can be roughly borrowed is well illustrated in just one study in the following five pages.

As shown in the photo below as well as in the text provided, the initial start came from an educational American TV show called Sesame Street which decided to create a song that young children might remember in case of a fire. In the end, this got transformed into a somewhat different training film that would indicate to Iranian children in their own native language on how they should behave in an earthquake. We especially want to thank Assistant Professor Yasamin Izadkhah (yasyasak@yahoo.com) who freely provided photos she had taken to Ian Davis via email communications. She had received her PhD under the mentorship of Davis while studying at Cranfield University in 2004.

This Iranian song lasting about 5 minutes was originally written in Persian by Dr. Mahmood Hosseini from the International Institute of Earthquake Engineering and Seismology (IIEES). For further information on how teachers can instruct Kindergarten children, see Parsizadeh, Izadkhah, and Heshmati, 2007. It was translated into English by Dr. Izadkhah and adapted into a simple nursery rhyme by Heather Bliss in 2007.



"The Earthquakes and Safety Song"

Hi kids, hi kids, Nice, kind Kids Kids sitting patiently, I'll tell you 'bout 'quakes, If you'll listen quietly.

Quakes come sudden, The earth starts to shake, People are scared And windows may break,

If we're wise And know what to do, Quakes won't harm you – Or only a few!

So what's safe? What's best to do? Listen carefully And you'll hear it too. If you're home Or if you're at school, When the earth shakes, What to do? What to do?

Don't panic and push You must be quite calm, Do what you're told and You'll come to no harm. If you're near a door, In the doorway you'll stand. If you're near a wall, Cover your head with both hands.

If you're near a table Go quickly below, Grasp the legs tight and wait For the earthquake to go. If you're indoors, Strong corners are best. Crouch down and put Your hands on your heads.

Don't go in the lift, Don't jump outside, Keep away from the windows, Cupboards and lights.

If you're outside, Keep away from the trees. Keep away from houses And power lines like these!

Move to a space, Stay there crouched down, Cover your head Till the quake leaves town.

Learn this song, children, Learn it all through, Sing to your parents And they'll be wise too.

Sing to your brothers And sisters and friends, And they'll all learn How this story ends.

[Everyone jumps around and claps]

Mothers, Fathers, Aunts, Uncles and Friends, Listen to our song about safety in Quakes! Don't get scared, don't panic and scream, Be prepared and you'll survive the Shakes. The television show Sesame Street has also addressed disaster education for other types of events such as earthquakes as evidenced in the button below featuring one of their main characters, Big Bird.



Elsewhere in Iran, the games illustrated below were part of educational training also for earthquakes.



Photo by David Alexander



Iranian Earthquake Safety Children's Game

Photo by David Alexander

Iranian disaster 'Snakes and Ladders' children's game

Although we did not use any of the accompanying photos, we did run across an article by Johnston which appeared in the *Australian Journal of Emergency Management* (January, 2011)

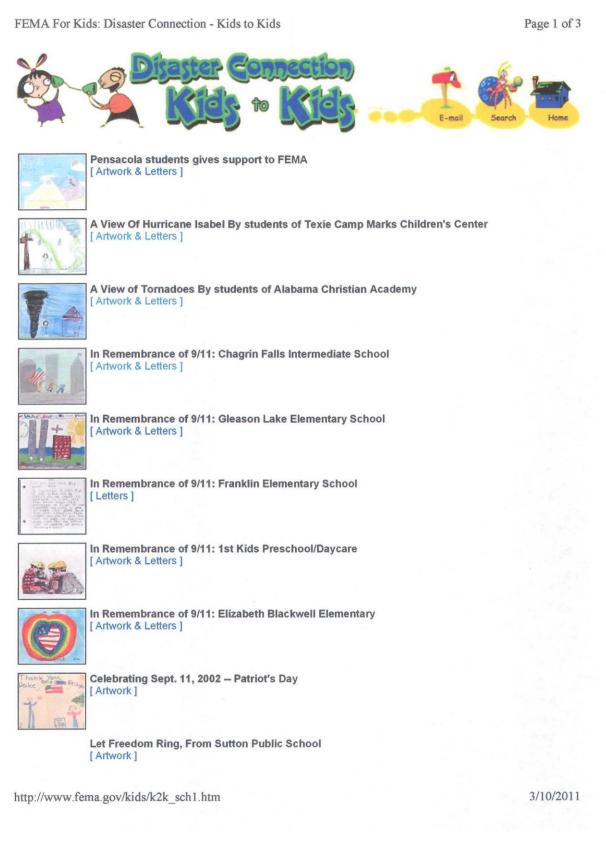
which discusses educational efforts regarding earthquakes in New Zealand and which was exceptionally detailed. The abstract of the article reads as follows:

The purpose of the present study was to observe and evaluate an earthquake response and evacuation exercise in a Wellington primary school (Years 1-8) comprising 200 pupils and 15 staff. Processes and behaviours were observed by a team of six emergency management personnel who met with teachers at the conclusion of the exercise to discuss the exercise and identify areas requiring modification. Key lessons learnt include the following: frequent, well-learned emergency practices are likely to increase the probability that in a real emergency at school, staff and pupils will respond in an informed and predictable manner, and engage in behaviours that are recognised as best practice, and; schools that have well developed and regularly practised [sic] emergency preparedness plans in place send a message to pupils and caregivers alike that in the case of an emergency, the school is prepared to protect the safety of the children. Lessons learnt will inform future hazards preparedness in New Zealand schools, and promote community resilience in the event of a significant earthquake.

Given the recent earthquake in New Zealand, it would be interesting to determine if any followup study was conducted regarding the effectiveness of the school training.

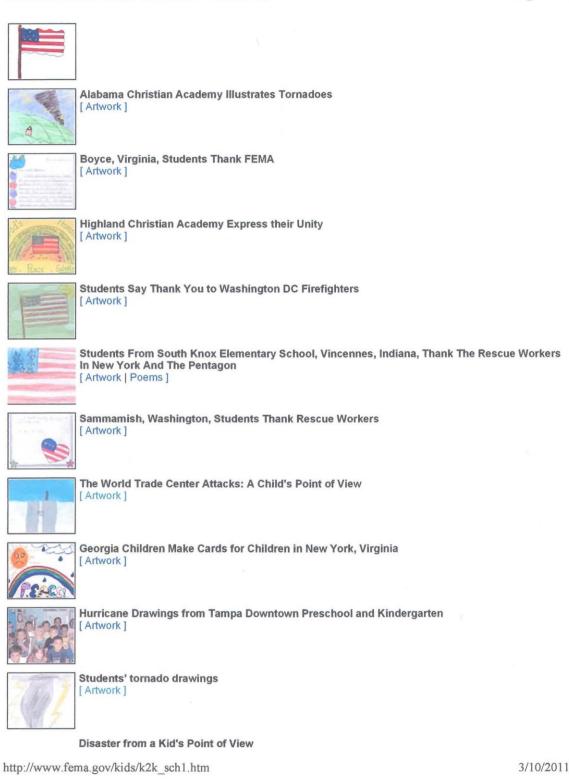
Governmental Educational Activities

FEMA has established a Web site that has a collection of children's reactions to disasters as depicted through their artwork and writings. See the 23 major listings as noted in the following screen shot of one of their Web pages. As can be seen, this site includes artwork, letters, poems, and stories pertaining to a variety of disaster situations.



FEMA For Kids: Disaster Connection - Kids to Kids

Page 2 of 3



FEMA For Kids: Disaster Connection - Kids to Kids Page 3 of 3

FEMA For Kids: Disaster Connection - Kids to Kids

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Page 3 o

The site also provides extensive archives of similar material.

There are several dozen examples of artwork under the heading "The World Trade Center Attacks: A Child's Point of View" alone. Each image within the listings can be clicked on and expanded for a clearer view. Below are three examples from the September 11, tornadoes, and Hurricane Isabel collections.





So far we have presented above as well as elsewhere in the book a series of examples of training, exercises, etc preparing children and others to react well to collective crises. We think that as a whole, the material is impressive and overall is a **significant** contribution to the topic of PCD. However, in concluding this chapter we wish to note **both** some more positive aspects as well as some points that need more thought and thinking.

1. While we do not have a quantitative survey to document the following point, our impression is that too many times many of the training exercises and educational activities have **not** been evaluated in any way, but have been accepted at face value. This is particularly unfortunate since very good material is available to improve the end product or process. We would especially **recommend** Izadkhah and Hosseini (2010) article "Using song as an effective educational tool for teaching disasters to preschoolers". It provides in detail along with relevant references what are appropriate features of songs for children and what the roles of teachers should be in teaching such songs. There are other good helpful sources (e.g. such as the article by Johnston and his colleagues for which we present an abstract earlier).

2. Our impression is that much of the training material for children tends to focus on *earthquakes*. Maybe this is a function of the kind of disaster agent that predominates in the societies that undertake training for children. That could be the case. But we looked long and hard for other kinds of disaster agents that were used as a basis for the training of children, but

only found **isolated** examples in the literature here and there. There seemed to be little on floods, nuclear radiations, volcanic eruptions, and tsunami, for example. Do they not lend themselves to being incorporated into songs, puzzles, games, etc.? Or are we missing something that provides something of an explanation?

3. Some societies are very homogeneous in population composition. Others are very diverse and differ internally on the basis of a variety of characteristics such as ethnic background, religion, social classes and statuses, occupations, languages, educational achievement and/or literacy, etc. to mention some of the more obvious candidates. We raise this point to ask if in the latter kinds of social systems there can **not** be only **one** model song or whatever the basis of the PDC training is. In any kind of educational activity any teacher has to adjust to the audience; in some instances it is the difference between day and night.

4. It was fairly obvious that in some cases, especially in the examples provided by FEMA, that the teachers involved had clearly monitored what their students had written, drawn or otherwise produced. No misspelling, no grammatical errors; just perfect English. As authors of this book we have also been classroom teachers, and what the trainers did is understandable. But for certain research purposes, as shown in the non-corrected drawing on page 155, a more authentic and useful product was produced.

5. It would be interesting to **redo** an already done school exercise after knowledge of a similar disaster happening. For example, given the major Christchurch earthquake in New Zealand just a few weeks ago, it might be worthwhile to go to some other community in the country and repeat the same school exercise. Would the children or for that matter, the school teachers behave in any different way because of what they had learned about what had happened elsewhere? In other words, does knowledge of an actual happening elsewhere make a difference? We hypothesize it would.

6. Sometimes, a larger social context needs to be taken into account in doing any training. Several years ago, Quarantelli was involved with a Canadian and a French disaster researcher in being consultants on a planning effort in Venezuela. Overall, the goal was to improve community planning if an earthquake led to the collapse of the flood walls that protected three small towns from total flooding. Simplifying the overall effort which cannot be discussed here, a part of the planning was for the teachers to lead the evacuation of the children to a safer location elsewhere. During the daytime most of the men in the community would be working in the oil fields located in the lake. The children would be all in the school buildings. And almost all the women would be in their homes. The women felt very unsure the teachers would handle the children and would not know to where the children would be evacuated. And there would be a different evacuation planning when the children were not in school. There was considerable unhappiness over the planning. Clearly the planning of the handling of the children in the school overlooked that there was a larger social context, and not just children in a school setting. Basically the necessary training had to assume that in any realistic planning, families as families had to be evacuated. Treating all the human beings involved as individuals missed that crucial social entity. This makes sense at least to some sociologists.

We suspect that there is an abundance of PCD material with regard to children, perhaps more so than in any other area. If so, we recommend that much more follow-up work be done in this area.

CHAPTER 12: CONCLUDING OBSERVATIONS

We conclude with four general observations.

1. First, the study of PCD should be kept rooted in social science and historical research. Particularly in the last half-century, the social sciences and history have provided us with considerable and general research-based knowledge and understanding about the phenomena of disasters. They have indicated a number of existing misconceptions about disaster behavior as well as what is solidly known (e.g., as reported in Dynes and Tierney 1994; Mitchell 1996; Mileti 1999; Alexander, 2000; Tierney, Lindell and Perry 2000; Waugh 2000; Rosenthal, Boin and Comfort 2001; Alexander 2002; Barton 2005; Rodriguez, Quarantelli and Dynes, 2007; Boin, 2009). Accordingly there is **no** need to develop a new science to deal with PCD (but see Clarke's paper in 2008 on the need to distinguish between a probabilistic and a possibilistic approach to disaster phenomena).

Such knowledge can be used to place whatever will be found about PCD in a proper context. It should also be noted that the social sciences as well as history are not static. **New** ideas are always being added to the corpus of knowledge. As was referenced earlier, this is well illustrated in an article by Enarson (2000) where she used recent feminist studies about gender to give a good explanation about post disaster quilting activities.

In the long run, our overall goal should be not only to let social science knowledge and historical understanding inform disaster studies, but also the converse. Elsewhere, a case has been made for the latter. PCD should **not** be in some wayward intellectual ghetto but should be a part of the mainstream of the traditional disciplines.

2. Second, researchers should not let themselves be swayed by **intellectual biases** in the cultural arena (in the artistic rather than anthropological referent of the term). In a very rough sense, there is elite or high culture, folk culture and popular culture. Intellectuals tend to think of classics in high culture and of course consider them to be of the greatest importance and significance (see Mukerji and Schudson, 1991). Viewed from this perspective, folk culture may be deemed worthy of some attention, but **not** as much as high culture products and activities (although as Schroeder, 1980, points out, it precedes the invention of printing by centuries). Ranking last, and often in a dismissive way, are popular culture products and processes. Thus, studies of extreme cultish behavior or fads (such as in Wenger and Quarantelli, 1973; Aguirre, Quarantelli and Mendoza 1988) or the myriad popular cultural and dynamic aspects of sports are seen **not** as worthy of study when compared to "really" important topics such as political activities. Certainly far more people are interested and involved in the former than the latter. Ask any population about name recognition of sport heroes and even villains or rock stars compared to governmental officials or political leaders. This question has indeed been posed by many surveys. Everyone knows who will be named and recognized most frequently.

The importance of noting this is that it illustrates a point made in the sociology of knowledge and science literature. It indicates that, to an extent, researchers are judged and evaluated on the supposed "importance" of the topics they study. As such, this influences what some researchers

will study. We would hypothesize this is probably a factor in the past lack of attention to PCD. To study **movies** (the label often used in preference to **films** or **cinematic productions** which indicates something of what is involved) is very unlikely to give a researcher the professional status that, for instance, studying voting behavior might.

Our overall point is that PCD researchers should not be discouraged by this intellectual and elitist bias. As is well known, Plato and Aristotle had a very negative view regarding the value **even** of poetry (see http://opinionator.blogs.nytimes.com/2010/08/29/platos-pop-culture-problem-and-ours/). In the context presented here, it is evident that the value of studying PCD would not be defended by any number of people. All human and social behavior is worthy of attention. The **importance** of that behavior, whatever that might mean, is a matter of empirical determination not of an a priori value judgment. It is our view that any number of instances of PCD are as socially important as many other social phenomena that could be studied. Future PCD researchers ought to be able to make an empirically based determination of that. But of course such studies will not occur if potential students of PCD shy away from the area.

3. Third, it should be clear that research on PCD has to go **beyond** the usual quantitative surveys and questionnaires that tend to dominate current social science research (although studies using these methods are also needed). Many aspects of PCD would seem to be best studied by observational methods and by the collection of documents (in the broad sense of the term). There is a fair amount of literature on participant observation (e.g. DeWalt, 2002). This way of gathering data goes back a long time (e.g. see Whyte 1943 and even earlier in the 1930s in England, by *Mass-Observation* whose archives can be found at www.sussex.ac.uk/ library/massobs). Finding documents is of course the province of historians and they have written much on how to go about looking for such items (but for a social science view on gathering data this way see Pitt, 1972; Prior, 2003).

The point is that students of PCD need **not** develop new data gathering techniques; they already exist even though not dominant in contemporary research. Almost any text on qualitative research sets forth various possible methodologies that can be used (Feldman, Bell and Berger, 2003; Stake, 2010). There are as well other texts that discuss how to deal with visual data (Emmison, 2000; Rose, 2001; Pink, 2001). Just in sociology alone, there is an International Visual Sociology Association with its own journal, publications, and a web site that actually occasionally touches on PCD topics.

What if any differences will the advent of bloggers as well as other changes brought about by the **newer** technologies such as instant photographing in real time by cell phones make to the appearance and content of future PCD? Even if they do not have current technologies immediately on hand, some populations will find them at times of crises. There are anecdotal stories that a drugstore very near the *World Trade Center* sold 60 to 100 cameras in the hour after the Towers were struck (Heller, 2005:8; see also Sturken, 2005 who somewhat argues that photographs were more important in that occasion than television; for roughly the same claim see Melnick, 2009: 64-77, and *The September 11 Photo Project*). Given existing social and technological trends, this is an issue that requires immediate attention.

The recent catastrophe in Japan clearly demonstrates how important social networking has become in disasters. Because this book is being completed during the early stages of this event, we can only speculate about certain things. But it is obvious simply from watching the mass media reports how crucial, important and salient social networking has become as a key operative in this situation. We can expect much more of this in the future. On the other hand, few societies will be as advanced along these lines as Japan was at the time of this crisis. Even in the United States, a country that is generally considered to be relatively advanced in terms of technology use, there are areas where isolation has decreased the marked presence of technology and its use (for example see Marks, 2006, Donner and Rodríguez, 2008, and Rodríguez, Donner, Díaz, and Santos-Hernández, 2010).

4. In this book, here and there we have noted examples of PCD from non-English speaking countries. However, we are aware of very few systematic comparative studies of PCD from non-Western and developing countries. We have **not** run across any such collections. It does not mean they do not exist.

But this may be a function of the fact that until recently the great majority of disaster researchers were from Western type societies and therefore less likely to be aware of PCD in other social systems. In 2004, Davis (co-author of this book) was approached by an *Indian* scholar who gave him an abstract of one of her publications that noted: "In 1966 during a major drought the All Indian Handicrafts Board encouraged ...women to paint on paper... {for the first time}". In another abstract this same *Indian* scholar noted that there were Bengali scroll paintings with one scroll representing highlights of the *Gujarati earthquake* of January 2001; another scroll highlighted the destruction of the *Babri Masijd* in *Aodhya* by *Hindu* "extremists" in December 1992. There is enough here to indicate that in *Indian* society there **is** a relationship between disasters and PCD. Who knows how many such linkages exist in other developing societies, many of whom are very disaster prone? So our current lack of awareness may be mostly a matter of lack of knowledge rather than of the absence of PCD in the rest of the world. This would seem a very viable hypothesis to put to the test.

Clearly this issue ought to be given very high priority for at least the two following reasons.

First, a basic theoretical question that can be asked is whether there are **universal** dimensions in PCD. In general terms, social scientists have found some common aspects of social behavior in all societies. Current disaster researchers have done **almost** no studies on this topic.

There have been speculations that if disaster social behavior was looked at in terms of different social levels, going up the scale would show less universal characteristics. That is, there are some common disaster behaviors at the lowest social levels. For example, human beings do not engage in panic flight behavior at times of crises, and concern about the safety and welfare of significant others has very high priority in all countries. But if one goes up the social scale from individual and kin group behavior, to organizations, communities and finally societies, there seem to be fewer universals. For example, how societies prepare for and respond to disasters will differ markedly depending on whether the society has a centralized or decentralized political

structure, and what legitimacy and responsibility is given to the governmental authorities (McLuckie, 1977). While the research just cited supports the idea, it is only one study in three societies of but one proposition.

A test of the social scale based hypothesis might be worthwhile studying for PCD. Does the occurrence of PCD follow this movement up the social scale? Do the more universal forms of PCD occur at the individual and kin levels? To really study this would necessitate looking at **all** kinds of societies, Western and non-Western, developed and developing, etc. Do these differences, structural as well as cultural, spill over into PCD?

Earlier in this paper, we illustrated the use of mostly yellow ribbons as a spreading PCD phenomenon around the world. Something like this might at least be hypothesized as a response at the individual level more or less, cutting across different social systems and cultural patterns as well as different kinds of collective crises. The 2011 mass shooting in Tucson showed a very interesting pattern over time. It started out, as far as we could ascertain, as a spontaneous gesture by sole individuals (or by a linked couple). They laid ribbons in a very random manner. However, at the time of this writing, an organized effort was underway to replace the individuals'/couples' effort by getting rid of the scattered ribbons and replacing them with a symbolic and permanent memorial. This one location would be the place where the community could express its collective remembrance and feeling regarding those who had died, been injured or otherwise been affected by what had happened. Will this **happen** elsewhere?

Second, apart from what has just been said, there might be very practical reasons for ascertaining cross-societal and cross-cultural similarities and differences. To what extent can possible findings be incorporated into disaster mitigation, disaster relief and disaster recovery planning and management? Here and there one can find anecdotal stories about possibly relevant activities.

For example, comic books have been professionally developed in Nicaragua to give guidance on housing construction for earthquakes. The Canadian Red Cross used the film "Dante's Peak" (about a volcanic eruption) to inform citizens on how to prepare for natural and other emergencies (volunteers mounted displays, handed out tips and talked to those who had watched the film). When a TV movie called 10.5 was scheduled to be shown in 2004 in California with images of the destruction of the Golden Gate Bridge, local authorities urged the network to run a list of websites "directing its audience to more realistic information about earthquakes" (Harlow On the other hand, informal songs and poems have been written by amateurs that 2004). sometimes circulate in camps housing disaster evacuees (see Motion 2001); otherwise published collections of disaster poems are very rare. We have found only about half a dozen such collections. One in particular by Amirthanayagam which had poems focused on the massive tsunami in 2006 in southwest Asia (2008) was of greatest interest. How much of this occurs, along what lines, and more importantly, what are the functional and dysfunctional consequences of such kinds of disaster related cultural products and processes? Again there could be endless speculations.

It is time to move to **systematic** studies.

CHAPTER 13: A GLANCE BACK

As stated at the start of the book, we said we were going to be selective in what we discussed. In retrospect, it might be that certain possible topics relevant to PCD were not addressed at all or perhaps not enough. Let us mention five possibilities.

1. Although we allude to political matters, they were not highlighted. It occurs to us now that much PCD can be seen as an expression from the bottom up - a populist position – rather than from the top down, that is from elites and the powerful in social systems. Not **enough** has been done in disaster research generally on social class differences and how they affect disaster planning and management. Perhaps PCD could be used to examine class differences that exist in all social systems. But as Max Weber pointed out a long time ago in *Economy and Society*, social stratification can incorporate rather different dimensions, namely wealth, power or status (Weber died when he had only sent four chapters to the printer, but a full German version appeared posthumously in 1920 with the assistance of others, followed by an English version which was published in 1968).

For example, by any criteria, Haiti is one of the poorest countries in the world. The vast majority of the population has **no** meaningful wealth, power or status. Nevertheless, even in that country there are a small number of elites in all three dimensions. Passing references in foreign mass media reports after the earthquake indicated that most such elites lived in very secure gated communities. More important, there was a **hint** that very little disaster-related PCD surfaced among certain limited sectors of the population, especially in terms of those with wealth and to some extent with power.

This does suggest an almost totally neglected research topic that could be explored in all social systems. Our major suggestion here is to look at the phenomena from the **bottom up**, as well as ascertaining if there are differences in the kinds of PCD that exist at different social levels.

2. We found it of interest that very recently in the March 6, 2009 issue of the *New York Times* there was the following appeal on the very first page of the US news section: "The *Times* is inviting readers to submit original verse that addresses the current economic downturn, exploring the relationship of work to a way of life and a geographical place." While the request made has reference to a recession, the notion of treating **economic depression** as a collective stress situation was actually set forth a long time ago by Allan Barton, an early and very well known disaster researcher (see his 1969 book as well as a later 1985 statement). Is or should the field of PCD going to expand the range of crisis occasions it studies? If so, will there be **some different** kinds of PCD that will need to be researched? What problems for the development of the PCD area might be generated by such a move?

In the last few years, there have developed interest in and writings about the relationship between global warming/climate change and disasters. Simply as one example of several that could be cited, there is the recent editing by Porfiriev (2009) of a special journal issue of *Environmental Hazards* with the title of *Climate Change as Environmental and Economic Hazard*. At least half

of the six articles explicitly discuss some aspect of the relationship between disasters and climate change. Now the nature of that relationship will develop less on anything happening in the PCD area, but rather in the larger context. However, given that possibility, it might be wise for PCD specialists to consider the negative as well as the positive consequences of such a development. The point here is if PCD research expands into new topical subject areas as in the last two examples just cited, we may have to look for **new** kinds of PCD.

3. For the most part, it seems that discussions of PCD assume that the consequences are probably positive for at least some part of the social setting in which they occur. Most sociologists at least generally assume that with respect to almost any social phenomena there are **always** some negative consequences as well as positive ones for some social entity. What might be some negative consequences of PCD? What are the real consequences of the presence of misinformation? Although not discussing PCD at all, Gow and Paton (2008) make an interesting point that disaster research ought to pay more attention than it does to the positive aspects or the resilience that surface in crisis occasions. In what way is this negative/positive aspect relevant to PCD?

Three other analysts have offered a rather different perspective on this matter. Ann Larabee (2000), for example, discusses the fierce debates that follow disasters as government agencies, business corporations, public interest groups, academics and scientists, and local communities fight to control the meaning of the crises. On the other hand, Kevin Rozario (2007) examines why and how Americans are fascinated by disasters and how this has changed the very structure of American society. Ingham (2009) suggests that a linear "positivistic-scientific paradigm" needs to be supplemented by a more holistic view of a multimodal decision making process. These perspectives are rather different than looking at a collective crisis as simply a matter of positive or negative outcomes.

4. In a number of behaviors that occur in disasters, researchers are increasingly able to indicate both in percentage and in relative terms how many persons engage in search and rescue, take part in evacuations, provide housing to victims, are killed and injured, etc. The figures and statistics obtained are far from perfect, but for many areas the research has put us in the ballpark. But with respect to PCD, except for measuring isolated activities such as how many disaster fiction books or films are sold or watched, etc., little has been studied that produces quantitative results. But somewhat imaginatively, in 2003 Hamm, simply surveyed the mp3.com website and found 1,500 songs specifically focusing on 9/11. There is little quantitative data around how many victims and survivors undertake what PCD activities in any given disaster. How many hear disaster jokes, how many attend memorial services, how many contribute to wall and flower displays, how many see and/or spray on graffiti displays, how many look at disaster relevant web sites or participate in relevant chat rooms, etc? Much of such data can easily be obtained in well-conducted population surveys. There is actually a great amount of children's and adolescents' literature on disasters. Sometimes such accounts are based on real disasters while others are based on fictional disasters. However, practically no research at all has been done on measuring what behavioral effects in crises, if any, children and adolescents experience from this literature.

Of course any such quantitative data has to be placed in a larger social context. For example, *Walmart* sold 116,000 flags on September 11, that being about 110,000 more than the same date the previous year (Scanlon, 2005). But in a population of nearly 300 million, is that a large number? How does one designate any PCD item or activity as large? Also, the sales of flags at *Walmart* dropped way off after a few days (Scanlon, 2005). We would guess that any pattern would vary depending on the particular item or activity.

There are some interesting data from an article referencing the Deepwater Horizon Gulf oil spill that was featured on American Public Media's program, *Marketplace* (see http://marketplace. publicradio.org/display/web/2010/08/11/am-bp-spill-inspires-fashion-through-disaster/). The reporter makes the following statement:

"My best guess is that there are tens of thousands of these oil spillrelated t-shirts out there. Threadless alone sold more than 12,000 of its t-shirt. Café Press told me they sold between 4,000 and 5,000 oil spill-related shirts. So putting all these things together, all the companies I talked to were in the tens of thousands range rather than the hundreds of thousands (Adriene Hill as quoted from the story broadcast noted above, 2010).

The reporter carefully notes that what may appear to be a large number is **not** so in the larger context. Few researchers ever note that the statistics they cite cannot be understood unless one is familiar with the greater scheme of things, such as the universe being studied.

5. Are there not PCD aspects of potential crises that do **not** materialize? We have in mind such examples as the response to the supposedly huge threat that Y2K posed for human societies (see Bilton, 2009, a decade later retrospective look at the massive organizational efforts to prepare for the impending crisis). More recently Ensha (2009) notes "the potential bug may cause some third-party Twitter services like *Tweetdeck* to malfunction or crash once the unique identifier that's associated with each sent tweet exceeds 2,147,483,647." The running count that could be viewed at Twitpocalypse has passed; but could that designation in itself be viewed as PCD?

In a more serious and larger question, in what way if any, does the PCD in unrealized disasters and catastrophes **differ** from what emerges in actual collective crises? For example, on May 1, 2010 there was an attempt to explode a car loaded with very hazardous items and material in the very center of *Times Square* in New York City. The effort failed and there was no disaster or catastrophe of any magnitude. The somewhat damaged car was eventually towed away from the physical space in which it had initially stopped. The area is not only the point of attention of dozens of security cameras, but as Kaminer (2010) pointed out, many tourists everyday take thousands of photos of the location using their own cameras. It seems that in the immediate following days, some minor PCD activity appeared. The exact space which the car had occupied became the focus of photo taking by many tourists and others walking around the square. Almost certainly encouraged by sidewalk vendors, a new "tourist" attraction had been created. Does this **happen** in other aborted crises? How long does the original PCD activity last? Does it ever become institutionalized? What happened several years after in Mumbai, India, is interesting because of the **dual** reaction that occurred during that time period (Allen, 2010). The luxury hotels that had been attacked while undergoing major reconstruction left no references to the attack such as the bullets that impacted their walls. On the other hand, a restaurant had left the bullets in the wall that subsequently became a tourist attraction. Also, the train station which had been attacked put up a small memorial to the station announcer who was responsible for alerting passengers of the attacks and directing them to safe exits, even after his own booth came under fire. The memorial consists of "a carved black granite slab with golden lettering" which was installed in the wall across from the inter-city platforms. Ignoring an event seems to lead to the lack of creation of PCD. Or does it manifest itself in different ways?

A Last Word

In conclusion, it should be clear that the disaster research community has a very long way to go in studying and assessing PCD. Our book is at best but a very small step to further such an effort. We hope readers of this book will be able to implement some of our selective suggestions.

We would be very interested in anyone who would express a desire to begin a dialog or even a web discussion on PCD. We strongly feel that such a discussion would further the exploration of PCD.

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After reading this book, would one classify this as PCD...or not???