THE SYMBOLIC USES OF DISASTER AND THE LESSONS OF DISASTER
FOR INDIVIDUAL AND SOCIAL POTENTIAL

—Bad times have scientific value. There are occasions a good learner would not miss.

Emerson
Conduct of Life
Considerations by the Way

Russell R. Dynes
Research Professor, Disaster Research Center
University of Delaware

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Introduction

I have always found it difficult to articulate to others a convincing argument as to the importance of the set of intellectual problems in which I have been interested. Certainly, I share that problem with those in other disciplines. I once had an anthropologist colleague who was constantly being driven up the wall by people who wanted him to identify arrowheads for them. They were reluctant to accept his explanation that, as an anthropologist, he was interested in work organization in Modern Japan and knew little about American Indians. But at times, I have felt some compulsion to provide some rationale for my intellectual interests. Early in my career, I became interested in the sociology of religion, in part because I felt that the sociological endeavor at that time tended to downplay "religion" and its social importance. While my particular research interest was sectarianism, I have maintained my involvement through the years by introducing and teaching courses. Today, that field is healthy and well institutionalized and I see my colleagues at professional meetings and also on television commenting on the latest evangelist trial.

Starting in 1963, I developed another interest—in disaster, and with a colleague founded the Disaster Research Center at The Ohio State University. In part, that interest was somewhat accidental since it was prompted by my colleague's initial interest and enthusiasm. But now, after over 25 years of that interest, I am now more often identified as a "disaster" by my colleagues. (There are occasions, however, when my dual interests come together. A number of years ago when I accepted a position with a national professional organization headquartered in Washington, D.C., Peter Berger sent me a congratulatory note in which he pointed out that with my interest in sectarianism and disaster, Washington was the perfect place for me.) Behind the formation of the Center
was the notion that, while disaster might be created by geophysical or atmospheric agents, they were at their base human events. They offered the opportunity for understanding personality and social structure in crises conditions and those windows of opportunity might have provided the context for understanding basic social processes and structures. While our approach was rooted in basic social sciences, there was the expectation that such knowledge would have pragmatic value. We picked as a major focus "organizational response during the emergency period". Little was known at that time about the emergency period in part because of the difficulties in maintaining a continuing research operation for "periodic" events. We also envisioned our task as long run and cumulative since there were already enough "experts" whose knowledge was based on one disaster. And we also saw our task as to build an international research community. We have been able to accomplish many of those goals. The Center has studied over 500 different field studies, most but not all in the U.S. We are currently initiating a three year study on earthquake mitigation and preparedness, with colleagues in the Peoples Republic of China, which will involve studies of two American and two Chinese cities. My colleague has just returned from a trip to Moscow which we hope will lead to future collaborative work. In addition, I have just completed the planning effort for an international congress next year in Madrid which will be composed of over 60 papers with representation of scholars in 24 countries. This growing international research base provides the starting point and the base for much of what I have to say, although I will use it rather than cite it.

What I plan to talk about is grounded in my own research and the research of others. But I do not intend this to be only a research review since giving the significance of disaster predates the research tradition. In the Judeo-
Christian tradition, there is rich Biblical imagery about disaster. So much so, that I often use Noah as an example of the first emergency planner. Also in 438 BC, Euripides commented that "Disaster appears, to crush one many now but afterwards another". Too, a considerable number of important writers in the past have used disaster to communicate meaning. Consequently, I want to make the point that the images which people have about disasters, even if they are "false, are still important. Those images have consequences. I will argue then that disasters have always had important social consequences since they are events to which people impute meaning—about life, about cause, about others, and about the future.

First, then, I want to take one historical example—The Lisbon earthquake and to discuss some of the controversy which that earthquake evoked in the intellectual life of Europe of the time.

Second, I want to take certain contemporary images of disaster behavior which are usually presented by the visual media and to critique these images on the basis of the research tradition which has developed in recent years. Those images generally present a view of human fragility and trauma, framed by social chaos and confusion. On the other hand, the research tradition suggests that many of those images are inaccurate and that both individual personality and social structure are more resilient and adaptive than are usually portrayed. Hence, this is the more optimistic view and suggests that we underestimate human potential.

In the last part, I want to come back to the idea of the importance of disaster for symbol of the future and to question about meanings which have been given to some recent disasters, especially technological ones. In effect, I want
to raise the as to whether Chernobyl or Bhopal may be our Lisbon. I am not sure I have a clear answer but perhaps raising the question here is sufficient.

THE SYMBOLIC IMPORTANCE OF DISASTER

It would be possible to pick several different examples to illustrate the importance of disasters on the way that we think about the world. But the choice made here is the Lisbon earthquake which occurred on November 1, 1755. It affected not only Lisbon but a whole area, including the northern coast of North Africa, probably creating more damage in Fez and Mequinez than in Lisbon. Lisbon, however, as one author put it became the attention of the "Whole of the relevant civilized world" (Kendrick, p.24). That designation, the civilized world, of course, limits our discussion to those living north of Lisbon.

To simplify the discussion, let me use the metaphor of a theatre marquee with the letters THE LISBON EARTHQUAKE and the subtitle--Did God Do It? The cast beside God are relatively unknown Portuguese extras but there is a notation of the brief appearance of an Italian actor, Malagrida, who played a crazy Jesuit in his last performance. The play has been over for some time and we wait for the reviews to come in from the civilized world. The reviewers include some of the more recognized intellectuals of the time as well as spokesmen for most of the better known institutions. There comments run as follows:

- Voltaire complains that the major script writers of the times, especially Alexander Pope and Wilheim Leibnitz, wrote "pap and fluff" and they cannot deal with tragedy.

- Rousseau, without challenging the status of Voltaire as a senior critic, suggest that he can appreciate being optimistic. He implies Voltaire is getting old and cranky.
- Immanuel Kant suggests we need more scientific knowledge about earthquakes and more respect for the Planet Earth. Suggests that when we come to know God, he is likely to be an environmentalist.

- John Wesley says the earthquake signals the need for repentance and prayer. He also points out God's discriminating aim in Lisbon where the Protestant chapel remains intact amidst the ruins of Catholic cathedrals.

- The Archbishop of Canterbury reaffirmed God's strength and condemned methodist ravings.

- In Lisbon, a local Catholic spokesman indicated that he was not sure that God had anything to do with it but, if He did, He probably worked with the Jesuits. A local Inquisition spokesman said that the scenes involving Malagrida were not unnecessary violence since heresy always carries its own reward.

- Back in England, the Vice Chancellor of Cambridge noted that the earthquake had a calming effect on faculty, while the London Magazine pointed out that, while there were over 70,000 casualties, only 10 were English. It is quite likely, of course, that the review from the Morocco Times would have complained the extent of the coverage given Lisbon when there was more damage in Fez.

These reviews were intended to point to the conclusion that the significance of the earthquake had little to do with what actually happened in Lisbon because the event itself was used to fight the current intellectual and political battles. Voltaire is perhaps best known since his philosophy continues to be perpetuated by thousands of language teachers. He used the earthquake to challenge the optimism which he felt was current among intellectuals, in particular Pope's Essay on Man. A month after the earthquake, Voltaire wrote a poem in which he criticized the "tout est bien" philosophy. Of course, he continued the argument in Candida where in particular he attacked Leibnitz.
Theodicy (Individual misfortunes give rise to the general good, so that the more individual misfortunes exist, the more all is fine. Candida, 1759)

Others did not agree with his attack. Rousseau wrote to Voltaire pointing out that the optimism which Voltaire had dismissed had helped him endure the very things which were supposed to be endurable. The cast of characters "involved" in the Lisbon earthquake did not stop there. Immanuel Kant, at the beginning of his career, became interested in earthquakes, as a scientific endeavor (he wrote a paper on theories of the causes of earthquakes) but he added his endorsement to the idea that since, earthquakes were a part of nature, we cannot expect nature to confirm to man's wishes, thus we must accommodate to nature. He condemned the interpretation of the earthquake as signifying God's punishment, because it is a shocking example of impertinence to offer any reason for God's action. Some cultural historians have suggested that the Lisbon earthquake brought an age of optimism to an end. Subsequently, pessimism as an outlook as well as perfectibility as a goal became a more common intellectual outlook.

In England, the earthquake became the center of a theological argument centered on establishment and anti-establishment views of the Church. Sometime later, John Wesley, in a letter to a friend, made the comment that "there is not divine visitation which is likely to have so general an influence on sinners as an earthquake." It is possible that he was reflecting the judgement of the Vice Chancellor of Cambridge University, Dr. Law made in a letter to the Duke of Newcastle in January 1756. He had said "We have been perfectly quiet here nor have I had any certain information of the least irregularity among the scholars. It is rather fashionable to be decent" (Augustus Hervey's Journal, ed. David Erskine, London, 1953, p. 189) This to my knowledge is the first mention of the possible beneficial effects of earthquakes on faculty behavior as well as the
first notation of faculty decency. But the more central argument in England was theological. John Wesley wrote a pamphlet on "Serious Thought occasioned by the late Earthquake at Lisbon" which became a best seller and went through six editions. He argued that events such as earthquakes are not accidents of "natural". He provided descriptions of the horror of various natural calamities and concluded "If anything can help, it must be Prayer. For what wilt thou pray to? Not to the God of Heaven; You suppose him to have nothing to do with Earthquakes."

Wesley's characterizations of the meaning of the earthquake did not seem to overly excite those in the Established Church. In fact, the Wesleyan pamphlet was dismissed by the Archbishop of Canterbury as "A presumptuous forwardness in pronouncing on extraordinary events we leave to raving designing monks, methodists and ignorant enthusiasts". On the other hand, some of Wesley's argument probably gained rather wide-spread concurrence. There was common knowledge in England that Lisbon had been a major center for some of the excesses of the Inquisition and the fact that the earthquake had destroyed many of the impressive churches while leaving a single Protestant chapel intact provided an "empirical" base for Wesley's comments on the effectiveness of the "distinguishing arm of God". The established churches, however, were not as sure of God's accurate punishment but called for several fast days for prayer and repentance. Often the text of Psalm 46 was suggested. "GOD IS OUR HOPE AND OUR STRENGTH: A VERY PRESENT HELP IN TROUBLE. THEREFORE WILL WE NOT FEAR, THOUGH THE EARTH BE MOVED AND THOUGH THE HILLS BE CARRIED INTO THE MIDST OF THE SEA"

Also, a hymn was recommended to parents to have their children memorize. It would emphasize the Creator's omnipotence, rather than his punishment.
It has been suggested that the Lisbon earthquake was "embarrassing to professors of physics and humiliating to theologians." That may have been true. Obviously, the earthquake was the initiator of changes in conception about the nature of the world, the nature of human kind and the nature of GOD. These were not trivial matters and they provided the basis for intellectual ferment all over the "civilized" world.

There is an interesting subplot to which I wish to give attention, dealing with the "longer terms consequences of the earthquake" and that involves the story of Gabriel Malagrida. An Italian by birth, he had developed a reputation as a Jesuit "preacher" for his missionary work in Brazil. He came to Portugal in 1751 to raise money for a convent and was received with open arms by the Royal family. He was present at the death of the King, Joao V. He left Portugal but promised to return later to prepare the King's consort for death. He did return in 1754 and was accorded considerable influence by those who opposed the political power of Pombal, who later had emergency responsibility. Malagrida was a master preacher and used the earthquake as the reason to demand repentance. In 1756, he published a pamphlet on the true cause of the earthquake and the need for repentance, which he suggested could be found in meditation at his retreats. Pombal grew increasingly irritated with Malagrida and finally asked the Papal Nuncio to banish him from Lisbon. He continued to hold retreats in which he continued to engage in predicting tragic events in the future, not just new earthquakes but assassination attempts on royalty. An assassination attempt on the life of the King provided the opportunity for Pombal to put him in jail since Malagrida had made an earlier prediction of such harm. Malagrida was put in jail in 1758 and later handed over to the Inquisition where he was sentenced as a heretic. On September 21, 1761, he was put to death by strangulation in an auto
da fe which lasted all day. His body was burnt and the ashes were thrown into the sea. His pamphlet continued to be banned as heretical.

CURRENT IMAGES AND REALITIES OF DISASTER

There is a rather standard perception of disasters and disaster victims which permeated the media. For most of us, the experience of disaster is mediated by the media. As someone has suggested, the advent of television has turned us into a perpetual "audience" so that we can sit in our living rooms and vicariously experience disaster. And television provides a sense of reality to distant events which is not present in the print media. On the other hand, disaster presents to the electronic media an opportunity to tell a story. That story is told in terms of certain myths. These myths suggest that human beings do not respond well to stressful situations. It is generally assumed that individuals especially during the emergency period are likely to panic and act irrationally, will be stunned and unable to cope for themselves, act in anti-social ways, be emotionally traumatized of psychologically incapacitated and react in self centered ways during and immediately after a disaster threat and impact. There is also a deviate implication that communities and their organizational action arms will be inept, since they will be manned by traumatized people or they will be unable to cope with new and widespread problems. Consequently, these communities will need extensive external support and reinforcement.

Let me start first with the imagery and to contrast it briefly with research results.

1. Panic Myth. The term panic is closely associated with "disaster" but that term means many different things. If it means that people will be frightened and afraid, this is correct but there is the notion that people will
panic in the sense of wildly fleeing, aimlessly running around and breaking down. In other words, exhibiting nonadaptive and inappropriate behavior for the situation basically irrational behavior.

Disaster victims may be concerned and frightened but that does not mean that they will act without thinking, selfishly or impulsively. They do not become unreasoning animals. In fact, one could argue that they tend to show more rationality under stress than they do normally, especially if one defines rationality as the conscious weighing of alternatives. While panic flight behavior can occur in extreme stress situations, it is quite rare and not likely to be present in almost all community disasters.

2. Passivity Myth. The notion implied here is just the opposite of the panic myth—a picture of the paralysis of actions and reactions. There is a tendency to assume that disasters leave large numbers of people dazed, shocked and unable to cope. This image of passive dependency is often highlighted by agencies which claim a mandate to help.

The passivity does not hold up well in actual research. Self help and kin help are the norm and mutual informal initiative and assistance dominate. Helplessness and passively waiting for the help of others is far from the norm.

3. The anti-social myth. Next to panic, the term looting seems to be inexorably associated with reports of disaster. There is the implication that Mr. Hyde takes over from Dr. Jekyll in the chaos of disaster. This suggests that "civilized" behavior is only surface behavior which suddenly reverts back to its irrational and antisocial mode in disasters.

While it is true that stories of looting are widespread, actual looting is rare. In fact, crime rates drop. Too, far more materials is donated and
given away than could be conceivably be looted. The prevailing cultural nor is altruistic rather than criminal.

4. The traumatized myth. Here the notion that there are long run negative mental health consequences from disasters. In reality, community disasters very rarely, if ever, produce any new psychoses or severe mental illness. While they can generate surface psychological reactions such as sleeplessness, anxiety and irritability, these tend to be sub clinical, short lived and self remitting. These reactions are rarely incapacitating. The experience of disaster may become a part of the psychological makeup, for example, in memory, but that experience is seldom behaviorally dysfunctional. In fact, for some "victims", disaster can have a favorable psychological consequences, strengthening positive self-images and social ties to others. The point here is that disasters are not totally bad in their consequences and, in fact, there are sometimes positive psychological effects.

5. The self centered myth. There is often the notion that disaster victims will dwell on their losses and that will lead them to despair about the future. This loss of morale leaves them reluctant to face the future and often they will move out of the community to escape.

This view is also incorrect. Morale is not destroyed; in fact, right after impact, morale is often higher than before. In disasters, non-victims always outnumber the victims. Since suffering is not an isolated experience, it does not become an isolating experience. Others are in the same boat. In addition, however, there are always others who are worse off and except for the worst case, everyone else is "better" off. People do not give up but start to put the pieces together.
Overall, disaster victims do not panic; they are not passive, they do not become caught up in anti-social behavior; they are not behaviorally traumatized and their morale is not destroyed. That is why beliefs to the contrary are called myths. The research evidence suggests that the opposites are what will predominate.

The picture just presented is intended to point to the conclusion that, contrary to the images which are usually presented about the behavior of disaster victims, the evidence suggests a much more optimistic view of the potential of victims both for survival and response. Victims respond in a "rational", active ways and those ways are best characterized as altruistic, not antisocial nor traumatized. They are able to cope with significant stress and with considerable loss in a fashion which does not demoralize them and lose hope for the future.

These myths suggest to me that the view of human nature as tenuous and that people always on the edge of personality disintegration is not the picture which is revealed by actual disaster behavior. The response and adaptation which individual personality makes to such stress presents much more hopeful picture than the media provides for us.

That negative and traumatized view of disaster victims creates another form of distortion since this negative image is aggregated into a conclusion of the ineptness of local organizations in emergencies. The logic which makes victims inept also makes organizations ineffective.

While I do not have the time to review the research evidence in detail, let me suggest that while specific organizations may have difficulties in operating in disaster conditions, from the viewpoint of community systems—the overall pattern of organizational involvement, the results reveal that organizations adapt well to the increased demands which are made on them.
Instead of needed external assistance, such organizations are able to mobilize the necessary resources and to accomplish necessary tasks with considerable efficiency and effectiveness. In fact, I have argued that, in "normal" non-disaster time, most American communities are relatively inefficient since they have rather diffuse and conflicting goals and they do not mobilize their human resources with great efficiency.

The disaster situation creates an emergency consensus on community goals usually with the needs of injured victims having the highest priority. At the same time, other traditional community goals become less important--leisure, education, pleasure, etc. Given this consensus, communities often use under-utilized population categories, such as the elderly, teenagers, and housewives, to accomplish tasks for which they would not be traditionally used. Community opinion afterwards expresses amazement as to their competence. That surprise is less a commentary on their abilities as to the previous inattention given by the community to such under utilized resources.

Let me make another point, disasters, rather than creating the conditions of increased demoralization, actually "conclude" with an increase in community morale. There are a number of reasons for this and sometimes the consequences are dysfunctional--for example, when increased in group hostility is directed toward an out group. On the other hand, certainly one of the reasons for the heightened morale is the fact that during the emergency period, status differences are "relaxed." The lines that used to mark people off and keep people apart have softened and, in some instances, disappeared. Sociologists might explain this in terms of Gemienschaft or the increased importance of primary group relationships during the emergency. Ignazio Silone, the Italian writer in his essay in The God That Failed put it in another way, "An earthquake
achieves what the law promises but does not in practice maintain, the equality of all men."

There is one final lesson that disasters might teach us and that is the value of planning, but it is not a form of planning which rigidly specifies what people are supposed to do and act. It is planning which is based on knowledge, not just of geotechnical, seismological or engineering effects, but also of human effort and social structure. It is planning which is based on treating people as resources, not as problems. It is planning which tries to maximize human creativity, rather than planning, which tries to exercise social control.

IMAGES OF THE FUTURE: THE APOCALYPSE AND A UTOPIA

The earlier discussion of the controversy of the Lisbon earthquake was entertaining primarily because it contained issues and ideas in which we are no longer engaged. To most of us, God does not play a major role in emergency management. However, we can properly raise the question of who or what has taken God's place. What are our contemporary images of disaster and what will be the consequences of those images in the future?

Let me provide a few ideas. Our Lisbons will not be mediated through writers and intellectuals but, for most people today, disasters happen only on television. If "news" is a description of man's changing relationship with his environment. While "natural" disasters still evoke considerable media attention, one can argue that technological disasters have become the media stars and if we look for evidence of the development of new mythology, that is where we must look. That technological disasters are newsworthy is evidenced in the fact that for 1987, the two top news stories were the Challenger and Chernobyl. Twenty percent of all of the network news was taken up with Chernobyl for the next 30 days. Eighty percent of those stories were lead stories and 65 percent were
longer than three minutes, twice the length of the usual domestic story. (Patterson and Wilkins, 1988)

What messages were conveyed by this news coverage? First, that the Soviets were portrayed as low-tech bumbling, unable to deal with the problems created with modern technology. Second, the Soviets were portrayed as caring less about human lives than about national image. They were slow in admitting, slow in evacuating, willing to sacrifice people to fight the reactor fire. Third, the Soviets were defined as liars, but not as directly. They were withholding information. They were secretive. The networks did not accept their damage estimates and instead called on American "experts" such as the Secretary of State. The Chernobyl story managed to tie together two prominent evils—the Soviets and the atom. Only eight of the 61 stories did not contain a reference to radioactivity. And in a quarter of the stories there was some reference to nuclear war or atomic tests. Thus, the story was not about the effects of nuclear power or even about the effects of radiation, but a story about "good and evil" in which we were assured where we, as a nation, stood.

Certainly, the Chernobyl story was rendered more complex by our attitudes toward the Soviets, so let us change the example to Bhopal. (Wilkins, 1987) Bhopal evokes our awareness that the technology which we have created can create death and destruction, and, in effect, societal extension. There was the implication that individuals were helpless to prevent that. If we are helpless and if God is dead or only working part time, then what's the cause and who is in charge? In Bhopal, the loss of control of technology has to be placed. Here it was placed in institutional locations—the Indian government which with good intentions initiated a program of economic and technological development and with
multinational corporations which have taken advantage of the opportunity given
to them by the government.

Drawing on themes from Chernobyl and Bhopal, there are themes which are
repeated, perhaps in less dramatic fashion, in other situations involving
technological risks. The image provided is that risks are the result of a
conspiracy between political and economic leaders who have put us all at risk.
In effect, we have been victimized by the life that we have created. The only
way to achieve our "utopian dream" is to dismantle or restrict severely those
institutions and to destroy the conspiracy. With God now gone, there is a need
for those institutions to repent. Repentance is most likely to be achieved by
destroying the conspiracy and reclaiming nature.

Mary Douglas, a cultural anthropologist interested in myths, has recently
turned her attention to the cultural definition of risk and how they have
functioned to organize thought in various societies. She has suggested a
scenario for the future which is both plausible and frightening. She argues that
key ideologies on major cultural themes so that at different periods of history,
certain issues become the center and focus of conflict. Looking at the world
today, she suggests that out of political struggle there has emerged a degree
of consensus on democratic forms of government which emphasizes democratic
values. She also suggests that, out of political struggle, there is a growing
consensus on economies of the free market. With these issues temporarily
"solved," she suggests that the next ideological battleground will center on the
environment and on the handling of the issue of technological risk.

She points out that the question of risk is not a scientific issue which
can be solved by better science, but at its base, it is a political issue. Risk
is immeasurable and its unacceptability is unlimited.
Given those circumstances, she points to the fact that especially some of the leaders of what has come to be known as the "environmental" movement have adopted a political stance to place severe limits on our current industrial and technical life. These limits are argued from a position of moral purity and personal piety—a stance which has characterized other sectarians throughout history. To restrict the development of risky technology will require an increase in big government to place restrictions and to enforce them. (That presents an internal contradiction since in the sectarian views of the movement, the stance is taken that power always corrupts and given that, large institutions are completely corrupt.)

That view, which Douglas suggests is becoming normative in much of the Western world, is deeply pessimistic. At its core, it says that all of mankind has been victimized by its own evilness in creating large governmental and economic institutions. Now all of us are victims of life which we have created. It reinterprets history to suggest that the evaluation of our social order has been one long expletive deception, without any redeeming qualities. It is a secular version of original sin, in which all of the apples in the garden of Eden which we call modern life, are now coated with Alar. But, in contrast with Lisbon, we now have no possibility for redemption. God is gone. Repentance is only possible if we make the effort to castrate the social institutions which have corrupted us. The environmentalist's heaven is offered as an alternative to the corruption of social institutions. It is vague, however, but it seems to be located somewhere high in the Sierra Madre mountains where there is clean air and water. But one should also note that there are few people there to corrupt it.