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THE SOCIOLOGY OF PANIC

E. L. Quarantelli

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E. L. Quarantelli
Disaster Research Center
University of Delaware
Newark DE. 19716 USA

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ABSTRACT

Sociology of Panic

E. L. Quarantelli

The term "panic" is widely used in everyday speech as well as in the literature of different professional areas and scientific disciplines. This article confines itself primarily to discussing how sociologists, historically and currently, view the phenomena. The justification for such a focus is that the concept has long been used in the discipline especially in the sociological subspeciality of collective behavior, and much of the relevant empirical work has been done by sociologists studying behavior in natural and technological disasters.

Early approaches to panic were vague in defining the phenomena. However, most formulations view panic as either extreme and groundless fear, or flight behavior. Both phenomena are supposedly widespread in crisis situations. Present day discussions about panic also revolve around whether or not the behavior is irrational, and whether it is highly contagious or not. Three major empirical studies that have heavily influenced present day sociological views about panic are presented. Two of the studies particularly challenge widespread ideas in the literature about the phenomena, showing for example that panic flight is very rare, and has few of the characteristics typically attributed to the behavior, even in situations where it might be expected.

There are two questions that will loom even larger in the future. One is why despite the research evidence, the idea of "panic" captures the popular imagination and continues to be evoked by scholars of human behavior. A second basic question is whether there is still any scientific justification for the continuing use of the concept in any technical sense in the collective behavior area.

The Sociology of Panic

The term "panic" is widely used in everyday speech as well as in the literature of different professional areas and scientific disciplines. This leads to a very wide diversity in the attribution of both the characteristics of and the conditions that generate the phenomena. However, this article confines itself primarily to how sociologists view "panic." Thus, it does not consider the substantial but circumscribed literature in economics that focuses solely on "financial panics," or another set in psychiatry that deals with "panic states" from a mental health viewpoint. Although a few sociologists have looked at the first phenomena under the general rubric of panic, the second has never been of any concern to them.

The focus on *sociology* is justified for several reasons. From the very origins of the field, sociologists have used the term as part of their professional vocabulary. The first introductory sociology textbook states that "panic is the crowd in dissolution" (Park and Burgess 1924:876) because it is the opposite of the crowd in the sense of not having any psychological unity. In particular, panic has always been considered part of the subject matter of the sociological specialization of collective behavior, which deals with nontraditional and newly emergent forms of social action (see Sociology of Collective Behavior). Most American textbooks and extended theoretical treatises on collective behavior discuss panic (Miller 1985) with some giving extensive attention to the phenomena. Furthermore, such empirical studies of panic as have been undertaken have been mostly by sociologists studying human and group behavior in natural and technological disasters (see Sociology of Disasters). Even psychologists,

who next to sociologists have most looked at panic, primarily cite empirical and theoretical sociological sources (Schultz 1964).

1. Past Approaches

The first extended and systematic treatment of panic by a sociologist is a chapter by LaPierre (1938) in a little known book on collective behavior. He sees panic as dysfunctional escape behavior generated by fortuitous, ever varying circumstances, but involving impending danger. Panic is never formally defined except as the antithesis of regimental behavior, which is preplanned collective action for dealing with crises, such as fire drills in schools. Instead what constitutes panic is illustrated by presentations of anecdotal examples from stories of disaster behavior in journalistic and popular sources. While his vague formulations and use of popular sources are typical, in three major ways, LaPierre differs from many later writers. He does not generally deal with any covert emotional or feeling state associated with the behavior, and he avoids use of the term "irrational." In addition, he distinguishes between collective and individual panic, which is at variance with most treatments which imply panic necessarily involves a multiplicity of participants.

As just implied, there is little consensus, historically or currently on the use of the term. Nevertheless, most discussions about the nature of panic can be grouped into one of two categories. The oldest view, coming out of everyday speech, primarily equates panic with extreme and groundless fear. This is clearly related to the linguistic origins of the word which is derived from the Greek god Pan who supposedly was able to generate sudden and overwhelming fear in the absence of any actual threat. For many writers taking this position, being seized by such a fear can lead to other irrational

reactions although the essence of panic is the emotional manifestation, and not what this might otherwise overtly affect.

Another view, visualizes panic as manifesting itself primarily as flight behavior. In this conception, the essence of panic is the overt behavior that is marked by the setting aside of everyday social norms, even the strongest, such as parents abandoning their young children trying to save themselves in a life threatening crisis. Often implicit, there is the assumption in this view that such flight behavior will occur only if there is a perception that there is a possibility of escaping the threat. Disaster researchers in particular have emphasized that hope of escape rather than hopelessness is what is involved. Persons who perceived themselves as totally trapped such as in sunken submarines or collapsed coal mines do not panic because they see no way of getting away from the threat.

Of course it is possible to put the two general formulations together. Smelser (1963, 131) defines panic as "collective flight based on a hysterical belief" which allows him to talk both about overt escape behavior and the selling behavior of investors in financial panics. But others have noted the relationship between a terror state and rout behavior is not necessarily a direct one, given that whatever the emotion, it need not inevitably lead to flight of any kind. Apart from agreeing that panic participants are very afraid of some perceived threat, there is little agreement otherwise among students of

the phenomena on the relationship of the emotional state involved to what other, if any, behaviors will be manifested.

2, Current Issues

Apart from differences about the nature of panic, many discussions of panic focus on two other major themes. One such theme and a very prominent one is that which assumes that panic behavior is "irrational." This is often contrasted with the assumed rationality of most other behavior, where the means-ends relationships are in balance or where the end result is a positive one. This conception has come under sharp criticism especially from those who have done empirical studies of the behavior of people caught in disasters and fire situations (Quarantelli 1981). These researchers note that when the behavior in such occasions is looked at from the perspective of the social actors involved, the behavior is very meaningful and far from most conceptions of irrationality (Johnson 1985). The argument is that nothing is gained by characterizing the behavior as irrational or along any similar dimension (Wenger 1980). However, it is still very common and typical for social science textbooks that discuss panic to characterize it as irrational.

A second major division among scholars is between those who are argue that panic behavior is very contagious, and that human beings are easily swept up into the behavior, and those who strongly disagree with such a conception. Many of the early discussions of panic clearly assume that the participants are overwhelmed by the fearful emotion of others, and will trample over others in their path. In contrast, are those researchers who take the position that whatever panic behavior is, it results from meaningful social interaction among the participants. They note that even in those rare cases of extreme instances of panic flight, very few spectators ever get caught up in the behavior.

Several specific studies have particularly influenced all of the previous

arguments. One is a study by Cantril (1940) on reactions by Americans to a nationally broadcast radio show supposedly reporting as actual fact an alien invasion from Mars. The study takes the view that those who panicked upon hearing the broadcast lacked "critical ability." The behavior was seen as irrational. While even to this day this study is cited as scientific support for this view of panic, the research has come under sharp critical scrutiny. Analysts have noted that even taking the data reported at face value, only a small fraction (12%) of the radio audience ever gave even any remote credence to the idea that the broadcast was an actual news story. And the accounts of flight behavior as well as other illogical and bizarre actions reported in the book give the mistaken idea that they were obtained in the survey study done. Actually, they are taken almost unacknowledged from journalistic accounts of the time which reported that supposedly numerous Americans fled wildly to get away from the alien invaders. A close scrutiny of the actual news report that appeared found that most of them were sensationalized anecdotal stories that these days are typically reported in the so-called tabloid press.

The last point is particularly important because much later Rosengren (1978) and his colleagues studied in a very systematic manner a roughly similar radio show. A Swedish radio station broadcast a fictitious news program about a nuclear plant accident that had created radioactive clouds drifting in southern Sweden. Within an hour, other media were broadcasting about widespread panic reactions in the population with the print media later reporting panic reactions of various kinds on a large scale including escape flight. However, the systematic survey study found less than 10% of the audience gave any credence to the broadcast, with less than 1% showing

any behavioral reaction, and no one who had engaged in flight behavior. The research showed that the supposed panic reaction of the population was almost exclusively a mass media creation. There is very little found by this research that would be supportive of any of the formulations about panic advanced to that time by social scientists.

More recently, Johnson (1988) did intensive studies of persons caught in potential provoking panic situations such as a fire in a night club and a stampede during a rock music concert, where 160 and 11 persons respectively died. The findings are unambiguous. The great majority of involved persons did not engage in animal like behavior, contrary to what many early writers on panic suggest occurs. Instead of ruthless competition, the social order did not breakdown with cooperative rather than selfish behavior predominating. Contrary to notions of irrationality, there was much evidence for rational responses in the face of the crisis. While strong emotions were experienced, these did not lead to maladaptive behavior. These findings reinforced the ever growing viewpoint among many researchers who have studied what seem potential panic situations, that prosocial rather than antisocial behavior predominates even in such contexts.

3, Future Questions

Two additional and fundamental but unresolved questions regarding the concept of panic, are surfacing. Most scholars seem to agree that whatever "panic" might mean, the phenomena are statistically quite rare, usually involve only a handful of persons, and are of short duration. Some researchers have observed that it is very difficult to find clear-cut cases of actual panic in natural and technological disasters (and that they

are also extremely rare in the other arena in which they supposedly occur, that is among soldiers in battles during wars). But the term continues to be widely used and persists despite the lack of empirical evidence that it happens on any scale; it also continues as noted by students of popular culture to be the staple of disaster movies and novels.

Over four decades ago, Wolfenstein (1957) explicitly questioned why despite what the research evidence showed, the idea of "panic" captures the popular imagination and continues to be evoked by scholars of human behavior. Using a psychoanalytical framework, she suggests that the fascination with the term is a psychological fantasy actually useful and functional in a variety of ways for coping with personal crises. Some disaster scholars have thought that a more sociological approach might parallel what Durkheim, a major figure in the origins of sociology, said about crime. If it did not exist, it would be necessary for human societies to create crime, at least symbolically, so as to emphasize the fact that human beings generally adhere to social norms. So perhaps the idea of the possibility of panic is necessary in society to highlight the fact that human beings in contrast react remarkably well in most stressful situations and that the social bonds between and among people usually holds. Supporting this view, as disaster researchers have noted, the mass media in reporting the *absence* of panic are behaving as if the normal expectation is that panic will occur. Whether the merit of the parallel to crime, clearly there is a need to explain the huge discrepancy between the actual frequency of panics in any sense of the term, and the exaggerated interest in and widespread use of the word not only in popular culture but also especially among social scientists who have not researched the phenomena.

A second basic question is whether there is still any scientific justification for the continuing use of the concept in any technical sense. Increasingly, students of the phenomena have questioned if the term "panic" ought to be continued to be used by students of collective behavior (Mawson 1980, Sime 1981). The logic of the argument is that such behavior as is attempted to be captured under that label can better be dealt with by using other concepts. In other words, what is often currently described and analyzed as panic behavior can be characterized and explained by other terms. Those taking this view argue that because a word has widespread popular currency and has been unthinkingly imported into a scientific field should not be seen as necessarily giving the term any legitimacy. From this perspective, it is possible that the concept of panic within collective behavior in sociology may disappear as a technical term in the future.

Bibliography

Cantril, H. 1940 *The Invasion From Mars: A Study in the Psychology of Panic*. Princeton University Press, Princeton**.**

Foreman P 1953 Panic theory. *Sociology and Social Research* 37: 295-304.

Johnson N 1985 Panic and the breakdown of social order: Popular myth, social theory and empirical evidence. *Sociological Focus* 20: 171-183.

Johnson N 1988 Fire in a crowded theater: A descriptive investigation of the emergence of panic. *International Journal of Mass Emergencies and Disasters* 6:7-26.

Keating J 1982 The myth of panic. *Fire Journal* 57-62.

LaPierre R 1938 *Collective Behavior.* McGraw Hill, New York**.**

Lofland J 1981 Collective behavior: The elementary forms in Rosenberg S and Turner, R (ed) *Social Psychology: Sociological Perspectives* Basic Books, New York.

Mawson A 1980 Is the concept of panic useful for scientific purposes? in *Second International Seminar on Human Behavior in Fire Emergencies*. National Bureau of Standards, Washington.

Miller D *Introduction to Collective Behavior* Wadsworth, Belmont CA

Park R Burgess E 1924 *Introduction to the Science of Sociology*. University of Chicago Press, Chicago.

Quarantelli E 1954 The nature and conditions of panic. *American Journal of Sociology* 60:265-275.

Quarantelli E 1957 The behavior of panic participants. *Sociology and Social Research* 41: 187-194.

Quarantelli E 1981 Panic behavior in fire situations: Findings and a model from the English language research literature in *Proceedings of the 4th Joint Panel Meeting, the UJNRR Panel on Fire Research and Safety* Building Research Institute, Tokyo.

Rosengren K, Arvidsson P, Sturesson D 1978 The Barseback "Panic": A Case of Media Deviance in Winick C (ed) *Deviance and Mass Media* Sage, Beverly Hills.

Schultz D (ed) 1964. *Panic Behavior: Discussion and Readings.*

Random House, New York.

Sime J 1981 The concept of panic in Canter D (ed) *Fires and Human Behavior*

Wiley, New York.

Smelser N 1963. *Theory of Collective Behavior.* Free Press, New York.

Strauss A 1944 The literature on panic. *Journal of Abnormal and Social Psychology* 29: 317-328.

Wenger D 1980 Some Observations on the Nature of Panic Behavior: A Normative Orientation in Leven B, Paulsen R (ed) *Second International Seminar on Human Behavior in Fire Emergencies*. Washington, National Bureau of Standards.

Wolfenstein M 1957 *Disaster: A Psychological Essay* Free Press, Glencoe.