# The Martian Panic Sixty Years Later
## *What Have We Learned?*

*The 'War of the Worlds' panic happened sixty years ago, but its lessons are as relevant today as back then.*

ROBERT E. BARTHOLOMEW

Shortly after 8 o'clock on Sunday evening, October 30, 1938, many Americans became anxious or panic-stricken after listening to a realistic live one-hour radio play depicting a fictitious Martian landing at the Wilmuth farm in the tiny hamlet of Grovers Mill, New Jersey. Those living in the immediate vicinity of the bogus invasion appeared to have been most frightened, although the broadcast could be heard in all regions of the continental United States and no one particular location was immune. The play included references to real places, buildings, highways, and streets. The broadcast also contained prestigious speakers, convincing sound effects, and realistic special bulletins. The drama was produced by a 23-year-old theatrical prodigy named George Orson Welles (1915–1985), who was accompanied by a small group of actors and musicians in a New

York City studio of the Columbia Broadcasting System's Mercury Theater. The actual broadcast script was written by Howard Koch, who loosely based it on the 1898 book *The War of the Worlds* by acclaimed science fiction writer Herbert George (H.G.) Wells (1866–1946). In the original Wells novel, the Martians had landed in nineteenth century Woking, England. Sixty years after the 1938 event, it remains arguably the most widely known delusion in United States, and perhaps world history, and many radio stations around the world continue to broadcast the original play each Halloween eve.

During this sixtieth anniversary year of the Martian panic, it is timely to reflect on the lessons we can glean from the incident, applying the wisdom that six decades of hindsight can provide.

## Human Perception and Memory Reconstruction Are Remarkably Flawed

Today many people seem to forget that the Martian "invasion" illustrates far more than a short-term panic. It is a testament to the remarkable power of expectation on perception. A person's frame of reference has a strong influence on how external stimuli are interpreted and internalized as reality (Buckhout 1974). Perception is highly unreliable and subject to error (Loftus 1979; Wells and Turtle 1986; Ross, Read, and Toglia 1994). This effect has long been known to be pronounced under situations of stress, ambiguity, and uncertainty (Sherif and Harvey 1952; Asch 1956; Krech, Crutchfield, and Ballschey 1962). This message cannot be over-emphasized and continues to go widely unheeded, as visual misperceptions are a common thread in many reports of such diverse phenomena as religious signs and wonders, UFOs, and Bigfoot.

In his famous study of the Martian panic, Princeton University psychologist Hadley Cantril discusses the extreme variability of eyewitness descriptions of the "invasion." These examples have been usually overlooked in subsequent popular and scholarly discussions of the panic. One person became convinced that they could smell the poison gas and feel the heat rays as described on the radio, while another became emotionally distraught and felt a choking sensation from the imaginary "gas" (Cantril 1947, 94–95). During the broadcast several residents reported observations to police "of Martians on their giant machines poised on the Jersey Palisades" (Markush 1973, 379). After checking various descriptions of the panic, Bulgatz (1992, 129) reported that a Boston woman said she could actually see the fire as described on the radio; other persons told of hearing machine gun fire or the "swish" sound of the Martians. A man even climbed atop a Manhattan building with binoculars and described seeing "the flames of battle."

The event also reminds us that the human mind does not function like a video camera capturing each piece of data that comes into its field of vision. People interpret information as it is processed. These memories are not statically locked away in the brain forever, but our memories of events are reconstructed over time (Loftus and Ketcham, 1991). Cantril (1947) cited the case of Miss Jane Dean, a devoutly religious woman, who, when recalling the broadcast, said the most realistic portion was "the sheet of flame that swept over the entire country. That is just the way I pictured the end" (181). In reality, there was no mention of a sheet of flame anywhere in the broadcast.

## The Mass Media Are a Powerful Force in Society

Not only does the Martian panic demonstrate the enormous influence of the mass media in contemporary society, but in recent years an ironic twist has developed. There is a growing consensus among sociologists that the extent of the panic, as described by Cantril, was greatly exaggerated (Miller 1985; Bainbridge 1987; Goode 1992). The irony here is that for the better part of the past sixty years many people may have been misled by the media to believe that the panic was far more extensive and intense than it apparently was. However, regardless of the extent of the panic, there is little doubt that many Americans were genuinely frightened and some did try to flee the Martian gas raids and heat rays, especially in New Jersey and New York.

Based on various opinion polls and estimates, Cantril calculated that of about 1.7 million people who heard the drama, nearly 1.2 million "were excited" to varying degrees (58). Yet there is only scant anecdotal evidence to suggest that many listeners actually took some action after hearing the broadcast, such as packing belongings, grabbing guns, or fleeing in motor vehicles. In fact, much of Cantril's study was based on interviews with just 135 people. Bainbridge (1987) is critical of Cantril for citing just a few colorful stories from a small number of people who panicked. According to Bainbridge, on any given night, out of a pool of over a million people, at least a thousand would have been driving excessively fast or engaging in rambunctious behavior. From this perspective, the event was primarily a news media creation. Miller (1985, 100) supports this view, noting that while the day after the panic many newspapers carried accounts of suicides and heart attacks by frightened citizens, they proved to have been unfounded but have passed into American folklore. Miller also takes Cantril to task for failing to show substantial evidence of mass flight from the perceived attack (1985, 106), citing just a few examples and not warranting an estimate of over one million panic-stricken Americans. While Cantril cites American Telephone Company figures indicating that local media and law enforcement agencies were inundated with up to 40 percent more telephone calls than normal in parts of New Jersey during the broadcast, he did not determine the specific nature of these calls:

> Some callers requested information, such as which units of national guard were being called up or whether casualty lists were available. Some people called to find out where they could go to donate blood. Some callers were simply angry that such a realistic show was allowed on the air, while others called CBS to congratulate Mercury Theater for the exciting Halloween program. . . . we cannot know how many of these

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> telephone calls were between households. It seems . . . (likely) many callers just wanted to chat with their families and friends about the exciting show they had just listened to on the radio (Miller 1985, 107).

Goode (1992, 315) agrees with Miller's assessment, but also notes that to have convinced a substantial number of listeners "that a radio drama about an invasion from Mars was an actual news broadcast has to be regarded as a remarkable achievement." Either way you view it, whether tens of thousands of people became panic-stricken, or more than a million, there is no denying that the mass media have significantly influenced public perception of the event. There is also no disputing that similar broadcasts have resulted in full-fledged panics.

## It Can't Happen Again

Only someone with an ignorance of history would assume that similar panics could not recur. More recent mass panics and delusions have involved the pivotal role of the mass media (especially newspaper and television). For instance, the media were instrumental in triggering a widespread delusion about the existence of imaginary pit marks on windshields in the state of Washington during 1954, erroneously attributed to atomic fallout (Medalia and Larsen, 1958). Mass delusions can also have a humorous side. During March 1993, excitement was created in Texas after *The Morning Times of Laredo* published a hoax account of a giant 300-pound earthworm undulating across Interstate 35. Many citizens in the vicinity of Laredo believed the story despite claims that the worm was an incredible seventy-nine feet long! What is not humorous is the relative ease at which a spate of media hoaxes were perpetrated across the country in the early 1990s, prompting the Federal Communications Commission to impose fines of up to $250,000 for TV stations knowingly broadcasting false information. But could a repeat of the 1938 Martian panic occur? The answer is, "Yes."

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A widespread panic was triggered following a broadcast of the Wells play by a Santiago, Chile, radio station on November 12, 1944. Upon hearing the broadcast, many fled into the streets or barricaded themselves in their homes. In one province, troops and artillery were briefly mobilized by the governor in a bid to repel the invading Martians. The broadcast was highly realistic. It included references to such organizations as the Red Cross and used an actor to impersonate the interior minister (Bulgatz 1992, 137).

On the night of February 12, 1949, another radio play based on *The War of the Worlds* resulted in pandemonium in Quito, Ecuador, with tens of thousands of panic-stricken residents running into the streets to escape Martian gas raids. The event made headlines around the world including the front page of the February 14, 1949, edition of *The New York Times* ("Mars Raiders Caused Quito Panic; Mob Burns Radio Plant, Kills 15"). The drama described strange Martian creatures heading toward the city after landing and destroying the neighboring community of Latacunga, twenty miles south of Quito. Broadcast in Spanish on Radio Quito, the realistic program included impersonations of well-known local politicians, journalists, vivid eyewitness descriptions, and the name of the local town of Cotocallo. In Quito, a riot broke out and an enraged mob poured gasoline onto the building housing the radio station that broadcast the drama, then set it alight, killing fifteen people.

The tragic sequence of events began when a regular music program was suddenly interrupted with a news bulletin followed by reports of the invading Martians wreaking havoc and destruction while closing in on the city. A voice resembling that of a government minister appealed for calm so the city's defenses could be organized and citizens evacuated in time. Next the "Mayor" arrived and made a dramatic announcement: "People of Quito, let us defend our city. Our women and children must go out into the surrounding heights to leave the men free for action and combat." Positioned atop the tallest building in the city, the La Previsora tower, an announcer said he could discern a monster engulfed in plumes of fire and smoke advancing on Quito from the north. It was at that point, according to a *New York Times* reporter, that citizens "began fleeing from their homes and running through the streets. Many were clad only in night clothing."

Other radio adaptations of *The War of the Worlds* have had less dramatic consequences, but resulted in some frightened listeners in the vicinity of Providence, Rhode Island, on the night of October 31, 1974, and in northern Portugal in 1988 (Bulgatz 1992, 139).

## What of the Future?

Since 1938, the world's rapidly expanding population has grown increasing reliant on the mass media, and people generally expect the news to contain immediate, accurate information on nearly every facet of their lives. By most projections, the twenty-first century will bring an even greater dependence on information and mass media. While it may be true that you cannot fool all of the people all of the time, as the "War of the Worlds" panics and other mass scares attest to, you need only fool a relatively small portion of people for a short period to create large-scale disruptions to society. That is the lesson we can glean from the reaction to the 1938 broadcast. It can and will happen again. Only the mediums and forms will change as new technologies are developed and old delusional themes fade away while new ones come into vogue.

Each era has a set of taken-for-granted social realities that define it and manifest in unique delusions. During the Middle Ages scores of popular delusions, panics, and scares sur-

rounded the belief that humans could transform into various animals, especially wolves (Eisler 1951; Noll 1992). In the seventeenth and eighteenth centuries, most recorded delusions were precipitated by a widespread fear of witches and manifested in episodes of mass demon possession and moral panics involving a hunt for imaginary witches (Calmeil 1845; Garnier 1895; Huxley 1952). These episodes often resulted in torture, imprisonment, or death for various minority ethnic groups including Jews, as well as heretics, deviants, the aged, women, and the poor (Rosen 1968; Goode and Ben-Yehuda, 1994). Twentieth-century mass delusions overwhelmingly involve two themes. The first is a fear of environmental contaminants mirroring growing concern about global pollution and heightened awareness of public health. This situation has triggered scores of mass psychogenic illness in schools (Bartholomew and Sirois, 1996), factories (Colligan and Murphy 1982) and occasionally communities (Goldsmith, 1989; Radovanovic 1995), and numerous delusions without psychogenic illness (Miller 1985; Goode 1992). A second series of delusions has spread widely in Western countries that have become dependent on child day care facilities. Their prominence since the mid-1980s coincides with a series of moral panics involving exaggerated claims about the existence of organized cultists kidnapping or molesting children. These myths function as cautionary tales about the inability of the weakened nuclear family to protect children (Victor 1989, 1992).

At the dawn of the twenty-first century and a new millennium, we can only ponder what new mass panics await us. It is beyond the realm of science to accurately predict what these will entail. But it will be vital for scientists to respond to the challenge of this new era of ideas and technologies that will engender an as-yet unforeseen set of circumstances that characterize and define each age. For mass panics and scares can tell us much about ourselves and the times in which we live. Part of this challenge entails remembering the lessons of the past.

## References


Asch, S.E. 1956. Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs* 70.

Bainbridge, W.S. 1987. Collective Behavior and Social Movements. Pp. 544–576. In R. Stark (ed.), *Sociology*. Belmont, California: Wadsworth.

Bartholomew, R.E., and F. Sirois. 1996. Epidemic hysteria in schools: An international and historical overview. *Educational Studies* 22(3):285–311.

Buckhout, R. 1974. Eyewitness testimony. *Scientific American* 231:23–31.

Bulgatz, J. 1992. *Ponzi Schemes, Invaders from Mars and more Extraordinary Popular Delusions and the Madness of Crowds*. New York: Harmony Books.

Calmeil, L.F. 1845. *De la Folie, Consideree Sous le Point de vue Pathologique, Philosophique, Historique et Judiciaire* [On the Crowd, Considerations on the Point of Pathology, Philosophy, History and Justice]. Paris: Baillere.

Cantril, H. 1947. *The Invasion From Mars: A Study in the Psychology of Panic*. Princeton, New Jersey: Princeton University Press. Originally published in 1940.

Colligan, M.J., and L.R. Murphy. 1982. A review of mass psychogenic illness in work settings. Pp. 33–52. In M. Colligan, J. Pennebaker, and L.R. Murphy (eds.), *Mass Psychogenic Illness: A Social Psychological Analysis*. Hillsdale, New Jersey: Lawrence Erlbaum.

Eisler, R. 1951. *Man into Wolf, An Anthropological Interpretation of Sadism, Masochism, and Lycanthropy; a Lecture Delivered at a Meeting of the Royal Society of Medicine*. London: Routledge & Paul.

Garnier, S. 1895. *Barbe Buvee, en Religion, soeur Sainte-Colombe et la Pretendue Possession des Ursulines d'Auxonne* [Barbe Buvee, and Religion, Sister Columbe and the Feigned Possession of the Ursulines at Auxonne]. Paris: Felix Alcan.

Goldsmith, M.F. 1989. Physicians with Georgia on their minds. *Journal of the American Medical Association* 262:603–604.

Goode, E. 1992. *Collective Behavior*. New York: Harcourt Brace Jovanovich.

Goode, E., and N. Ben-Yehuda, 1994. *Moral Panics: The Social Construction of Deviance*. Oxford: Blackwell.

Huxley, A. 1952. *The Devils of Loudun*. New York: Harper and Brothers.

Krech, D., R.S. Crutchfield, and E.L. Ballschey. 1962. *Individual and Society*. New York: McGraw-Hill.

Loftus, E. 1979. *Eyewitness Testimony*. Cambridge, Massachusetts: Harvard University Press.

Loftus, E., and K. Ketcham. 1991. *Witness for the Defense: The Accused, the Eyewitness, and the Expert who Puts Memory on Trial*. New York: St. Martin's.

Markush, R.E. 1973. Mental epidemics: A review of the old to prepare for the new. *Public Health Reviews* 2:353–442. See p. 379.

Medalia, N.Z., and O. Larsen. 1958. Diffusion and belief in a collective delusion. *Sociological Review* 23:180–186.

Miller, D. 1985. *Introduction to Collective Behavior*. Belmont, California: Wadsworth.

Noll, R. (ed). 1992. *Vampires, Werewolves, and Demons: Twentieth Century Reports in the Psychiatric Literature*. New York: Brunner/Mazel.

Radovanovic, Z. 1995. On the origin of mass casualty incidents in Kosovo, Yugoslavia, in 1990. *European Journal of Epidemiology* 11:1–13.

Rosen, G. 1968. *Madness in Society*. London: Routledge and Kegan Paul.

Ross, D.F., J.D. Read, and M.P. Toglia. 1994. *Adult Eyewitness Testimony: Current Trends and Developments*. Cambridge: Cambridge University Press.

Sherif, M., and O.J. Harvey. 1952. A study in ego functioning: Elimination of stable anchorages in individual and group situations. *Sociometry* 15:272–305.

Victor, J.S. 1990. The spread of Satanic-cult rumors. SKEPTICAL INQUIRER 14(3):287–291.

Victor, J.S. 1989. A rumor-panic about a dangerous Satanic cult in Western New York. *New York Folklore* 15:23–49.

Wells, G., and J. Turtle. 1986. Eyewitness identification: The importance of lineup models. *Psychological Bulletin* 99:320–29.

Wells, H.G. [1898] 1986. *The War of the Worlds*. New York: New American Library.



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