
RESEARCH ARTICLE

Truth and Lies: A Case Study of the US Government's Information Dissemination Strategy

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ABSTRACT

As a chemical spill that caused serious harm, the Love Canal chemical disaster brought heavy financial, social and public pressure to bear on the US government. Faced with this situation, the US government has adopted a certain information dissemination strategy to lead public opinion and thus reduce resistance. The strategy has been proven to be effective in solving the environmental crisis and secondary social problems in the early years of the crisis, as well as in completing the restoration and resettlement of the canal area ahead of schedule. However, the examination of the US government's information dissemination strategy during this environmental crisis also provides a glimpse into the truth and lies of the US government.

KEYWORDS

The US government, information dissemination strategy, the Love Canal tragedy

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1. Introduction

As one of the major environmental crises in American history, the Love Canal tragedy is highly regarded by academics for its enormous political, economic and environmental impacts. On the one hand, scholars have conducted biochemical analyses and pathological studies of the environmental and human health hazards from the perspective of environmental science and medicine, starting with the chemical disaster itself, and have gained a lot of achievements (Brown 1980; Janerich et al. 1981; Vianna & Polan 1984). On the other hand, some scholars have also explored the political, economic and social aspects of the subject (Baurer 1980; Kahn 2007; Blum 2008). Among them, Adeline G. Levine's *Love Canal: Science, Politics and People* has sparked much discussion on environmental justice, environmental regulations, class and gender, which in part contributed to the study of environmental-political history (Levine 1982). However, studies related to the government's information dissemination strategy during the Love Canal tragedy are still incomplete, especially on the effectiveness of the strategy and intentions behind it. This paper will conduct further research, which I hope will make it a useful addition to these issues.

2. Birth of the Tragedy

Love Canal, located at the southeastern end of Niagara Falls, New York, is a rectangular underground landfill covering approximately 0.065 square kilometres, about 0.4 kilometres from the Niagara River. The love canal was named after William T. Love, an entrepreneur who in 1894 began building a canal to connect the Niagara River to Lake Ontario and to harness the tremendous potential energy of the Niagara Falls to generate hydroelectric power for an urban park and residential community which was intended to be built (Dickson 1982). However, due to the panics in 1873, 1893, and 1907 as well as the use of alternating current spread rapidly, William Love had to abandon the project and put the area up for auction under economic pressure (Blum 2008, p. 21). In 1920, the Hooker Chemical Company acquired the site and began dumping chemical waste, including chlorinated hydrocarbon residues, into the canal area in 1942. By 1953, 21,800 tons of chemical waste had been dumped from its plants in Niagara Falls, the vast majority of which was not treated rigorously, except for a small amount that was drummed and sealed before dumping (New York State Department of Health 1981).

In the 1950s, the Niagara Falls School Board began to consider establishing a school on the Love Canal site and expressed its interest to the Hooker Chemical Corporation. In order to avoid future environmental liability (Colten & Skinner 2010, p. 158), Hooker Chemical sold the canal to the board for \$1, stating in the sales contract that Hooker had shifted "all risk and liability incident to the use" of the *property* to the Board. In addition, the deed specified that the future owner(s) of the *property* could not make any claims against Hooker for injury or death or property damage arising even from "the presence of said industrial wastes (Zuesse 1981)." Human activity and construction, particularly the breaking of the canal walls twice in November 1957 and May-September 1960 by the Board to build sewers despite warnings from Hooker Chemical that the land was "not suitable for underground construction", led to the destruction of the already poorly sealed storage containers and coverings of the chemical waste, and ultimately to the leaching of stored toxic chemicals from the damaged and deteriorated containers into the soil, basements and storm drains. In early 1962, chemical waste began to leak and spread, and oily puddles or coloured liquids appeared in the yards or basements of some of the houses in and around the canal (Blum 2008, p. 25). By the mid-1970s, the odours due to the volatilization of chemicals had caused great discomfort to some local residents and complaints were received by the local authorities; at the same time, as the chemical waste continued to spread, chemical spills in local houses and basements became more and more serious, and people even suffered from illnesses as a result. With reports on the issue in *Niagara Gazette* in 1976, the chemical spill in the Love Canal area an issue became the focus of media and public attention (University at Buffalo Libraries 1980).

3. Public Opinion and Media Reaction

Media played a vital role in uncovering, informing and shaping public opinion during the 28-year process that began in 1976 with a series of reports in *Niagara Gazette* and ended in 2004 with the removal of Love Canal from Superfund list and the official resolution of the crisis. Even after formal action had been taken by the government in September 1977, *Niagara Gazette* continued to conduct independent investigations and urge the government to take more practical action (University at Buffalo Libraries 1980). According to the 54 copies of *Niagara Gazette* about the Love Canal tragedy from October 13, 1976 to August 7, 1978 kept in University at Buffalo Libraries, it can be seen that they urged and criticized to some extent the policies and actions of the government and the attitudes of its officials (University at Buffalo Libraries 1998). In addition to the local newspapers, the story was also reported in a number of national newspapers, for example on the front page of *The New York Times* on 2 August 1978 with the headline "Upstate Waste Site May Endanger Lives", which attracted a lot of attention (McNeil Jr 1978). To be sure, both President Carter's approval of emergency financial aid for the Love Canal area and the passage of the Comprehensive Environmental Response, Compensation, and Liability Act, otherwise known as CERCLA or Superfund by Congress on 11 December 1980 relied in part on the public attention generated by press coverage (Carter 1978; U.S. Environmental Protection Agency 1980). However, it should not be overlooked that there were some bad press release and "bad news bias", such as the *Niagara Gazette* of 7 August 1978, which considered that the government had not paid enough attention to the chemical disaster, just after President Carter had approved the first emergency funds for something other than a "natural" disaster in U.S. history (Niagara Gazette 1978). In addition, the press overlooked the limited resources available to the government at short notice to address the crisis and criticised issues such as the resettlement of residents, even exploiting stereotypes of "politicians" to steer public opinion (Niagara Gazette 1980). These reports added resistance to the implementation of the response strategies formulated by the government.

Just as important as press coverage is public opinion. It is well known that in contemporary society, especially in countries like the United States where civil libertarianism and anti-statism are extremely strong, public opinion has become an invisible force that exerts an increasing influence on politics. In the case of foreign policy, for example, according to Benjamin Page and Robert Shapiro's statistics, 62% of foreign policy is shifting in the direction of public opinion (Page & Shapiro 1983). In the Love Canal tragedy, public opinion focused on three main aspects: dissatisfaction with the status quo and the government's attitude, and the interests at stake during the crisis resolution phase. Firstly, in response to the threats to inhabitants' lives and health caused by the spills and leaks of chemicals, local residents, in addition to making representations to the relevant authorities, engaged in collective actions in order to further urge the government to take effective measures, such as the tax strike in August 1978, and in 1980 there was even an incident in which two officials of the Environmental Protection Agency (EPA) were held hostage by the local residents (Greene 2013). Secondly, residents also expressed their discontent and anger at the government's passive response and delays in environmental testing, such as at the House Subcommittee on Oversight and Investigations on 21 March 1979, when residents and others argued that the state had underestimated the scope of health problems and failed to respond in an efficient and timely manner, on 21 May 1980, when residents expressed their discontent at the Niagara County Legislature's passive attitude during the restoration of the area, and on 30 May 1981, when they expressed their anger at the delays in environmental testing (University at Buffalo Libraries 1980; Niagara Gazette 1981). Thirdly, interests at stake during the crisis resolution phase had also contributed to a negative impact on public opinion, such as the conflict between the concerns of store operators about the business situation of their stores after the relocation of residents and the support of some residents for permanent relocation for health reasons, and the conflict between the limited resources available to the government at short notice and the residents' call for a large

umber of relocations as soon as possible, all of which contributed to the public opinion pressure on the government (Niagara Gazette 1980). It is also worth mentioning that various organisations such as the Love Canal Homeowners Association, the Concerned Love Canal Renters Association and the Center for Health, Environment, and Justice had been established in order to align the interests of specific groups and to express their demands more effectively (Blum 2008). Although public opinion played a certain role in expressing demands of the rights, it was often impulsive, radical and emotional, which led to the above mentioned excessive accusations against the government, resistance to resettlement policies and even kidnapping of government officials, it added irrelevant pressure on the federal government and stalled the resolution of the crisis.

4. US Government's Information Dissemination Strategy

The information disseminated by the Government about the Love Canal tragedy is characterised by a wide range of content, a diversity of format types and a coherent message. The information available to date covers a wide range that includes policy releases and adjustments, environmental surveys and monitoring, as well as risk assessments, such as *Love Canal Emergency Declaration No.1 by President Carter*, *Environmental Monitoring at Love Canal* and *Love Canal Emergency Declaration Area Habitability Study Final Report*, involving press releases, administrative documents, policy announcements, research results and other documents (Carter 1978; Office of Research and Development 1982; U.S. EPA Region 2 1988). It is also worth noting that information was collected and made public on a continuous basis, such as the long-term uninterrupted monitoring of the Love Canal site by the EPA (U.S. Environmental Protection Agency 2004). On the one hand, all this information enabled the public to gain an in-depth understanding of the crisis, but on the other hand, the sheer volume of information facilitated the effectiveness of Government's information dissemination strategy.

During the Love Canal tragedy, in the face of public pressure from the press and the public, the US government adopted an appropriate information dissemination strategy, manipulating information on three dimensions: awareness, priorities and salience, as well as using its authority as an opinion leader to make full use of the agenda-setting effect and thus control public opinion to reduce administrative resistance and maintain public support.¹

The manipulation of the awareness dimension is concretely manifested in the presentation of only specific issues in the media, i.e. the distinction between no disclosure and having disclosure.² In the case, it was mainly reflected in the government's concealment or fabrication of some facts and figures about the Love Canal tragedy. In the early autumn of 1978, the US Department of Health and Human Services released the results of a previous questionnaire survey and analysis of blood samples from 850 families in the Love Canal area, which concluded that the area was still a safe place to live and the local abortion rate was not high relative to other areas (Paigen 1982). However, according to a special report released by New York State Department of Health in 2005, the EPA and New York State Department of Health had already researched and found many dangerous chemicals in the local air before this information was released, and the document confirmed that women living closer to the Love River site have a higher risk of miscarriage (New York State Department of Health 1981). In addition, the current state of chemical spills in the Love Canal site, the irritating odours in residents' houses and at the mouths of water pipes, as well as the high rate of unexplained illnesses, miscarriages made the public sceptical about the survey and analysis results. In response, Beverly Paigen, a cancer researcher at Roswell Park Memorial Institute (now Roswell Park Cancer Institute) in Buffalo, has re-examined the relevant issues in the above-mentioned document and the findings proved that, in terms of miscarriage rates, five pregnant women living in damp houses situated in the Love Canal area (approximately 8% of the sample) had three or more miscarriages, compared to the previous official figures of 0.4%-0.7%, with the probability of incidental occurrence is less than 0.001 (Paigen 1982). At the same time, Beverley Paigen was subjected to pressure from authorities and was denied access to the impugned reports when requested.³ Combined with his work experience in the relevant sector, Beverley Paigen recognised that the delayed effect of using incomplete or even unscientific data would be in the interest of the government, as the amount of resources required to carry out environmental remediation and resettlement of residents is enormous, and there were over 600 similar hazardous waste sites in New York State, in addition to the Love Canal site (Ginsberg 1979). Faced with limited financial resources, officials had to wait until there was sufficient evidence that the Love Canal area was unsafe enough to make substantive decisions. At the same time, as public opinion could not understand the government on these issues, the government had to adopt the information dissemination strategy to maintain stability.

The priorities model means that the information disseminator, when dealing with two or more issues, rearranges the order in which these issues are presented to the public according to its wishes, using the order of exposure to influence the importance of different issues in the minds of audience members, in order to guide public opinion and people's behaviours to a certain extent and to change their existing attitudes towards a given issue. In this case, the priority given to the release of information by the government is reflected in the fact that the local environment was first investigated and analysed at the beginning of the incident. It is well known that the Love Canal tragedy attracted widespread attention because of the impact of chemical spills on the health of the local population. According to the explanation that "the government of the United States exists to serve its citizens", the government should have made the relocation and resettlement of the local population a priority in terms of people's health, but it did not initially adopt a policy to do so, but rather conducted numerous studies of the local situation. According to New York State De

partment of Health's report on Love Canal, as early as 25 April 1978, Robert P. Whalen, the New York State Commissioner of Health, recognized that conditions in the Love Canal area posed a serious threat to the health of residents and recommended that appropriate measures should be taken to protect residents' health and control pollution, but New York State Department of Health did not say much about the evacuation of residents and compensation program until 2 August. According to New York State Department of Health's report on Love Canal, as early as 25 April 1978, Robert P. Whalen, the New York State Commissioner of Health, recognized that conditions in the Love Canal area posed a serious threat to the health of residents and recommended that appropriate measures should be taken to protect residents' health and control pollution, but New York State Department of Health did not say much about the evacuation of residents and compensation program until 2 August, when the state health department declared an emergency at the Love Canal, recommended that the 99th Street school be closed, that pregnant women and children under age of two be evacuated (University at Buffalo Libraries 2022). Instead, it prioritised information disclosure and even allocated \$500,000 to conduct a long-term health study (Nailor et al. 1978). This is partly related to the principle of deferred decision mentioned above, and partly due to the limited resources deployed for emergency response. From the financial assistance approved by President Jimmy Carter on 7 August 1978, the purchase of houses for 236 families in the relocation site alone would have cost \$10 million, which would have undoubtedly been a heavy financial burden for the New York State government before receiving federal financial assistance (Carter 1978). Therefore, it is necessary to use the priorities model to shift the focus from the issue of the resettlement and subsidies to the survey results of the local status quo.

The salience model shows that when two main issues are presented in the media, constructors place greater emphasis on one and less on the exposure of the other. In this case, the typical model of salience is reflected in the US government's recourse to the responsible parties. In terms of judicial accountability for the Love Canal tragedy, it is clear from the federal lawsuit filed against Hooker Chemical and its subsidiaries on 18 December 1979 that the US government preferred to hold Hooker more accountable, both to mitigate the financial losses incurred by local governments and related agencies as a result of compensation, and to maintain public trust in government by creating an image of no-fault on the part of the government in the incident, so that it could implement response measures and related policies more effectively (U.S. Environmental Protection Agency 1979). In order to achieve this purpose, the US Government has worked on two fronts: the attribution of the primary responsibility and the comparison of the degrees of harm. In terms of the attribution of the primary responsibility, it is well known that while Hooker Chemical is certainly largely responsible for the Love Canal tragedy, Hooker Chemical's large-scale discharge of chemical wastes was premised on a permit from Niagara Power and Development Company (DeVroom 2014). Similarly, after Niagara Falls School Board took over the Love Canal site, Hooker Chemical gave a warning that the land was "not suitable for underground construction", but this was ignored (Zuesse 1981). Despite this, the US Department of Justice and the EPA apportioned most of the responsibility for the incident to Hooker Chemical at the initial stage of the crisis and made little mention of the government's responsibility for the incident in press releases and related documents.⁴ In terms of the degree of harm, while it has been acknowledged in relevant administrative documents that the Love Canal area was used as a municipal solid waste landfill for Niagara Falls, the damage caused by the municipal solid waste was often overlooked in most public chemical analysis reports (Nailor et al. 1978). For example, in *Love Canal: A Ticking Time Bomb Has Exploded* by the EPA Region 2 in late 1978, the only sampling was limited to the leachate including lindane and toluene, and the incomplete exposure of information led the population and media to focus more on the chemical companies than government itself (U.S. EPA Region 2 1978). Thus, even though the City of Niagara Falls, the Niagara County Health Department and the Board of Education of the City of Niagara Falls were later named as co-defendants, they were still not found to carry their fair share of liability relative to Hooker Chemical & Plastics Corp., Hooker Chemical Corp. and Occidental Petroleum Corp. Notably, the City of Niagara Falls, which dumped the waste, was even released from punitive damages (New York State Department of Health 1981). In addition, the Department of the Army stated that it had no knowledge of the US Army's involvement in the dumping of waste in the Love Canal area and the investigation it initiated was internal (United States District Court 1994). The salience model adopted by the US government during the information dissemination process led to a greater focus of public opinion and the media on chemical companies. The government not only reduced the financial losses due to compensation and ensure the efficiency of resource deployment but also maintained public support and trust.

5. Conclusion

It seems clear from the above discussion that there is a certain sense of paradox in American society, judicial and administrative systems, and one that runs through the whole process of the Love Canal tragedy from its genesis to resolution. From a social point of view, US citizens have a high degree of freedom of press and speech. They express their will, defended their rights and interests in various ways, with certain achievements which reflects the effectiveness of the supervision by public opinion. However, it should not be overlooked that such actions not only create problems for public administration, but also bring a lot of harm to themselves, and ultimately the media and the public are misled in the "information cocoon" carefully woven by the government. In terms of judicial, Freedom of Information Act guarantees the American public the right to access information, but in the face of the enormous amount of information available, they seem powerless and have to accept only that which has been processed. The judiciary has also failed to maintain judicial independence and the protection of private property by favouring government department

ents over the interests of chemical companies for various reasons in the process of determining liability. Politically, the US government has disregarded its responsibility to protect the basic rights of citizens to life, liberty, and property by putting the approval rating above the safety of people's lives and property, using its authority to deceive the media and the public, thus providing a glimpse of the deceptive character of the US government.

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Notes

1. Scholars such as Cobb and Elder (1971) have found that policymakers, as the government in this case, are more influential than other information sources because their authority allows them to be opinion leaders more often and to influence public opinion by the way they present and interpret issues, while information published by affiliated news sources used by the government for information dissemination (e.g. EPA's press office) has a higher success rate of becoming an agenda. These institutions are also considered to be the most frequent sources of news at local, state and national level (Kenamer 1994).
2. Awareness, priorities and salience are the three models of agenda-setting carried by McCombs and Shaw, for agenda-setting theory and applications (McCombs & Shaw 1972; Zhang 2021).
3. Part of this section is from a private conversation between Beverley Paigen and Dr. Joseph Highland at the Washington office of the Environmental Defense Fund.
4. See also: <https://www.epa.gov/history/love-canal>; https://www.health.ny.gov/environmental/investigations/love_canal/

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