

# JUXTAPOSITION IN ENVIRONMENTAL HEALTH RHETORIC: EXPOSING ASBESTOS CONTAMINATION IN LIBBY, MONTANA

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*This essay argues that juxtaposition is an important rhetorical convention for overcoming uncertainty and institutional inertia in relation to environmental health hazards. The essay illustrates the rhetorical dynamics of this convention in the public discourse that exposed the problem of asbestos contamination in Libby, Montana, and contends that the dichotomous moral framing of this problem was an effective and morally appropriate example of “ecospeak.”*

Libby, Montana, is the site of what one Environmental Protection Agency official has called “the most severe human exposure to a hazardous material this country has ever seen.”<sup>1</sup> Over two hundred human deaths have been attributed to a vermiculite mining operation that ran for most of the twentieth century outside of Libby. Vermiculite was a lucrative ore for the companies that owned the mine, but it was a death sentence for mine workers: the deposit is laced with tremolite, an especially toxic form of asbestos that has been linked to elevated levels of asbestosis, lung cancer, and mesothelioma. At one point during the operation of the mine, company records reported that 92 percent of the mine’s long-term workers had lung abnormalities related to asbestos exposure.<sup>2</sup>

Miners’ families also are suffering from asbestos-related disease. For decades workers would come home with clothes covered in asbestos dust, and wives and children would breathe the toxic fibers. It is not surprising that this type of exposure to asbestos occurred. W. R. Grace, the company that operated the mine from 1963 until its closure in 1990, did not provide changing rooms for the workers until the mid-1970s, and decided in 1983 that adding a shower room to their facilities would not be cost-effective.<sup>3</sup> A recent public health screening conducted in Libby by the U.S. Agency for Toxic Substances and Disease Registry (ATSDR) revealed the extent of this exposure: fully 25 percent of those who lived with mine workers have pleural or interstitial lung abnormalities related to asbestos exposure.<sup>4</sup>

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Beyond that, even residents who never worked at the mine or lived with those who did are showing signs of asbestos-related disease. This is likely due to the fact that environmental exposure to asbestos is pervasive in Libby; ATSDR researchers have identified 18 pathways of exposure to asbestos in the Libby area. For example, the processing of vermiculite released dust into the air containing as much as five thousand pounds of asbestos per day, and vermiculite with traces of asbestos was used throughout the town for insulation in homes, for soil conditioner in gardens, and for fill in schoolyards, ball fields, and skating rinks. These environmental exposures are the likely cause of astonishing public health statistics. The ATSDR found that in one 20-year period the rates of mortality from asbestosis in the Libby area were 40 to 60 times higher than in a normal U.S. population.<sup>5</sup> In addition, the public health screening found that approximately 18 percent of all participants x-rayed had abnormalities in the lining of their lungs, compared to pleural abnormality rates of 0.2 to 2 percent among populations that do not have work-related asbestos exposure.

These statistics documenting the pervasiveness of asbestos-related disease leave little doubt that Libby is the site of a serious environmental health problem. Moreover, documents from W. R. Grace and state and federal agencies also leave little doubt that this problem could have been averted. Company and government officials knew several things about asbestos hazards in Libby as early as the mid-1950s but did little to eliminate those hazards:

- They knew the vermiculite deposit contained asbestos, and that asbestos dust is toxic.<sup>6</sup>
- They knew that processing vermiculite released amounts of asbestos into the workplace that often exceeded maximum allowable concentration levels.<sup>7</sup>
- They knew that significant percentages of workers had lung abnormalities,<sup>8</sup> and that workers in Libby and at locations that processed Libby vermiculite were getting sick from diseases related to asbestos exposure.<sup>9</sup>
- And they knew that if information about asbestos exposure resulting from the processing of Libby vermiculite or the use of vermiculite products were to become public knowledge, the company could face significant financial costs, both from the threat of lawsuits and from declining product sales.<sup>10</sup>

In spite of this knowledge, public officials in multiple government agencies failed to act on this knowledge, and thus failed in their duty to regulate corporate activity and protect the health of workers and citizens.<sup>11</sup> Early reports of the problem in Libby highlight the role of government inaction. The newspaper article that first brought national attention to the Libby situation, written by Andrew Schneider in the November 18, 1999, issue of the *Seattle Post-Intelligencer*, encapsulates the situation in this way: "The story of Libby, Mont., is the story of the monumental, even unforgivable, failure of government at all levels to protect its people from corporate

misdeeds that at best were neglectful and insensitive and at worst were dishonest, immoral and criminal.”<sup>12</sup> Subsequent articles by Schneider draw further attention to government failure in Libby, as does the rhetoric of citizen activists and even some government officials. Thus, while W. R. Grace rightfully gets targeted in public discourse as the party responsible for this problem, government agencies also face criticism for their acts of omission.

The story of Libby is not unlike other stories about other environmental health struggles. Indeed, the dramatic elements of the situation in Libby—innocent victims, a deceptive corporation, and an ineffective bureaucracy—resonate with other public narratives about toxic exposure. The Love Canal story of the late 1970s, the book and movie *A Civil Action* (also starring W. R. Grace) and *Erin Brockovich* offer similar tales about issues of power and politics that communities confront when trying to address toxic contamination situations. Rhetorically, these popular narratives of civic engagement with unresponsive government agencies and callous corporations provide a framework for interpreting events and making moral judgments. In particular, they provide a dramatic structure in which a rhetoric of stark oppositions, simplification, and moral outrage—what M. Jimmie Killingsworth and Jacqueline S. Palmer call “ecospeak”<sup>13</sup>—can be viewed as a justifiable response to corporate and governmental disregard for environmental health concerns.

Such responses are precisely what led public institutions to address asbestos problems in Libby. In this essay, I show how resident voices and investigative journalism combined to produce a powerful public discourse that provoked institutional engagement with the environmental and health conditions in Libby. I describe and analyze the rhetorical conventions that emerge in this discourse, explaining how a rhetoric of exposure operates to influence meaning and action in this environmental health controversy. Specifically, I argue that *juxtaposition* is a central rhetorical feature of this discourse that helps overcome key obstacles to engagement with the problem. Juxtaposition contextualizes different forms of knowledge about the situation, altering the dynamics of certainty and uncertainty surrounding the situation; and it heightens moral outrage, generating pressure on public institutions to act. In my view, the juxtapositions in the Libby rhetoric can be judged as an effective and ethical mode of rhetorical engagement.

To pursue these objectives, my analysis focuses on a set of texts that exposed the asbestos problem in Libby and oriented initial public discussion. These texts include Schneider’s series of articles in the *Seattle Post-Intelligencer* (hereafter referred to as *P-I*) from mid-November 1999, which first brought national attention to the Libby situation, and the transcript of a public hearing held by the Montana Department of Environmental Quality (DEQ) on December 1, 1999, in Libby. To provide contextual information, I have relied on other local, regional, and national newspaper accounts, magazine articles, W. R. Grace memos, and government documents pertaining to the

situation. I have chosen to treat Schneider's articles and the public hearing as a relatively unified object of rhetorical analysis. In this situation, residents' comments and investigative reports share the same rhetorical purpose—exposing the existence and consequences of asbestos contamination—and address the same audiences—the general public and institutional decision makers. Moreover, because I am interested in conceptualizing juxtaposition as a rhetorical convention rather than in explaining the operation of a particular text, my approach to the texts foregrounds their similarities and downplays their differences. In this regard, my approach is akin to what James Jasinski has called “conceptually-oriented criticism.”<sup>14</sup>

### OBSTACLES TO EXPOSURE: MATERIAL UNCERTAINTY AND INSTITUTIONAL INERTIA

The main rhetorical obstacles faced by those addressing the situation in Libby are *uncertainty* about material conditions and relationships and *inertia* on the part of institutions responsible for investigating and addressing those conditions. These obstacles are characteristic of environmental health controversies, and as rhetorical scholars have noted, they present a daunting challenge for advocates trying to establish relationships between environmental degradation and human health. For example, Killingsworth and Palmer observe how advocates such as Rachel Carson, Paul Ehrlich, and Lois Gibbs get labeled “hysterical” on account of their provocative articulations of environmental problems to human health issues.<sup>15</sup> The charge of hysteria is used to insinuate that such linkages are figments of the imagination, illusions of certainty driven by raw emotion or sheer ideology. However, Killingsworth and Palmer argue that from a psychoanalytic perspective, these hysterical rhetorics can be interpreted productively as the return of repressed knowledge of environmental degradation. As they remark, “If the fervor of environmentalism seems irrational, that is because, in the view of the environmentalists, an ostensibly rational public discourse has neglected the signs of trouble for so long that only a cry of pain can break the public habit of inattention.”<sup>16</sup> Exposing environmental health problems, then, may demand provocative forms of rhetoric to garner public attention and puncture the prevailing assumption that no problems exist. Advocates face a significant rhetorical challenge, then, in overcoming scientific and public uncertainty about possible material relationships between environmental degradation and human health.

In addition to the obstacle of material uncertainty, environmental health advocates often face the related obstacle of institutional inertia. For example, Phaedra Pezzullo explores the strategies of environmental justice advocates in Warren County, North Carolina, whose rhetorical efforts prodded the state to clean up a local toxic landfill.<sup>17</sup> Pezzullo shows how residents “critically interrupt” the dominant success-story narrative about environmental activism in Warren County and open the possibility for a new conclusion to those narratives, one that would

include environmental cleanup. In this case, advocates faced the obstacle of institutional inertia and invoked an earlier promise of cleanup made by the governor in order to hold the state accountable and provoke institutional action. Similarly, Caitlin Wills Toker examines strategies of the comic frame used by Lisa Crawford, whose advocacy helped overcome institutional resistance to community concerns about cleanup of a former nuclear weapons facility in Fernald, Ohio. Toker's analysis shows how Crawford's rhetoric functioned to expose the "unjust, irrational and unfair nature"<sup>18</sup> of institutional practices and to generate new forms of negotiation and engagement between residents and institutional decision makers.

These studies, then, identify two key rhetorical obstacles faced by advocates when attempting to expose environmental health controversies: material uncertainty and institutional inertia. Scholars from a variety of disciplines confirm that these obstacles are typical features of environmental contamination situations. Regarding uncertainty, environmental psychologist Michael R. Edelstein explains, "Local environmental disasters are inherently fraught with uncertainty. The pollution is not easily identified nor are its characteristics easily described."<sup>19</sup> Sociologists Phil Brown, Steve Kroll-Smith, and Valerie J. Gunter concur in finding an "endemic presence of uncertain knowledge" in controversies surrounding environmental contamination and disease: "From the clinical literature on environments and diseases to the social science literature, the problem of knowing is never very far from the center of the discussion."<sup>20</sup> And political scientist Sylvia Noble Tesh shows how grassroots groups consistently enlist the support of "environmentalist" scientists to challenge the claims of uncertainty by government and industry scientists about environmental effects on human health.<sup>21</sup>

Both of these obstacles establish conditions that are ripe for rhetorical intervention. First, to the extent that rhetoric emerges to influence judgment under conditions of uncertainty, it can serve several important functions in environmental health controversies. It can establish certainty on some issues, expose uncertainty on others, and promote or thwart courses of action based on those certainties and uncertainties. Second, rhetorical intervention can help overcome the obstacle of institutional inertia on environmental health issues. In some instances, the obstacles of uncertainty and inertia are inextricably intertwined; the lack of certainty about contamination may result from institutional failure to investigate environmental conditions or act on citizen complaints. Even when a problem is apparent, institutions may not prioritize the problem as significant and may not consider the problem their responsibility to address. In these instances, rhetoric can function as a force for overcoming institutional inertia, motivating officials to take action with regard to some problem.

The combination of material uncertainty and institutional inertia constrains environmental health advocates in specific, characteristic ways. Uncertainty about material conditions can lead advocates to call on personal experience, which often

gets discredited by public officials who prefer to base action on “the facts.”<sup>22</sup> Similarly, an overreliance on personal experience can lead advocates to make unwarranted generalizations, what Lawrence Buell calls “a rhetoric of unequivocal assertion” in which citizen claims are buoyed more by moral outrage than by data and leave themselves open to charges of hysteria.<sup>23</sup> Institutional inertia also constrains rhetorical intervention. Victims and agency officials tend to perceive toxic situations from very different perspectives; as Edelstein suggests, “controversy is inherent in the relationship of toxic victims to their institutional context because there are differences in the way citizens and technocrats view risk.”<sup>24</sup> Due to these competing perceptions and discourses of risk, citizens often find themselves frustrated in their efforts to engage public institutions. In Edelstein’s view, “It is the realization that they cannot depend on government to solve their problems that often spurs the contaminated community’s residents to collective action aimed at forcing a solution.”<sup>25</sup> Indeed, citizens have found some success in overcoming these obstacles. As Fred Setterberg and Lonny Shavelson state, residents “have grappled with the uncertainties of science, pressed up hard against a resistant political establishment, and overcome their own lack of confidence and entitlement to speak out for commonsense solutions to complex, often immobilizing problems.”<sup>26</sup>

The Libby situation provides an exemplar of how advocates effectively addressed material uncertainty and institutional inertia to spur investigation of ongoing environmental and health problems. Advocates in Libby were able to reverse the dynamics of uncertainty typical of most environmental health controversies by demonstrating the pervasiveness of asbestos-related diseases among miners and their families. From those grounds, advocates had a powerful basis from which they could generate moral outrage at W. R. Grace and government agencies for their role in perpetuating exposure, and a compelling rationale for demanding that agencies address ongoing environmental exposure. Juxtaposition was a primary rhetorical convention in this process.

### **JUXTAPOSITION AND THE RHETORIC OF EXPOSURE**

The exposure of both material conditions and institutional inaction forms what I will call a rhetoric of exposure. This is a rhetoric of exposure both in form and in content. Formally, the rhetoric functions to expose problems, and the content or subject matter of those problems concerns residents’ exposure to asbestos. The purposes of this rhetoric are to establish certainty about past exposure and institutional failure, generate uncertainty about ongoing exposure, and ultimately motivate action by state institutions. Across its manifestations in specific texts, this rhetoric relies upon the contrast between victims’ knowledge of asbestos exposure and illness, and statements of officials from W. R. Grace and government officials about the extent of their knowledge of asbestos hazards.

The *juxtaposition* of these pieces of evidence is the central rhetorical convention of the discourses that exposed the asbestos problem in Libby. By juxtaposition, I mean the placement of apparently conflicting or contradicting pieces of evidence in close proximity to one another. With this definition, I align my notion of juxtaposition with the strategy identified by Anne Teresa Demo and Kimberly A. Powell in their analyses of social change rhetoric.<sup>27</sup> Juxtaposition creates the appearance of an incongruity between symbolic characterizations of reality, and it encourages audiences to take sides and make judgments in order to resolve the incongruity. As earlier research demonstrates, juxtaposition may operate in a liberatory or hegemonic fashion;<sup>28</sup> thus, it is important to continue examining instances of juxtaposition to further understand its rhetorical functions.

In relation to Libby, juxtaposition functions effectively to recontextualize institutional discourses and (in)actions, opening those discourses to questions and calling (in)actions into question. Residents and journalists juxtaposed institutional knowledge claims with evidence of past asbestos exposure to render institutional knowledge uncertain. Thus, as Demo illustrates in her analysis of the Guerrilla Girls, juxtaposition “exposes . . . hypocrisies” and can function to “critique . . . institutions.”<sup>29</sup> The Libby rhetoric confirms these functions and illustrates how juxtaposition can help reverse the dynamics of uncertainty that are typical of environmental health controversies.

Further, juxtaposition functions to highlight the moral dimension of public controversies. This is the case in Libby, and it is especially characteristic of the two types of discourse I analyze here, investigative journalism and advocacy about toxicity. Other scholars have noted that these types of discourse can hardly avoid giving moral meaning to factual evidence. In both, moral meanings can be generated as the juxtaposition of evidence—words, actions, personal experience, expert testimony, official documents, and the like—helps to establish protagonists and antagonists in controversies. For example, regarding discourse about toxicity, Buell has argued that one of its chief characteristics is “the moral passion of a battle between David and Goliath.”<sup>30</sup> For Buell, this motif aligns the interests of workers and citizens against forces of capitalist development, using a “strategy of channeling communal hostility by linking environmental reform with social justice against ‘the common enemy’ of corporate greed.”<sup>31</sup> Similarly, in investigative journalism, the David/Goliath motif resonates with the rhetorical constitution of “villainy and victimization” as identified by communication scholars James S. Ettema and Theodore L. Glasser.<sup>32</sup> These authors interpret investigative news stories as rhetorical constructions that, like advocacy about toxicity, function as a powerful form of public moral discourse. These stories rely on two important rhetorical features: “the innocence of those good citizens who have been victimized by some systemic problem, and the guilt of those reprehensible lords of civic vice (often, though not always, bureaucrats) who have caused the problem or else failed to address it.”<sup>33</sup> Through

the juxtaposition of victims and villains, stories begin to take on a moral meaning; events get framed “not merely as an example of a systemic problem but as a moral outrage.”<sup>34</sup> Thus, juxtaposition provides the formal structure for developing both the David/Goliath and victim/villain themes, producing a moral framework for understanding unacknowledged environmental health problems.

The juxtapositions in the Libby rhetoric present a useful case for rethinking the moral implications of particular rhetorical conventions. As noted above, juxtaposition can be understood as an example of perspective by incongruity. In Denise M. Bostdorff’s words, “perspective by incongruity involves altering an orientation or expectation by viewing an incongruity, which is inconsistent or not in agreement.”<sup>35</sup> The Libby rhetoric exemplifies this concept, as public discourse consistently attempts to alter orientations toward institutional discourse (claims made by W. R. Grace or government officials) by juxtaposing the latter with conflicting evidence.<sup>36</sup> In Libby, as in other cases, perspective by incongruity foregrounds the dominant discourse used to characterize some situation and then views the situation from another perspective, serving to “remoralize” by accurately naming a situation already demoralized by inaccuracy.<sup>37</sup>

Juxtaposition, then, can serve a socially beneficial purpose to the extent that it remoralizes a situation. The rhetoric that exposes the Libby situation does exactly this. The stark oppositions and clear moral lines drawn by the rhetoric surrounding Libby helped to accurately name a situation that for decades had gone unnamed. Consequently, the juxtapositions illustrated here provide an example of “ecospeak” that is productive and commendable.

### JUXTAPOSITION IN INVESTIGATIVE JOURNALISM: “UNCIVIL ACTION”

The rhetoric of exposure is most apparent in the narratives that juxtapose the statements and actions of W. R. Grace and government officials against concrete examples of sick miners, personal testimony from former mine workers and their family members, and expert testimony from doctors. Schneider’s “Uncivil Action” series in the November 18 and 19 editions of the *Seattle Post-Intelligencer* provides several examples of how journalistic narratives employ multiple forms of evidence to construct an article that constitutes certainty about “the facts” of the situation and arranges those facts in a way that summons moral outrage over institutional failure.

Schneider’s introduction in the main *P-I* article of November 18 frames the situation in terms of “killing” and amplifies the facts of knowledge and inaction to generate a clear set of victims and villains:

First, it killed some miners.

Then, it killed wives and children, slipping into their homes on the dusty clothing of hard-working men. Now the mine is closed, but in Libby, the killing goes on. The



W. R. Grace Co. knew, from the time it bought the Zonolite vermiculite mine in 1963, why the people in Libby were dying. But for the 30 years it owned the mine, the company did not stop it.

Neither did the governments.

Not the town of Libby, not Lincoln County. Not the state of Montana, not federal mining, health and environmental agencies, not anyone else charged with protecting the public health.<sup>38</sup>

This introduction ends with the quotation in which Schneider characterizes the story as the “monumental failure” of government to protect citizens from “corporate misdeeds.” This broad framing of “the story of Libby” immediately identifies the victims and villains in the story, with government’s role falling somewhere outside of this dichotomy. That role is clarified in the November 19 article; the November 18 article focuses primarily on W. R. Grace.

The moral stance of the “killing” narrative that opens the November 18 article is supported by the juxtaposition of numerical evidence and medical testimony with a statement by a W. R. Grace official. Schneider states that the paper’s investigation

has shown that at least 192 people have died from the asbestos in the mine’s vermiculite ore, and doctors say the toll could be much higher. The doctors and Libby’s long-suffering families say that at least another 375 people have been diagnosed with fatal diseases caused by this silent and invisible killer. Dr. Alan Whitehouse, a lung specialist from Spokane and an expert in industrial diseases, said another 12 to 15 people from Libby are being diagnosed with the diseases—asbestosis, mesothelioma, lung cancer—every month.<sup>39</sup>

Schneider juxtaposes these numbers and doctor claims with the company’s discourse: “The W. R. Grace Co. says it did no harm. ‘Obviously we feel we met our obligation to our workers and to the community,’ said Jay Hughes, Grace’s senior litigation counsel.” The juxtaposition of the weighty numerical evidence and medical testimony with Hughes’s self-satisfied comments encourages audiences to interpret skeptically the claim that W. R. Grace had met its obligation. Coupled with the initial narrative, the notion that Libby’s families have been “long-suffering” and that their diseases were caused by a “silent and invisible killer,” this juxtaposition underscores the innocence of victims and characterizes Grace as an unsympathetic corporation.

The villainy of W. R. Grace is strengthened by the story of Helen Bundrock’s family. It is the first personal narrative we see in the article, and it functions almost as a representative anecdote of the Libby situation. The section is entitled “A Family’s Nightmare,” a fitting frame given the fact that “six of the family’s seven members have been diagnosed with asbestos-related disease.” Schneider uses

Helen's words to describe her late husband Art's pain—from the disease and from the knowledge that he brought home asbestos dust to his family. Then, the article moves toward Helen's indictment of W. R. Grace, in which Helen juxtaposes the words and actions of the company with the effects on her son.

She said that managers at the mine told miners that the dust was harmless—a claim echoed by other miners and denied by W. R. Grace. "They lied, but they did worse than that," she said, talking about when her son, now 46, went to work for Grace. "Bill had to get a chest X-ray before they hired him. That X-ray showed he had asbestosis and they never told him. They just let him go to work up there with all that poison. They never told him for the 10 years he worked there."<sup>40</sup>

Helen's account depicts W. R. Grace as lying, which is corroborated by Schneider's insertion that this claim was corroborated by miners and denied by Grace. Moreover, W. R. Grace's villainy comes not only from lying about specific facts, but in maintaining that lie over time, perhaps over the stretch of multiple managers such that Grace the company is to blame, not a particular person. Finally, this juxtaposition heightens the innocence of the victim, who did not know he was sick and yet was knowingly exposed to "all that poison." In this anecdote, then, the juxtaposition of the company's words and actions with the ultimate effects on human health work rhetorically to heighten outrage toward W. R. Grace and emphasize the innocence of the victim.

The latter half of the article juxtaposes several types of evidence within a narrative to establish detailed facts about knowledge of asbestos hazards and further generate moral outrage at mining companies and government agencies. Noting first that the paper "examined 6,000 pages" of documents and "interviewed 110 people" with connections to the mine, Schneider then places multiple pieces of evidence in proximity to one another. He says that in 1956 the Montana Board of Health reported that "asbestos dust in the air is of considerable toxicity," and that two and a half years later, the board's follow-up report listed four single-spaced pages of deficiencies and repeated a warning that inhalation of asbestos dust would lead to asbestosis. These statements from government reports are followed with the fact of the first diagnosis of asbestosis in a Libby miner (Glenn Taylor) in 1959, and testimony from another miner (Les Skramstad) describing work he was directed to do at the mine involving raw asbestos. By juxtaposing this firsthand evidence from miners with the state's discourse, the narrative suggests that miners were working with asbestos and getting sick from it even as the State of Montana was telling the company that their asbestos dust was a health hazard.

This juxtaposition of worker exposure to asbestos with institutional knowledge of asbestos becomes more appalling with a subsequent example of what W. R. Grace knew about asbestos and disease. First, we see the words of a 1969 internal Grace

report that states “tremolite is definitely a health hazard.” Then, we read the statement of a local doctor whose examination of x-rays found “a great deal of lung abnormalities among the employees . . . far in excess of what one would find in examining the normal population.” This movement back and forth between a variety of forms of evidence—government reports, miners’ evidence, company documents, medical statements—allows Schneider to generate a compelling account of factual knowledge that W. R. Grace had about asbestos problems at the Libby mine. The account composes a set of consistent signs of asbestos hazards, fortifying the appearance of certainty about those hazards. Moreover, these consistent signs show that W. R. Grace officials certainly knew of the hazards.

This constitution of certainty about asbestos hazards implies a moral judgment. The overall narrative depicts several instances in which W. R. Grace knew of the problem but neither acted to protect workers nor told workers about their own medical condition. W. R. Grace was in the wrong because they knew of the asbestos problems, knew of the related health problems, and failed to disclose this knowledge or to act upon it. Through the consistent set of juxtapositions in this story, W. R. Grace gets framed as a villain, and miners such as Taylor and Skramstad as unknowing, innocent victims. This moral judgment emerges implicitly from the organization of evidence from multiple voices in the story and is supported explicitly by an outside source, Grace’s insurance company. Schneider cites a 1969 letter from Maryland Casualty to W. R. Grace that states, “Certainly when an X-ray picture shows a change for the worse, that person must be told. . . . Failure to do so is not humane and is in direct violation of federal law.”<sup>41</sup> This evidence shows that it is not merely Schneider’s personal moral judgment intruding on the story, but that others raise the issue of moral obligation as well as legal transgression. Thus, the rhetoric of exposure flows seamlessly from factual knowledge to moral judgments, offering readers a solid basis for criticism of W. R. Grace.<sup>42</sup>

Alongside the exposure of W. R. Grace, the rhetoric of the Libby situation also criticizes government agencies that knew of problems but took little preventive or investigative action. The government angle is at the heart of the November 19 *P-I* article, and is echoed in accounts in the *Missoula (Montana) Missoulian* and much later articles in the *New York Times* that focus specifically on the EPA. Schneider’s November 19 article displays conventions similar to those of the previous day’s story, juxtaposing comments from local, state, and federal agencies with firsthand testimony of Libby residents who have asbestos-related health problems.

The November 19 headline signals the basic juxtaposition at work in Schneider’s article: “While people are dying, government agencies pass buck.”<sup>43</sup> The article’s movement between the words of asbestos victims and the statements, actions, and inactions of government agencies makes clear how human lives have been damaged by the institutions that are supposed to serve them. Schneider’s framing of the problem blunts the villainy of any specific agency, however, and

instead indicts government as a whole. The story of Libby, again, is a story of systemic institutional failure to address an environmental health problem.

The lead of the article emphasizes the buck-passing noted in the story's headline, playing upon a commonsense distinction between words and actions.

They all say somebody should do something.

City, county, state and federal officials agree that someone should follow up. Inquire. Ask questions about the hundreds of people from Libby who have either died or been diagnosed with fatal diseases after being exposed to tremolite asbestos from a vermiculite mine.

Somebody, they say, should investigate disturbing indications that Libby may still be at risk. But every official and every agency has a reason why, so far, they have not been that somebody.<sup>44</sup>

This framing of the problem sets the stage for two important features of the rest of the article: results of soil and air samples taken near the mine by the *P-I* showing actionable levels of asbestos, and comments from an array of agency officials disclaiming responsibility for asbestos problems. By juxtaposing these comments with concrete evidence of potential ongoing asbestos hazards and actual ongoing health problems, Schneider's article constitutes a tension between material conditions and institutional inertia that attempts to provoke the indignation of audiences and implies that action needs to be taken to adequately address those conditions.

This tension works rhetorically by generating uncertainty about the claims of state institutions. In contrast to the construction of W. R. Grace's and the government's certain knowledge about past asbestos hazards, the article depicts a current situation marked by considerable uncertainty. Early in the article, Schneider states that as the death and illness statistics grow,

(S)ome townspeople are finding questions none of the government agencies has dared to seek answers for:

- Are the tons of asbestos debris from the mine still killing people?
- Are people being exposed today, breathing in death sentences that will be carried out halfway into the next century, after decades of agonizing illness?
- Are there dangerous levels of asbestos in the air, in the ground, in the waters of the Kootenai River?
- Are the children and grandchildren of the sick and dying, who never saw the mine in operation, going to die from its legacy?<sup>45</sup>

After quoting two EPA officials who reviewed the soil samples and confirmed the need for further investigation, the article further heightens uncertainty by introducing a 34-year-old logger, Shane Whitmarsh. He never worked at the mine, but he has had pneumonia three times in one year. Whitmarsh is uncertain whether his

illnesses are related to asbestos; through the voice of his wife, the story implies that he is in denial about the source of his persistent illness. However, he does want certainty about the safety of his children: "That old vermiculite is all over this town. Has anyone checked to see what happened to the asbestos that's part of it? Are our kids safe?"<sup>46</sup> Through this juxtaposition of asbestos evidence with a resident and his unexplained illness, the article adds to the initial questions and bolsters the sense of uncertainty about current asbestos exposure.

The article amplifies this uncertainty as it introduces statements from agency officials. No agency at any level is able make claims about asbestos in Libby with any degree of certainty, and the evasion of responsibility that echoes across the statements suggests that officials have not even tried to resolve uncertainties. Moving from the local to the federal level, Schneider quotes a series of officials to illustrate the buck-passing of the article's headline.

First, Tony Berget, Libby's mayor: "We know what happened in the old days, the miners coming home covered with white dust. But I don't think there's anything to worry about now. If there was a problem, I'm sure the county or the state people would have told us."

Then, Kendra Lund, a county environmental official who claims the county hasn't done any testing for asbestos "for years. We don't have the facilities to test for asbestos fibers. These are not county issues, but state issues."

The mining supervisor at the Montana Department of Environmental Quality: "We keep hearing about all these people from Libby who are sick or have died, but no one that I know from the state has any real information."

A state epidemiologist: "It sounds like the asbestos problem in Libby may have fallen between the crack of 'whose territory is it?'"

Finally, Schneider quotes John Wardell, coordinator of the EPA in Montana: "A lot of folks are saying EPA should do this or that, but not one of them, the town, the county or the state has written us a letter or called and asked for our help. We cannot go out there unless we're invited."<sup>47</sup>

Through repetition, these comments amplify the uncertainty about the extent and severity of material problems, as well as related uncertainty about institutional responsibilities, all of which has led to overall institutional inertia.

As these comments are juxtaposed with the voices of Libby residents who have health problems, the uncertainty of state officials takes on moral weight. While Whitmarsh's pneumonia is not clearly linked to asbestos exposure, a more certain case follows the comments from an agency official. Carrie Detrick, a 67-year-old woman who never worked at the mine, has asbestosis. "I just got it by living around here. It's all over the town. . . . I can't understand why the government doesn't do anything and why the newspaper doesn't print a word. It's like it's a dirty secret that nobody wants to talk about."<sup>48</sup> The juxtaposition of previous statements of institutional uncertainty with residential certainty about the

pervasiveness of contamination reveals a moral problem, and Detrick herself functions as evidence of the effects of government inaction. Her comments, which conclude the article, make the link between institutional uncertainty and health effects in a much more pointed way. "If the government says there is nothing wrong here, they're crazy. . . . I'm going to die. Let the government come to my funeral if they need proof."<sup>49</sup> The certain end that Detrick faces exposes the moral failure of the government to protect the residents of Libby and provides a powerful impetus for institutional action.

### JUXTAPOSITION IN RESIDENTS' RHETORIC

Carrie Detrick's comments display how juxtaposition works in the discourse of many Libby residents as they address asbestos exposure. Their comments in Schneider's articles and at the public hearing feature juxtaposition as a convention that demarcates certainty and uncertainty about asbestos exposure. Moreover, their advocacy in the public hearing makes explicit the implicit message of Schneider's articles, as residents address agency officials face-to-face and issue forceful calls for action.

The Montana DEQ bond reclamation hearing was held December 1, 1999, in Memorial Gymnasium in Libby. In the fall of 1999, the DEQ issued notice that they were going to return the remainder of the reclamation bond, \$67,000, to the company that currently owns the mine site.<sup>50</sup> This notice prompted Gayla Benefield to explore the site herself to see how well it had been reclaimed. At the hearing, Benefield spoke about her experience, and her testimony provides a powerful example of how juxtaposition affects the rhetorical dynamics of certainty, uncertainty, and moral outrage.

Benefield's testimony juxtaposes public accounts of reclamation efforts with her own experiential knowledge to expose both material and institutional problems. She begins her testimony by reading a 1993 article from a Libby newspaper about the reclamation. The article describes elk and deer roaming in areas that used to have mine tailings and heavy equipment on it. The article itself relies on juxtaposition as it contrasts depictions of the old mine site with visions of pristine nature—lush grass, green meadows, wild deer and elk—to show that reclamation can work. Benefield's reading of the article ends with a quotation from W. R. Grace's local representative Alan Stringer: "We have proven that a mine can exist in scenic areas," Stringer said, "and that we can succeed in closing it, removing it from the face of the earth."<sup>51</sup> Grace even received an award for its reclamation efforts. However, Benefield counters this account with her personal experience. "I drove up there last fall. I was shocked. I drove up, I saw the tailings pile, I saw the pond. It did not match everything else. It was nothing but a great big tailings pile going into the water."<sup>52</sup> Benefield's personal experience was corroborated by Roger Sullivan, a Kalispell

lawyer who has hundreds of clients in Libby and who won a case against W. R. Grace for the wrongful death of Benefield's mother. Sullivan's opening presentation at the hearing included comparison photographs of the tailings pile before and after the operation of the mine and estimates that there were "approximately five billion pounds of asbestos in the tailings pile that we looked at."<sup>53</sup> Reinforced by this evidence, Benefield's juxtaposition of public accounts and personal experience provides a powerful indictment of the proud claims of W. R. Grace officials.

Benefield's initial juxtaposition exposes the material dimension of the problem, but she goes on to expose institutional problems of uncertainty and unresponsiveness:

I called the DEQ about it. I saw that a bond was being released. I called the DEQ and they had little or no information on it. I called the EPA. There again, they had little or no information on it at all. I asked for the DEQ report on it. I read the report. The report was full of inconsistencies. What I read you right here is basically what the report said. What is actually up there is entirely different.<sup>54</sup>

Here, Benefield places institutional uncertainty up against the certainty of her personal experience at the mine site and her personal experience of a "family history full of asbestosis." Given her certainty about past exposure, its link to asbestosis in her family, and her experiential knowledge about the mine site, Benefield's comments provide a solid ground for issuing a demand that DEQ and EPA further investigate the situation.

A more personal and stark juxtaposition comes later in the meeting from Pat Vinion, whose father worked at the mine and who himself is diagnosed with asbestosis. As with Benefield's comments, Vinion juxtaposes the assurances of safety with the tangible effects derived from personal experience.

When my father was a young man they told him that you can't eat enough of that stuff. It won't bother you. Don't worry about it. Well, he's dead. When I started feeling sick when I was younger they said, you never worked there. It's not possible. You can't get it that way. You never worked there. Well, it's more than possible. I am dying from it.<sup>55</sup>

While Vinion's comments do not specifically identify the "they" to whom he refers, the sharp contrast between conventional wisdom about asbestos and the material effects of exposure further builds the case that agency officials do not have certain knowledge about asbestos. Therefore, they need to reconsider what they know about the relationship between asbestos and human health.

Environmental advocates also resisted institutional inertia. Bonnie Gestrung, spokesperson for the Montana Environmental Information Center, makes explicit the implicit indictment of "the system" in Schneider's articles. Like Benefield and

Vinion, she questions the assurances made in official discourse by juxtaposing them with the fact of exposure, disease, and death. Schneider reports her “angrily” delivering her remarks.

I got a hand-out when I entered that says that—from the Department that says that it is apparent that the State and Federal agencies have worked with W. R. Grace to insure the ore processing facilities complied with statutes and standards. And I can’t understand how this can possibly be. How can 300 people—hundreds of people be exposed, have asbestosis, have died from this and all the statutes and standards have been complied with?<sup>56</sup>

Gestring’s question makes plain the incongruity between abstract legal criteria and concrete health effects, turning critical scrutiny toward the statutes and standards that allowed such an environmental health hazard to go unchecked.

In all these comments, advocates appealed to the certainty of material conditions, both in terms of environmental degradation and human health, and juxtaposed those conditions with official discourses in order to expose the deficiency of those discourses, raise uncertainty about ongoing problems, and motivate institutional action. Benefield’s comments expose the *environmental* hazards still lurking in Libby; Vinion’s comments expose the *health* hazards that can result from environmental exposure to asbestos; and Gestring’s comments expose the *institutional* hazards that obscure government recognition of the environmental and health hazards in Libby. Taken together, these comments constitute a powerful force for overcoming the institutional inertia that advocates had faced for several years.

The comments particularly gain force by generating a sense of moral outrage about institutional inertia. To be sure, the moral force of residents’ rhetoric stems from the tragic health consequences already occurring in Libby, the sense that those problems are likely to grow over several decades, and the possibility that continued exposure could harm children in the community.<sup>57</sup> But it is the framing of those elements through the convention of juxtaposition that makes their moral character emerge and applies moral force to state institutions. The juxtaposition of environmental and health effects with statements from corporate and government actors constitutes a sense that W. R. Grace officials have lied to residents, and that government agencies have failed in their duties to warn and protect citizens. While the State is not villainized to the extent that W. R. Grace is, these juxtapositions contribute to the perception that a moral bond between the State and its citizens has been violated, and that the State must act to reestablish that bond.

Schneider’s articles and public comments at the hearing were highly effective in jostling state institutions into action. The EPA and ATSDR immediately sent officials to Libby as a result of Schneider’s articles.<sup>58</sup> These officials attended the public hearing along with the top six officials of Montana DEQ, several state legislators



and state health officials, and approximately five hundred residents. Subsequently, the federal agencies engaged in extensive environmental testing, health screenings, and remedial action that continues today. Ongoing public advocacy by local residents and persistent media coverage by Schneider and reporters for several Montana news outlets persuaded Governor Judy Martz to change her initial position that W. R. Grace should clean up Libby. In a surprising decision, Martz requested in December 2001 that Libby be given expedited or “silver bullet” priority for listing on the Superfund National Priorities List. The EPA approved removal of Zonolite insulation (made from Libby vermiculite) from houses in Libby, a dramatic reversal of long-standing EPA policy that asbestos products should be managed “in place.” Clearly, public discourse had a significant impact on institutional action in Libby.

### **JUXTAPOSITION AND ENVIRONMENTAL RHETORIC: RETHINKING THE DICHOTOMIES OF “ECOSPEAK”**

The preceding analysis demonstrates that the rhetoric surrounding Libby relies heavily on juxtaposition to shed light on unacknowledged effects of asbestos exposure and to generate outrage that would pressure institutions to act. Consequently, the Libby situation invites reflection on the rhetorical dynamics of juxtaposition. It also encourages reconsideration of a central issue in the study of environmental rhetoric: the appropriateness of the moralizing, dichotomous rhetoric that Killingsworth and Palmer label “ecospeak.”

First, in the Libby rhetoric, juxtaposition recontextualizes institutional discourses and renders them uncertain. In both Schneider’s articles and public advocacy, various statements of knowledge and assurances of safety by W. R. Grace officials and government officials are undermined as they are juxtaposed with the firsthand accounts of miners and family members. Their experiences—of exposure, disease, and death—provide a compelling contrast to the discourse of established institutions. Hence, this study illustrates how rhetorical intervention can expose the uncertainties of “official” knowledge and use that exposure as a basis for advocating public action.<sup>59</sup> Juxtaposition can be an effective rhetorical convention for exposing uncertainty.

The case of Libby, then, illustrates how rhetorical intervention can reverse the dynamics of the uncertainty that often accompanies environmental health controversies. In this instance, uncertainty functioned less as a negative constraint to be overcome through public advocacy, and more as a positive opportunity that could be used to motivate public action. The public discourse surrounding Libby reversed the dynamics of uncertainty by shifting the burden of proof onto the State, creating the need to provide an account as to why they failed to act in the face of clear public health problems. Also, it created the need for public agencies to execute studies that

would resolve their own uncertainty about conditions in Libby. In contrast to other environmental health controversies, personal experience was not discredited, in part because of the pervasiveness of disease but also because institutions' prior knowledge claims had been debunked. Thus, institutions had little ground from which they could effectively counter the claims of residents. Instead, uncertainty at all levels of government, juxtaposed with the certainties of disease and death in Libby, put government officials in a position that demanded remedies rather than refutation.

Second, in the Libby rhetoric, juxtaposition generates outrage by creating the appearance that a clear moral order has been violated. The moral dimension of this rhetoric is most apparent in the Schneider articles, where W. R. Grace is clearly positioned as a villain in contrast to victims in Libby. Their victim status is constituted by juxtaposing the knowledge that W. R. Grace and government officials had with the lack of knowledge on the part of miners and residents, and the subsequent physical and emotional traumas they have undergone. The moral framing carries over into the hearing, too. Advocates pick up on the "government failure" motif in order to influence agency officials to redeem themselves and thereby fulfill their moral duty as protectors of public safety. Thus, this study confirms how public discourse "realizes" innocence and guilt by rendering accounts of reality that are "intellectually comprehensible and at the same time morally meaningful."<sup>60</sup>

The case of Libby, then, illustrates how juxtaposition can structure moral meaning in a way that pressures institutions to overcome inertia and address previously unrecognized environmental health problems. But in doing so, it forces us to confront the crucial issue of ecospeak as a mode of environmental rhetoric. One might argue that the moral meanings constructed through juxtaposition merely reinforce the "oversimplified dichotomy" that Killingsworth and Palmer find characteristic of ecospeak.<sup>61</sup> Arguably, the binary constructions of David/Goliath and victim/villain identified by Buell and by Ettema and Glasser (and found in the Libby rhetoric) are precisely the object of Killingsworth and Palmer's criticism. The latter claim that environmental discourse is plagued by a tendency toward an "allegory of good guys and bad guys, demanding of the observer a value judgment about the goodness or badness of each side" and "a ready-made stock of plots and characters" that foreclose possibilities for social transformation.<sup>62</sup> The rhetoric exposing the situation in Libby surely partakes of these tendencies. Moreover, while the juxtaposition of resident voices with official discourses may function as a form of critical rhetoric, it also may reify the dichotomy between lay experience and ostensibly scientific discourse, branding the former the product of "hysterics" and "troublemakers."

While dichotomies have their drawbacks, I believe these drawbacks must be considered in the context of particular situations. Exposing previously unrecognized problems may require drawing sharp dichotomies between perpetrators and victims, between abstract explanations and lived experience, between official rhetoric and material reality. The need to avoid dichotomous thinking may be outweighed

by the need to gain recognition, provoke outrage, and motivate action. These needs can only be weighed in relationship to the specific situation and the sense of advocates that it is time for officials to face the problem and take action.

In some cases, then, the dichotomous moral framing constituted through juxtaposition may be a timely and appropriate gesture, a crucial catalyst for motivating action. Libby is one of those cases. Clear identification of distinct identities and interests, discrete categories of right and wrong, and glaring distinctions between rhetoric and reality were needed in order to overcome the identifications, concordances, and unspoken consensus that prevented public recognition of the problem in the first place.

Moreover, the particular style of ecospeak in the Libby rhetoric draws sharp divisions while also cultivating the crucial audience: government officials. Certainly, the public hearing explicitly positions these officials as a primary audience. But the newspaper articles, too, have government as a key audience. Robert Miraldi draws attention to this audience in relation to the muckrakers. "What is true today—and what was emerging also at the turn of century—is that government, more than the public, responds especially and vigorously to journalistic exposés."<sup>63</sup> Ettema and Glasser concur, arguing: "If powerful interests are to be called most fully to account, journalists must draw other social institutions, especially government into a dialogue—particularly if they are to engage in any discussion of either punishment or policy reform. The initial investigative report must generate enough of a charge to compel officials to respond."<sup>64</sup> As mentioned earlier, EPA and ATSDR officials reported going to Libby as a direct result of Schneider's series. The moral outrage, the obvious regulatory failure, and the challenge to long-standing scientific assumptions about asbestos exposure constituted a compelling set of appeals that moved elected representatives, agency officials, and scientists to investigate Libby. Thus, even as the Libby rhetoric exposed the failures of government, it did so in a way that provoked government officials to make up for those failures by aggressively engaging the problems in Libby.

To be sure, dichotomous moral framings of environmental controversies can be debilitating. But that judgment should be made on a case-by-case basis. Arguably, the juxtapositions of the Libby rhetoric did not produce a debilitating case of ecospeak. Rather, they were an effective and morally appropriate response to environmental injustice.

## NOTES

1. Mark Levine, "Killing Libby," *Men's Journal*, August 2001, 77+.
2. This figure is stated in Peter Kostic, "Study to Determine Relationship Between Years of Employment, Age, Smoking Habits and Chest X-Ray Findings. Zonolite/Libby Employees," December 1969, in author's possession.

3. Andrew Schneider, "A Town Left to Die," *Seattle Post-Intelligencer*, November 18, 1999. Accessed July 9, 2001, available at <<http://seattlepi.nwsource.com/uncivilaction/lib18.shtml>>
4. U.S. Agency for Toxic Substances and Disease Registry, *Year 2000 Medical Testing of Individuals Potentially Exposed to Asbestiform Minerals Associated with Vermiculite in Libby, Montana* (Washington, D.C.: U.S. Department of Health and Human Services, August 23, 2001).
5. U.S. Agency for Toxic Substances and Disease Registry, *Health Consultation: Mortality from Asbestos in Libby, Montana* (Washington, D.C.: U.S. Department of Health and Human Services, December 12, 2000).
6. Benjamin F. Wake reported this to Zonolite officials, in Montana State Board of Health, *A Report on an Industrial Hygiene Study of the Zonolite Company of Libby, Montana* (Helena: Division of Disease Control, August 8–9, 1956).
7. The earliest report that provides data on amounts of asbestos dust specifically is Montana State Board of Health, *A Report on an Industrial Hygiene Study of the Zonolite Company of Libby Montana* (Helena, Mont.: Division of Disease Control, January 12, 1959). In 1961, Earl Lovick, a manager at Zonolite, wrote to a colleague: "There is a relatively large amount of asbestos dust present in our mill and this is difficult to control." E. D. Lovick to C. A. Pratt, Vice President, Western Mineral Products Company, June 14, 1961. Lovick's assertion was confirmed to the State Board of Health in 1962; the U.S. Public Health Service found that a sample of airborne dust from Libby contained "40% tremolite asbestos." Robert G. Kennan to Benjamin F. Wake, Industrial Hygiene Engineer, Montana State Board of Health, April 13, 1962. State Board of Health reports in 1962, 1963, 1964, and 1968 (both before and after W. R. Grace's acquisition of Zonolite in 1963) show results exceeding maximum allowable concentrations.
8. In 1959, an analysis of chest x-rays of 130 Zonolite workers showed 48 with abnormal chests, approximately 37 percent. J. M. Cairns, M.D., to Raymond A. Bleich, Local Manager, Zonolite Company, Libby, Montana, July 20, 1959. In 1965, another analysis showed that of 39 hourly employees with over 10 years of experience, 18 (fully 46 percent) had abnormal chests. The 1969 study cited in the first paragraph states that rates of occurrence of abnormal chests were 45 percent for those with 11 or more years of service. However, interpretations of these early studies did not assert significant correlations between asbestos exposure and lung disease because high rates of smoking among employees presented a confounding factor.
9. The first case posing a potential link between Libby asbestos exposure and disease is the diagnosis of questionable asbestosis in Glenn Taylor. His case is described in Montana State Hospital—Galen Campus Records, "Discharge Summary," March 20, 1959. Taylor's case is acknowledged by company officials as a "positive indication that constant exposure to dust may be catching up with mill employees" and "that a problem may exist." R. A. Bleich to J. A. Kelley, April 22, 1959. Taylor died in 1960. In 1964 several additional cases emerged. The case of Eitel Ludwig is described in Woodrow Nelson, M.D., to Maryland Casualty Company, February 14, 1964. The case of Dennis Cleary is addressed in C. A. Pratt to J. A. Kelley, General Manager, Zonolite Division, April 2, 1964. A spirometry test of 140 Zonolite employees that year showed that 21 percent displayed "definite pneumoconiotic changes," and that "the measured respiratory dysfunction in the positive group is of such severity that I would conclude that a serious hazard from pneumoconiosis exists to the employees at Libby." Dr. W. Nelson, "Spirometry Tests, Libby Zonolite Employees," 1964, in author's possession.
10. Several letters circulated among W. R. Grace managers in late 1968 and 1969 on these issues, as they deliberated about how to respond to inquiries from public health agencies and about potential public concern about products made with Libby vermiculite. N. F. Bushell to R. W. Sterrett, General Manager, Zonolite Division, December 10, 1968; R. E. Schneider to "Distribution List," December

- 13, 1968; R. E. Schneider to R. M. Vining, March 3, 1969; H. A. Brown to R. M. Vining, October 15, 1969, in author's possession.
11. Even an abbreviated list of the federal and state agencies that failed in their oversight of operation and reclamation of the mine would include: Montana State Board of Health, Montana Department of Environmental Quality, Montana Department of State Lands, U.S. Public Health Service, National Institute for Occupational Safety and Health, Occupational Safety and Health Administration, the Bureau of Mines, the Mine Safety and Health Administration, and the Environmental Protection Agency.
12. Schneider, "A Town Left to Die."
13. M. Jimmie Killingsworth and Jacqueline S. Palmer, *Ecospeak: Rhetoric and Environmental Politics in America* (Carbondale: Southern Illinois University Press, 1992).
14. James Jasinski, "The Status of Theory and Method in Rhetorical Criticism," *Western Journal of Communication* 65 (2001): 249–70.
15. M. Jimmie Killingsworth and Jacqueline S. Palmer, "The Discourse of 'Environmentalism Hysteria,'" *Quarterly Journal of Speech* 81 (1995): 1–19.
16. Killingsworth and Palmer, "The Discourse of 'Environmentalism Hysteria,'" 3.
17. Phaedra Pezzullo, "Performing Critical Interruptions: Stories, Rhetorical Invention, and the Environmental Justice Movement," *Western Journal of Communication* 65 (2001): 1–25.
18. Caitlin Wills Toker, "Debating 'What Ought To Be': The Comic Frame and Public Moral Argument," *Western Journal of Communication* 66 (2002): 72.
19. Michael R. Edelstein, *Contaminated Communities: The Social and Psychological Impacts of Residential Toxic Exposure* (Boulder, Colo.: Westview Press, 1988), 75.
20. Phil Brown, Steve Kroll-Smith, and Valerie J. Gunter, "Knowledge, Citizens, and Organizations: An Overview of Environments, Diseases, and Social Conflict," in *Illness and the Environment: A Reader in Contested Medicine*, ed. Steve Kroll-Smith, Phil Brown, and Valerie J. Gunter (New York: NYU Press, 2000), 16.
21. Sylvia Noble Tesh, *Uncertain Hazards: Environmental Activists and Scientific Proof* (Ithaca, N.Y.: Cornell University Press, 2000).
22. Tesh, *Uncertain Hazards*, 110.
23. Lawrence Buell, "Toxic Discourse," *Critical Inquiry* 24 (1998): 661.
24. Edelstein, *Contaminated Communities*, 129.
25. Edelstein, *Contaminated Communities*, 81.
26. Fred Setterberg and Lonny Shavelson, *Toxic Nation: The Fight to Save Our Communities from Chemical Contamination* (New York: Wiley, 1993), 265–66.
27. Anne Teresa Demo, "The Guerilla Girls' Comic Politics of Subversion," *Women's Studies in Communication* 23 (2000): 133–56; Kimberly A. Powell, "The Association of Southern Women for the Prevention of Lynching: Strategies of a Movement in the Comic Frame," *Communication Quarterly* 43 (1995): 86–99.
28. See Helene A. Shugart, Catherine Egley Waggoner, and D. Lynn O'Brien Hallstein, "Mediating Third-Wave Feminism: Appropriation as Postmodern Media Practice," *Critical Studies in Media Communication* 18 (2001): 194–210. However, these authors conceptualize juxtaposition as synonymous with postmodern pastiche, a practice much different from those analyzed in this study and that of Demo and Powell. Further research might consider how juxtaposition functions differently in relation to different audiences, purposes, subject matter, situations, or other rhetorical elements.

29. Demo, "Guerilla Girls," 147, 149.
30. Buell, "Toxic Discourse," 651.
31. Buell, "Toxic Discourse," 651.
32. James S. Ettema and Theodore L. Glasser, *Custodians of Conscience: Investigative Journalism and Public Virtue* (New York: Columbia University Press, 1998).
33. Ettema and Glasser, *Custodians of Conscience*, 115.
34. Ettema and Glasser, *Custodians of Conscience*, 115.
35. Denise M. Bostdorff, "Making Light of James Watt: A Burkean Approach to the Form and Attitude of Political Cartoons," *Quarterly Journal of Speech* 73 (1987): 44.
36. Although scholars typically have identified particularly clever and deliberate "misnamings," puns, and metaphors as examples of perspective by incongruity, the factual juxtapositions of institutional discourse and conflicting evidence that I have identified share the rhetorical function of those tropes.
37. Kenneth Burke, *Permanence and Change: An Anatomy of Purpose*, 3d ed. (Berkeley: University of California Press, 1954), 309.
38. Schneider, "A Town Left to Die."
39. Schneider, "A Town Left to Die."
40. Schneider, "A Town Left to Die."
41. Schneider, "A Town Left to Die."
42. Ettema and Glasser argue that this use of an external source to provide a moral judgment contributes to the "objectification" of moral standards. By invoking someone else's moral judgment, journalists "attempt to transform moral claims into empirical claims so that ultimately the evaluative standards used to appraise the transgression appear as empirically unambiguous as the evidence used to document its existence. By the logic of this process the moral order is made fact, and fact can be reported with detachment." Ettema and Glasser, *Custodians of Conscience*, 71.
43. Andrew Schneider, "While People Are Dying, Government Agencies Pass Buck," *Seattle Post-Intelligencer*, November 19, 1999. Accessed July 9, 2001, available at <http://seattlepi.nwsource.com/uncivillaction/lib19.shtml>.
44. Schneider, "While People Are Dying."
45. Schneider, "While People Are Dying."
46. Schneider, "While People Are Dying."
47. Schneider, "While People Are Dying."
48. Schneider, "While People Are Dying."
49. Schneider, "While People Are Dying."
50. Companies post bonds to the state in order to fund future reclamation projects. These projects are intended to insure that, after a mine is closed, there is no ongoing hazard to the environment or to human health.
51. Montana Department of Environmental Quality (DEQ), *Transcript of Proceedings in Re: Montana Department of Environmental Quality Bond Release Hearing for Kootenai Development Company, Operating Permit 00010*, December 1, 1999. Accessed January 30, 2002, available at <http://www.deq.state.mt.us/libby/libbyhearingcomments.asp>.
52. Montana DEQ, *Transcript of Proceedings*.
53. Montana DEQ, *Transcript of Proceedings*.
54. Montana DEQ, *Transcript of Proceedings*.

55. Montana DEQ, *Transcript of Proceedings*.
56. Montana DEQ, *Transcript of Proceedings*.
57. The long latency period of asbestosis means that people who have been exposed to asbestos may not show signs of disease for several decades. As Norita Skramstad, Libby resident and wife of a former miner, noted at the hearing, "[In] the first place, asbestosis doesn't come to life, as a rule, maybe 10, 20, 30, 40 years, and it's dormant and then it springs its ugly head up and it's full-blown." Montana DEQ, *Transcript of Proceedings*.
58. Levine, *Killing Libby*; Richard Jerome and Vicki Bane, "The Avenger," *People*, October 2, 2000, 70–75.
59. For a similar example, see Michael Reich, "Environmental Politics and Science: The Case of PBB Contamination in Michigan," *American Journal of Public Health* 73 (1983): 302–13.
60. Ettema and Glasser, *Custodians of Conscience*, 127.
61. Killingsworth and Palmer, *Ecospeak*, 8–10.
62. Killingsworth and Palmer, *Ecospeak*, 8–10.
63. Robert Miraldi, "Introduction: Why the Muckrakers Are Still with Us," in *The Muckrakers: Evangelical Crusaders*, ed. Robert Miraldi (Westport, Conn.: Praeger, 2000), xiv.
64. Ettema and Glasser, *Custodians of Conscience*, 196.