"I heard it on the News" Mainstream Media and its Effect on Public Opinion and Environmental Policy

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Introduction

Reporters the world over are frequently divided into categories around what topic they cover, what is called a beat in news speak. Well known and entrenched beats include the crime beat, the entertainment beat, the political beat. Far less entrenched and still in its young stages, however, is the environmental beat. This angle of coverage was born, understandably, out of the rise of the modern environmental movement in the late 1960s. The 60s and 70s in the United States brought changes to the environment and environmental activism that are impossible to overestimate. In the past, unpredictable danger to human health came from nature in the form of epidemics, floods and hurricanes. But with the publication of Rachel Carson's Silent Spring, as well as other high profile chemical health scares, the very science that was supposed to protect us from harm, appeared to be creating it. And what was worse, science created dangers that were completely unfamiliar and consequently that much more frightening.¹ This fear, as is not uncommon throughout history, was a great motivator, and the media was affected just like everything else. A new beat was born. While the field is still small compared to more mainstream beats, some 1,400 journalists have identified themselves as environmental journalists in the United States alone as of 2005, a number not to be taken too lightly². This level of media attention, which has been growing in fits and starts throughout the past two decades, has the ability to affect real change in the general public's view of environmental issues, and by default, legislator's public policy agenda.

¹ McGurty, Eileen. *Transforming Environmentalism*, New Brunswick: Rutgers University Press, 2007, 22-3. ² Wyss, Bob. *Covering the Environment: how journalists work the green beat.* New York: Routledge, 2008, ix.

While the growth of environmental journalism is by no means a bad thing, the way in which stories are reported, and the inherent value calls involved in choosing what stories to cover, can have significant effect on public perception of environmental dangers. Reporters who cover the environment are often under fire from both sides, pro and anti-environment, for being too biased. The environment beat has some unique characteristics that make it particularly susceptible to strong personal opinion and perhaps biases. There is even debate about whether there is anything wrong about allowing environmental reporting to blend somewhat into the realm of advocacy. If the world is at stake, some argue that it is wrong not to use one's influence as a reporter to advocate for the environment³. Regardless of one's opinion, this there is no refuting that the way that the media portrays environmental issues, intentionally or not, can make a difference in the way that policy is drafted in this country.

This paper will explore the relationship between media, environment and public policy. Beginning in a general sense, it will delve into the relationship the three fields have historically and in the present, as well as the challenges that environmental reporters face in their field. This survey will be followed by the development of two case studies, PCB contamination and mountaintop removal mining, which will look more specifically at real world examples of how the media responded to different issues. The differences in contexts of these two cases lead to significantly different policy outcomes, and the media reacting to the particulars of the situations played a part in shaping these outcomes.

³ Ibid, 233.

History of Environmental Journalism

While there is some disagreement between different experts on what specifically was the match that lit the haystack in the late 1960s, no one disagrees that the environmental movement went from candle to wildfire in an extremely short time. Emerging from decades of relative slumber, activists and ordinary people alike were suddenly terrified for the health of their planet and consequently themselves. This interest stemmed from a handful of high profile events that occurred in quick succession. As mentioned previously, Rachel Carson's 1962 book offering a stark warning about consequences of widespread use of the pesticide DDT, began the shift in American view of industry from one of inherent trust to one of inherent distrust about industrial dangers to human health⁴.

Following the fallout from *Silent Spring*, several other events continued to catch the media and public's attention. Events such as the Cuyahoga River in Cleveland Ohio catching fire again, and a Union Oil rig spilling millions of gallons of oil directly onto Santa Barbra's pristine shorelines (both happening in 1969)⁵, initiated outrage over how the environment was being treated, and fear over what such poor treatment might do to human lives and the comforts we had become accustomed to. The first Earth Day celebration, held on April 22, 1970 and drawing more than 20 million people nationwide, was one of the largest demonstrations in American history.⁶ This large-scale public support for federal environmental regulation was a major factor in President Nixon's

⁴ Wyss, Bob. *Covering the Environment: how journalists work the environmental beat,* 29. ⁵ Ibid. 30.

⁶ Cox, Robert. *Environmental Communication and the Public Sphere, Thousand Oaks: Sage Publications,* 2006, 46.

decision to create the Environmental Protection Agency, a new department of the federal government. Nixon, not an ardent environmentalist by anyone's standards, recognized that environmental protection was shaping up to be an election issue, and moved to address it quickly and forcefully.⁷ The laws that were enacted during Nixon's first term form the basis of environmental policy in the US that still exists today.

Furthermore, in this decade the environment as a stand-alone sector of journalism first began to emerge. The media was instrumental to the success of citizen demands to clean up the Love Canal toxic waste dump in Niagara Falls, New York, that eventually lead to the passing of the Comprehensive Environmental Response Compensation and Liability Act, commonly known as the Superfund⁸. Beginning in the late 60s as only a handful of national reporters covering environmental issues in conjunction with other domestic affairs such as labor and health policies,⁹ the environmental beat has slowly expanded to a fully fledged sector of journalism, unfortunately with its own set of unique hazards and controversies to go along with it.

The Environment Beat and Bias

The news of any kind is an extremely competitive business. Stories and bylines compete for small news holes with far more events happening than there is time to report them. Due to the way that media coverage has evolved in the world, environmental stories are often given the short end of the stick. While the level of coverage of

⁷ Wyss, Bob. Covering the Environment: how journalists work the environmental beat, 31.

 ⁸ Layzer, Judith A. *The Environmental Case: Translating values into policy,* Washington DC: CQ Press, 2006,
74.

⁹ Wyss, Bob. Covering the Environment: how journalists work the environmental beat, 30.

environmental issues has clearly grown in the past 20 years, it still encounters many barriers to being as well established, and more importantly trusted, as it might be. This lack of stability has several underlying causes. By nature, news reporting is heavily event driven, with most stories revolving around a breaking story of some kind. This sensationalism-driven news style is ill-equipped to report on longer term environmental stories. Robert Cox calls these types of issues "unobtrusive events,"¹⁰ because they only manifest themselves over long periods of time. Slow-onset hazards such as climate change and ozone depletion are often reported using traditional reporting styles, surfacing as specific and discrete events, rather than gradual connected developments. This emphasis on the event and not the underlying issue undermines the importance of the issue, while simultaneously implying an infrequency that is simply untrue.

Closely tied to this focus on singular events, the news is also visually focused. Stories that have compelling or shocking images to go along with them are often favored over those who do not, especially in television.¹¹ While this bias toward photogenic issues does not entirely cut out environmental stories, it tends to favor the effects of environmental issues rather than the driving causes. For example, the death of the polar bears and record snow storms are reported on, but shifting levels of carbon dioxide in the atmosphere are more often ignored. Activists such as Greenpeace take advantage of this preoccupation with "image events," by creating spectacles that represent or draw attention to issues that are less visually represented. This is one way to generate coverage of underrepresented issues.

 ¹⁰ Cox, Robert. *Environmental Communication and the Public Sphere*, 170-72.
¹¹ Ibid. 176.

Barriers also exist within the coverage as well. Even more so than with other beats, environmental journalism is frequently accused of several types of bias, from both sides. Most, if not all environmental reporters share a deep interest in the planet, and its health. But if they appear to care too much they are often charged with being biased. "No one thinks crime stories are biased," says environmental reporter Rocky Barker. "When you care about education, you're not accused of being pro-education or pro-children."¹² The environment is not seen as something a human being is morally compelled to care for, therefore reporters are considered biased should they appear to care too much, or give too much attention to the environmental side of the story. Others contend that a bias occurs because environmental reporters, and science writers in general, by necessity must become experts in their field. In order to assess the validity of scientific sources and understand their relevance or importance to the story, environmental reporters must have a high level of technical knowledge. While this knowledge should give these writers an edge in understanding differing points of view, it also cultivates very strong opinions on some very controversial issues.

Whether or not environmental reporters should even be held to the same strict standards of traditional reporting is another point of contention. While critics say that the science surrounding many environmental issues is still far too fluid for an objective journalist to take a side, others point out that journalists are in the perfect place to affect significant positive change in the global environment, and because of their position of

¹² Cross, Kim, "The Environment" in *Media Bias: finding it, fixing it*, ed Wm David Sloan and Jenn Burleson Mackay, Jefferson: McFarland and Company, 134.

influence, they are morally obligated to do so.¹³ Citing examples such as the civil rights movement and the war on drugs, some scholars and journalists believe that some issues are so important that objectivity is no longer an option. As with the civil rights movement, such widespread and fundamental behavior change is necessary to address the global environmental issues of our time that business as usual is not going to be effective. It is simply a matter of time, says Lester Brown, the founder of the Worldwatch Institute. "We don't have time for the traditional approach to education – training new generations of teachers to train new generations of students – because we don't have generations, we have years.¹⁴" Proponents of advocacy journalism believe that it is their duty to become those teachers. Still others contend that the journalistic norms of balance and objectivity begin to break down the second that anyone decides to write. Not only does the choice of what to cover and for how long insert bias but even where the section will be placed is an inherent opinion on the value of the story.¹⁵ If bias is inevitable, then isn't it better to make an informed choice about which side to advocate for than an unintentional and unacknowledged slant due to unconscious value judgments? Opinion over this is very much divided within the journalistic community.

Public Policy Formation

Opinions also differ on how best to describe policy formation in this country, and more specifically, the role that media and public perception plays in such dealings. There are so many competing messages and viewpoints throughout the process, that it is

¹³ Ibid, 142.

¹⁴ Ibid, 142.

¹⁵ Wyss, Bob. *Covering the Environment: how journalists work the green beat,* 241.

difficult for anyone to say one way or another what has the most influence; that of course doesn't stop people from trying. There are multiple theories that address how public perception affects public policy, ranging from the not at all in Elite theory to fairly significantly in a Systems theory. While no theory is necessarily correct, they do well to describe some important influences.

In their book "Public Policy," Michael Kraft and Scott Furlong summarize several key theories relevant to this paper. Both <u>Elite Theory¹⁶</u> and <u>Group Theory</u> emphasize the power of a select group of people, separated from the wishes of the public at large. Elite theory focuses on individuals while group theory looks at interest groups and lobbies, but both agree that specific actors have the largest sway over the legislative process. This group can be comprised of many different sectors, from corporate elites and wealthy benefactors, to organized unions or economic interest groups; but whether it is agribusiness influencing the Farm Bill, or wealthy campaign donors influencing tax cuts, these theories are based upon the opinion of the few drowning out the opinions of the many. This is of course a fairly disheartening conclusion to face when studying the influence of public opinion, but the issue is also far more complex than these theories allow for.

While it can't be denied that big business plays a significant role in the legislative process in this country, the ability of the government and the people it governs to think for themselves can't be completely disregarded. <u>Institutional Theory</u> and <u>Rational</u>

¹⁶ Kraft, Michael and Scott Furlong. *Public Policy: politics, analysis and alternatives*, Washington: CQ Press, 2007, 65-68.

<u>Choice Theory</u>¹⁷ both address this more fully. Institutional theory asserts that the very way that our institutions and rules are set up affects who has power over policy and who is shut out. Rules governing how interest groups can interact with elected officials can help or hinder their ability to influence; institutional frameworks such as the each state having two senators gives small states disproportionate representation in the senate, allowing those state's interests to become more prominent. Rational Choice theory instead puts more emphasis on the people themselves, mainly those making the laws. It assumes that people act in rational ways, all with the aim of protecting their own self interest. From this assumption, it can be assumed that legislatures act in ways that they feel will be both good for them and good for the largest portion of their constituents.

All of these theories are simplistic models that explain a certain portion of the policy process. All of these influences – individual elites, interest groups, government rules and regulations, and people themselves – are influenced by or are influences on the media. Therefore it is important to understand that they in turn are major influences on how policy is drafted.

<u>Case One – Polychlorinated Biphenyls</u>

Background

Polychlorinated biphenyls, commonly known as PCBs, are a group of synthetic organic compounds once used in a variety of industrial processes. Predominantly, PCBs were used in electrical appliances, as fluid in transformers and capacitors. Generally,

¹⁷ Ibid 68-69.

PCBs have a very high boiling point and very low flammability, low conductivity and are very inert, which make them very useful in processes that include high temperatures, because they don't easily break down¹⁸. Unfortunately, many of the characteristics that make this group of compounds so attractive to industry are also the very same aspects that make them such an environmental hazard. Their slow rate of breakdown classifies them as a *persistent contaminant* in the environment, because they attach easily to organic matter like soil and sediment and remain there for very long periods of time. Additionally, PCBs are lipophilic, so they bind easily to fatty tissues. This allows for the process of bioaccumulation¹⁹. The small creatures that eat the sediment in rivers build up PCBs in their bodies. Then when those creatures are eaten in turn by larger animals, the PCBs rise up the food chain via the fat that is eaten. Because larger animals eat more than one smaller animal, the levels of PCBs in the body rise for each level up in the food chain.

PCBs were one of the first groups of chemicals to be banned under the Toxic Substances Control Act of 1976 (TSCA). The road to that ban, however, was long and fraught with scientific uncertainty and vigorous resistance from the chemical industry. Regulation of the chemical industry, something so taken for granted today, has been occurring for less than 40 years. The government's first attempt to set some restrictions on chemical usage came in 1971, when the newly formed Council of Environmental Quality issued a report advocating that the future of regulation was not just in post-

¹⁸ McGurty, Eileen. *Transforming Environmentalism*, 24-5.

¹⁹ Morrison, Robert D and Brian L Murphy, editors. *Environmental Forensics: contaminant specific guide*. Burlington: Academic Press, 2006, 194.

production and use but also rules on pre-production and outright prohibitions²⁰. While this seems like a fairly ordinary suggestion, it emphasized the growing opinion that the effects of manmade chemical compounds were uncertain and that scientific knowledge of long-term consequences was virtually nonexistent. Following this and other qualified recommendations highlighting the need for comprehensive federal chemical regulation, congress attempted three times to pass such a bill, in 1972, '73 and '74, but was unsuccessful; powerful chemical manufacturing lobbies were able to very effectively frame the issue as a simple cost-benefit analysis, where the cost far outweighed any unknown potential risk.²¹

This legislative block could not last long however, under the onslaught of increasingly demanding public pressure. Other chemical scandals, including the surfacing of the damaging effects of vinyl chloride in 1974 and the ban of DDT in 1972, galvanized the public into actively demanding that the government take steps to protect the population from seemingly infinite and unknown potential dangers from chemicals in the environment. TSCA was finally passed in 1976, with full rules and regulations coming into effect in 1978. An amendment to the act banned use of PCBs in all but completely closed processes, and slowly phased out all PCB use.²² In later years, the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA or more commonly Superfund)

²⁰ McGurty, Eileen, *Transforming Environmentalism, 25.*

²¹ Ibid, 26.

²² Environmental Health and Safety, "PCB Regulatory Guidance," Environmental Health and Safety Online, http://www.ehso.com/PCBregs.htm

addressed how toxic chemicals like PCBs be disposed of, and how toxic waste dumps should be cleaned up and paid for.

It would seem that with the combination of those three federal regulations, controversy over PCBs would be over. Federally, the major policy has been written. Yet coverage of the issue still often centers on lawsuits and problems with applying those laws, especially when assigning blame and apportioning payment for cleanup under the Superfund.

Media Coverage

When looking at how the media has covered PCBs, it is helpful to separate coverage into two different categories: coverage leading up to large federal legislation and coverage of cleanup and rehabilitation of old sites once the ban was in place. There are two very different journalistic styles and purposes at work during these two times, and it is interesting to see how that changes the tone and outcome of the writing.

Before TSCA was passed, coverage was dominated by event-driven, human health scare stories. In October, 1975, CBS aired a documentary titled "The American Way of Cancer," which emphasized that the best way to cure cancer might be to reduce exposure to cancer causing chemical agents²³. This documentary was viewed by both the House and Senate committees working on TSCA. The fact that this program was shown in prime time on a major network station is an indication of the level of salience the issue had with the general public. Health was the frame that interested people initially.

²³ McGurty, "Transforming Environmentalism," 27.

A high profile case also surfaced in Japan where more than 1,500 people ingested rice contaminated with PCBs from a factory nearby. Health effects from the contamination included "dermatitis, hyper-pigmentation of the skin, aches and pain, severe headaches, central nervous system peripheral nerve damage, stomach and liver disorders, and death."²⁴ This story was published widely across the US, and only fueled people's fear of this previously harmless chemical. This story is typical of the type of coverage that was prevalent at the time on PCBs and also environmental issues in general. With such stark health problems, it was easy to frame the story in an 'us vs. them' fashion, with the people on one end and the companies on the other.

Monsanto Chemical Co., the sole manufacturer of PCBs in the United States, worked hard, but ultimately failed to counteract this image. Another news story broke when the FDA reported that PCBs in plastic food packaging could potentially leach into the food itself. People all across the political spectrum very publically demanded that PCBs be taken out of food processing. Monsanto attempted to piggyback on this sentiment by volunteering to halt production of PCBs in all food processing and packaging facilities. But media sources were quick to point out that it was electric transformers and nothing else that accounted for 99% of the PCB production in the US,²⁵ the halt of which Monsanto vehemently opposed.

Two new media frames finally catapulted the years-long debate through to legislation. After months of stories decrying general health concerns, two stories focused

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²⁴ Masuda, Y. "Health Status of Japenese and Taiwanese after exposure to contaminated rice oil," Environmental Health Perspectives, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1568546/

²⁵ Society for Science and the Public. "First DDT, now PCB." *Science News* 78 (1970) 332.

the media on concrete events whose consequences could be easily understood and more importantly, visualized. In 1976, EPA released a study that found elevated levels of PCBs in women's breast milk.²⁶ While the levels were below the legal level set by the FDA, it worried scientists. Similarly, a study of monkeys receiving PCB contaminated breast milk as infants resulted in death of half of the monkeys as well as skin discoloration, loss of eyelashes and swelling of the eyelids.²⁷ The images of baby monkeys and then human babies were the visual stimulation that was needed to throw this issue front and center. In August of 1976, Walter Cronkite reported on the dangers of PCBs in human breast milk on CBS Evening News. During this same time, the potential economic repercussions of PCBs also began to be reported on. Senator Nelson and Representative Dingell both emphasized the impacts to commercial and sports fishing that PCBs would have if left unregulated, citing that \$350 million were spent per year on commercial fishing alone²⁸. Major papers like the Washington Post picked up on this story, pitting small scale fishermen against large industrial companies such as General Electric²⁹. The public responded to both visually compelling stories with well placed fear and anger, successfully putting more pressure on their elected officials to add an amendment to the Toxic Substances Control Act.

Post- legislative Coverage

²⁶ Chemical Week. "Closer Look at PCBs," *Chemical Week,* September 8, 1976, Top of the News Section, 26.

²⁷ McGurty, Eileen. *Transforming Environmentalism*, 29.

²⁸ Ibid, 29.

²⁹ Claiborne, William. "PCBs Ruin Housatonic, River of Writers; Fish-Rich River Ruined by Chemicals," *The Washington Post*, July 11, 1977, A1.

In the years after the 1977 ban and the following cleanup regulations, coverage of PCBs understandably shifted. Not only have the reporting frames changed, but also the scope and tone of articles have diversified considerably. While there are no national policies this coverage is affecting, it can still influence the public's knowledge and opinions on legal proceedings surrounding PCB contaminated sites, as well as general hazardous waste policy across the nation.

Villain vs. Victim – Unlike initial reporting of PCB manufacture and use, more current reporting often lacks a defined villain to portray, or at the very least the picture is far more complicated. Superfund requires hazardous waste sites which have identifiable responsible parties to be cleaned up and rehabilitated by those responsible. However, in assigning blame and planning the cleanup process, problems frequently arise between regulators and corporations over requirements and best practices. This argument is often reported from a frame of balance, giving both sides of the story equal weight. This is a decided shift from reporting of the 1970s, where companies were often portrayed in a decidedly negative way. The continuing battle over the logistics of cleaning up the Upper Hudson River is a perfect example of such reporting. It is a well established fact that General Electric released more than 1 million pounds of PCBs into the Hudson River in New York between 1940 and 1977,³⁰ but disagreement began almost immediately following that on what exactly GE was responsible for, what the best way to approach the clean up was, and what kind of timeline was required under the law. The EPA supported a comprehensive dredging program, which would remove the vast majority of

³⁰ Watson, Tracy, "GE might get bill for Hudson River Cleanup," USA Today, August 2, 2001, News 4A.

contaminated sediment from the bed of the river and transport it to two new processing plants to be disposed of. GE spent more over \$15 million on a campaign against this plan, stating that dredging was not only expensive but dangerous to the natural cleansing of the river. The potential dangers of pulling contaminants up to the surface of the water, they claimed, outweighed the benefits of removing the contaminants themselves. Far better to let the river naturally lock the chemicals in the deep sediments of the riverbed.³¹ General Electric eventually resorted to a class-action lawsuit but ultimately failed. The first phase of this cleanup has been recently completed, with varying levels of reported success. Both EPA and GE released separate reports, with very different outcomes from the first phase; GE unsurprisingly painting a far less supportive picture than EPA.³²

Other cases portray even less of a defined villain. A similar contamination of the Sheboygan River outside of Milwaukee Wisconsin resulted in not coverage of balanced conflict but distinctly positive and constructive communication. According to Anders Hansen's analysis of the Superfund site, coverage focused very little on who was to blame and more on how the site affected the community and what could be done to fix it.

<u>Industry Participation</u> – Tecumseh Products Company, one of the three companies indicated in the EPA assessment of responsibility, signed on to participate in the cleanup with very little pressure or argument, and was an active and productive participant in the

³¹ Powell, Michael. "EPA Orders Record PCB Cleanup; GE to foot \$480 million bill to dredge upper Hudson," *Washington Post*, August 2, 2001, Section A05.

³² New York Times. "The Hudson Cleanup," *The New York Times: Late Edition*, February 9, 2010, Editorial Section A, 26.

cleanup planning process³³. With the hole for environmental reporting being as small as it is in most newspapers, the amount of print that was freed up by not having and/or choosing not to report on any internal bickering significantly affected the overall tone of the issue, and therefore the opinion that locals had of the functioning of Superfund.

Conversely, in New York, up and down the Hudson River, readers were given a very different view of Superfund's role and approval. While the two cases varied in other ways and therefore cannot be compared completely with each other, it can be noted that the space given to arguments between EPA and GE took up the majority of media coverage of the issue. Opposition and argument was then reflected in a division within the community over what the best plan of action in fact was.

Societal Constraints and Desires – One potential reason for such a distinct difference in two cases that both resulted in the same solution – large-scale dredging of a defined section of the river – is the structure of the community that was reported to, according to Hansen.³⁴ The communities of Sheboygan and Sheboygan Falls were largely homogenous, with many readers interested predominantly in issues that affected the community as a whole. The editors of the two newspapers in the area reported that readers were not interested in legal battles and large national implications; they wanted "feature stories, not critical reporting"³⁵. Homogenous communities such as these are simply less receptive to reading about conflict, especially when it regards their own community, and this greatly affected the frames that were used in reporting. New York

 ³³ Hansen, Anders. *The Mass Media and Environmental Issues*. Leicester, UK: Leicester University Press, 1993 41-43

³⁴lbid, 45-6.

³⁵ Ibid, 45

on the other hand, in large part because of the increased scope of papers such as the New York Times and national pickup of the specific case, could appeal to a far more diverse pool of readers, and therefore papers had far more personal discretion over what to print. Differences of opinion are nothing out of the ordinary in the pages of the New York Times or Washington Post; in fact according to many analysts, conflict sells. As mentioned in previous sections, much news is event driven, and many events are in turn driven by conflict.

The Economic Frame – A similarity across all cases discussed thus far is the success of the frame of economic impact. Though approached in two different ways, both the Hudson and Sheboygan River cases successfully used economics to activate and engage local communities. GE cited the high cost and low benefits of dredging, as well as the potential negative economic impact if dredging went wrong, as major reasons for their opposition to EPA's proposed cleanup plan. Additionally, they fueled resident's concerns over noise, machinery and ugliness scaring tourism dollars away from riverfront businesses.³⁶ Conversely, the site on the Sheboygan River encompassed the Sheboygan Harbor. The harbor is classified as a diversified cargo port, but in order to function it must be dredged periodically in order to maintain an adequate depth. Therefore the dredging from the start was an implied part of the solution; it was happening before the stretch of river was designated as Superfund site. In another vein, the area maintains a nearly year round sport and commercial fishing industry, both downriver and in the harbor itself. Once PCBs were found in the sediments, however, stocking of those waters

³⁶ Powell, Michael and Eric Painin, "How Green Should Their Valley Be? Hudson river cleanup divides N.Y." *The Washington Post*, July 27, 2001, Section A01

was completely halted, and commercial fishermen were warned not to catch or sell fish for fear of contamination.³⁷ In both cases, the media picked up this frame, though it was especially prevalent in Sheboygan Falls. Hansen speculates that while health concerns catch readers' attention in the short term, after major reports or new health information is released for example, hazards don't have longevity as news items unless they continue to change³⁸. The health risk of PCBs was already well established nationally as well as in the community before the site was officially designated a Superfund site, and therefore, as time went on, coverage shifted to more engaging topics such as cleanup and the effects on local businesses.

Major Factors in the Media

From the above cases, it is clear that media reporting is an extremely complex and issue-specific business. However, some broad conclusions may be drawn from this exploration.

Media coverage is indeed event driven. Readers get bored of hearing the same story again, no matter how important the story is. If a story doesn't remain fresh and changing, it will either fall off the radar, or the angle will change to something more engaging. After the passing of the Toxic Substances Control Act, the framing of PCB coverage moved away from health and toward economics.

Focusing events and charismatic figures can be used extremely effectively to catch attention and brand an issue. Stories such as the rice contamination in Japan and

³⁷ Hansen, Anders. *The Mass Media and Environmental Issues*, 43.

³⁸ Ibid, 44.

effects on nursing mothers and babies forced PCBs onto the national agenda more successfully because they are stories that catch our eyes and pull our heartstrings. Similarly, the idea of large, loud, disruptive dredging machinery up and down the Hudson engaged local residents in a way that bioaccumulation of toxins in fish simply couldn't do.

Finally, simplicity sells. It was relatively easy, prior to TSCA, to portray the issue as a clear scientific choice, a story where the innocent public was being poisoned by unregulated industry. Public support of environmental reform was strong, and mistrust of industry was common. Despite campaigns on behalf of industry to change such a negative opinion, distrust remained prevalent throughout the 1960s and 70s. When the villain became more difficult to describe and blame, the issue itself was simplified. Reports on proposed dredging were simplified into concrete numbers and basic examples, which failed to adequately explain the complexity of the issue.

<u>Case Two – Mountaintop Removal Mining</u>

Background

Mountaintop removal mining (MTR) is a far newer environmental controversy, with more complex social and economic importance to the Southeast as well as the United States as a whole. According to the US Environmental Protection Agency, mountaintop mining is a "practice involving the removal of mountaintops to expose coal seams, and disposing of the associated mining overburden in adjacent valleys."³⁹ That

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³⁹ US Environmental Protection Agency. *Midatlantic Mountaintop Mining*, April 2, 2010, <u>http://www.epa.gov/Region3/mtntop/</u>

sentence alone already begins to suggest the potential environmental risks that correspond with such an abrasive mining strategy. Yet unlike PCBs, MTR has yet to catch the eye of the general public. While prominent newspapers continue to report on major legislation and EPA decisions regarding MTR, these stories are not energizing public opinion and pressure as PCBs in the water did in the 1970s.

Mining is truly an ingrained American profession, especially in the coal-rich Mid-Atlantic region of Appalachia. In West Virginia, the unofficial capital of mountaintop removal mining in the US, the coal mining industry supplied the state with over 22,000 jobs in 2008, an impressive number for one single industry.⁴⁰ Appalachia has a long and often painful history with mining, dating back to the first small-scale mines in the late 19th and early 20th century.⁴¹ Safety issues, union suppression and wage battles plagued mining operations for decades, until the pro-union Roosevelt Administration provided enough momentum for some rights to be granted to many of the miners. Unfortunately, the constantly changing technology and boom-bust nature of the coal industry continued to make coal mining an unstable and unreliable occupation⁴².

While coal mining has never been, and in all likelihood never will be considered an environmentally positive practice – digging deep into the ground in any way risks shifting the structural and ecological integrity of an area, not to mention the potentially hazardous waste and heavy metals that can wash out of mines – but the environmental

⁴⁰ US Energy Information Administration, "Coal Mining Productivity by State and Mine Type," Department of Energy, <u>http://www.eia.doe.gov/cneaf/coal/page/acr/table21.html</u>

 ⁴¹ McGinley, Patrick. "From Pick and Shovel to Mountaintop Removal: environmental injustice in the Appalachian coalfields," *Journal of Environmental Law* 34 (2004): 24-5.
⁴² Ibid. 30.

impact of coal mining took on a whole new meaning in the second half of the 20th century, when new large-scale technologies allowed mining operations to increase dramatically in size and depth. With the invention of the dragline, a pit-making machine often up to 20 stories high capable of moving over 100 tons of rock and other debris in one fell swoop, mines were able to scale up production in a way never seen before. It is because of just such machinery that the number of mining jobs on Appalachia peaked in the 1940s, while coal production continued to set record levels. Between 1997 and 2007, coal production in West Virginia increased 32%, while coal employment declined 29%.⁴³ Additionally, as old thick seams of coal began to dwindle in the area, a new type of mining started to spread throughout the region. This type of mining – surface mining to its proponents, mountaintop removal to those against – targeted not the thick seams deep underground, but instead the thin layers closer to the surface on the tops of mountains. These seams, deemed too thin to be accessible via standard underground shaft mining, nonetheless often consisted of extremely high quality and low sulfur coal. With this new style of mining, a dwindling supply of coal unexpectedly transformed itself into a second goldmine.44

Unfortunately, surface mining, while extremely efficient, comes with a whole host of environmental problems. As discussed above, the surface tops of mountains are removed in order to expose thin layers of coal. Once the coal has been mined, the displaced earth must be replaced in order to restore the Approximate Original Contour

 ⁴³ Motavali, Jim. "Once There Was a Mountain." *E – The Environmental Magazine*, 18 no 6 (2007) 38.
⁴⁴ Lipton, Michael. "Notes from Charleston: the Fight for the Soul of Coal Country." *The New York Times*, May 17, 2002. Section A, Column 2 , Editorial Desk.

(AOC) of the mountain. Once the overburden has been exposed to air and water for an extended time, it swells and therefore the full amount of overburden is rarely needed to refill the depression in the mountain. The unused overburden, or "spoil," is then dumped into surrounding valleys to create valley fills⁴⁵. Beyond simply irreparably altering the geography and ecosystems of these valleys, the material that comes out of the earth is not only harmless earth and rock. Heavy metals such as lead, aluminum, chromium, manganese and selenium dissolve in rainwater made slightly acidic from the massive amount of exposed rock, and then can infiltrate streams, rivers and eventually drinking water sources.

These new practices didn't escape from the environmental fervor that swept the nation in the 60s and 70s. Pressure to regulate mining practices built over several decades and culminated with the passing of the Surface Mining Control and Reclamation Act (SMCRA) in 1977. This act, which places regulatory power for mining under the Office of Surface Mining within the Department of the Interior, set up rules, permits and guidelines for surface mining practices, including mountaintop removal. Among other things, it required mining operations to obtain a permit before dumping any spoil to create a valley fill, proving that the fill would not adversely impact the surrounding water system⁴⁶. In 1977, fifty permits were granted for valley fills in West Virginia, affecting twenty miles of streams. This number has been steadily increasing, so that by 2000 only

⁴⁵ Diamond, Benjamin. "Recent Developments in Mountaintop Removal Mining," *The Environmental Lawyer* 6:1 (1999-2000) 891-92.

⁴⁶ Copeland, Claudia "CRS Report to Congress. Mountaintop Removal: Summary of Current Controversies," *Congressional Research Service*, February 1, 2005.

24% of streams were unpolluted by mining⁴⁷. The Clean Water Act also required that industry obtain a permit before releasing anything toxic into any water system. Both the EPA and the Army Corps of Engineers, responsible for the issuing of CWA permits, were also required to consult The Fish and Wildlife Service before issuing new permits, to ensure that new discharges would not irreparably damage aquatic life.

Despite the apparent preponderance of environmental regulation of mining practices, the industry has continued to incur huge and lasting damages on the areas surrounding mines. As part of SMCRA, mining companies are required to leave the mountain with an Approximate Original Contour, and restore the land back to forest or prepare it for a "higher and better use." This last phrase was left intentionally vague, and has lead to inappropriate and shoddy environmental restoration. Previous mine sites have been transformed into shopping malls and detention centers, both deemed a higher or better use than the natural mountain ecosystem. The old growth forests that once carpeted the mountains in Appalachia have been replaced with grazing and pastureland, a more economically productive and therefore of higher use⁴⁸. Citizen groups have also accused the Army Corps of issuing permits that do not adequately protect water sources and wildlife, despite being legally required to do so. In 2002, a further blow was dealt to the effectiveness of CWA regulation, when the Army Corps altered its definition of "fill material" material that could legally be deposited into streams and rivers without a permit, to include mining spoils. This change drastically increased the number of sites

⁴⁷ Diamond, Benjamin. "Recent Developments," 892.

⁴⁸ McQuaid, John. "Mining the Mountains," *Smithsonian*, 39, no 10 (2009).

available for valley fills, as the required buffer between fill and stream was no longer necessary.⁴⁹

In an attempt to fix this gap between regulatory language and actual action, different groups tackled the problem from diverse angles. A West Virginia citizens group sued the Army Corps of Engineers in 1998 for violations of a SMCRA buffer zone regulation, as well as the Clean Water Act. The court ruled in their favor of them in 1999, saying that disposing of mining spoil in valley streams violated federal and state mining rules and the CWA (Bragg v. Robertson, 1999). Had this ruling stuck, it would have effectively halted all mountaintop removal mining, for without the ability to dispose of spoil cheaply and easily, the process becomes economically unviable. The ruling was overturned when it was appealed to a District Court and mining quickly resumed; the case did result in the ACE and EPA releasing a joint Environmental Impact Statement (EIS) in 2005⁵⁰. An Impact Statement, an integral part of the National Environmental Protection Act, attempts to evaluate the environmental impact of a new industry or project, as well as the impact of potential alternatives, in an effort to discern whether the proposed action is the most sustainable option. The EIS on mountaintop removal, published under the very industry-friendly Bush Administration, came under intense criticism for lacking any viable alternatives in the assessment. The Union of Concerned

⁴⁹ Copeland, Claudia. "Controversies over Redefining 'Fill Material' Under the Clean Water Act." Congressional Research Service, April 20, 2009.

⁵⁰ Copeland, "CRS Report to Congress," 5.

Scientists released a statement of disapproval over the EIS, saying that "The EIS process has been usurped and its scientific underpinnings destroyed."⁵¹

More recently, two bills have been introduced in congress, one in the House and one in the Senate, aimed at addressing the Corps' new definition of fill material. They were both introduced in March of 2009 and referred to committee. Unsurprisingly, markup of both bills was pushed back by the clean energy bills and then healthcare. No further action on the bills has happened within the last year. In part because of the congressional standstill on the issue, EPA has put significant effort into using agency regulatory power to curb the most egregious environmental damages that come from mountaintop removal mining. On April 1, 2010, EPA released new guidelines that are far stricter on certain substances, such as salt and specific toxins, which enter the water. Few current valley fills meet these new guidelines, and although the rules will only apply to new fills applying for a permit, it is assumed that few proposed valley fills will meet the guidelines.

Media Coverage

As is clear from the above summary, mountaintop removal is an extremely complicated issue, far larger and more complex than a single chemical used in a fairly limited number of products. It is also a far more current issue, with far less scholarly literature available analyzing media coverage. However primary sources are far more

⁵¹ Union of Concerned Scientists, "Leveling a Mountain of Research on Mountaintop Strip Mining." UCS. <u>http://www.ucsusa.org/scientific_integrity/abuses_of_science/case_studies_and_evidence/</u> <u>mountaintop-removal-mining.html</u>

prevalent, because of its current relevancy. Through extensive reading of current articles and media representation of mountaintop removal, several themes can be teased out from the large pool of coverage.

Industry Opposition – Probably the most striking factor in the coverage of mountaintop removal is the mining industry's incredibly strong opposition to any attempts to change mining practices, and the attention that the media gave and continues to give to this opposition. While there are few articles that are outright proponents of decreased regulation, a large portion of the available coverage either questions the economic sustainability of mining under stronger regulations, or references the severe negative economic effect that such regulations would have on not the companies but the communities and counties that the mines are in. Papers such as the Washington Post print articles perpetuating the idea that there must be a choice between economics and environmental stewardship. With sentences such as "Some environmentalists think the science is overwhelming that mountaintop mining is harmful. Pro-coal people think the economy trumps everything,⁵² journalists legitimized the choice as a dichotomy, one or the other with no hope to have both. Recently coverage has shifted slightly, perhaps in response to the increased support and attention the Obama administration has given to a new green jobs economy, giving some light to the subject of more environmental uses of the mid-Atlantic area. On the popular video hosting website Hulu, the Coal River Mountain Wind Project, an organization advocating for the mountains of Appalachia to be used for wind farming rather than coal mining, has been airing a dramatic anti

⁵² Fahrenthold, David. "Future Grows More Hazy For Mountaintop Mining; EPA's Fluctuating Messages Concern W.Va. Residents." *Washington Post,* April 11, 2009; Metro Section, B1.

mountaintop removal and pro wind energy commercial, highlighting the destructive and unsustainable nature of mountaintop removal mining and coal in general.⁵³ This type of attention, though admittedly not journalistic coverage per se, is unusual in its placement in such a mainstream medium. For the most part, however, the coverage is dominated by the industry's predictions of doom and disaster should mountaintop removal come to a halt anytime in the near future.

<u>Media Frames</u> – The economic frame is once again dominant and salient in the coverage of mining. EPA Administrator Lisa Jackson and other EPA spokespersons have reiterated that they take no stance on mining itself or its legitimacy and future as an American energy source. They stress that with regards to new regulations, EPA is strictly concerned with how mining spoils comply with regulations in the Clean Water Act. All other aspects of mining are not being speculated on.⁵⁴ This determination to distance themselves from the larger debate over mountaintop removal only highlights how large and ingrained the economic concerns of coal mining are, even within the regulatory community. Many articles focus on the potential for job loss and coal price increases. It is extremely difficult to write about mountaintop removal in a positive light; using explosives to rip of the surface of mountains is not something that even mining companies can describe as an environmentally beneficial or even neutral practice. However, a large portion of articles while first describing the horror and destruction that mountaintop removal leaves behind it, end the article on an inconclusive note, quoting

⁵³ <u>http://www.coalriverwind.org/</u>

⁵⁴ Reis, Patrick. "Critics on Both Sides of Coal Mining Debate Assail EPA on Mountaintop Regulation." *The new York Times,* March 18, 2010.

economic strategists or mining executives about the potential fallout that might occur after stricter regulation. Some articles are critical of this economic frame, quoting statistics that restricting the most environmentally damaging valley fills would only increase the price of coal by \$1-2 per ton, and result in very small comparative job loss.⁵⁵ Unfortunately, articles accepting the economic frame far outweigh those that question it.

Human health and environmental health frames are also present within coverage, despite the dominance of economics, but there is a strong norm of balance in reporting. Rarely are value judgments made or even implied about whether it is morally acceptable to give preference to economics over the lives and health of a marginalized and deeply impoverished population.

Local vs. National Media Holes – Another factor differentiating coverage of mountaintop removal from PCBs is the stronger divide between local and national coverage of the issues. Mountaintop mined coal only accounts for 10% of the nation's entire coal consumption. Yet all of the consumption is concentrated in the northeast and mid-Atlantic coast. Nearly 100% of all mountaintop removal operations take place within the bounds of four states: West Virginia, Virginia, Kentucky and Tennessee⁵⁶. The national coverage of the issue has been largely concentrated in media originating from this area. Papers such as the New York Times and the Washington Post have relatively frequent articles discussing the issue, while in papers such as USA Today, the Los Angeles Times or The San Francisco Chronicle, it rarely comes up. The space for

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⁵⁵ USA Today. "Mountaintop Mining Leaves Massive Scars in Appalachia." USA Today Final Edition, October 27, 2009, News Section 10A.

⁵⁶ McQuaid, John. "Mining the Mountains."

environmental articles, though increasing in many papers, is still relatively small. Local issues and other more prominent national issues such as climate change and offshore drilling take precedence over an issue that may not be viewed as very relevant to the average western United States resident's life.

Focusing Events and Visual Cues – The issue of mountaintop removal is interesting in that it is an extremely visually appropriate storyline. The desolation and almost otherworldly destruction of large scale mines lends itself to eye-catching and sensational photos. Yet television has all but ignored the issue, comparative to other environmental issues. There are the occasional stories; for instance Steven Colbert did a segment on mountaintop removal on the popular comedy news program The Colbert Report.⁵⁷ Yet these mostly focus not on the visual destruction but again on technical and economic aspects of specific regulations or events. It appears that while the issue as a whole is visually captivating, individual events are predominantly rhetorical and involve policy and regulation, neither of which is interesting to the eye. The recent intense and nationwide coverage of the underground mining accident at the Upper Big Branch Mine in West Virginia only strengthens this hypothesis. This event, concerning underground rather than mountaintop mining, has everything that the mountaintop mining story doesn't. It is a singular event, that is distinctly different than any other recent story, that affects a defined group in a generally agreed upon and measurable way. The effects, death and mourning, are easy to understand, and the solution is equally concrete. Finally, there is a clearly defined victim and villain to portray. Massey Energy, the owner of the

⁵⁷ Coal Comfort - Margaret Palmer. January 18 2010 episode of *The Colbert Report (*Comedy Central, 2005-2010; Comedy Partners)

mine in which an explosion on April 5, 2010 killed 29 people had been cited for safety violations 1,342 time since 2005 according to a Washington Post article.⁵⁸ While the science points to the fact that mountaintop removal mining leads to equally destructive health impacts to surrounding communities, through both water and air contamination,⁵⁹ the lack of concrete events has affected the way the issue has been covered, especially by television.

Major Factors Affecting Environmental Coverage

The above two case studies demonstrate the variety of environmental issues that are reported on regularly in the United States. The attention varied, as did the outcomes, but it is useful to understand or hypothesize the reasons for both similarities and differences. In doing so, one can tease out the trends that flow throughout environmental media coverage, and begin to understand why some issues become more publicly significant than others.

The issues that seem to have the most success are, understandably, the ones that have the largest exposure and the least resistance. PCBs became a national issue in part because the chemical was pervasive across the United States and indeed across the world. When this pervasiveness became clear and the public proved interested, no major media source could afford to not have information on the subject. There is a significant strength in numbers when attempting to catch the attention of an event focused media system.

⁵⁸ Dionne, E.J. Jr. "An Old Sad Story at a West Virginia Mine." *The Washington Post,* April 8, 2010, OP-ED.

⁵⁹ Motavali, Jim. "Once There Was a Mountain," 37.

Even if there is only one originating story, at a certain point other writers are forced to pick up the story whether they like it or not. A threshold seems to exist, after which the story self-perpetuates, with no media source wanting to drop the issue before any other. This threshold is far easier to attain when the issue is already, by very nature of its scope, on the national stage. Mountaintop removal mining, on the other hand, has not achieved this threshold in any fashion. Unfortunately as far as coverage goes, MTR is a practice selected by a small number of coal mines in a specific geographic area. Opposition activists attempt to broaden this scope by calling attention not just to the mines themselves but also the cities and towns which get their power from mountaintop mined coal.⁶⁰ While this tactic has proved somewhat successful, it only increases the area by so much; mountaintop removal is still solidly an Eastern seaboard problem, with little salience west of the Mississippi.

Equally important to scope are the actors and opposition facing the issue. While environmental reporters are accused as being biased to or against the environment, and on an individual level they very well could be, what seems to matter most on an industry level is not personal opinion but the strength and complexity of the opposition. Prior to the ban, Monsanto was the sole producer of PCBs in the United States, and more importantly PCBs comprised only a small fraction of their total production and earnings. While Monsanto actively lobbied against PCB regulation for obvious reasons, the ban did not represent a crippling decrease in their business or profit margins. Therefore public support was given more space to grow, leading to more effective policy change.

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⁶⁰ McQuaid, "Mining the Mountains."

Conversely, when General Electric was required by EPA to foot the bill of the Hudson River cleanup, their opposition was far stronger; that cleanup not only represented a very large sum of money, it also established a precedent for several other sites around the country for which they were negotiating cleanup settlements as well.⁶¹ GE's opposition to this specific PCB story captured a majority of the media attention over the issue, and complicated the outcome. Although GE eventually lost its case, coverage of the case was far more mixed and inconclusive than it might otherwise have been had the opposition been weaker. Similarly, the coal industry's massive multi-million dollar opposition to mountaintop removal restrictions has effectively killed any comprehensive reporting of the environmental and health impacts of the practice. Industry's preoccupation with the economic repercussions of any regulatory strengthening are mirrored in the media's coverage of the issue, in a way that was not nearly as prevalent in the lead up to the ban of PCBs. With enough administration support, this strong opposition can be overcome, as evidenced by EPA's recent valley fill permit restrictions, but this seems to have been done despite the media coverage of the issue not because of it.

The homogenous nature of a community is also significant in predicting the likelihood that a controversial issue will be covered. If a certain locality is hostile or uninterested in a certain aspect of the story, local media is less likely to cover it, especially if the community is largely homogenous. In the coverage of the Sheboygan Falls Superfund cleanup process, the community was largely in agreement over the type of story it wanted to see in the news and the local papers were quick to acquiesce to this

⁶¹ Powell, Michael. "EPA Orders Record PCB Cleanup"

desire if it meant support for the paper. The area was lacking in diversity and therefore less used to conflict, which was reflected in the coverage of the cleanup. New York, as discussed earlier, was far more accepting of stories revolving around conflict. Communities in coal mining states are also largely homogenous. While it is difficult to frame mountaintop removal outside of a conflict lens, this could be one factor driving the balanced coverage of economics and health in the media. Support of or opposition to mountaintop removal in mining communities is a sensitive and dividing issue in a culture founded in community strength and support.⁶² Therefore any appearance of taking one side or the other might be strongly discouraged, for fear of further divisions and conflict.

It has also been speculated by many activists and community organizations that coverage of mountaintop removal has been sparse due to the generally low socioeconomic status of Appalachia. The mountainous area of Virginia, West Virginia and Kentucky is one of the poorest and most isolated regions in the entire United States. These communities feel disenfranchised and lack the power to affect political change. The greater public feels less outrage about dangerous health concerns in a poor industrial area than suburban New York City, and therefore the media is less responsive to health stories in the area. When PCBs were connected to breast milk and children, public response was immediate and uncompromising, yet when studies were published about drinking water contamination near valley fills and the effect on school children, a similar

⁶² McQuaid, "Mining the Mountains."

response was not seen⁶³. Part of this difference could be explained by the economic situation of the effected populations.

This difference in response to events is an ideal example of the shifting influence of focusing events in media coverage. The available literature on environmental reporting never fails to mention the importance of focusing events and visual appeal when choosing what to cover. While this has definitely proven true, it must also be mentioned that there is nonetheless broad discretion by reporters and editors to choose how to report on these focusing events. When news broke about the PCB contaminated rice, reporters chose to focus on PCBs, as the most publically prominent chemical, rather than the various other chemicals that were also leeched into the water and ingested via the very same rice. This choice made a difference in how people perceived PCBs in their relationship to other dangerous toxins, and put PCBs on a level of their own in terms of importance. Similarly, coverage of the recent mine accident in West Virginia has been focused entirely on blame and improving mine safety, not on the need to move away from an energy that is requiring more and more dangerous mining operations as easy to access coal runs out. Both of the focusing events were big enough stories that they probably would have been covered in one way or another, and no matter what the coverage consisted of, the sheer volume has a significant influence on public knowledge and issue recognition. However, the choices that writers and editors make can change the takeaway message from those events dramatically.

⁶³ S. McAuley, M. D. Kozar, *USGS Report* 5059 (2006); <u>http://pubs.usgs.gov/sir/2006/5059/pdf/sir2006-5059.pdf</u>

A final and decidedly most vague influencing factor in environmental reporting and policy is simply the complexity of the issue itself. Addressed somewhat in the discussion above, as the number of actors (affected communities, businesses, federal agencies, interest groups etc) involved increases, it becomes more and more difficult to quantify and explain the issue in a way that is understood, and more importantly absorbed, by the public. Similarly, as the issue itself involves more complicated science or uncertainty, it becomes increasingly difficult to simplify the causes and effects in a way that is clear yet not so pared down that they lose meaning. The long term effects of dredging for PCBs in the Hudson are complex and only hypothesized; the effects to ecosystem and human health from mountaintop removal valley fills are equally layered and difficult to fully comprehend. The economic frame was extremely effective in both cases, due in part perhaps because of the opposition taking advantage of the ineffective communication of risk by the environmental and health community. Media reports reflected and continue to reflect this message confusion. Not all of this confusion is necessarily malicious or even dishonest. It is difficult for reporters, who are not ecologists or toxicologists by profession, to differentiate and fully understand the issue themselves. Even environmental reporters must report on a wide variety of topics, so specialization in any one issue is very nearly impossible. This can lead to dependence on outside experts and confusion in messages simply by way of there being too many intermediaries between the data and the reporting. Motives aside, the complexity of the issue has significant influence on the way that issues are reported.

Conclusion

Environmental journalism is a beat in its infancy, historically speaking. Only recently has the worthiness and worthwhile of such a specialization been accepted by mainstream media. Even today, the beat is often buried within a larger health and science specialization. The beat comes with its own set of unique hazards and critiques. Regularly accused of being biased from both sides, an environmental reporter must walk a dangerous line: respect the planet and environment in which they both live and earn a living from, while not appearing to care too much. Unlike any other pro-livelihood and pro-health issues, one can be accused of being pro or anti-environment, as if a person who depends on the environment to live and breathe could ever truly be antienvironment, even if they wanted to be. Yet this is the climate the environmental reporter must write in. Biased or not, what is written in the mainstream media has a real and not insignificant effect on public opinion and public policy formation. The cases ended with a varying level of success as far as public policy is concerned. PCBs have been all but eliminated from use across the world, but cleanup is still a contentious issue. Mountaintop removal is still common practice in the mid-Atlantic, but new EPA regulations and a push for congressional action appear to be changing that. However, the general lack of public support or even knowledge about the issue threatens the success of such legislation.

While it was impossible within the scope of this paper, or any scholarly work, to gain a full understanding of every influence on environmental reporting, the preceding background and case studies presented an interesting contrast in which some important generalizations have been made. Media, it can be seen, is an extremely subjective field. No matter how hard one tries to be an objective observer, each choice that is made comes with some inherent value judgments. Media is also very swayed by the realities of its readers. Both the community make-up and the power of those opposed to any given issue have influence on how the story is reported back. Additionally, the complexity and uncertainty of the issue can cloud messages and make it more difficult for readers to understand the main points of the story. The role of the media in communicating environmental stories and risk to the public is complicated and varies significantly by issue and time. Despite this complication, it is still a subject worthy of study, for only with greater knowledge can we become greater advocates for change.