

# **Frames of Mountaintop Removal in Print Journalism**

Amanda Womac

## **Introduction**

For the past 35 years, a coal mining process called mountaintop removal, or contour-ridge mining, has been employed to extract coal from the mountains of Central and Southern Appalachia.<sup>1</sup> This phenomenon of coal extraction has been called “the worst manmade ecological disaster” by numerous environmental and community advocacy groups on local, regional, and national levels.<sup>2</sup> However, mountaintop removal has not received a lot of national media attention. This study aims to evaluate the types of frames used in news coverage on mountaintop removal in print journalism over a one-year time period.

## **Media Framing**

According to Stephen Reese, framing refers to “the way events and issues are organized and made sense of, especially by media, media professionals and their audiences.”<sup>3</sup> However, communication theorists have yet to identify a common theory of framing for social sciences. Robert Entman claims that “nowhere is there a general statement of framing theory that shows exactly how frames become embedded within and make themselves manifest in a text, or how framing influences thinking.”<sup>4</sup> Some researchers have suggested that framing is an extension of agenda-setting theory and use the term “second-level agenda setting” to describe the characteristics of media coverage and audience reaction to it.<sup>5</sup>

Reese suggests a working definition of frames as “organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world.”<sup>6</sup> He continues to break down the definition by interpreting each word within a working

frame and claims that frames help to organize information both cognitively and culturally. Cognitive organization of frames helps the audience to think a certain way about a social phenomenon by “appealing to basic psychological biases.”<sup>7</sup> On the other hand, culturally organized frames help to guide the audience in understanding culture, and by doing so, allow the audience to continue evaluating culture beyond the immediate information presented in the frame. Reese also states that ultimately, frames are “an abstract principle of interpretation that works through media texts to structure social meaning.”<sup>8</sup> By using frames in media texts, journalists are able to organize information and principles within social and cultural realms. Reese also goes on to explain how frames structure information by “impos[ing] a pattern on the social world.”<sup>9</sup>

Entman claims the concept of framing “consistently offers a way to describe the power of a communicating text,” and analyzing frames can help a researcher understand the “precise way in which influence over a human consciousness is exerted by the transfer of information from one location to that consciousness.”<sup>10</sup> Entman also states that framing involves salience and selection by saying “to frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described.”<sup>11</sup> He lays out the four basic roles of a frame in media: define problems, diagnose causes, make moral judgments, and suggest remedies.<sup>12</sup> In frames, the definition of a problem is measured with common cultural values, which determine the costs and benefits of the problem. Frames help to clarify the forces creating the problem, guide the audience to evaluate causes and effects, and advocate solutions to the problems.

After determining the role of framing, Entman suggests four locations in the communication process where frames are prevalent: the communicator, the text, the receiver and the culture.<sup>13</sup> In this evaluation, the communicator presents a frame, consciously or unconsciously, which is determined and guided by her belief systems. The text contains the frame that is identified by certain catch phrases and keywords, which provide thematic clusters of information. A receiver of the frame may or may not be guided by the frame presented; instead, she might create her own frame of reference based on the frames presented by the communicator. And lastly, the culture of the frame is the “stock of commonly invoked frames.”<sup>14</sup> In their analyses of frames and framing, Reese and Entman help create a paradigm in which to work while evaluating frames, framing, and analyzing the use of frames in media effects.

### **Mountaintop Removal**

Mountaintop removal has been an environmental issue for the past 35 years in Central and Southern Appalachia. West Virginia, Kentucky, Virginia and Tennessee all have mountaintop removal mines operating under a permit obtained through the federal Office of Surface Mining and state permitting agencies.<sup>15</sup> This process of aggressive surface mining uses dynamite to the mountaintops off in order to reach the coal seams below. The “overburden” (the top of the mountain) is discarded into the valleys and hollows below creating valley fills. Under the Clean Water Act, this is considered mining waste and illegal dumping into the waterways. However, recent amendments by the Bush Administration through policy directives have redefined this overburden as “fill,” not “waste,” and skirted the enforcement of the Clean Water Act by the Environmental Protection Agency and Army Corps of Engineers. As it becomes more economical for coal companies like Massey Energy, Arch Coal, and National Coal Corporation,

the practice of mountaintop removal increases because fewer people have to be employed to work the mines and more coal can be extracted in less time, thus creating more profit for the coal companies.

Mountaintop removal has had some news coverage, but not as much as other environmental problems, such as global warming. Some critics of the news media's coverage of mountaintop removal claim the reason this issue is not on the front page of every national paper and leading the nightly news is because it happens in Southern Appalachia – a poor region of the country that is used and abused for its natural resources. Robert Kennedy, Jr., has been quoted as saying there would be a revolution today if people could actually see what was happening in Southern Appalachia.<sup>16</sup>

So how have the media handled this issue of mountaintop removal? When it does appear in the news, how is the issue framed? These are questions addressed in the following pages of this research paper.

## **Methods**

The goal of this study was to evaluate the framing of mountaintop removal in print journalism. I chose to focus on print journalism because journalists are able to present more information to the public in print form rather than in broadcast form.

This study looks at mountaintop removal in the news over a one-year time period from March 31, 2004, to March 31, 2005. Using the Lexis Nexis database, I performed a guided news search in all news wires available. I used <mountaintop removal> as the key term for the news search and selected <past year> for time period. After the results of the search were returned, I did a search within the results using <Associated Press> in order to obtain samples from one

print journalism source. The significance of the Associated Press is that it is one of the largest and most credible news wires in the country. Stories written for the AP are circulated throughout the country and appear not only in national papers, but also in smaller, local dailies. Therefore, the audience for the AP is very large and varied. After the search results were returned, I copied and pasted each news story into a Word document for further evaluation.

In order to discover the frames used in each story, I read over each story and highlighted similar themes. This process of thematic framing was done in order to obtain a broad idea of what kind of frames were being used in each story about mountaintop removal. After completing the initial evaluation, I went back over each story and categorized the story based on the different frames I observed.

Because the general overview of my thematic analysis did not give me statistical or graphical information with which to work, I decided to use a content analysis program to obtain more information about the framing of mountaintop removal in print journalism. The content analysis program I used for my evaluation was QDA Miner from the Statistical Consulting Center at the University of Tennessee, Knoxville. I ran the conversion wizard to import my Word files into the program, and coded segments of the coverage under a larger heading of <legal>. The codes I used were <bury>, <violation>, <stream>, <lawsuit>, <Clean Water Act>, and <permits>. The variable I used was the month each article was printed. I ran a text retrieval to code each segment of the text; then ran an analysis of coding by variables to obtain a frequency count. The results of this analysis are explained further in the Findings section and are accompanied by a bar chart to show the results.

Another aspect of content analysis I used for evaluation was WordStat. This program allowed me to evaluate the frequency of words and phrases within the news coverage of

mountaintop removal. Using QDA Miner to first import the documents, I ran a content analysis that appeared in WordStat. From there, I was again able to look at frequency of keywords within a legal frame, but also run a cross tabulation with other words and phrases to evaluate both the frequency and percentage of each word or phrase used. The results of this analysis are explained further in the Findings section of this paper.

## **Findings**

The major frame used in print journalism by the Associated Press on a story about mountaintop removal in the past year is a legal frame. Other frames include political framing, protest/action, and personal/individual framing. However, the legal frame was most prevalent in the 27 stories evaluated.

Most of the stories printed about mountaintop removal over the year studied covered lawsuits and legal issues with the process of mountaintop removal. The legal battle being fought was between environmental groups opposed to regulation and permitting changes and the regulatory agencies and coal companies wanting a more efficient permitting process.

Environmental groups such as the Ohio Valley Environmental Coalition (OVEC), Kentuckians for the Commonwealth (KFTC), Save Our Cumberland Mountains (SOCM), and the Sierra Club all participated in the legal battle for stricter regulations on mountaintop removal. Opposing voices included the Army Corps of Engineers (federal regulatory agency responsible for the maintenance of waterways), the Office of Surface Mining (the federal regulatory agency that approves/rejects permit applications for mountaintop removal), and coal companies such as Massey, Arch Coal, and National Coal Corporation.

One significant finding from this study is that the legal frame is based on one or two important rulings by federal courts. Beginning in July of 2004, a federal court “barred the U.S. Army Corps of Engineers from using a streamlined process to approve coal permits for waste disposal.”<sup>17</sup> Contained within the July 9, 2004, story were words and phrases such as “buried about 26 miles of stream” and “violated the Clean Water Act.” These phrases were prevalent throughout the legal framing of mountaintop removal. Also used were phrases such as “ensure the nation’s energy independence,” which aligns with the coal companies’ argument for mountaintop removal.<sup>18</sup> The coverage in the months after this article deals primarily with the ruling in the lawsuit and whether or not the Army Corps of Engineers obeyed the ruling. After the federal court ruling in July, the Corps refused to offer guidance to the mining industry on how the order should be applied. On these grounds, environmental groups petitioned the judge to clarify his order. Then, in an article printed August 29, 2004, a headline ran: “Surface mining dispute back where it started.”<sup>19</sup> By the end of the year studied, the legal battle was still underway between the mining industry and environmental groups.

At the heart of the lawsuits and legal framing for the news coverage of mountaintop removal is the quality of water in the streams below the mountaintop removal sites. Burying streams with sediment or waste is a clear violation of the Clean Water Act – one of the few federal regulations that can help protect waterways from pollution by mining and logging activities. The framing of this issue included words such as “bury”, “violation”, and “destroy.” These words clearly showed the importance of streams within the framework of mountaintop removal mining. Using the WordStat program, I was able to run a cross tabulation with these keywords involved in the legal framing of mountaintop removal in the news. The chart below shows the results:

	Lawsuit	Water
Stream	14	11
Violated	5	7
Clean	40	44
Sediment	12	16

Table 1: Cross-Tabulation of framing.

This chart shows the relationship between the key words used in evaluating the legal frame of mountaintop removal. The use of “clean” 40 times with “lawsuit” and 44 times with “water” shows a strong correlation between the lawsuit and the Clean Water Act. Another correlation is the occurrence of “sediment” and “water.” The occurrence of these words described the illegal dumping of sediment into the water; a violation of the Clean Water Act and direct correlation to the legal framing of mountaintop removal.

As mentioned earlier, QDA Miner was used to analyze the text. Using the terms “lawsuit”, “Clean Water Act”, “permits”, “stream”, “bury”, and “violation” as coders, I ran a coding by variables test to compare the frequency with which each term appeared in relation to the other. The chart below shows the frequency count in each month of available news coverage.

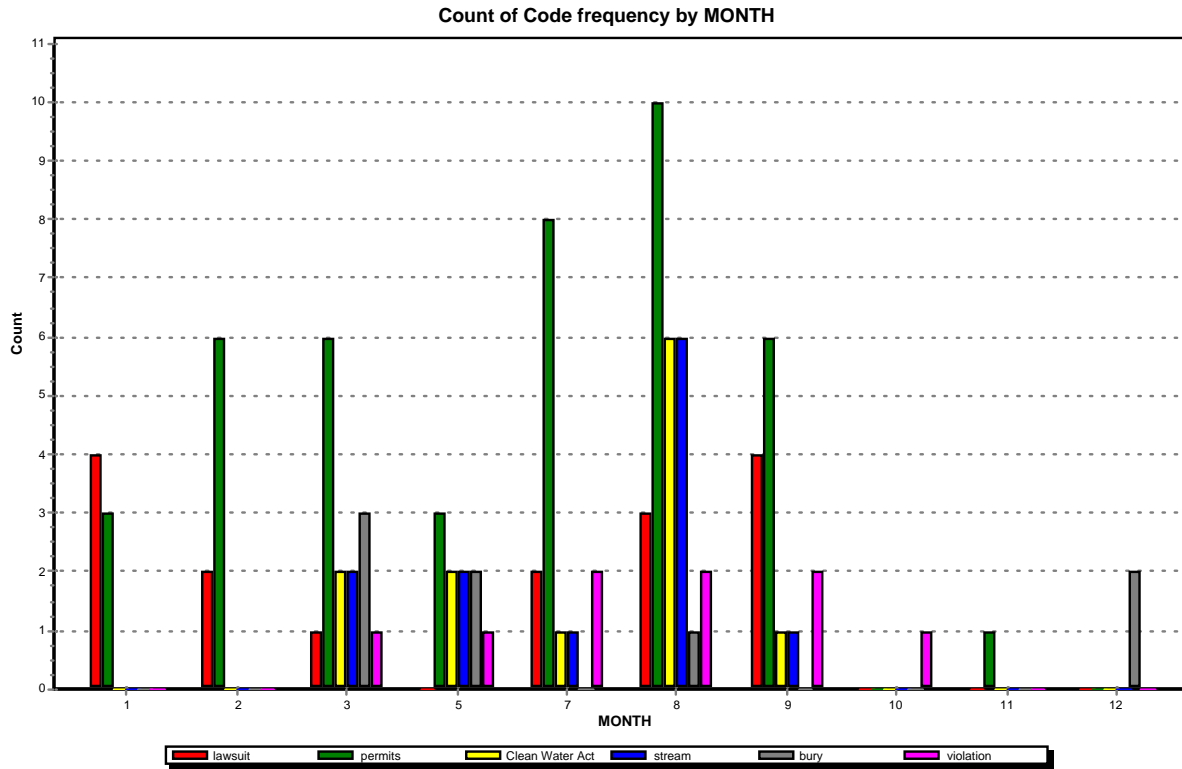


Table 2: Frequency of keywords in legal frame of mountaintop removal in the news.

This graph shows the keywords used in the coverage of mountaintop removal in order to implement a legal frame. The highest coverage within the legal frame was during the months of March through August. Through the year, these were the months that covered the lawsuits most frequently because most of the important rulings and issues ordered were during this time period. Because the legal battle focused mostly on the permitting processes used by the Office of Surface Mining, the keyword used most frequently in the framing of the issue was “permits.”

Other frames of mountaintop removal in the news included the framing of mountaintop removal itself. Each story that actually defined mountaintop removal for the audience had variations on the same theme. The definition of mountaintop removal most used by the news media is as follows:

Mountaintop removal is a high-efficiency surface mining technique designed to recover 100 percent of the coal. The rock and dirt above and between the coal seams is blasted away, then disposed of in nearby streambeds, leaving a finished landscape that is flat or gently rolling rather than the steep mountains and valleys that existed before mining. The disposal sites are known as valley fills.<sup>20</sup>

Other variations of the definition are more descriptive: “In mountaintop removal, coal operators blast off entire hilltops to uncover coal seams. Leftover rock and dirt is deposited into nearby valleys, burying streams.”<sup>21</sup>

The coverage of mountaintop removal in print journalism, while mainly working within a legal framework, also included information about public opinion, protests by environmental groups, and political issues. Over the time period studied, political issues were used as frames around the time of the presidential election. In West Virginia, the Mountain Party<sup>22</sup> made the news with its stance against mountaintop removal, while George W. Bush’s visit to West Virginia made news with the framing of mountaintop removal as energy independence. Using the phrase “clean coal technology”<sup>23</sup> the media framed Bush’s message as one of patriotic importance.<sup>24</sup>

Another frame used two months earlier in the coverage of mountaintop removal was polling. The Appalachian Center for the Economy and the Environment conducted a survey of 500 likely voters on their opinion of mountaintop removal. Fifty-six percent of the likely voters surveyed opposed mountaintop removal; whereas only 29 percent of those surveyed were in favor of mountaintop removal. The remaining 15 percent were unsure how they felt.<sup>25</sup> Because public opinion is mentioned within this frame, it enables the audience to evaluate and compare their own opinions with those of the public.

During the earlier part of the year studied, the media also covered the opposition and action against mountaintop removal. Activists with the environmental groups Save Our Cumberland Mountains and Tennessee Scenic Rivers Association organized a boat relay to highlight the issue of water pollution from mountaintop removal. Traveling down the Big South Fork to the Cumberland River, activists brought a “message in a bottle” to Tennessee Governor Phil Bredesen about working with residents of the coal fields to protect the state’s streams from mountaintop removal.<sup>26</sup> This frame fits in with the legal framework because most of the boaters were members of environmental groups involved in the lawsuits covered over the year studied.

### **Analysis**

This study of AP surface mining stories shows the framing of mountaintop removal in print journalism over this one-year time period is a legal frame. Lawsuits between environmentalists, mining regulators, and coal companies have been covered by the Associated Press. However, other issues of importance in this debate were not so prevalent or even included in the coverage.<sup>27</sup>

Frames are used for both presenting and comprehending news coverage. Because of this dual role, Scheufele, adding to work done by media theorists Kinder and Sanders in 1990, suggests frames as both a media frame and an individual frame. The media frame can be described as devices imbedded in political discourse,” while an individual frame relates to the “internal structures of the mind.”<sup>28</sup> Using these two distinctions, the framing of mountaintop removal can be evaluated through both a media frame and an individual frame.

The media frame used for mountaintop removal is in large part the legal issue, but as a “device imbedded in political discourse,” the framing of the definition of mountaintop removal is critical. Again, the working definition of mountaintop removal used by the Associated Press:

Mountaintop removal is a high-efficiency surface mining technique designed to recover 100 percent of the coal. The rock and dirt above and between the coal seams is blasted away, then disposed of in nearby streambeds, leaving a finished landscape that is flat or gently rolling rather than the steep mountains and valleys that existed before mining. The disposal sites are known as valley fills.<sup>29</sup>

Within this framed definition of mountaintop removal, political discourse is already at work. The first sentence offers the audience a technological advantage of this type of mining by labeling it a “high-efficiency surface mining technique.” In the second part of this same sentence, the audience is given an economical argument for coal mining as well with the statement “recover 100 percent of the coal.” This first sentence in the definition of mountaintop removal has already framed the issue for the audience: a technological advancement that will help the economy. By using this media frame for political discourse, the media stay within the paradigm that most people in American culture are used to – science as technology. This provides a central organizing idea for mountaintop removal in the news media. Within the paradigm of science as technological progress, the legal issues of clean water and violations become secondary to larger framework of technological progress.

A study done by Bengston, Xu, and Fan shows how media framing works in news media coverage to sway public opinion. In their study, they examined attitudes towards ecosystem management in the United States from 1992-1998. They claim that the media “have been shown to have a strong influence on agenda setting for the general public for a wide range of issues,

including those in the environmental area.<sup>30</sup> Findings suggest that the attitudes expressed in public opinion polls were similar (78 percent of the time) with the attitudes of ecosystem management the media put forth.<sup>31</sup>

However, the individual frame is where most of the audience will perform a second-level analysis of what mountaintop removal mining is and how it affects them. This individual framing, relying on the internal structures of the mind, helps the audience to create their own frame of reference for the particular news event. Individual framing was used in coverage of the polling results, which showed a majority of people in West Virginia opposed mountaintop removal. With a frame of reference that a neighbor opposes this practice of coal mining, the individual framing will possibly merge the two opinions into the majority.

### **Framing Revisited**

Both analyses of framing, individual and media level framing, help to understand the coverage of mountaintop removal in the news. Entman evaluates the benefits of creating a concept of framing in news media research by stating that “understanding frames will help to illuminate many empirical and normative controversies because the concept of framing directs our attention to the details of just how a communicated text exerts its power.”<sup>32</sup> He continues to lay out four results of framing that can be useful when evaluating news coverage of issues, such as the coverage of mountaintop removal. According to Entman, audience autonomy is affected by framing because people are “not generally well-informed and cognitively active and framing therefore heavily influences their responses to communications.”<sup>33</sup>

This concept can be seen in the coverage of mountaintop removal. Results of the poll conducted in West Virginia about mountaintop removal, which showed that 56 percent of people

were opposed to mountaintop removal, were published in July of 2004. Stories published before then focused on numerous issues with mountaintop removal. The legal frame was present, but there were also frames of emotion and protest. One story that appealed to the emotional framing focused on a family who was going to be forced out of their home because a coal company wanted to expand its mine. The issue landed in the West Virginia Supreme Court, which ruled to allow the family to keep their land, despite protest from the coal companies. Another story focused on public hearings to the proposed rule change by the Bush Administration to the Clean Water Act that would allow valley fill. Loaded, emotional words such as “pleaded with” were prevalent throughout the article, which gave a voice to the community of people who wanted to rid West Virginia of mountaintop removal. With these frames in place, the audience autonomy is likely to be influenced.

Another benefit of creating a concept of framing is journalistic objectivity. Entman argues that although rules for objectivity are practiced in journalism, a dominant frame will still emerge because journalists “lack a common understanding of framing [and] frequently allow the most skillful media manipulators to impose their dominant frames on the news.”<sup>34</sup> Having a framework for evaluating media framing will help to create news that will be accessible to average, inattentive and marginally informed audiences. Another benefit would be the ability to conduct accurate content analyses to identify and describe frames rather than draw conclusions from dominant meanings. Entman argues that content analysis “may often yield data that misrepresent the media messages that most audience members are actually picking up.”<sup>35</sup>

Lastly, Entman suggests a concrete concept of media framing for public opinion and normative democratic theory, because “framing appears to be a central power in the democratic process, for political elites control the framing of issues.”<sup>36</sup> Because media is controlled through

corporate ownership, public opinion can be swayed one way or the other by gatekeepers. Entman argues that a framing paradigm “can illuminate, if not solve, central puzzles in a normative democratic theory.”<sup>37</sup>

## **Conclusion**

The way an issue is framed in the media can have rippling effects through the public and its opinion of the frames projected towards them from the media. In the case of mountaintop removal, the legal issue is the main frame within which the public evaluates mountaintop removal. By using this frame, the media project faith in the legal system to determine the rights and wrongs of permitting, stream destruction, and all other issues of mountaintop removal.

The movement to stop mountaintop removal and rid Southern and Central Appalachia of this destructive mining process is growing, as well as the media coverage of the issue. This study looks at a one-year time period in print journalism, focusing specifically on the Associate Press. Because of these limitations, the full picture of opposition was not prevalent throughout the research. Further and broader research into the media coverage and framing of mountaintop removal in print journalism could include evaluating the daily newspapers of each town directly affected by mountaintop removal. Another possible aspect is to relate public opinion to the concept of framing and compare the two for consistencies.

Over the next few months, I will be conducting more research into the opposition of mountaintop removal and how it is framed in print journalism. Using specific dailies from towns affected by this form of surface mining, I hope to expand on this research and understand other frames that come into play. One particular source I have found interesting is a dissertation published by Marc Seamon while at Pennsylvania State University, which discusses the different

arguments used by claimsmakers and the frames formed from those arguments by the media. He concludes that more research needs to be done in framing of environmental issues by the media and their conceptual understanding of reporting on technical issues like the environment.<sup>38</sup>

Mountaintop removal is an environmental concern with many different frames that environmentalists use to evaluate media coverage. Those frames include the destruction of intact forests, loss of biodiversity, and clean water; destruction of cultural heritage for people in the coal fields and depopulation of areas with both active and closed mines; private property loss for residents of the coal fields when the government seizes the land, or the property is devalued because of the mining; blasting from the mines, flooding because the mountain is gone and there is no more topsoil for water filtration, and flyrock.<sup>39</sup> These frames and more can be used by media effects researchers to further evaluate the framing of mountaintop removal in print journalism.

Although a concrete theory of media framing has yet to be decided on by media scholars and critics, the working definitions of media framing by Entman, Reese, and Scheufele help students of communication and beginning researchers to evaluate news coverage and draw conclusions about what role media framing has in media effects research.

## Endnotes

- 
- <sup>1</sup> The region defined here as Central and Southern Appalachia include the states of West Virginia, Kentucky, Virginia, and Tennessee.
- <sup>2</sup> Examples of groups are Katuah Earth First!, Coal River Mountain Watch, Ohio Valley Environmental Coalition.
- <sup>3</sup> Stephen D. Reese and O.H. Grady, eds. *Framing Public Life: Perspectives on media and our understanding of the social world*. (Mahwah: Lawrence Erlbaum, 2001), 7.
- <sup>4</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 51.
- <sup>5</sup> Dietram A. Scheufele, "Framing as a Theory of Media Effects," *Journal of Communication* 49 (Jan 1999): 103 [database on-line]; available from Academic Search Premier, EBSCO, AN 1698666.
- <sup>6</sup> Stephen D. Reese and O.H. Grady, eds. *Framing Public Life: Perspectives on media and our understanding of the social world*. (Mahwah: Lawrence Erlbaum, 2001), 7.
- <sup>7</sup> Stephen D. Reese and O.H. Grady, eds. *Framing Public Life: Perspectives on media and our understanding of the social world*. (Mahwah: Lawrence Erlbaum, 2001), 12.
- <sup>8</sup> Stephen D. Reese and O.H. Grady, eds. *Framing Public Life: Perspectives on media and our understanding of the social world*. (Mahwah: Lawrence Erlbaum, 2001), 14.
- <sup>9</sup> Stephen D. Reese and O.H. Grady, eds. *Framing Public Life: Perspectives on media and our understanding of the social world*. (Mahwah: Lawrence Erlbaum, 2001), 17.
- <sup>10</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 51-2.
- <sup>11</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 52.
- <sup>12</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 52.
- <sup>13</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 52.
- <sup>14</sup> <sup>14</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 53.
- <sup>15</sup> Other terms for mountaintop removal used by these regulatory agencies include cross-ridge mining, peak reduction, and steep-slope surface mining. The Office of Surface Mining in Tennessee, for example, does not refer to this process of coal extraction as mountaintop removal; they instead use cross-ridge mining.
- <sup>16</sup> *Associated Press* (Washington), 31 March 2004.
- <sup>17</sup> *Associated Press* (Charleston), 9 July 2004.
- <sup>18</sup> *Associated Press* (Charleston), 9 July 2004. Coal companies and some governmental officials believe that the United States can increase energy independence by increasing the mining of coal. This political issue is highly debated by environmentalists who argue that energy independence will only come with increase in funding for renewable energy, not increasing the production of coal.
- <sup>19</sup> *Associated Press* (Charleston), 29 August 2004.
- <sup>20</sup> *Associated Press* (Huntington), 24 August 2004.
- <sup>21</sup> *Associated Press* (Charleston), 22 March 2005.
- <sup>22</sup> The Mountain Party is an independent, state political party in West Virginia.
- <sup>23</sup> Clean coal technology refers to the burning of low-sulfur coal in coal plants with air filters, or scrubbers, on the smokestacks. Environmentalists argue that this term is an oxymoron and that coal will never be clean technology.
- <sup>24</sup> Frequently, the Bush Administration plays on the patriotic fever of the nation when discussing energy policies. With mountaintop removal coal mining, Bush's message is aligned with the coal companies in that the United States must mine coal in order to become less dependent on foreign sources of energy.
- <sup>25</sup> *Associated Press* (Charleston) 14 July 2004.
- <sup>26</sup> *Associated Press* (Nashville) 19 July 2004.

- 
- <sup>27</sup> Other issues associated with mountaintop removal include human rights, social justice, environmental racism, private property rights, and others which will be discussed later in the paper.
- <sup>28</sup> Dietram A. Scheufele, "Framing as a Theory of Media Effects," *Journal of Communication* 49 (Jan 1999): 106 [database online]; available from Academic Search Premier, EBSCO, AN 1698666.
- <sup>29</sup> *Associated Press* (Huntington) 24 August 2004.
- <sup>30</sup> David N. Bengston, et. al., "Attitudes Toward Ecosystem Management in the United States, 1992-1998," *Society and Natural Resources* 14 (July 2001): 472. [database on-line]; available from Academic Search Premier, EBSCO, AN 4802273.
- <sup>31</sup> David N. Bengston, et. al., "Attitudes Toward Ecosystem Management in the United States, 1992-1998," *Society and Natural Resources* 14 (July 2001): 472. [database on-line]; available from Academic Search Premier, EBSCO, AN 4802273.
- <sup>32</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 55-6.
- <sup>33</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 56.
- <sup>34</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 56-7.
- <sup>35</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 57.
- <sup>36</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 57.
- <sup>37</sup> Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43 (Autumn 1993): 57.
- <sup>38</sup> Seamon, Marc. "Media and Claimsmaker Framing of Controversial Environmental Issues: A Frame Mapping Analysis of Mountaintop Removal Mining." Submitted to Pennsylvania State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy, College of Communications, May 2005.
- <sup>39</sup> Flyrock is a term used to describe the rock that flies from the mine sites during blasting. It has been known to land on homes and destroy roof tops. Rocks frequently fly off from mining sites because they have been dislodged by heavy equipment too.