
Honors Research Thesis

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by

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Introduction

The environmental movement has been active in the United States since the 1800s. However, as time has passed, so have the goals and strategies of environmental movement organizations. What began as small, often-ignored groups have become large and powerful organizations. From reading other literature, I learned how social movement organizations turn ideas into action and achieve goals. Namely, public opinion matters! Public opinion is mobilized through the media, and important information is presented to the media by social movement organizations (SMOs) through frames. I seek to explore how this matters in the environment and how environmental social movement organizations garner media coverage.

Drawing on data from multiple sources, I determined how many times three keywords—“global warming”, “climate change” and “recycling”—were mentioned in the New York Times annually between 1970 and 2001, how many environmental protests occurred each year from 1970 to 2001, how many environmental movement organizations (EMOs) existed each year from 1970 to 2001, and what percentage of the U.S. population stated that the environment was the most pressing problem facing the United States.

I found a number of things. My most prominent finding was that as the number of environmental protests, the visibility of the environmental movement and the percentage of Americans who said the environment was the most important problem all increased, the New York Times mentioned “global warming” more frequently.

My findings backed up what I had already assumed; public opinion matters, but it is not the only thing that affects media coverage. Other events have to occur for an
organization to receive media attention and sometimes, even if everything is successful, the media may find other organizations and events to cover.

**Literature Review**

**Overview of the American Environmental Movement**

In 1872, Yellowstone National Park was established as the first national park in the United States and the world. Some believe that this was the beginning of the environmental movement in America, but many groups and individuals were working on conservation and preservation before Yellowstone was founded.

Silveira (2001) provided a broad summary of the history of the American environmental movement, while Johnson (2008) provided a brief history of the American environmental movement since the 1960s. Silveira divided American environmentalism into four eras: 1) conservation and preservation; 2) modern environmentalism; 3) mainstream environmentalism; and 4) grassroots environmentalism. The era of conservation and preservation had mainly ended before the scope of this paper begins. This era began in the 1800s in the American West and led to the creation of many National Parks. Johnson’s paper focuses on modern environmentalism forward.

This paper will focus on how the environmental movement has changed since the 1960s, which marked the beginning of modern environmentalism (Johnson, 2008). The modern environmental movement began with the publication of Rachel Carson’s *Silent Spring* in 1962. The primary focus of modern environmentalism was based on the cleanup and control of pollution because of the human health effects of pollution, and other quality of life issues (Johnson, 2008). This era regarded environmentalism as a social value. Carson’s book exposed the dangers of environmental pollution on human
health and on the natural environment. *Silent Spring* “helped launch a new decade of rebellion and protest in which the concept of “nature” was broadly construed to include quality-of-life issues” (Silveira, 2001). The modern environmental movement was still interested in the conservation of natural resources and wildlife, but grew to include other objectives as well (Johnson, 2008).

The modern environmental movement occurred alongside other social movements of the 1960s, including Civil Rights, Peace movement and women’s rights. All of these movements took on similar stances against corporations and government bureaucracy. The tipping point for activists was a number of environmental catastrophes that occurred in the 1960s, including the 1965 power blackout and garbage strikes of New York City, the 1969 burning of the Cuyahoga River along the industrial sections of Cleveland, and the 1969 Santa Barbara oil spill. Students also became more involved in the movement. Environmentalists began demanding government protection from environmental degradation and pollution.

The modern environmental movement was also characterized by the passage of more than 30 pieces of major legislation that dealt with the environment in the 1970s (Johnson 2008). Environmental activists pushed for and helped draft legislation on several bills, including the Wilderness Act (1965), the Clean Air Act (1967), National Trails Act (1968), and the Wild and Scenic Rivers Act (1968). Their efforts and the increasing momentum of the environmental movement culminated in the first Earth Day celebration on April 22, 1970, which marks the beginning of the third era of the environmental movement: mainstream environmentalism.
Earth Day in 1970 was celebrated by twenty million Americans and focused on quality of life issues and concern for the environment. There were several toxic chemical accidents in the 1970s that brought more publicity, energy and momentum to the movement. In addition, the energy crisis over the winter of 1973-74 brought even more attention to the movement. This led to the formation of the Environmental Protection Agency in 1970, and more environmental regulations were established throughout the decade: water quality legislation, air pollution laws that were passed in 1965, 1970, and 1972, the Pesticides Act of 1972, and the Coastal Zone Management Act of 1972. All of these factors brought the environmental movement into the mainstream.

During Reagan’s presidency, political protection of the environment eroded. Reagan undertook deregulation that frustrated environmental activists. There was some backlash that led to support for environmental issues and movement organizations; national EMOs, especially those focused on issues of wildlife and natural resource conservation, had an influx on members in the 1980s (Johnson 2008). However, grassroots groups were ignored by the government, while mainstream environmental groups formed the “Group of 10” (G-10), which included the CEOs of the ten largest environmental organizations. These groups used lobbying, legal and scientific expertise, and compromise to push their agenda. The G-10 became the American public’s perception of the environmental movement and pushed other groups to the backburner, especially the groups looking to take direct, rather than legislative, action. The late 1980s is characterized by a decline in national EMOs due to several factors: “the perceived inability of [national EMOs] to protect previous legislative gains and the growth of a grassroots-based environmental justice movement extremely critical of the national
The beginning of the fourth era of American environmentalism is marked by the emergence of grassroots organization that criticized the mainstream groups’ issue-by-issue, legislative methods. These grassroots organizations formed as a reaction to Reagan’s anti-environmental deregulation laws. Grassroots environmentalism “embraces the principles of ecological democracy, and is distinguished from mainstream environmentalism by its belief in citizen participation in environmental decision making” (Silveira, 2001).

These new citizen-based groups reflect the evolution of environmentalism from a narrow, wilderness-centered philosophy to a richer, more inclusive ideology encompassing both rural and urban environments. Philosophically, the fourth era encompasses a spectrum of ideologies, including: deep ecology, social ecology, bioregionalism, feminist ecology, spiritual ecology, native ecology, and Not in My Backyard (NIMBY) groups. Moreover, grassroots environmentalism cuts across ethnic, racial, and class barriers to introduce diversity previously absent from the environmental movement.

Grassroots groups can be divided into four categories: 1) splinter groups, 2) the new conservation movement, 3) environmental justice groups, and 4) Not in My Backyard groups. Splinter groups are formed by individuals who leave mainstream organizations when their personal ideology and organizational vision clashes with establishment views. An example of a splinter group is when the Sierra Club fired radical
activist David Brower in 1969. Brower went on to form three distinct organizations: Friends of the Earth (FOE), the League of Conservation Voters, and the Earth Island Institute. The New Conservation Movement consists of thousands of small, local and regional groups formed by dedicated activists to save America’s forests, especially ancient forests, one at a time. Local and regional groups arose in direct response to the failure of mainstream organizations such as the Sierra Club and the Wilderness Society, to protect old growth forests.

Environmental justice and NIMBY groups “seek to address the uneven distribution of the costs of pollution and the benefits of environmental protection by framing environmental issues within the larger context of social justice, civil rights, and the democratic process” (Silveira, 2001). These organizations diversify the environmental movement by including environmental activists of all colors and social classes. Moreover, both environmental justice groups and NIMBY groups generally arise in reaction to the general disregard of the poor, the disadvantaged, and those classically underrepresented in the political process. However, the formation of each movement is different.

Environmental justice groups argue that neither the costs of pollution nor the benefits of environmental protection are evenly distributed throughout society. Such uneven distributions of environmental hazards stem from inequalities of socio-economic and political power. Anti-toxics, or NIMBY, groups are often led by average citizens, often by women with little political experience (which has led them to be known as a “movement of housewives”). Many of these activists are not politically motivated.
Instead their motivation usually lies in their desire to protect their families and communities from toxic contamination and pollution.

The environmental movement has changed in its motives and tactics since its beginnings two centuries ago. It can even be hard to generalize one environmental movement, as there are a variety of different groups with different goals and different means of achieving those goals. Whatever its motivation or goal, social movement organizations, including environmental organizations, need to mobilize public opinion through the media via framing derived from its resources. Public opinion, the media, framing and resource mobilization all interact with each other to impact the outcome of environmental groups and their success. In the following, I describe research on public opinion, the media and framing to better understand the environmental movement.

**Mobilize Public Opinion**

Environmental movement organizations, like all other social movement organizations, need public support to be successful and achieve their goals. There is mixed evidence on the impact public opinion has on public policy: some scholars believe that public opinion has a large impact on public policy, while others think that public opinion does not affect public policy.

Lohmann’s (1993) summary of Democratic Theory states that the responsiveness of democratic governments to their citizens is substantial. This is because elected officials, in order to be elected, will pay very close attention to their constituents’ opinions. Political parties will also be responsive in order to win and hold onto power. Interest groups and social movement organizations provide politicians with information
about the opinions of certain segments of the population. Many statistical studies have found that public opinion strongly affects public policy.

In addition, studies have been done linking public opinion and the media in environmental issues such as nuclear power. The findings of these studies are transferable to public opinion of the environmental movement. Gamson and Modigliani (1989; 2) claim that “media discourse is part of the process by which individuals construct meaning, and public opinion is part of the process by which journalists and other cultural entrepreneurs develop and crystallize meaning in public discourse”. Further, the authors state that using a set of discourses that interact with each other is more useful in approaching public opinion than using a single public discourse model. The different discourses include a specialist’s discourse, an oral discourse, and a challenger discourse. General audience media is only one of the forums where public discourse occurs, but it is the most important to public opinion. Journalists refer to other forums for their information on topics and also bring in popular culture. This article demonstrates how important the media is in influencing public opinion on nuclear power, but this idea is useful when considering the public’s opinion of the environment more broadly and the importance of protecting it.

In contrast, Paul Burnstein (2005) argues that statistical studies that often show that public opinion strongly affects public policy may overestimate the effect because they focus on the issues on which governments are most likely to be responsive. Those issues are especially important to the public. This sampling bias has led us to overestimate the strength of the opinion-policy link. Burnstein claims that if issues that
were less important to the public were examined (i.e. the sampling bias was removed),
the opinion-policy link would be weaker.

**Movements and the Media**

As noted by Gamson and Modigliani (1989), the media serves as the intermediary
to the public. The media can also filter the
messages the public receives. Thus, gaining media access is critical. Journalists can cover
a variety of topics and their opinion affects what they cover and the slant they cover it
with. If a SMO is able to get the media on their side, their ability to win over the public is
enhanced.

Lipsky (1968) provides a theoretical perspective on protest activity as a political
resource and the role of the media. Lipsky (1968: 1145) defines protest activity as a
“mode of political action oriented toward objection to one or more policies or conditions,
characterized by showmanship or display of an unconventional nature, and undertaken to
obtain rewards from political or economic systems while working within the systems”.
The “powerless” groups that partake in protest activities need to activate third parties
(supporters) to enter bargaining arenas in ways that are beneficial to the protesters. In
successful protests, the reference publics of protest targets are conceived as reacting to
protest in such a way that target groups or individuals respond in ways favorable to the
protesters (Lipsky, 1968).

The environmental movement had an active protest agenda earlier in the 20th
century. Along with antiwar protests and civil rights marches, environmental protests
sought to raise attention about the chemicals being released into the air via a number of
means. These protests drew attention to the groups’ concerns, and eventually led to changing legislation. The environmental movement is no different than any other SMO that mobilizes external allies.

When public officials recognize the legitimacy of protest activity, they are likely to aim public policy at the reference publics from which they originally draw support. Even though policy tends to be written to help the disadvantaged, Lipsky suggests that symbolic reassurances are dispensed to potentially concerned publics. In addition, he argues that symbolic reassurances are given out because they are the public policy outcomes and actions desired by the constituencies to which public officials are the most responsive.

Other social movements see the media as an important avenue for garnering widespread support. Rohlinger (2006) has researched the media’s role in the abortion war and determined why groups behave the way they do with respect to other groups. For example, she found that “in times of political opportunity, groups remain silent on their allies’ activities because silence distances their organizations from rancorous public debates and buttresses their political legitimacy. During political threats, groups cooperate with their allies in the media arena but they use public coalition work to advance their own political and media goals” (Rohlinger 2006; 554).

Rohlinger claims silence is powerful media tactic but it can only be used when movement groups have access to political elites, which allows them to be choosier about which public debates they engage in. An activist organization may use silence in the media arena to distance itself from its more radical allies and take advantage of the radical flank effect, which occurs when a radical wing engages in disruptive tactics to
challenge the status quo, which sometimes forces politicians to take the movement more seriously. Silence during bitter debates can position an activist group as a rational, moderate actor in a broader and more radical field by separating moderate groups from the radical ones. This may provide an organization additional public and political legitimacy and leverage.

These findings suggest that SMOs evaluate the costs and benefits of their actions in both the political and media arena. It is difficult to gain rapport in the media arena, so SMOs may ride on the coat tails of sympathetic politicians and allied organizations when the political environment is positive so that they can work on goals more specific to their organization. There are many SMOs and where each organization falls with respect to all the other organizations affects the media tactics that particular organizations use. “When and how a social movement organization deviates from its preferred strategies and tactics reflects political opportunities and threats as well as a group’s position in a multi-organizational field” (Rohlinger, 2006; 556).

In *The Whole World is Watching* (1980), Todd Gitlin examined how and why the media covered the events surrounding the student and anti-war movements between 1965 and 1972, with a special focus on the 1968 Democratic National Convention in Chicago. He called this the “movement-media dance” (Gitlin, 1980). The media needed stories and they preferred dramatic ones; the movement needed publicity for recruitment, for popular support and for political support. The movement radicalized, in part, to receive media coverage, which would help them gain new members and support. Gitlin found that the media first ignore new political developments, then select and emphasize aspects of the story that highlight movements as unique.
This story illustrates the danger of media coverage; it can be harmful to an SMO. Although no one perspective was taken on by the *New York Times* or CBS News, over time the movement was framed in a way that defamed, trivialized and marginalized the movement. The press emphasized the appearance, age and style of the participants instead of their message about the morality and horrors of the war. Arrests, violence, Viet Cong flags, communists, and right-wing counter-demonstrators were highlighted out of proportion to their internal importance. While for many demonstrators (and the media) opposition to the war was the only issue, the official Students for a Democratic Society position was more inclusive. The media exaggerated the importance of revolutionary rhetoric which destabilized the movement, and then promoted "moderate" alternatives, but still spreading the antiwar message. He found that the media coverage changed the movement leaders into celebrities, which estranged them from their movement base. Gitlin argues that one reason for the increased militancy and radicalism in the New Left occurred in an attempt to satisfy the media’s hunger for novelty and drama. The media picked out what they thought was interesting and important and that is the message that the vast majority of the public received.

This research on the media is transferable to environmental organizations. The media affects movements in similar, if not the same, ways. The media actively picks what it believes to be interesting, relevant and important and then reports that information to the public. The media has a direct effect on what the public knows and even how the public views people and events by presenting information in particular ways.

Research in this area has noted the important, active role that SMOs play in the media. Andrews and Caren (2010), recognizing the importance of the media in a
movement’s success, studied why some social movement organizations are more successful than others in gaining media coverage. They wanted to know what organizational, tactical and issue characteristics contribute to more media attention. They examine local environmental organizations in North Carolina and the news coverage they receive in their local area. They found that the local news media favor professional and formalized groups that employ routine advocacy tactics, mobilize large numbers of people, and work on issues that overlap with newspapers’ focus on local economic growth and well being.

In addition, the news media report more extensively on local organizations, ones that have greater organizational capacity, and mobilize people through demonstrations or organizations. Conversely, groups that are confrontational, volunteer-led, or advocate on behalf of novel issues do not receive as much attention in the local media. More resourceful organizations are better able to establish and maintain relationships with the media and may also be better able to signal the legitimacy of the organization and its claims. They note that membership is an important resource and that demonstrations are a powerful strategy for gaining media attention.

There is evidence that the media plays in an important role in environmental movement organizations in other countries as well. Vliegenthart, Oegema, and Klandermans (2005) studied the relationship between media coverage and public support for the Dutch environmental movement. The authors were also interested in how media coverage affects membership figures. They found that media coverage of an EMO causes membership to increase. Conversely, membership growth does not lead to more media coverage. The authors found that membership growth in one year will likely lead to
growth in the following year, which points to gaining momentum and bandwagon effect being relevant for SMOs. Finally, the authors also found that if one SMO in a specific sector receives media coverage, SMOs with similar goals or objectives will be unlikely to also receive media coverage. Media is clearly important for EMOs, but it is possible for some groups to be crowded out.

**Framing**

Framing is an important tool for movement and media agency. SMOs have to present their case in a way that is appealing in order to gain as much support as possible. One way SMOs do this is to present their position through frames, which are then picked up on by the media and disseminated to the general public. Collective action frames are “action-oriented sets of beliefs and meanings that inspire and legitimate the activities and campaigns of a social movement organization” (Benford and Snow, 2000: 614). Framing actively constructs meaning and is an instrumental way for SMOs to portray their position and views to the larger public. Benford and Snow (2000) attempt to gain a basic understanding of framing and how frames are applied to social movements. They argue for the importance of framing and say that it has become central to the study of social movements.

Collective action frames are constructed by SMOs to create a shared understanding of some problematic condition or situation that they define as in need of change, make attributions regarding who or what is to blame for the problem, articulate an alternative, and urge others to act together to change. Boundary or adversarial framing creates a boundary between good and bad and creates protagonists and antagonists.
Prognostic framing creates a solution to the problem and course of action to solve the problem. Counter framing occurs when opponents of the SMO refute the SMO’s position and create their own view of the problem. Motivational framing is a “call to arms” and validates the reasons for joining in collective action (Benford and Snow, 2000: 617).

Frames vary in several ways. First and foremost they differ in what problem they wish to address and how they envision addressing that problem. Frames also vary in flexibility/rigidity, inclusivity/exclusivity, scope and influence, and resonance. Frames also vary in their processes. Firstly, they vary in their discursive processes, which are the talk, conversations and written communication that movement members use with regards to the SMO activities. Strategic processes are the processes that SMOs use to achieve their goal. Contested processes are the development, creation, and elaboration of collective action frames.

It is important to note that the authors point out that collective action frames are not static; they are continuously changing during the SMOs activity and over time. Framing processes are affected by the socio-cultural environment that they are in. Several socio-cultural factors are important to look out for when examining collective action frames: the political opportunity structure, cultural opportunities and constraints, and characteristics of the intended audience.

For example, Rohlinger (2002) has done research on the framing in the abortion debate, and some of her findings are relevant to environmental SMOs. Specifically, Rohlinger studied the National Organization for Women (NOW) and Concerned Women for America (CWA) and how those organizations react to and generate media coverage during the abortion debate. She states that the tactics SMOs employ to gain media
coverage are important but that their tactics are influenced by the organizations’ structure and identity.

She identified several characteristics of NOW that led to them receiving more media coverage than CWA. 1) Gaining media coverage is an organizational goal of NOW; 2) NOW is centralized and bureaucratic; and 3) NOW is very serious about their media strategy and it is formalized (message formation and adaptation, frame and package coordination, and assessment of coverage). As a result, NOW’s frame and media package receive more media coverage than the organization itself, NOW is not as prominent as single-issue organizations but it is a very visible organization, and pro-choice frames and organizations receive more media coverage than pro-life frames and organizations. NOW has laid the framework of a SMO successfully gaining media coverage.

Just like other SMOs use framing, environmental organizations also frame issues. Pellow (1999) studied consensus-based decision-making (CBDM) and how it differs from traditional adversarial approaches in “consensus building” (Pellow, 1999: 660). CBDM is a balance between conflict and collaboration in that it functions through non-hierarchical, democratic principles (Pellow, 1999: 660). CBDM can be thought of as “tactical framing” with the use of collective action as a signifier (Pellow, 1999: 664).

Pellow identified two new movement frames: the “political economic frame” and the “environmental justice frame”. The “political economic frame” makes three claims: 1) “the state and industry have colluded to produce the increasing environmental and economic injustices against the poor, the working class, and people of color”; 2) the same “citizen-workers were allowed little or no participation in the decision making process
that produced this ecological and economic degradation”; and 3) there can be “no separation between the health of the economy and the stability of the environment” (Pellow, 1999: 665). This seems to be the frame that the environmental justice and NIMBY groups have taken on. Their focus on inequality is their frame.

The “environmental justice frame” claims the right to have 1) “accurate information about the situation”, 2) “democratic participation in deciding the future of the contaminated community”, 3) “commitment to solidarity with victims of toxic contamination in other communities”, and 4) “environmental protection be integrated with public health protection” (Pellow, 1999: 666). This frame fits in with the focus and goals of modern and mainstream environmentalism.

Pellow claims that participating in consensus-based decision-making represents a significant shift in tactics and strategies for many environmental organizations, which have used adversarial tactics. Groups understand that all members will not see eye to eye on all things, but aim to talk things over to come to a consensus. Unfortunately, Pellow did not implement the media into his research of framing and the environmental movement. However, we would expect, given prior research, that the media is a critical target in environmental protest frames as well.

**Resource Mobilization**

In order to be able to frame the issues, develop a good relationship with the media and mobilize the public, environmental movements need resources. There are a variety of resources that SMOs need (money, support, communication, access to the media, etc) and without them, SMOs have no chance at success
John D. McCarthy and Mayer N. Zald (1977) present a set of concepts and related propositions drawn from a resource mobilization perspective. It emphasizes the variety and sources of resources; the relationship of social movements to the media, authorities, and other parties; and the interaction among movement organizations. The resource mobilization approach emphasizes both societal support and constraint of social movement phenomena. It also emphasizes the variety of resources that must be mobilized, the linkages of social movements to other groups, the dependence of movements on external support for success, and the tactics used by authorities to control or incorporate movements.

The resource mobilization model emphasizes the interaction between resource availability, the preexisting organization of preference structures, and entrepreneurial attempts to meet preference demand. Heavy use of advertising and an emphasis on stable resource accumulation is characteristic of many SMOs seeking reform.

Barker-Plummer (2002) studied the National Organization for Women (NOW), investigating its resource mobilization and media access. NOW has had much success with the media, in terms of being able to reach the general public audience. The media, in that light, is and of itself a mobilizing resource. The author found that NOW’s ability to reach the media was due to two key factors. Firstly, “NOW was able to mobilize the material resources-money, skills, technology, labor, organizational structure, and especially information- necessary to serve as a reliable and routine source for journalists” (Barker-Plummer, 2002: 189). Secondly, NOW was able to “develop effective and reflexive media strategies by mobilizing it knowledge of the routines and discursive structures of news and using them in its own media communications” (Barker-Plummer,
This article demonstrates that access to the media is a resource, and if the environmental movement can gain the level of access to the media that NOW has, perhaps it can be as successful as NOW has been in changing public attitudes and understandings of their aims.

Other articles that I have cited previously also discuss resource mobilization. Andrews and Caren (2010) found that the local news media favor professional and formalized groups that employ routine advocacy tactics, mobilize large numbers of people, and work on issues that overlap with newspapers’ focus on local economic growth and well being. In addition Rohlinger (2002) gave several reasons why NOW was more successful in gaining media coverage than CWA. The most relevant reason being that NOW is centralized and bureaucratic.

Methods

In this paper I am interested in examining how the American environmental movement has changed over time and what factors may have lead to those changes. In order to do so, I used data from a variety of sources, some that I collected on my own and others that I used from other sources. Table 1 summarizes the data that I use:

Table 1 about here

Outcomes. I am especially interested in media attention given to the environmental movement. I used ProQuest Historical Newspapers to determine how many times the New York Times mentioned global warming, climate change, and recycling annually from 1970 to 2001. ProQuest is a search engine available from the
Ohio State University’s library system. ProQuest has archived all *New York Times* issues from 1851 to three years from the present.

**Predictors.** I draw upon data from other peoples’ research for my main problem. McCarthy, Walker & Martin (2008) used a data set of 21,185 collective action events between 1960 and 1990, and from there, determined the *total number of environmental protests*. These events were centered on a multitude of issues, but they were all covered in the *New York Times*. For an event to be included in this research it had to be collective, it had to “present some claim being made by those involved in the action” (McCarthy, Walker & Martin, 2008; 46), and it had to be public. The events were both non-confrontational and confrontational. Coders read every issue of the *New York Times* searching for coverage of events that matched the three criteria. The events that were found to meet the criteria were then coded for content. From Lipsky’s research, I know that protest activity is important to SMOs, so this is why I was interested in environmental protest activity.

distinct national EMOs were identified as having existed between 1956 and 2003. These measures capture the strength and activity of the environmental movement, which should be directly related to EMOs’ ability frame issues effectively and get media attention.

Finally, I used data from Gallup Polls to determine how many Americans identified the environment as the most pressing problem.

**Controls.** I found data on the United States’ annual unemployment rate from the Bureau of Labor Statistic’s website and I determined the party of the president from the White House’s website. The data for the president’s political party is coded 1 for Democratic Party. I expect that an economic downturn and a higher unemployment rate to draw coverage away from environmental issues. In addition, I expect that when a Democratic president is in office, there will be a greater focus on environmental issues than when a Republican president is in office.

**Data Analysis**

I first looked to the trends in how the *New York Times* used my three keywords. I am interested to see how the media uses those keywords and how their usage has changed over time. Then I use the predictors and controls to predict the use of the keywords and the coverage of EMOs in the media (*New York Times*).

Figure 1 shows the trends in the usage of “global warming”, “climate change” and “recycling” from 1970 to 2001. Global warming did not receive much coverage until 1986 when it began rising until a peak in 1990, and then it declined again. Its usage rose sharply from 1996 to 1997, declined again, rose sharply again from 1999 to 2000 and leveled off in 2001.
Climate change also received little media coverage, but spiked in 1979 to 1981, and then went up and down moderately through 2001. Recycling was mentioned more than global warming and climate change in 1970. Recycling increased from 1970 to 1972, declined a bit and then shot up again from 1973 to 1974. Recycling usage went up and down throughout the late 1970s and early 1980s, but began another increase in usage in 1983. Usage peaked in 1990 but declined again through 2001.

Overall, recycling was mentioned the most in the *New York Times* from 1970 to 2001; Climate change came next and global warming was mentioned the least out of the three outcome terms. I believe that recycling was mentioned the most frequently because out of the three keywords, recycling in the only personal term. One citizen would have a very difficult time affecting how the country deals with global warming and climate change, but recycling is a personal decision and is a small way that one person can make a difference in the state of the environment.

Figure 2 shows the density of EMOs from 1970 to 2001 and the number of EMO events every year from 1970 to 2001. The number of EMOs gradually rose from 1970 to 1991, then leveled off until 1998, and then gradually declined until 2001. The total number of EMO events was erratic from 1970 to 2001, with the number barely declining in the first half of the sample, and then increasing in the second half.

Figure 3 shows the percentage of Americans that said the environment is the most important problem in a Gallup Poll. The percentage peaked in 1971, then declined until 1988, increases until 1990, declined again, increased in 1992, and then dropped again.
The increase in the percentage from 1995 to 2001 is probably due to the increase in celebrity activism in environmental concerns (for example, Al Gore and *An Inconvenient Truth*).

**Figure 3 about here**

To assess how the predictors and controls affected the *New York Times*’ use of the key words, I ran a binomial regression, presented in Table 2. The binomial regression confirmed some ideas that I had. For instance, as environmental protests, the density of EMOs, and the percentage of Americans reporting the environment as the most important problem all increased, the *New York Times* used global warming more often. As the visibility of environmentalism grew, so did its media coverage. Conversely, as the unemployment rate increased, the use of global warming in the *New York Times* decreased.

**Table 2 about here**

The findings are not as clear-cut for climate change and recycling. I hypothesized that as the predictors increased, the usage of all the keywords would increase as well. Interestingly, as environmental protests and the percentage of Americans reporting the environment to be the most pressing problem increased, the usage of climate change decreased, but not significantly. Environmental density has a positive impact on the use of *climate change*, like it does with *global warming*.

As the percentage of Americans reporting the environment as the most important problem increased, the usage of recycling increased as well. Recycling is a decision made by individuals, while global warming and climate change tend to have to do with policy decisions made by legislators. Thus, we now expect that the percentage of Americans
reporting the environment as the most pressing problem to be the most related to the use of recycling in the *New York Times*. Similarly, the percentage of Americans reporting the environment as the most pressing problem is an individual action, while the other two predictors are collective and organizational. It makes sense that the two personal issues are positively correlated. Overall, the findings do indicate that movement activity affects media coverage, but there are variables.

In earlier times, protests were large events that garnered large amounts of media coverage. Lipsky wrote on the importance of protest activity for media coverage. However, protest activity was on a general decline during this period so there were fewer events for the media to even consider covering. If protests are on the decline, perhaps media coverage will focus more and more on scientific findings, especially those related to the environmental movement. The majority of coverage of environmental issues in my lifetime that I can remember has been due to scientific discoveries rather than protest activity. I think protests were used much more when the previous generation was younger, whereas my generation seems less apt to protest.

**Conclusion**

There were a number of findings from this research. First, there was a difference between how often the *New York Times* mentioned policy-type terms (global warming and climate change) and how often they mentioned recycling, which is an individual level decision. Second, the density of EMOs generally increased from 1970 forward, but leveled off a bit after 1991 and then slightly decreased after 1998. In addition, the number of environmental protests fluctuated between 1970 and 2001, but stayed at about the
same number. Third, the percentage of Americans who reported the environment as the most pressing problem varied a lot during the sample, but there was a large spike in 1998. Finally, all of the predictors were positively correlated with global warming, while the predictors’ relationship with climate change and recycling was not so clear. I believe that recycling is tied with the percentage of Americans who say the environment is the most pressing problem because they are both individual level decisions.

The implications of my research build on the findings of other researchers who have studied SMOs, but makes the research of EMOs a bit more complete. I think that the reason the relationship between global warming and the predictors is stronger than the relationship between climate change and the predictors is due to the fact the global warming is a more politically-charged term.

It is obvious from the research on media that media coverage is vital for an organization’s success. How an organization receives coverage is more difficult to determine, however. Frames seem to be vital to that achievement and Rohlinger’s research (2002) about organizations with more formal infrastructure receiving more coverage translates to EMOs. Historically, national EMOs have received more media coverage and public support than less organized groups. EMOs must have the enough resources to create a structure and remain relevant.

Gitlin’s statement that the media prefers to cover the dramatic is clearly evident today with the amount of coverage awarded to violent crimes despite their rarity. With protest activity declining, the media is looking to other dramatic events to cover. Perhaps scientific findings that drastically change preconceived notions will attract media coverage. Social movement messages that are more dramatic or exciting are perhaps
more likely to garner media coverage. In addition, I have noticed from my own experience that movements that have celebrity support often develop a following in the general population. One thing that I am curious about is if in the future EMOs will use science in their framings and how that will affect media coverage and public opinion.
Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Global Warming</td>
<td>62.72</td>
<td>90.21</td>
<td>ProQuest, NYT</td>
</tr>
<tr>
<td># Climate Change</td>
<td>148.44</td>
<td>100.19</td>
<td>ProQuest, NYT</td>
</tr>
<tr>
<td># Recycling</td>
<td>234.22</td>
<td>100.08</td>
<td>ProQuest, NYT</td>
</tr>
<tr>
<td><strong>Predictors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Environ. Protest</td>
<td>76.31</td>
<td>40.07</td>
<td>McCarthy</td>
</tr>
<tr>
<td>Environ. SMO Density</td>
<td>499.56</td>
<td>129.31</td>
<td>Johnson</td>
</tr>
<tr>
<td>Environ. #1 Problem (Gallup Poll)</td>
<td>1.33</td>
<td>1.30</td>
<td>Gallup Poll</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>6.28</td>
<td>1.43</td>
<td>Bureau of Labor</td>
</tr>
<tr>
<td>Democratic President (1=Dem.)</td>
<td>.40</td>
<td>.50</td>
<td>White House</td>
</tr>
</tbody>
</table>

Table 2. Negative Binomial Regression of Keywords in *New York Times*

<table>
<thead>
<tr>
<th></th>
<th>Global Warming</th>
<th>Climate Change</th>
<th>Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Environ. Protest</td>
<td>0.0181 (0.0057)*</td>
<td>-0.0015 (0.0045)</td>
<td>0.0040 (0.0032)</td>
</tr>
<tr>
<td>Environ. EMO Density</td>
<td>0.0198 (0.0039)*</td>
<td>0.0093 (0.0029)*</td>
<td>0.0021 (0.0021)</td>
</tr>
<tr>
<td>Environ. #1 Problem (Gallup Poll)</td>
<td>0.2221 (0.0768)*</td>
<td>-0.0514 (0.0926)</td>
<td>0.1471 (0.0620)*</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-0.3124 (0.0921)*</td>
<td>0.2315 (0.1060)*</td>
<td>0.0029 (0.0690)</td>
</tr>
<tr>
<td>Democratic President (1=Dem.)</td>
<td>-0.3327 (0.1815)†</td>
<td>-0.0612 (0.2249)†</td>
<td>0.1699 (0.1644)</td>
</tr>
</tbody>
</table>

*p<.05; † p<.10 (two-tailed tests)
Figure 1. Trend in Environmental Keyword Mentions in the *New York Times*

![Graph showing trend in environmental keyword mentions](image)

Figure 2: Environmental SM Activity

![Graph showing environmental SM activity](image)
Figure 3: Percentage of Americans That Say Environment Most Important Problem
References


