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THE U.S. ENVIRONMENTAL MOVEMENT 1890-2002: DISCOURSE DIVISIONS,  
ENVIRONMENTAL CRISIS EVENTS, AND STRATEGIC CONCESSIONS

by

WENDI BELINDA KANE  
M.A. University of Central Florida, 2009

A dissertation submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the Department of Sociology  
in the College of Sciences  
at the University of Central Florida  
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Major Professor: Elizabeth Grauerholz

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## ABSTRACT

The U.S. Environmental Movement is facing a paradox: increased mobilization over the last 100 years has not been entirely effective in halting environmental degradation. This research suggests that discourse divisions among environmental movement organizations constitute a fundamental obstacle to progressive change. The discourse divisions are evident in movement organizing patterns during periods of increased environmental crisis over the history of the modern environmental movement. In addition, evidence suggests that federal environmental policy is an outcome of increased organizing among movement organizations with more transformative visions of change. However, policy outcomes from increased pressure among transformative organizations are significantly correlated with Republican presidential administrations lending evidence to the idea that policy reform is a moderating strategy employed to silence radical change-makers. The results from this research contribute to the Marxist model of historical change under-discussed in the social movement literature. It also contributes to the ongoing debate in the environmental movement literature addressing the continued effectiveness of the environmental movement as a program for change.

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Finally, I want to acknowledge my family and friends for constant love and support even when things were bleak. My husband, Shawn, and children, Saige, Zachary, and Maddox, I am indebted to you for sacrificing family time. I cannot emphasize how important you have been in this dissertation process—the best distractions anyone can ask for!! I acknowledge my best friend, Lisabeth Fryer, my biggest fan, who has confidence in my abilities even when I doubt them. For all the people that provide an outlet for me to vent and have shaped my life for the better: The Eaton's, Kane's, and Reed's, Anne Derosier (mom), Sherry Parker, Joanna Eisele,

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## CHAPTER I: INTRODUCTION

### Purpose of Research

The purpose of this dissertation is to examine the context in which U.S. Environmental Movement Organizations (EMOs) are founded between 1890 and 2002. This is a question about the relationship between structure and agency; the political and social context external to a specific movement that influence agency among environmental movement organizations (Meyer 2004). Specifically, what external predictors contribute to higher EMO founding rates? This study draws from social movement theory in an attempt to expand explanations of movement organizing to include not only the dominant research traditions of collective behavior, resource mobilization, new social movement, and political opportunity theories, but a reconsideration of the Marxist model of historical change under-discussed in the social movement literature.

In addition to EMO founding rates based on contextual predictors, the research presented attempts to explain the broader paradox of the environmental movement industry. With the steady increase in EMO founding rates over time, what factors contribute to the failed attempts of EMOs to successfully implement progressive changes that benefit the environment over industry? I suggest that EMOs are vulnerable to the moderating strategies of the countermovement because of discourse divisions within the environmental movement industry. Patterns of EMO founding rates during and after environmental crisis events vary based on discourse differences, whereby organizations with reform visions of change are significantly more likely to mobilize in response to environmental crisis events. In addition, key environmental policy legislation is also affected by discourse divisions, whereby the proportion

of organizations with transformative visions of change significantly increases preceding the passing of federal environmental policy. Yet, environmental policy appears to be a moderating strategy to silence transformative organizations since it is significantly more likely to pass during Republican presidential administrations, perceived to be less sympathetic to environmental issues.

This research is taking up the call of Thomas Rudel (2012) when he asks readers in “Toward a More Eventful Environmental Sociology” to incorporate historical events more fully into their analyses. The research techniques used in this study include qualitative and quantitative analyses. Qualitative analysis is used to describe salient environmental crisis events highlighted in the media that contribute to more than average environmental reporting. Theoretically, situating events provide support for the argument that public perception of environmental crisis leads to increased movement organizing and increased movement organizing leads to key environmental policies. Historical events are analyzed providing a model to conceptualize the relationship between the variables used in this study.

Quantitative analytical techniques are employed to look at broad trends in EMO founding rates and discourse divisions among the environmental movement industry. Using linear regression, I provide evidence that environmental crisis events are predictors of increased EMO founding rates and this is significant among organizations with reform visions of change. Using logistic regression, I show that policy outcomes are the result of higher proportions of organizations with transformative visions of change applying pressure during Republican presidential administrations. The remainder of the introduction addresses definitions and the broader field of social movement theory.

## What is a Social Movement?

A social movement is defined in its most basic form as a broad set of attitudes and/or behaviors (i.e., preferences), shared by a collective, directed at promoting or resisting some aspect of social development (Genevie 1978; McCarthy and Zald 1987a; McCarthy and Zald 1987b). To arrive at this definition, theorists and researchers over the last century have worked to develop distinctions of collective behavior on a continuum between highly structured and highly unstructured behavior (Genevie 1978). Early theorists dedicated significant attention to unstructured collective behavior in the form of crowds (LeBon 1896 [1978]), masses (Blumer 1978), mobs, and panics, and then more structured behavior in revolutions (de Tocquville 1856 [1978]), publics (Tarde 1898 [1978]), collective action (Turner and Killian 1957), and “bona fide” social movements. Steven Yearley (1994: 152-153) states, “Social movements are instances of collective behavior which are more organized than protesting crowds or mobs, less formalized than political parties and more concerted than simple social trends.” In an attempt to refine ideas about early forms of structured and unstructured behavior, theorists determined that all forms constitute collective behavior; however, only the most organized become social movements (Genevie 1978). Thus, social movement status emerges from sustained collective action.

A social movement, according to Charles Tilly and Sidney Tarrow (2007: 111), is “a sustained campaign of claim making, using repeated performances that advertise the claim, based on organizations, networks, traditions, and solidarities that sustain these activities.” The Tilly and Tarrow (2007) definition of social movements is used to guide this dissertation because of its focus on the mobilization of movement organizations as a key identifier of the transition from

collective action to a bona fide social movement. Social movement organizations mobilize and “formalize” to set goals and accomplish the objectives of the broader social movement.

Donatella della Porta and colleagues (2009: 231) suggests that “social movements are themselves complex actors, composed of many organizations pursuing profoundly different strategies.”

According to della Porta (2009: 16), “social movements cannot be characterized as unified actors: by their very nature, they are made up of loose networks, their repertoire of action is varied, and their collective identity is not structured within specific organizational boundaries.” Gerlach (2001) suggests that social movements are segmentary; for example, they are composed of many diverse organizations, and are polycentric; for example, the organizations have competing leadership. Borrowing from organizational theory, McCarthy and Zald (1977) agree that different segments of the same movement may not share political goals, objectives, interests, or beliefs about change. For this reason, social movement theorists and researchers refer to the broadest preference structure as the “social movement industry” (McCarthy and Zald 1987b). A social movement industry is the “broader configuration of organizations” sharing the collective identity of the social movement (Soule and King 2008: 1569).

Researchers studying social movement organizations focus their analyses primarily at the individual organization level; specifically, the internal processes or dynamics of specific social movement organizations (McCarthy and Zald 1987a). Fewer studies focus on the social movement industry; largely because of the difficulties in collecting data on the population or defining which organizations comprise the industry (Brulle et al. 2007a). The research presented in this study aims to understand broader trends at the industry level instead of the internal workings of a specific movement organization.

## Social Movement Organizations

In the broadest sense, a social movement industry acts to turn sympathizers into movement actors and onlookers and opponents into sympathizers through development of a collective identity (McCarthy and Zald 1987b). Collective identity is not an object, but a tool, a lens through which reality is explained, defined, and recognized (Melucci 1996). A collective identity cultivates from existing structured inequalities; moreover, the social movement industry anchors its collective identity in the broader public discourse. However, as stated above, multi-organizational fields exist within the social movement industry. These fields can be supportive but can also be antagonistic, indifferent, and competitive for resources (Klandermans 1997). Ultimately, while social movement organizations may share the broadest collective identity of the social movement industry, individually they have specialized goals, objectives, and beliefs about how change should take place, i.e. solutions, represented in an organizational identity. Figure 1 represents this relationship.

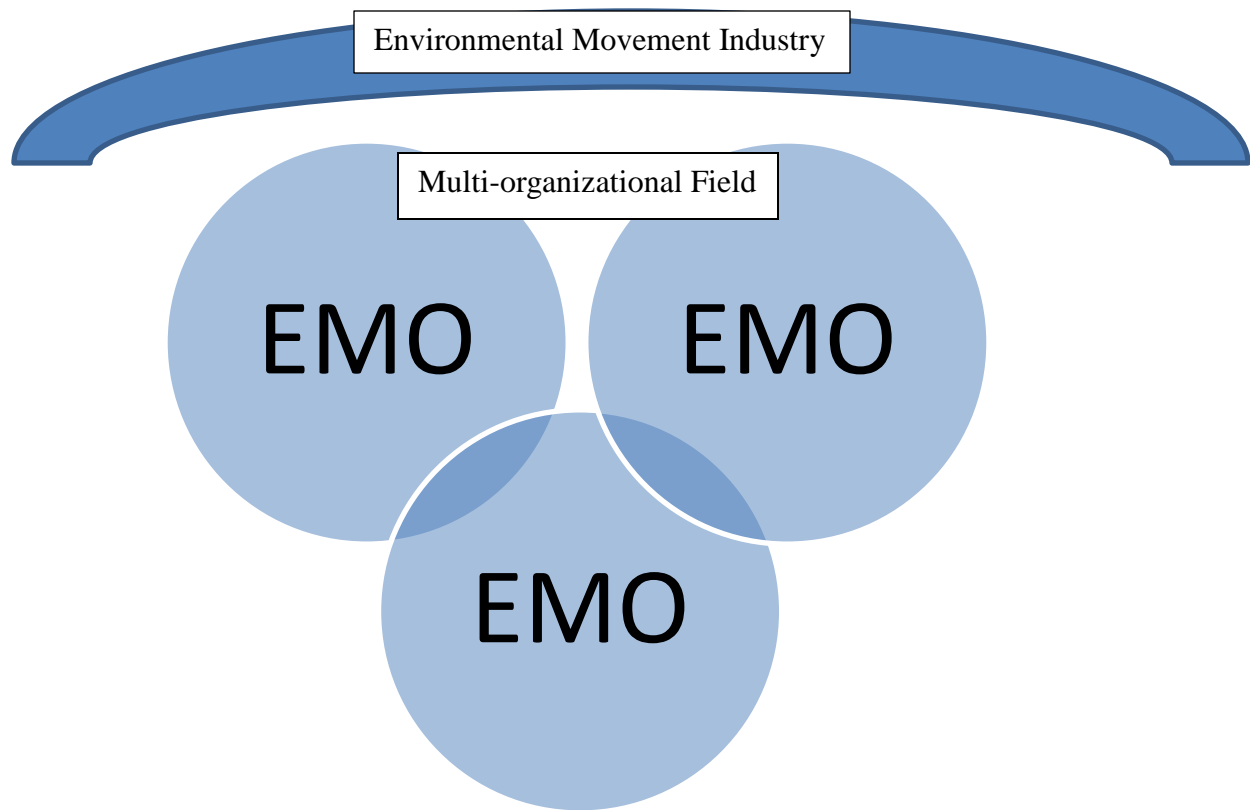


Figure 1: Environmental Movement Industry/Organization Relationship

The newly emerging movement organization enters a field of competition for resources as “generalists” (Soule and King 2008). If they choose to have a less specific organizational identity, they appeal to a wider audience (Friedman and McAdam 1992). To differentiate from other already established movement organizations, they may choose to “specialize,” bringing a different “niche” to the market (Soule and King 2008). Specialization can take the form of “issue” choice (single or multiple), organizational structure, level of political involvement, or targeted adversary, and while it can be about competition, especially for resources, it is more likely associated with conflicting views about the desired level of change, reform or transformative (Hopwood, Mellor, and O’Brien 2005; Olsen 1989).

Research suggests that movement organizations seek to bring about change in a fashion that either complements or is in conflict with other movement organizations (McCarthy and



Wolfson 1992). The desired level of change is often described on a spectrum from radical structural change, or “bottom-up” change, to more moderate system reform, or “top-down” change; moreover, this becomes a key component of a social movement organization’s organizational identity (Olsen 1989). Benford and Snow (2000) suggest that during the process of prognostic framing, organizations define their views about how change should take place and how a problem should be solved. This is where movement organizations tend to disagree (Benford and Snow 2000). Taking the literature into consideration, an assumption of this study is that when new organizations are founded, it is an indication that the organization shares the collective identity of the social movement industry, yet they believe they have a specialization to offer the industry. That specialization could arguably be based on differing views about solutions; moreover, new and conflicting discursive frames emerge to fill niches leading to increases in movement organizing (McLaughlin and Khawaja 2000). Discursive frames are discussed next.

### Organizational Identity

Movement organizations utilize framing and discourse to promote their organizational identities to movement actors, sympathizers, and onlookers. Frame and discourse analysis in social movement research highlight a socio-psychological and cultural approach (Brulle and Benford 2012). Frames allow actors to locate their personal ideology, belief systems, norms, and core values within the frame being represented by a movement organization (Oliver and Johnston 2005). Frames are tools used by movements to enable the consumer of information to interpret a message, align to the message either negatively or positively, and take action or offense based on the interpretation (Snow et al. 1986). Research suggests that framing influences

the success of social movements (Brick and Cawley 2008; Vasi 2006). However, dissonance theory suggests frames that align with a movement actor's ideology are readily accepted and those that contradict are avoided (Kollmuss and Agyeman 2002).

Frames are used in social movement organizations to influence individuals' decisions to participate (Snow et. al. 1986). Aligning to a frame suggests that a common definition of the problem and the remedy to solve it is identified (Goodwin, Jasper, and Polletta 2001). This includes the discussion above on levels of change pursued by a movement organization. What these frames have in common is that they align with collective beliefs, values, and ideology, taking advantage of discursive opportunity structures (McCammon et al. 2007; Snow et. al. 1986; Vasi 2006).

Framing processes take place within discursive fields (Steinberg 1998). According to Steinberg (1998, 857-858), "framing is dialogic and founded in the social process of mediated action or speech communication, it is the dynamic process or organizing of confluence of voices." Media, critical communities, legislative bodies, scholars, industry, events, and movement organizations contribute to establishing discourse repertoires (Steinberg 1998). However, they do not control how actors will interpret, combine, or create meaning based on the discourses. To fully clarify the theory of framing, the multilevel process of discursive repertoires must be understood (Steinberg 1998). Brulle (2000, 97) states, "The discourse of a movement translates the historical conditions and the potential for mobilization into a reality that frames an organization's identity." Context is important. Ultimately, movements must take advantage of the opportunities presented external to the movement, whether a social, political, or natural event. McCammon et al. (2007, 746) find that, "an overarching theme found in the interplay

between movement framing and the broader context is that to be politically effective, a movement must respond and interact with its environment as it frames its arguments.”

Discursive frames can also signal major shifts in thinking about an issue. Researchers document the discursive frame shift from game protection to wildlife management coinciding with an increase in EMO foundings in the 1930-1940s (Brulle and Benford 2012). A discursive frame provides not only a movement’s identity, but the language, networks, organizational practices, and level of political involvement that categorizes the group (Brulle and Benford 2012). Different movement actors are attracted to different change efforts and this is represented through discursive framing. While each EMO has a specific niche that distinguishes it from others, all EMOs can be categorized into broad discursive frames. The U.S. environmental movement industry over the last 150 years is characterized by EMOs that fall into eleven discursive frames: wildlife management, conservation, preservation, reform environmentalism, environmental health, deep ecology, environmental justice, ecofeminism, ecospiritualism, greens, and animal rights (Brulle 2000). Carmichael et al. (2012, 444) states, “The environmental movement can be understood as a single integrated dynamic shaped by a set of general social forces. At the same time, there are also internal dynamics that are discourse-specific, and affect the founding and growth of specific discourses.” Discursive frames arrange EMOs, and even individual actors, by movement identity; moreover, discursive frames divide EMOs (Brulle 2000; Dunlap and McCright 2008). This is especially salient when considering the level of change viewed as necessary for organizational action. The eleven discursive frames identified by Brulle and colleagues (2000) can be categorized by their similar views about change. Hopwood and Colleagues (2005, 13) provide a map of:

Three broad views on the nature of changes necessary in society's political and economic structures and human-environment relationships to achieve sustainable development: that it can be achieved within the present structures – status quo; that fundamental reform is necessary but without a full rupture with the existing arrangements – reform; and that as the roots of the problems are the very economic and power structures of society a radical transformation is needed – transformation.

While the authors use the map to classify EMO's attitudes toward sustainable development as a solution, they do so considering the EMO's vision of change. Based on the Hopwood et al. (2005) model, I adopt these definitions of levels of change and arrange the eleven discursive frames identified by Brulle and colleagues (2000) into the following 3 categories represented in Figure 2:

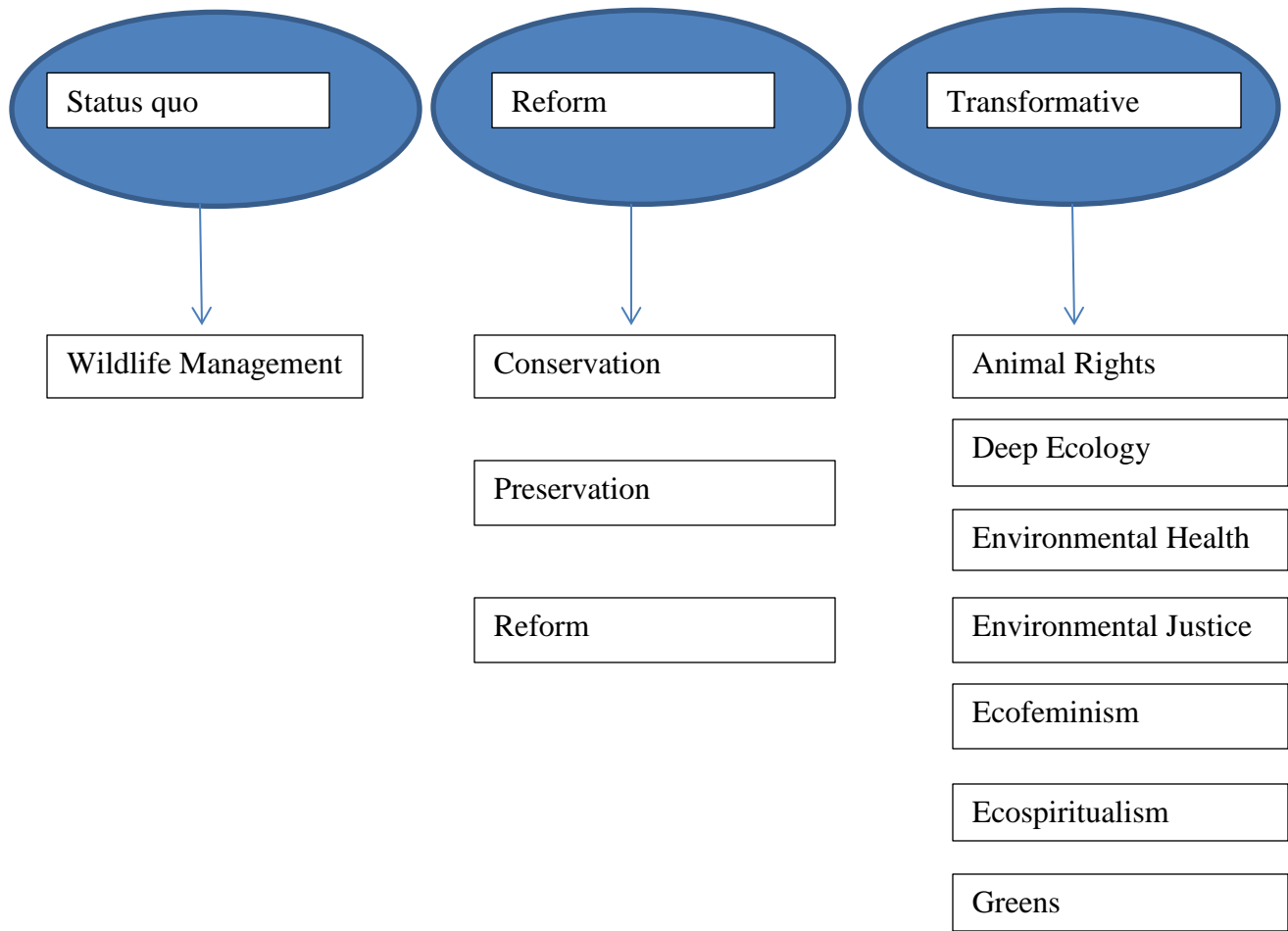


Figure 2: Discursive Frames by Level of Change

EMOs that desire the least amount of change represent a status quo discursive frame (Hopwood et al. 2005). The next level would be change that is equivalent with reforms to the current system, a reform discursive frame. The third level requires the most change and is characterized by a transformative discursive frame.

EMOs with a transformative discursive frame are oriented toward structural change, are “exclusive,” and rely less on the ebbs and flows of sentiment for member participation (Zald and Ash 1966). In addition, transformative organizations are more likely to challenge the political economic system, thereby failing to work within the legislative arena for social change and more likely to be excluded, suppressed, and repressed (Silbey and Sarat 1992). In light of transformative organizations’ contentious positions, they make up a smaller portion of all social movements. Similar research placing EMOs on an “ideological continuum” relate this group of movements to the radical left (Bosso 2005).

On the other hand, EMOs with reform and status quo discursive frames are more “inclusive,” require a minimum level of commitment, and are affected to a greater extent by contextual changes in society (Zald and Ash 1966). EMOs with reform and status quo discursive frames are more likely to work within the current political economic system, have organizational objectives for legislative change, and are moderate and less confrontational, so viewed as a more socially acceptable form of action (Silbey and Sarat 1992). EMOs with reform discursive frames make up a larger portion of all social movements. Terms used to describe this group of movements in similar research include: pragmatic reformers and accommodationists (Bosso 2005).

I argue that discourse divisions among EMOs are the main challenge of the environmental movement industry; specifically, as it pertains to the EMO's desired level of change necessary for significant environmental transformation. The research presented in this dissertation attempts to show that movement organizations with a reform or status quo discursive frame organize at different rates, effect policy, and are affected by contextual events differently than organizations with transformative discursive frames. This might lead to increased divisions between EMOs, movement ebbs and flows, and the greater possibility of future "movement moderating."

#### Research Questions and Plan for Dissertation

The U.S. environmental movement industry, spanning more or less over the last 110 years, is characterized by more than 5000 movement organizations and millions of activists nationwide reacting to environmental concerns (Brulle 2000). It is arguably the largest and most organized social movement in recorded history; moreover, it is described negatively as ideologically dispersed, lacking a charismatic leader, without a unified identity, dead, and utopian, and positively as "the great underground," and "coherent, organic, self-organized congregations involving tens of millions of people dedicated to change" (Hawken 2007, 4; Pope 2005; Wapner 2010). With its huge organizational membership and differing motivations, objectives, strategies, and tactics, the modern environmental movement is also characterized by varying degrees of involvement among organization members. Some movement actors get involved, sometimes with more than one organization, for as little as writing a check or signing a petition or for more active involvement like direct action or organizational leadership (Brulle 2000).

In addition to the size, duration, and scope of the U.S. environmental movement industry and its membership, the emergence of new environmental movement organizations ebbs and flows over time as the movement gains and loses momentum. Even with ebbs and flows there has been a steady increase in new movement organizing since the 1950s; moreover, the environmental movement has had enormous success over the past 100 years in creating a national and international dialogue about environmental problems (Brulle 2000; Gottlieb 2005). Policy wins, stronger environmental regulations, increased membership in and charitable giving to environmental movement organizations, and treaties like the Montreal Protocol illustrate movement effectiveness in mobilizing resources for environmental change (Brulle 2000; Canan and Reichman 2002; Gottlieb 2005). Furthermore, communities at the grassroots level are taking action against dirty industries and individuals as consumers are choosing more sustainable lifestyles (Bullard 2005; Brown 2007). There is no question that without the actions of the environmental movement industry, environmental behaviors in the United States would be much different than they are today.

Unfortunately, the expansion of environmental dialogue, green consumerism, policy and regulations favoring the environment, all accredited to environmental movement action, has created a paradox: Why has environmental movement action and its apparent success failed to stop environmental degradation? The environment today is not getting cleaner; moreover, CO<sub>2</sub> concentrations are increasing, natural resources are being exhausted, and technological risks have created a “risk society” (Beck 2010; Foster and Clark 2009; IPCC 2007; York and Rosa 2003). In an attempt to address this paradox, environmental researchers are focusing significant attention on the success of the conservative environmental countermovement and less attention



on the weaknesses of the environmental movement industry (Jacques, Dunlap, and Freeman 2008; McCright and Dunlap 2003; Meyer and Staggenborg 1996). The gap left by environmental researchers is the focus of this dissertation.

The research presented in this dissertation argues that the U.S. environmental movement industry as a program for change, while it has made improvements, suffers from a focus on environmental “crisis events” evident throughout the history of the movement in the ebbs and flows of EMO founding rates and their subsequent discourses. Increased movement organizing based on crisis events renders environmental movement organizations vulnerable to the moderating strategies of the countermovement resulting in limited change and possible movement demobilization. The argument presented in this paper is sustained by an analysis of EMO founding rates between 1890 and 2002, differences in founding rates based on discourse divisions, and the role of environmental policy in outcomes.

The environmental movement, with its long organizational history, provides a unique opportunity for analysts to explain the founding of movement organizations as a result of environmental crisis events and movement demobilization as a result of federal policy changes. Using EMO founding rates as an indicator of increased environmental mobilization, crisis events, in addition to other social movement theory predictors, are defined and analyzed. In addition, do variations exist between the different discourses in EMO founding rates as the result of crisis events, further intensifying inter-organizational divisions?

To answer these questions, I first provide an overview of the U.S. environmental movement industry in chapter two. In chapter three, I address the broader social movement literature and review the hypotheses that direct this study. In chapter four, I discuss the relative

deficit of conflict theory in explanations of movement mobilization and elaborate on the theoretical explanations of antagonistic conflict and crisis. I then illustrate how environmental crisis events shape the U.S. environmental movement through an analysis of New York Times articles of 1977 and 1989, two particularly eventful years for environmental issues. Finally, I test these ideas through analysis of the Comprehensive Census of Environmental Movement Organizations. Specifically, the founding years of Environmental Movement Organizations (EMOs) and their discursive frames are predicted by environmental crisis events and how federal environmental policies interact with this process.

## CHAPTER II: HISTORICAL EVENTS

### History of the U.S. Environmental Movement

During the industrial period, 1860-1920, populations moving from rural to urban areas increased tenfold (Kleniewski 2006). Changes in transportation, land use, and technology are major contributing factors (Kleniewski 2006). Rapid increase in population and pollution from industry raised concerns among city dwellers. In response to the atrocities that were seemingly taking place in the urban environment, movements against urbanism began to take shape; specifically, preservation and conservation strategies to protect rural areas and nature (Gottlieb 2005).

The early concerns around the turn of the 20<sup>th</sup> century were due mainly to the recognition that humans were urbanizing, deforesting, changing natural landscapes to their benefit, and killing off wildlife for profit (Nash 1990). Two ideas resonated among the U.S. population: First, that nature is infinite and placed here for humans to dominate, and second, that nature is sacred and should be protected (Brulle 2000). The period known as the preservation/conservation movement begins with concern over the industrializing of our nation and the possible limits of U.S. resources (Nash 1990). Some of these early environmentalists, known as preservationists, wanted growth to slow down; moreover, they fought for pristine land to be preserved. They were witnessing the exploitation of nature for the sake of capital. A group of opposition, known as conservationists, was critical of slowing growth, since they benefited from industry, but saw an easy compromise in resource management. During this period, 1890-1916, environmental success was based on conservation policies and the growth of environmental organizations

dedicated to conservation (Nash 1990). This was the first period to witness a split between the John Muir “preservationists” and the Gifford Pinchot “conservationists” (Sale 1986).

During this same period, the Chicago settlement house movement led by Jane Addams, worked toward the “experimental effort to aid in the solution of the social and industrial problems which are engendered by the modern conditions of life in a great city” (Lengermann and Niebrugge-Brantley 2002: 6). Unlike the preservation focus on land use and population, the Hull-House was pioneering in explaining the human condition through inventing methods of empirical research, collecting evidence that explained the conditions of the city, and offering progressive policy recommendations to make it better (Lengermann and Niebrugge-Brantley 2002). The Hull-House activists were particularly interested in sanitation and health issues among the disadvantaged, including industrial accidents in the work place and the living conditions of the poor (Gottlieb 2005). Addams began to recognize the inequalities of the city as a result of industrial production instead of the earlier explanations of urban societal disconnection (Lengermann and Niebrugge-Brantley 2002). The city at the turn of the twentieth century was a place of tension between capitalist production and the ethical interests of the majority. In hindsight it is easy to recognize that this tension was based on rapid changes in technological development.

Between 1916 and World War II, industrial growth continued and a utilitarian ideology of nature justified the growth even when limits were starting to be questioned (Nash 1990). Aldo Leopold’s 1949 *Land Ethic* was the first to articulate this concern. Leopold (1949) argues that humans in the role of “conqueror of the land” should be redefined as a member or citizen of the land. Humans and nature are interdependent so that soil, water, animals, and plants are part of the

community in which ethics should be enforced. A minority has what might be considered an “ecological consciousness,” yet powerful interests exist that are resistant to applying a land ethic. Leopold (1949) states, “man the conqueror *versus* man the biotic citizen; science the sharpener of his sword *versus* science the search-light on his universe; land the slave and servant *versus* land the collective organism.” Leopold (1949) suggests that modern development results in unforeseen degradation that forethought, open-mindedness, science as a “search-light,” and time could improve. Barry Commoner (1969, 21) calls this technology’s “frightful threats,” the President’s Science Advisory Committee (1965, 14) explains this in terms of having “ecological foresight,” and Rachel Carson (1962/2002, 13) argues for “advance investigation.” All of these authors are writing during a period of increased awareness of the risks of new technologies, not only on human health, but the health of the natural world in which humans are dependent.

Leading up to the first Earth Day in 1970, environmental attitudes in America reflected a growing concern with the interconnectedness of humans and the environment. Before Rachel Carson’s publication of *Silent Spring*, a vast amount of Americans viewed the environment as the infinite provider of resources and capable of rehabilitating itself from human degradation (Brulle 2000). *Silent Spring* provided scientific research of industries’ damage to the environment and an awakening to the effect of toxic chemicals on humans and nature (Nash 1990). While some rejected Carson’s account, many took action calling for fundamental change to the economic system. This action, in the 1960’s, coalesced with other movements also asking for systemic change. The turbulent sixties were inundated with fears of nuclear fall-out, the Vietnam War, racial unrest, and a growing counterculture resistant to the mainstream pro-business ideology (Gottlieb 2005). These issues culminated in some form of success; the end of

the war, civil rights policy, Earth Day followed by what is considered to be a political period ripe for environmental policy.

In terms of policy, the 1970's was a period of success for the environmental movement. The Environmental Protection Agency was created leading to a federal agency in which the sole purpose is to regulate for a cleaner environment (Nash 1990). Corporations were held to new standards of air quality, water quality, waste disposal, and energy use (Nash 1990). Communities with grassroots organizing won litigation against toxic polluters leading to superfund policy (Nash 1990). It was a 10 year period with major regulatory change.

In addition to policy wins, the environmental movement also had success in the growth of EMOs. Sierra Club, the Environmental Defense Fund, Greenpeace, Friends of the Earth, and others, took off throughout the 1970's, not only growing in membership but in contributions from foundations. The professionalization, or reform, of these powerful groups allowed them to mobilize resources, leading to the policy successes of the period (Brulle 2000). Some professionalized groups chose to work with industry and government for change instead of asking for change within industry and government. Researchers suggest that by funding "moderate groups," governments, foundations, churches, and corporations exercise social control over the direction of dissent or at least minimize it (Meyer and Tarrow 1998).

The 1980's ushered in a Republican administration lead by Ronald Reagan that played into the dominant social paradigm purporting unlimited resources and an end to the environmental hype of the 1970's (Dunlap 2008). Reagan acted to reverse the gains from the 1970's, appointing James Watt as Secretary of the Interior and Anne Burford as administrator of the EPA (Bosso 2005; Shabecoff 1989). Both engaged with his vision of deregulation, small

government, tax reductions for business and wealthy elites, and fiscal austerity (Bryner 2008; Gautney 2010). Early on in the Reagan administration, they “moved rapidly to slash budgets, reduce environmental enforcement, and open public land for mining, drilling, grazing, and other private uses” (Shabecoff 1989, 1). Within three years both leaders resigned amid controversies, shifting focus to the failings of federal environmental agencies and the loss of credibility for the EPA as a whole (Shabecoff 1989). “Reaganomics” politicized the environment creating a wedge issue that polarized conservatives and environmentalists (Bryner 2008). In response, grassroots environmental groups mobilized to offset losses accumulated during the conservative years of the Reagan administration (Bryner 2008).

The Reagan administration’s deregulation of industries and “pro-business” policies spurred increased interest in grassroots issues; specifically, those addressing the unequal distribution of environmental hazards based on social class and race, locally and globally (Dunlap and Catton 1994). Environmental justice advocates adopted a social and racial “rights” frame. It assumes that “all Americans have a basic right to live, work, play, go to school, and worship in a clean, healthy, sustainable, and just environment” (Bullard 2005, 43). The United Church of Christ (1987) report, *Toxic Waste and Race in the United States*, highlighted and brought attention to the racial disparities of polluting industries (Bullard 2005). Robert Bullard’s (1990) groundbreaking *Dumping in Dixie: Race, Class, and Environmental Quality* explained the dialectical relationship between regional development of toxic industries and the environments affected, mostly minority populations in the poor south.

In addition to movements mobilizing for environmental justice, the 1980’s and 1990’s witnessed a shift in concern about environmental sustainability, specifically, sustainable

development. It was not until 1987 that sustainable development would find a platform that would push the issue into the development debate. The World Commission on Environment and Development: The Brundtland Commission Report (1987:41), created the standard definition of sustainable development still referenced today: “development that meets the needs of the present without jeopardizing the ability of future generations to meet their own needs.” It goes on to suggest that two key concepts—needs and limitations—give priority to the world’s poor and limits technology so that it does not compromise the future health of the earth (Brundtland Commission 1987). The strongest critique of the report is its focus on continued growth; however, it is hailed as having set the foundation for continued “global alert” on the need for sustainable development at the 1992 United Nations conference in Rio de Janeiro (Wheeler and Beatley 2009).

While early discussions of sustainable development took place at the international level, later definitions of sustainable development embraced by the U.S. provide a more nuanced explanation of the role of economic growth, in addition to the social equity and environmental component of the Brundtland Commission definition (Gould and Lewis 2009). This is illustrated in the three E’s of sustainable development: social **E**quity, **E**conomic growth, and **E**nvironmental protection. The three goals of sustainable development are not equally shared by all development stakeholders (Gould and Lewis 2009). Gould and Lewis (2009: 270) suggest that “interest groups highlight different goals...industrialists focus on economic concerns, environmentalists on environmental protection, and some governments and nongovernmental organizations, especially those concerned with poverty alleviation, on social equity.”



At the national level and regional level within the U.S., the movement for sustainable development has been influenced by urban design. This movement promotes sustainability through the land-use planning process, “new urbanism and sustainability.” The desirability of this approach to sustainable development is that it does not impede industry or slow growth. This is the redefining of living, working, and playing spaces to accommodate “modern institutions without sacrificing human scale and memorable places” (Calthorpe 1993, 17). New urbanism attempts to recreate the traditional small town with pedestrian friendly streets, green spaces, shared parks, conservation areas, and a close community network. And while this style of neighborhood contributes to the mission of sustainable development, it is usually built outside the existing urban area. It makes sense in context that this idea would take off during a period questioning urban sprawl, inner city sanitation, population density, and transportation issues (Wheeler and Beatley 2009). New urbanism appears to eliminate many of the problems associated with poor planning.

The least represented component of sustainable development, according to Robert Bullard (1990), is social equity. New urbanism is credited with the proliferation of gentrification in inner cities. Environmental justice researchers illuminate the failure of new urbanization and ecological modernization in the city to include poor, minority, and disadvantaged communities that are displaced from infill development (Bullard 2005). One of the main challenges of sustainable development in the future is the inclusion of these groups in the modernization narrative. Some researchers see a future with an affluent class that lives healthy, away from pollution, without chemicals in their food, with abundant natural products, and in eco-friendly neighborhoods and workplaces. In the same vision they see a lower class subjected to pollution,

factory farmed meats, preservative ridden packaged food, in old homes with lead paint and suffering from miscarriages, low birth weight children, and increased asthma (Bullard 2005).

Issues surrounding environmental risks and hazards coincided with movements toward environmental justice and sustainability. For two decades, researchers have been concerned about “post-normal problems” (Marshall and Picou 2008). These risks are different than the risks of the past because decisions on how to deal with them have higher stakes and uncertainty is at the highest level (Marshall and Picou 2008). They are often times referred to as “worst cases”; moreover they include technological disasters, contaminated communities, and mega-hazards, to name a few (Marshall and Picou 2008). Three Mile Island, Bhopal, Chernobyl, and the Exxon Valdez oil spill are examples of technological disasters that heightened public perception of the risks associated with dangerous industries. Other mega-hazards include acid rain, ozone layer depletion, and increased CO<sub>2</sub> in the atmosphere; all the result of emissions from modern technologies (EPA 2013). Charles Perrow’s (1984) *Normal Accidents* introduced the idea that tightly coupled organizational structures, like those found in complex technological systems, are prone to “normal accidents.”

The problems associated with climate change are increasingly becoming the most critical risk of modern times. If the industrialized world continues on its current path of energy use and CO<sub>2</sub> production, the risks from technologies used every day will be the worst post-normal problem of all. It is predicted that the results of climate change could be devastating and irreversible: death, migration, food shortages, and possible chaos (IPCC 2007). The 1990’s witnessed increasing attention to this ultimate threat, represented by terms ranging from the

greenhouse effect, global warming, global weirding, carbon pollution, heat trapping emissions, and climate change (Boykoff 2011; EPA 2013).

By the 2000's, many environmental movement organizations had shifted their attention and resources to climate change education. It was not until after the scope of the research in this paper that climate change entered the public consciousness surrounding the release of Al Gore's, "Inconvenient Truth" and subsequent winning of the Nobel Prize with the IPCC in 2006 and 2007 (Boykoff 2011; Gore 2006, NBCnews 2007). Many see climate change as the ultimate challenge of the environmental movement. Environmentalists want to readdress the challenge posed by Aldo Leopold more than 60 years ago to question modern technology and development, subject it to scientific scrutiny outside of the industry that creates it, require forethought, open-mindedness, science as a "search-light," and time, as risk policy. The need for momentous changes in the institutional order induces an outcry by the public for social change (Piven and Cloward 1977). However, the current pattern of movement mobilization ebbs and flows seems to be failing the environmental movement. The following chapter turns to the social movement literature for answers.

## CHAPTER III: LITERATURE REVIEW

### Social Movement Theory

Classic and contemporary sociology of social movements continues an ongoing debate concerning historical phenomena, structural variables, differentiated meanings, autonomy of social action, and modes of organization in contributing to social movement mobilization (Melucci 1996). The complexity of the debate can be explained by competing theoretical research traditions based in Marxist scholarship, structural functionalist, and interactionist orientations. The major theoretical traditions rely on basic assumptions about the role of structure and agency in creating social order or social change. The assumptions compete, divide, and oppose—leading to the dualistic condition experienced by researchers analyzing collective action today (Melucci 1996). The social movement theory literature tends to offer a confrontational account of the struggle from competing paradigms over time, as is apparent in reviewing the literature that follows.

In order to represent the competing arguments within the social movement literature, I present a chronology based on the progression of the social movement literature over time. I first discuss the collective behavior theories which dominated social movement literature before the 1970's and then met criticisms for their focus on the internal processes that lead movement actors to participate in social movements. While it is beyond the scope of this research and unable to be tested with the data set used in this study, I present assumptions based on the collective behavior literature. I then address the resource mobilization and political opportunity literature. Both theories represent the transition to thinking structurally about social movements

and are tested in this research; moreover, hypotheses are provided. The following chapter concentrates on conflict theory explanations of social movement organizing; specifically, the Marxist model of historical change.

### Collective Behavior Approach

Early social movement research suggests that social movements advance through developmental stages of organization (Blumer 1978). Many theorists and researchers characterize the first stage with agitation, deprivation, restlessness, social strain, a grievance, or discontent that arouses some conscious members of society to the extent that claims are articulated (Blumer 1978; della Porta, Kriesi, and Rucht 2009; Ferree 1992; Hopper 1978; Gamson 1992; Smelser 1962; Zald and McCarthy 1987). Felstiner et al. (1980/1981) suggest that three transformations take place: first a perceived injurious experience is identified—naming, then the perceived injurious experience becomes a grievance against another entity—blaming, and finally the grievance is expressed to the entity responsible for the perceived injurious experience—claiming. Once the claim is rejected, whole or in part by the entity responsible, it becomes a dispute (Felstiner et al. 1980/1981).

In the first stage, the movement constitutes unstructured collective behavior. Only some members of society interpret the changes as grievances. Researchers recognize that not every individual will react negatively to a specific grievance. Many factors contribute to collective behavior including an individual's experiences, interests, social group membership, and changing values and beliefs. Consciousness is an important component in grievance recognition. According to Gamson (1992:67), consciousness is the interplay between "individuals who

operate actively in the construction of meaning and socio-cultural processes that offer meanings that are frequently contested.”

The social psychology explanation, or collective behavior approach as it is referred, assumes that social movement organizing can be spontaneous, disorganized, and social movement actors are not always rational in their movement involvement (Genevie 1978). For the original claim makers, the grievance presents itself within a social context that is measured in relation to ideals. The grievance is viewed as an injustice, as unfair, or problematic. The model encountered a number of critiques over the 1960's and 1970's based on the rise of resource mobilization theory and the shift to structural explanations of movement action (McCarthy and Zald 1987a). Emotion theorists are now countering the critiques stating that emotions based on grievances are not irrational or impulsive; moreover, sociologists “need to cease viewing emotions and rationality as dichotomous” (Nepstad and Smith 2001, 173). Social movements make emotion prominent because the “non-routine action removes some of the everyday social relationships in which emotions are invested stably and gives occasion for the workings of other emotions or other patterns in the appearance of emotions” (Calhoun 2001:55). Emotion theorists have even embraced structural explanations of emotions in an attempt to bridge the individual and structural (Kemper 2001). Individual beliefs are argued to be the “internalized by-products of socialization and public shared discourse” (Klandermans 1997:4).

Social construction is an attempt to bridge structural level explanations with individual level grievances. “Movement organizations play a significant role in the construction and reconstruction of collective beliefs and in the transformation of discontent into collective action and the maintenance of movement commitment – the three processes so central to the social

psychology of movement participation” (Klandermans 1997:9). The social constructionist approach suggests that social issues are defined as such through collective beliefs of a perceived conflict in everyday life. Research suggests that the original claim maker or social movement “organizer” first mobilizes people within their close network already sympathizers of the issue (Klandermans 1992). Social networks should not be taken for granted as they transmit values that form the basis for emotional responses (Nepstad and Smith 2001:173).

New social movement theory attracted considerable attention throughout the 1980’s and especially among European sociologists to explain the differences between classic social movements and the movements that are characteristic of modern times (Yearley 1994). Taylor and Whittier (1992:123) suggest that “new social movement theory attends to the social psychological and cultural discontent that propels movements.” New social movements shift the focus away from the labor based movements of the past to the cultural based movements since the 1950’s including the women’s movement, civil rights movements, and the environmental movement (Yearley 1994). According to new social movement theory, social movements are democratic niches “pursuing political ends” and “are seen as the natural allies of the ‘progressive’ left (Yearley 1994:152). Moreover, new social movements become the substitute for class based movements throughout history, especially as it pertains to alternatives to the current system of capitalism (Yearley 1994).

Research suggests that social movement organizing is institutionalized; ultimately, developed countries are “movement societies” (Meyer and Tarrow 1998). Greater resources, increased skills, higher education attainment, more educated public, access to travel, increased information, networks of activism, institutionalized repertoires, and more common protest events

lend to an increased ease in mounting contention (Meyer and Tarrow 1998). In line with this research, social movement organization emergence is a symptom of the institutionalization of social movements, access to abundant resources, and their increased participation in the political process (Klandermans 1997).

Based on the theories of social movements discussed above, I make the following assumptions about social movements in this study: 1) from social psychology theories: grievances and deprivations worthy of movement action are always in abundance, 2) from emotion theorists: emotions coupled with a dramatic event elicit “collective emotional arousal” (Collins 2001: 32), and 3) from new social movement theory: not all individuals in society (only a conscious constituency) are sympathetic to exogenous triggers to action (i.e., new social, economic, or political events or information).

The remainder of the literature presented on social movement theory addresses the variables that are tested in this study. Since the focus of this research is in broad trends in EMO founding rates influenced by structural conditions, the remainder of the literature will address conditions external to the movement instead of the internal processes that provide meaning for movement actors in the theories above.

### Resource Mobilization Theory

One structural explanation emerged that builds from the rational choice perspective in an attempt to challenge social psychology and collective behavior explanations of collective action: Resource Mobilization Theory. Resource Mobilization Theory dominates social movement research throughout the 1980's. Building on rational choice, a grievance is necessary but not sufficient for collective action. Many legitimate claims will fail to garner action based on what



Mancur Olson (1968) calls the “collective action problem.” The collective action problem suggests that grievances to some extent always exist and that unless resources are present and there is an incentive to participate, actors will not work to obtain change (McCarthy and Zald 1987a). Rational choice theory is one of the most significant arguments that shifted social movement research in the direction of structural explanations of movement organizing. Yet, rational choice theory proved to offer an explanation of movement mobilization that reduced social movement actors to “ad hoc groups of self-interested, pseudo-universal individuals calculating their short-term gains and losses” (Ferree 1992: 47).

Less reductionist than rational choice theory, Resource Mobilization Theory suggests that a grievance is not enough; moreover, individuals or groups must have access to resources if they are to successfully organize (Jenkins 1983; Killian 1984; McCarthy and Zald 1977). Resource mobilization transitions the focus from micro processes to macro explanations within the context of social, economic, and political factors (Caniglia and Carmin 2005). Social development over the last few centuries has witnessed a sharp increase in urbanization and a decrease in small, cohesive communities (Jenkins 1983). It can be argued that these changes make an impact on the way social movements take shape. Resource Mobilization Theory suggests that this urbanization and the competition within the political arena have mobilized “professional” organizations garnering significant “power” resources (Jenkins 1983:533). Resource Mobilization Theory considers the resources that, if mobilized, will provide links to other groups, external support, and potential incentives for its members (McCarthy and Zald 1977). Unlike previous theories, it also considers the role of supporters that do not have a commitment

to the values of the underlying movement, or who may not be directly affected by an underlying grievance (McCarthy and Zald 1977).

Detractors of Resource Mobilization Theory suggest that it places such an emphasis on structure that it ignores the solidarity among members of the core group (Stallings 1973; Fitzgerald and Rodgers 2000; Jenkins 1983). The creation of identity and solidarity among movement actors (not just instruments of change but networks with group identity) presents a challenge to resource mobilization (Klandermans 1997). To overcome the collective action problem, meanings are constructed, articulated, and shared and an antagonist is identified, thus leading to group solidarity and collective identity, something resource mobilization does not account for. Social constructionists critique the structural level explanations found in resource mobilization that fail to take into account individual action based on perceived reality (Klandermans 1992). By neglecting the fact that movements are comprised of individuals, scholars “easily lose sight of the fact that they are collectivities of individuals acting together and that the very fact that these individuals are acting together needs to be explained not taken for granted” (Klandermans 1997:3).

Like all areas of sociology, theories and research in social movements continually build, change, and reassess based on previous debates. Theories tend to spend time “in vogue” while assumptions, arguments, limitations, and rebuttals are hashed out, supported, refined, or discarded. Early social movement explanations focused on collective behavior and social psychology explanations, yet researchers could not ignore trends in society that support resource mobilization theory including: increasing per capita income that allows people to align their values with organizational support, more college bound students becoming involved once

networks are formed, and flexible work schedules among managers and professionals that allow episodic participation more frequently (McCarthy and Zald 1987a). In addition, organizations shifted from grassroots to a professionalized organizational structure with a paid staff, hierarchal decision making, and a less involved membership base (Bosso 2005; Carmin 1999). Instead of time and energy donations, constituents transition to “checkbook” members providing the monetary resources necessary for movement professionals to act as a voice for the organization (Brulle 2000; Carmin 1999). Increasing checkbook membership becomes a key objective for the organization.

Based on the resource mobilization research above, a strong economic climate suggests that resources are abundant in society and constituents are more likely to continue making “check book” donations. A strong economic climate is defined by the National Bureau of Economic Research (NBER) as a U.S. business cycle expansion visible in real gross domestic product (GDP), real income, employment, industrial production, and wholesale-retail sales. NBER creates a chart of expansion and contraction based on all these factors. This measure is stronger than other measures of U.S. “economic affluence” that only take into consideration per capita disposable income and service sector workers (Carmichael et al. 2012). Based on the resource mobilization research, I suggest that a strong economic climate provides the monetary resources necessary for increased EMO founding rates. Specifically, I hypothesize:

*H1: In comparison to years with weak economic climates, there are increases in EMO founding rates during a strong economic climate.*

## Political Opportunity

Resource mobilization and political process theories recognize the influence of external structures on movement actors' motivations, strategies, tactics, and the effectiveness of the collective process (Caniglia and Carmin 2005). Social movement theorists suggest that mobilizing resources and taking advantage of political opportunities are strong predictors of movement success (Morris 2000). However, a movement's ability to mobilize resources is greatly affected by the political process. The shift in research toward political opportunity theory reflects researchers attempt to improve upon collective behavior and resource mobilization explanations for organizational emergence (Meyer 2004). Specifically, political opportunity theory shifts the focus to the political context that influences movement mobilization.

The structural explanations of political opportunity theory have dominated social movement research for the past two decades (Meyer 2004). The political opportunity model focuses on the dynamics of power and political institutions that make up the political opportunity structure (Hipsher 1998). According to political opportunity theory, local, regional, and national positions of power may or may not be sympathetic to the issues brought forth by a social movement. Research in this area suggests that depending on the position of political actors, social movements find it easier to enact their agendas during periods of political favor (Meyer 2004). In contrast, if the social movement's issue does not align with the political environment, they face constraints instead of opportunity (Meyer and Minkoff 2004). For example, Meyer and Minkoff (2004) find overwhelming evidence that a Democratic presidential administration contributes to movement mobilization and outcomes among civil rights activists. They (Meyer and Minkoff 2004, 1482) suggest that the political opportunity opened by a Democratic

presidential administration provides a “cue” for activists to establish organizations. Christopher Bosso’s (2005) research illuminates increases in election-related donations to EMOs prior to major elections that would shift power to environmentally friendly, Democratic candidates to Congress or the White house. However, Carmichael et al. (2012:444) find that political allies discourage EMO foundings and suggest that political opportunities “may not be major factors behind movement organization foundings.”

The strengths of Political Opportunity Theory in explaining movement mobilization is overshadowed by the fact that there is little consensus of the theories effects on movement dynamics. While many studies find support for the theory (Agnone 2007; Meyer and Minkoff 2004), others find no significant results when controlling for other predictors (Carmichael et al. 2012; McLaughlin and Khawaja 2000). Meyer (2004:125) states, “The relatively small number of studies testing political opportunity hypotheses against other explanations have generated mixed results, owing in part to the articulation of the theory and the specifications of variables employed.” There is little consensus in the research in terms of conceptualizing political opportunity (Meyer 2004). Political opportunity as an independent variable has been defined in multiple ways, including: openness and ideological leanings of a political party, political allies, the organizations that came before the current actors, presidential speeches, supreme court rulings, changes in public policy, public perception of political opportunity, activities among the countermovement, and many others (Agnone 2007; Meyer 2004).

Since this is a study of EMOs at the national level, I focus attention to political opportunity at the federal level, specifically: is the Presidential administration sympathetic to the issues of the Environmental Movement Industry? Based on the Political Opportunity Theory

research, standard, straight-forward, and uncomplicated measures of political opportunity include a Republican or Democratic presidential administration (Meyer 2004). It is perceived that a president sympathetic to environmental issues provides a platform for positive change in that area. For instance, President Reagan would be sympathetic to industry interests and President Carter to environmental interests (this will be discussed in detail in chapter four). I hypothesize:

*H2: EMO founding rates increase during a Democratic presidential administration*

In addition to confusing definitions of political opportunity, it is also difficult to tease out the relationship between movement mobilization, political opportunity, and policy outcomes. Meyer (2004: 139) states, “The presumption underneath a political opportunity approach is that the development of movements reflects, responds to, and sometimes alters the realities of politics and policy, although most work gives short shrift to how.” The relationship between the variables interacts and influences each other, making it even more important to isolate the political opportunity variable from policy and mobilization to see effects clearly (Meyer 2004). I attempt to tease out this relationship.

It is suggested that opportunities for movement mobilization are also opportunities for policy reforms; ultimately, they work together in a synergistic spiral (Meyer 2004). While political opportunity research finds contradictory effects when political opportunity is used as a predictor of movement foundings, it fares much better as a predictor of policy change. In this context, a shift in political opportunities, whereby political conditions become favorable, results in the motivation among activists to challenge the status quo and policy changes become more likely (Olzak and Soule 2009). Jon Agnone (2007) finds that legislation favorable to the

environment is more likely to pass when Democrats control the White House and Congress. He (2007, 1602) states, “from 1948-1998, approximately 80 percent of enacted environmental bills were introduced by Democrats.” This is also the case for Olzak and Soule (2009) that finds a positive and significant relationship between a Democratic administration and pro-environmental legislation.

A positive account of political opportunity is illustrated in the actions taken in the turn of the 20<sup>th</sup> century. Some of the earliest environmental disputes included land use issues, urban pollution, the overhunting or fishing of animals, and the depletion of natural resources like timber (Gottlieb 2005). Early environmental action was aimed at local government officials, authorities, and elites whereby movement actors hoped to open policy windows to protect the environment they feared they were losing (Brulle 2000). It is assumed that a Democratic presidential administration is more sympathetic to environmental issues; however, what might be considered a political opportunity, Theodore Roosevelt was sympathetic to the early environmental movement’s concerns, even entertaining preservationist policy like national park legislation (Brulle 2000). Other sympathetic presidents include Franklin Delano Roosevelt, Lyndon Johnson, and Jimmy Carter. Based on Political Opportunity research, I hypothesize:

*H3: There is a positive relationship between a Democratic presidential administration and federal environmental policy being passed.*

Recent evidence indicates that policy success, as a result of movement mobilization, leads to less movement organizing after policy is passed (Meyer and Minkoff 2004; Olzak and Soule 2009). Less movement organizing after the passing of policy legislation is explained as the result of the social movement’s sense of accomplishment and perceived policy success;

moreover, there is less pressure to stay organized after the fact (Meyer and Minkoff 2004). I challenge the analysis of these findings based on Piven and Cloward's (1977: xi) claims that policy legislation acts as a concession by the political elites in power to influence movement organizations into "abandoning their oppositional politics." According to Piven and Cloward (1977), policy legislation acts as a symbolic gesture to ease movement disruption and shift attention among the movement actors to organization-building and accessing resources (usually provided by the political elites), instead of continuing the period of unrest. Based on this theory, I hypothesize:

*H4: Years following major federal environmental policy legislation, in comparison to years without, witness a decrease in EMO founding rates.*

Yet, Piven and Cloward (1977) also note that the passing of a concession is not necessarily a factor in the demise of a movement since the concession could be viewed as a modest gain or a big win, both easily likely to pacify or energize the movement. The political concession, symbolically viewed as a "win" for the movement and as an achieved goal, garners high aspirations among movement actors (Edelman 1964). It is much more likely that (instead of demobilizing) movement organizations will become more moderate and less confrontational (Piven and Cloward 1977). A competing hypothesis suggests:

*H5: Years following major federal environmental policy legislation, in comparison to years without, witness an increase in EMO founding rates among organizations with reform and status quo discursive frames.*

Piven and Cloward (1977, xii) also posit that when political elites are threatened with indignation and defiance from the politically hostile, and the situation seems uncontrollable,



political elites respond quickly to draw “insurgent masses into normal politics.” The application of this idea to the environmental movement is supported by the actions of radical environmentalists in the 1960’s—the new left and counterculture—that culminated in Earth Day and the environmental policies of the early 1970’s (Gottlieb 2005). Defiance and indignation against the status quo is more likely among EMOs with transformative discursive frames since EMOs with a reform and status quo discursive frame act within traditional politics (refer to chapter 1 for a discussion of discursive frame differences). This suggests that environmental policy legislation is a concession made by political elites based on the increased proportion of EMOs with a transformative discursive frame. Based on this idea, I hypothesize:

*H6: Years preceding major environmental policy legislation witness an increase in the proportion of organizations with transformative discursive frames.*

### Summary of Hypotheses

Meyer and Staggenborg (1996) state, "Movements can affect the political opportunity structure in a number of ways: Social movements can influence policy, alter political alignments, and raise the public profile and salience of particular issues. Movements can also create collective action frames, demonstrate the efficacy of various means of political action, and draw media attention that activates balancing norms in mainstream media. Finally, social movements can create or magnify critical events, to which their opponents can respond." The research presented in this dissertation attempts to disentangle the relationship between environmental crisis events, political opportunity, mobilization, and policy. Do environmental crisis events stimulate organization foundings? Does crisis or political opportunity lead directly to policy

outcomes or does movement action influence policy? Finally, does policy lead to demobilization?

The literature review provides answers to some of these questions and the research from political opportunity theory and resource mobilization are represented in the hypotheses that follow. In addition to the research discussed above, another variable is considered that introduces a different argument with components that may alter the results of past research. This variable is discussed in the chapter that follows. Below is a review of the hypotheses discussed in Chapter III and an introduction to the hypotheses that are discussed in Chapter IV:

*H1: In comparison to years with weak economic climates, there are increases in EMO founding rates during a strong economic climate.*

*H2: EMO founding rates increase during a Democratic presidential administration, and*

*H3: There is a positive relationship between a Democratic presidential administration and federal environmental policy being passed.*

*H4: Years following major federal environmental policy legislation, in comparison to years without, witness a decrease in EMO founding rates.*

*H5: Years following major federal environmental policy legislation, in comparison to years without, witness an increase in EMO founding rates among organizations with reform and status quo discursive frames.*

*H6: Years preceding major environmental policy legislation witness an increase in the proportion of organizations with transformative discursive frames.*

*H7: EMO founding rates increase during years with increased media attention to environmental crisis.*

*H8: There is a positive relationship between EMO founding rates among reform and status quo discursive frames and increased media attention to environmental crisis.*

The following figures, figures 3 and 4, represent the relationships in hypotheses 1-6 discussed in this chapter and both figures introduce the explanatory variable (hypotheses 7 and 8) that is discussed in Chapter IV, media attention to environmental crises:

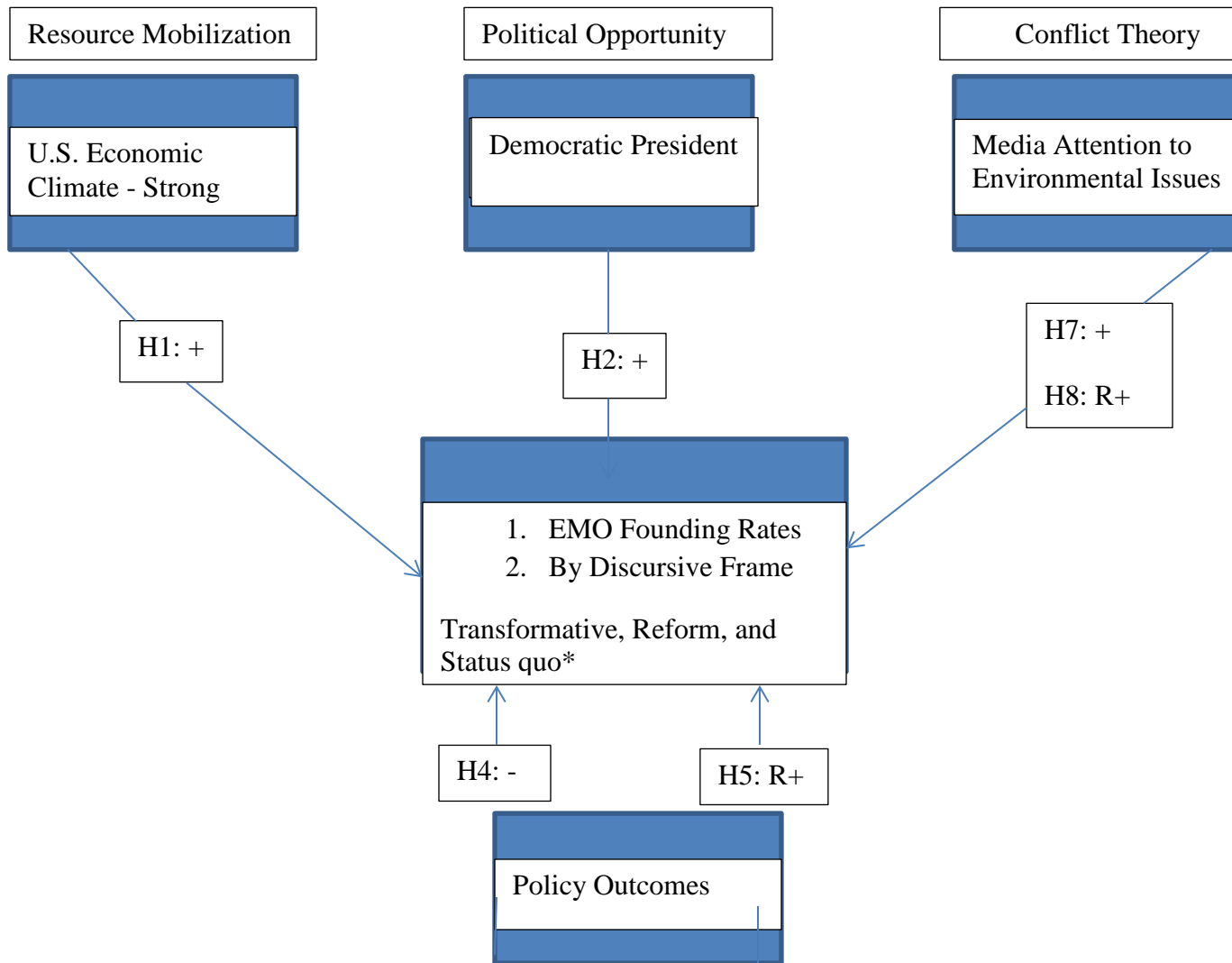


Figure 3: Exogenous Factors that Contribute to Increased EMO Founding Rates

\* Hypothesized relationships by discursive frame are represented with a “T” for transformative and “R” for reform

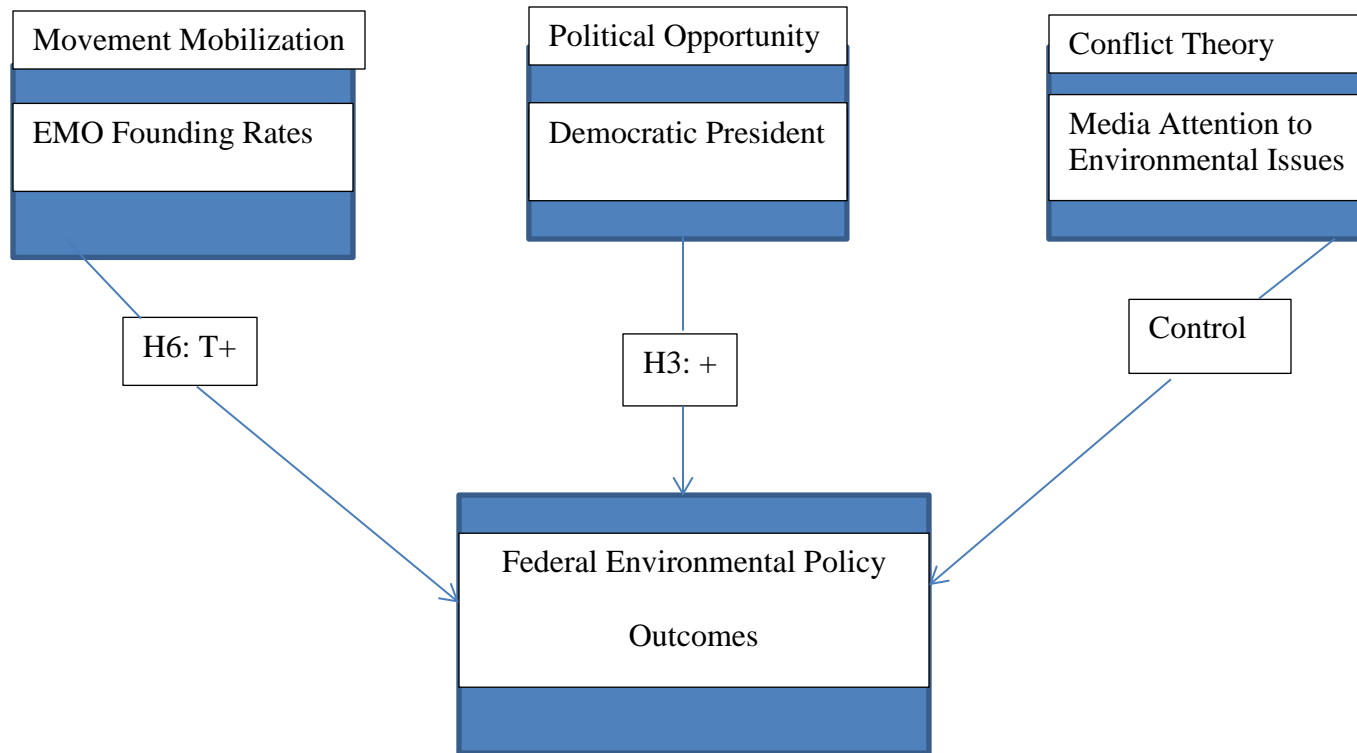


Figure 4: Exogenous Factors that Contribute to Federal Environmental Policy Outcomes

\*Hypothesized relationships by discursive frame are represented with a “T” for transformative and “R” for reform

## CHAPTER IV: CONFLICT, MEDIA, AND ENVIRONMENTAL CRISES

### Antagonistic Conflict versus Crisis

An area neglected by many in the social movement theory literature is conflict explanations of social movement emergence. Where functionalists explain social movement emergence in terms of strain, irrationality, resources, the breakdown of value systems, differentiation, and structural reform, the Marxist model of historical change reorients the focus of research to class struggle (Knapp and Spector 2011). Marx (1846/1970) would argue that the fundamental issue underlying all disputes that lead to social action since the shift from feudalism to capitalism is the expansion and concentration of capital. Religious, racial, gender, human rights, anti-war, and environmental issues and disputes are visibly similar only when social class, production, and the control of the means of production are taken into account (Knapp and Spector 2011). This idea can be applied globally in capitalist and pre-capitalist societies based on the interconnected world economic system (Wallerstein 1977). Powerful industry leaders, business interests, politicians, and the elite control the world economic system; moreover, they have a stake in economic expansion and progress. Within the system, natural resources and labor are exploited to the benefit of the elite. Those that take action and demand change are reacting to this antagonistic conflict.

The purpose of this research is to suggest that U.S. environmental movement action represents an antagonistic conflict characterized by a rejection of capitalist expansion and concentration of capital. The antagonistic conflict manifests in social movement action; however, it is not always explicitly expressed as such. Many disputes are fought without consciousness of

the antagonistic conflict over capital, thus leading to social movement divisions and vulnerability to dominant ideologies and repression. Theorists from Marx to Wallerstein have explained the power of ideology in legitimating structural inequalities that benefit the status quo (Marx and Engels 1846/1970; Tucker 1978; Wallerstein 2004).

Marx states that “the ideas of the ruling class are in every epoch the ruling ideas” (Tucker 1978, 172). Antonio Gramsci (1971/1987) explains the phenomenon of reproducing ideology as the power of hegemony controlled by the state and enforced through civil servants. Herbert Marcuse (2001) suggests that the power of ideology is visible in materialism. He (Marcuse 2001) is critical of technology as an instrument of repression and domination used in advanced capitalist societies to reproduce power for the privileged. Marx (The Grundrisse notebook VII, 1858) states,

Nature builds no machines, no locomotives, railways, electric telegraphs, self-acting mules etc. These are products of human industry; natural material transformed into organs of the human will over nature, or of human participation in nature. They are *organs of the human brain, created by the human hand*; the power of knowledge, objectified. The development of fixed capital indicates to what degree general social knowledge has become a *direct force of production*, and to what degree, hence, the conditions of the process of social life itself have come under the control of the general intellect and been transformed in accordance with it. To what degree the powers of social production have been

produced, not only in the form of knowledge, but also as immediate organs of social practice, of the real life process (emphasis in original).

According to Marx, technology, knowledge, and the resources of nature are in a constant process of change influenced by those that benefit from the production of each. Ideology is ultimately a historical product to protect this process.

Georg Lukacs (1922/1971) explains the power of ideology as system reification. According to Harry Dahms (1997, 183), “Reification, as the German *Verdinglichung* is usually translated, is the process that coerces and conditions individuals to see and treat each other, and the social and natural environment, as ‘things’ to be used for their personal purposes, to treat human beings and social relations in a reified and reifying manner.” Reification lends the appearance that the material world is mechanistic and inevitable; moreover, this is ignorant of historical development (Foster 2000). Foster (2000, 130) suggests that reification is “historical forgetting that reinforced the status quo.” Forgetting the historical roots of the material world allows reality to appear as if it were determined by natural forces instead of the material world created as tools of exploitation by those in control of resources (Foster 2000). In this sense, technological progress and capitalism seems like a linear path where the preconditions of each are forgotten. The preconditions include: primitive accumulation of the countryside, land becomes a source of capital, appropriation of nature, accumulation of capital, and antagonism between town and countryside (Foster 2000). Marx emphasized that relationships between humans and nature change historically and must be analyzed as such in a dialectical manner considering the antagonistic conflict, contradictions, and crisis (Wilde 1991).



Wallerstein (2004) argues that at some point ideology concealing the antagonistic conflict is revealed through contradictions making visible “system crisis.” Contradictions are incompatibilities in structural relationships that lead to social action and social change. Capitalism as an economic system has essential contradictions that cannot be remedied. Marx discusses the contradictions between capital and labor, the forces of production and the relations of production, and most importantly for explaining environmental contradictions, use value and exchange value. Most of history witnessed production for direct use by individuals, families, and communities; whereas capitalism shifts production to profit accumulation (Wilde 1991). Resources that once were “free” in the commons, i.e., use value, are now commodities, private property, for exchange value. The contradiction of use value and exchange value in modern times is illustrated during an environmental crisis event where one group’s interest is for use of a resource and another more powerful group “owns the right” to exploit the resource. The crisis event illuminates contradictions in the economic system; moreover, it is only a symptom of the fundamental adversarial relationship to resources under structural conditions. The crisis often raises the acceleration to action among social movements but it only highlights the underlying struggle over scarce resources (Melucci 1996). A “situation of crisis” or environmental crisis event (as it is referred to in this research) should not be confused with the antagonistic conflict (Melucci 1996).

Marx viewed crisis as not only a manifestation of contradiction, but also a reconciliation where the antagonistic relation among groups comes to a head resulting in social criticism, and possible revolutionary transformation (Foster 2000; Wilde 1991). Domhoff (2005:1) states, “power structures become most visible when some relatively powerless group or courageous

activists try to push up against them. Accidents and scandals that can't be controlled also tend to expose the contours of power structures, such as nuclear accidents, oil spills, Enron-type scandals, purloined documents, and leaked memos.” The mass media is an influential source in alerting the public to crisis events in society and setting agendas for public discussion. For the purpose of this research, media attention to environmental issues is a proxy for environmental crisis events. This is explained in detail in the following section.

### Media as Proxy for Environmental Crisis

Researchers interested in the relationship between increased media attention and movement organizations focus on factors that contribute to an organization’s newsworthiness. For instance; there are many studies documenting the newsworthiness of protest events (Carmin 1999; Oliver and Myers 1999; Smith et al. 2001); the location, issue, and size of an organizational event (Carmin 1999; Oliver and Myers 1999); and the differences in reporting based on reporters’ relationships with an organization (Andrews and Caren 2010; Gamson and Wolfsfeld 1993). Each of these studies raise concern about the news data used; specifically, the extent of selection bias by the news source in choosing what to report (Earl et al. 2004; Oliver and Myers 1999; Smith et al. 2001).

One of the major concerns about using the media as a source of data is the over or under-reporting of certain events and issues based on the news source’s criteria for newsworthiness (Earl et al. 2004). Thomas Dye (1990: 118) states, “The media create some issues and obscure others. They spotlight some personalities and condemn others to anonymity. They define some conditions in society as “problems” or even “crises,” and allow other conditions to go unnoticed.” According to Andrews and Caren (2010), only a relatively small amount of

environmental movement organizations capture media attention and the organizations that do are less confrontational, utilize conventional strategies in targeting politics and media, and are larger organizationally. They (Andrews and Caren 2010) suggest that the media focuses on more moderate environmental issues and themes; ultimately favoring economic growth over environmental issues, especially in local level reporting. Herman and Chomsky (1988) suggest that this is the media's pro-capitalist bias.

Concern has been raised that some issues captured in media accounts are privileged over others. Media attention and the national media agenda is an interaction between stakeholders: reporters, sources, health organizations, government officials, nongovernmental agencies, universities, and professionals (Mazur 2009). Research suggests that media influences public opinion but it is not a linear process starting with a source, then represented by the media, and ending with public opinion (Hansen 1991). Complex interactions between the stakeholders construct the issue through feedbacks and processes that produce meaning in a parallel fashion (Hansen 1991). An example of this complexity is when a news source conceals something newsworthy out of fear that they will lose advertising dollars from a powerful industry or business partner (Hansen 1991). In turn, scientific discoveries and scientific publications that are influential in the scientific community may not be made aware to the public until a salient event triggers its mentioning (Mazur and Lee 1993). It is important to recognize that contextual factors influence the interactive process of media agenda-setting and people in positions of power, especially corporate giants, have greater access to the media (Parenti 1995).

The criteria used to establish newsworthiness are complex, constantly changing, influenced by politics, and different at the local and national levels (Oliver and Maney 2000). At

the local level, it is also suggested that media is more likely to report conflictual events that are located at a central location or events sponsored by the business community (Oliver and Myers 1999). However, events that are featured in local news stories often make the national news (Oliver and Myers 1999). These patterns also transfer to movement organization action. Carmin (1999) finds that voluntary groups working at the local level draw media attention to issues that are then taken on by national professional movements. Other studies focus on media attention as a predictor of movement action and protest. Andrews and Biggs (2006) suggest that news media coverage of a Civil Rights sit-in in Greensboro inspired sit-ins throughout the South; moreover, according to their event history analysis, protests coincided with newspaper circulation cycles. They (Andrew and Biggs 2006: 772) state, “Social movements and protest waves have been shaped by the mass media, more than we have hitherto appreciated.”

Protest needs news coverage to be successful since media attention is a goal of protest (Gamson and Wolfsfeld 1993; Oliver and Maney 2000). However, environmental protest is not the only newsworthy factor that brings attention to environmental issues. The media’s messages are mediated by a social movement’s success in shaping the public and policy agenda that, in turn, shapes the media agenda (Smith et al. 2001). The news media places issues at the forefront of the public’s mind through agenda-setting (Mazur 2009). Environmental issues gain media attention through political agendas, scientific publications, increased public concern, educational and leisure opportunities, and local and national environmental crises. The total sum of news coverage on environmental issues contributes to public perception of environmental crisis; moreover, the increased media attention heightens awareness and stimulates movement mobilization.

Mazur (2009) suggests that the content of media reporting is less important than the quantity and saliency of the coverage. In support of quantity of coverage theory, Mazur and Lee (1993: 711) state, “sheer repetition of a worrisome image raises concern and stimulates public participation.” This suggests that the perception of environmental crisis is greater when the media reports more frequently on environmental issues. Issues spend time in the public consciousness based on “issue attention cycles” (Downs 1972). The issue attention cycle is less about real conditions as it is about perceived crises that at first heighten public interest then transitions to boredom with the issue over time (Downs 1972). Downs (1972) suggests that it is important to understand the issue attention cycle when initiating political pressure for change.

The issue attention cycle may be triggered by a critical event that garners attention to a broader set of related issues. Research suggests that “heightened attention to critical events sensitizes the newsroom to similar and related topics” (Djerf-Pierre 2012: 293). For instance, Djerf-Pierre (2012) found that heightened attention to global warming triggered environmental reporting on energy conservation, transportation issues, agricultural issues, and renewable energy. Smith et al. (2001) find that when the media takes interest in one environmental problem, they are more likely to generate attention for other environmental issues as well. An environmental issue may even receive considerable attention through “good timing” (Mazur and Lee 1993). Increased environmental reporting on what is perceived as “critical issues” is a driver of social action. Carmin (1999: 117) states, “the patterns of action revealed [in her research] suggest that sudden grievances and critical incidents often serve as catalysts for community action.” Environmental activists recognize ripe opportunities to push their own agendas into the

spotlight when external events propel the environment into the news and make scientific evidence contextually relevant (Mazur and Lee 1993).

I am interested in media attention as a proxy for environmental crisis events. While studies have found evidence that media attention to an issue inspires protest, few studies analyze media attention as a predictor of organization foundings. Based on the literature above, the cumulative amount of environmental issues reported in the media is a measure that captures issue attention cycles, critical events, and interaction between media stakeholders. I hypothesize:

*H7: EMO founding rates increase during years with increased media attention to environmental crisis.*

*H8: There is a positive relationship between EMO founding rates among reform and status quo discursive frames and increased media attention to environmental crisis.*

### Situating Events of Environmental Crisis

This chapter takes up the call of Thomas Rudel (2012) when he asks readers in “Toward a More Eventful Environmental Sociology” to incorporate historical events more fully into their analyses. I use content analysis of two years, 1977 and 1989, as situating events to inform my quantitative variables. I chose these years based on the amount of articles published on environmental issues in the *New York Times*. The first year, 1977, has more articles published on the environment than any other year in this study: 6,384 articles. Increased interest in the environment this year is not from one single environmental crisis event; public perception of environmental crisis in 1977 was from many smaller contested issues which will be described below. In contrast, the perception of crisis was higher than average in 1989 based on one single

event, the Exxon Valdez oil spill. I present the media story surrounding this environmental crisis, the reaction of environmentalists, and the discussion among policy makers that ultimately leads to the 1990 Oil Pollution and Prevention Act. Both years provide evidence to support relationships between variables in the quantitative analysis that follows this chapter.

### Environmental Crisis: 1977

The ten year period from 1970-1979 garnered an unprecedented amount of attention to environmental issues: 54,513 environmental articles in comparison to the period from 1960-1969 which only garnered 28,664 articles and 1980-1989 which garnered 50,096 articles. It is suggested that this is the result of the environmental activism of the 1960's spurred by recognition of environmental limits and the interconnectedness of humans and the environment. More federal environmental policies were passed in the 1970's than any other time in U.S. history (EPA 2013). The year 1977 was a particularly heightened year for perceptions of environmental crisis, reigning in 6,384 articles dispersed fairly evenly over the 12 month period. I analyze the first 100 "most relevant" articles in each month to identify themes that explain the media climate in 1977 and identify the issues that contributed to the most environmental articles published for all the years in this study.

In January 1977, President Carter took office on a platform of strong energy policy to curb the energy crisis; moreover, the focus would shift to energy conservation and reducing wasteful energy use (Etzioni 1977). Business and industry leaders immediately raised concerns about the administration's position on a variety of policy issues that would arrive on Carter's desk within the first few weeks of him taking office (Shabecoff 1977b). These include: amendments to the Clean Air Act and Clean Water Act, strip mine legislation, and other policies

that are viewed to slow the development of energy resources and hinder business interests (Shabecoff 1977b). Industry leaders stressed the importance of conservation practices that do not “damage economic growth or produce counterproductive regulations” (*New York Times* 1977a). Yet, Carter, in a speech to Congress on May 23, 1977, laid out initiatives that included “the sharpest shift in national policy on environmental matters since Theodore Roosevelt” (*New York Times* 1977c).

Other articles showcase the perceived importance of the presidential administration in office. EPA leadership expressed concern about the Ford administration’s underfunding of the agency and renewed hope in the Carter administration to alleviate understaffing and underfunding (Shabecoff 1977a). Environmentalists view Carter’s presidency as a win for the environment stating that an “unusual level of environmental concern in the White House constitutes two important new elements of power for the conservationist cause” (Hill 1977b). The executive director of the Environmental Defense Fund commented on the new initiatives of President Carter in reference to the Republican administration that came before him, stating that “he is addressing a lot of issues that were ignored over the last 8 years” (*New York Times* 1977c).

In addition to issues surrounding a new presidential administration, readers in 1977 also received a significant amount of information about air, water, and chemical pollution. An opinion poll released by the National Wildlife Federation found that the most pressing environmental concern for their readers was issues surrounding pollution (Hill 1977a). Many articles warned of the risks of new synthetic organic chemicals being introduced to consumers in the marketplace and their link to cancer (Lyons 1977; Waggoner 1977). Most articles about pollution focused on the increased attention that the EPA will pay to polluting industries and



municipalities beginning in July 1977 (Shabecoff 1977c). A component of the Carter administration environmental plan is the enforcement of current policies like the Water Pollution Control Act of 1972 and heavy fines or criminal penalties for major polluters that violate the policies (Shabecoff 1977c).

Another major pollution issue that captured the media's attention was vehicle emission standards. Environmentalists and industry interests debated and lobbied for months pushing their versions of a bill (Wooten 1977). Car industry leaders feared that strict emission standards would interrupt car manufacturing and possibly lead to the layoff of thousands (Holsendolph 1977). Carter sided with the car industry relaxing emissions standards and creating a timetable for meeting future standards (Wooten 1977).

Energy independence was an ongoing theme throughout 1977. Articles about off-shore drilling, pipelines from Alaska, nuclear power, increased use of coal, and tapping natural gas reserves, were abundant (Narvaez 1977c; *New York Times* 1977a; Rattner 1977; Trumball 1977). Within the context of the energy crisis of the mid-1970s, discussions about energy independence remained a major issue in 1977. Carter laid out his National Energy Plan on April 20, 1977, spurring media attention from environmentalists and industry. He promised energy policy that takes into consideration economic growth, environmental issues, energy conservation, and energy security (*New York Times* 1977b). Carter actually proposed an increase in energy resources that were close to home, like the U.S. abundant supply of coal (Vartan 1977). Industry leaders contributed to the discussion critiquing the government's policies and proposed their own ideas for more conservation and energy independence, usually focusing on their industry to solve the problem (*New York Times* 1977d).

Another environmental issue that dominated attention in 1977 was environmental education programs. Programs that involve students to “learn by doing” received increased media attention after grants were made available through the Office of Environmental Education and the National Science Foundation (Sander 1977). Teachers at all levels were receiving training to integrate environmental education into their curriculum. Teachers were encouraged by the education commissioner to “take advantage of student interest and response to the current energy crisis” to use this as a “teachable moment” (Narvaez 1977:1). However, industry seemed to reject the idea of educating students on the environment, providing teachers with a six week environmental literacy workshop with a focus on the “business-industrial” model hoping to garner support for weakening restrictions on pollution (Narvaez 1977b).

Based on the most pertinent environmental issues of 1977, I conclude that President Carter taking office and immediately taking a stand for the environment, and ultimately calling for enforcement of the environmental policies already in place, was a driving factor of increased articles on the environment. Environmental crisis in 1977 is the result of the back and forth between politics, industry, and environmental interests. Each are reacting to possible changes in policy that favors the environment, in the case of new emissions standards, educating youth, and enforcement of policies already in place that disrupt “business as usual.” They are also reacting to policy changes in response to Carter’s energy plan that seeks to build energy independence by shifting away from oil and natural gas into polluting energy sources like coal and nuclear. The findings suggest that society perceived President Carter as a political opportunity for changes that benefit the environment. This finding supports Political Opportunity Theory and also provides evidence that the effect of presidential administration is immediate and salient.

### Environmental Crisis: 1989

On March 24, 1989, the Exxon Valdez oil spill devastated the coast of the Prince William Sound's Bligh Reef spilling more than 10.8 million gallons of crude oil. According to the Exxon Valdez Oil Spill Trustee Council (2013), the spill was one of the most publicized and studied technological disasters in history. Scientists, environmentalists, politicians, and industry entered into dialogue over the failures, processes, and implications of the spill. Not only did it result in the threatening of species of animals, polluting of habitats, and environmental destruction, it disturbed subsistence livelihoods and the tourism industry of the area (EVOSTC 213). I analyze the effects of the Exxon Valdez Oil Spill by searching articles in the *New York Times* using the search term "oil" within my original search of key words: Environment, Environmental, Forest, Wilderness, Sanitation, and Pollution.

Within 1 month of the environmental crisis, the *New York Times* increased reporting on oil from 36 articles in January, to 37 articles in February, to 95 articles in April (New York Times 2013). The increased reporting on oil remained consistently around 60 articles for the remainder of the year. Articles reporting on oil jumped from 544 articles in 1988 to 675 articles in 1989. The following tables represent articles reporting on oil:

Table 1: Frequency of *New York Times* Articles Reporting on Oil (1987-1993).

1987	423 articles
1988	544 articles
1989*	675 articles
1990	779 articles
1991	670 articles
1992	597 articles
1993	440 articles

\* - represents year of oil spill

Table 2: Frequency of *New York Times* Articles Reporting on Oil (1989).

January	36 articles	July	63 articles
February	37 articles	August	50 articles
March*	50 articles	September	60 articles
April	95 articles	October	74 articles
May	57 articles	November	48 articles
June	56 articles	December	49 articles

\* - represents month of oil spill

Reporting on oil actually increased in 1990 to 779 articles, illustrating that the effects of an environmental crisis like the Exxon Valdez Oil Spill lasts into the following years. By 1992, reporting on oil returned to the pre-oil spill numbers, around 597 for the year.

The articles in 1990 focus on issues related to the litigation between Exxon, the state, local governments, and residents, and to what extent Exxon is responsible for restoration projects, clean-up, and future damages to livelihoods (Cushman 1990). In addition, a critical eye turned to the oil industry. The Exxon Valdez Oil Spill immediately garnered attention in the media. The first few days after the spill was a game of naming, blaming, and claiming (Felstiner 1980/1981). Safety officials question the practices of the oil industry, especially the cost-cutting measures that result in worker safety issues and equipment malfunctions (Holusha 1990). Also, Exxon had been replacing skilled union workers with new unskilled nonunion workers to save money, which led to explosions, spills, and increased accidents (Wages 1990). It seems that these issues were industry wide with many other large oil companies reporting issues with occupational health and safety (Wages 1990).

Only a portion of the oil articles in 1989 and 1990 were about the Exxon Valdez. Many of the oil articles beginning in 1989 were the result of perceptions of crisis instigated by the Exxon Valdez. The Exxon Valdez created the dialogue that led to increased interest in the oil industry as a whole. Politicians felt the pressure to create policy that would put tighter restrictions on the industry and prevent future accidents. This resulted in the Oil Pollution and Control Act passed in March of 1990.

## CHAPTER V: DATA, MEASURES, AND METHODS

### Data

In keeping with the terms identified by McCarthy and Zald (1977), I present the U.S. Environmental Movement Industry (EMI) as the broad configuration of organizations sharing the collective identity of the environmental movement. The EMI is made up of Environmental Movement Organizations that share a broad collective identity but may differ in goals, objectives, beliefs, and views about change.

The secondary data used for this research is the Comprehensive Census of U.S. Environmental Movement Organizations collected by Bob Brulle and colleagues (2007). Multiple and varied sources—150 in total—were consulted to build the data set of 5,428 EMOs in an attempt to represent the population. Brulle and colleagues (2007) begin recording environmental movement organizations starting in 1812 with the first known organization, the Academy of Natural Sciences. Between 1812 and 1890, 29 environmental movement organizations were founded. My dataset begins in 1890 and ends in 2002, comprising 112 years and 5,399 EMOs.

EMOs included in the census share the broad collective goal of improvement of the natural environment and this is demonstrated by identifying with environmental key words (See Brulle et al. 2007b, Table I). In addition to key words, EMOs are validated through a compilation of multiple sources; including directories, associations, websites, and government documents to represent the most inclusive data base of regional and national U.S. EMOs (Brulle et al. 2007). Examples of the most important contributors to the data were: *The Encyclopedia of Associations*,

*The Conservation Directory*, *The IRS Master File*, and all registries and directories currently in existence (See Brulle et al. 2007b for exhaustive compilation of sources). Research using only a single directory: e.g., *The Encyclopedia of Associations* or *The Conservation Directory*, provides insufficient representation of the population of EMOs and is biased to organizations with mainstream discourses (Brulle et al. 2007). Brulle et al. (2007: 209) states, “based on our estimated EMO population, we were able to capture important characteristics of an estimated 84% of the ‘real world’ national and regional EMOs that existed between 1900 and 2000.”

One methodological problem that cannot be avoided in representing the population of EMOs is that many movement organizations never make it formally into sources of identification. Collins (2001: 34) states, “they barely get off the ground, and disappear before anyone thinks of researching them.” In addition, some environmental movement organizations are self-declared “disorganizations” averse to the mainstream political system, therefore never identifying with the sources mentioned above.

Brulle and colleagues (2007a) collected a total of 3 variables that are used in this study. Variables include the name of the EMO, the date of founding, and their primary discursive frame: wildlife management, conservation, preservation, reform environmentalism, environmental health, deep ecology, environmental justice, ecofeminism, ecospiritualism, greens, and animal rights. Since I am interested in the rates of EMOs founded, I aggregated these data to calculate the number of EMOs founded in each year. Thus, in this study, I use the aggregated version of the data where each line of data represents a different year from 1890 to 2002 and each year is characterized by a number of EMOs founded. In addition, I calculate EMO

founding rates for each discursive frame in any given year and the proportion of each discursive frame in relation to the other frames.

In addition to the original variables that are aggregated from the Comprehensive Census of U.S. Environmental Movement Organizations, I created additional independent variables as predictors of EMO founding rates. The variables include the focus of this study—environmental crisis events and policy outcomes—and other control variables chosen based on prior research findings in resource mobilization, new social movement, and political opportunity theories.

#### Measures: Dependent Variables

The first dependent variable for this research is EMO founding rates each year. This rests on the assumption that environmental movement organizations form in response to identifying with the broad goals of the environmental movement industry. The data for this variable were collected by Brulle and colleagues (2007) from multiple public records identifying the official date of formation including: directories, internet searches, Worldcat publication search, IRS, and newspaper databases. For instance, World Wildlife Fund was founded in 1961 and validated in multiple sources including IRS Master File, *Conservation Directory*, and the *Encyclopedia of Associations*. I aggregated the data, resulting in 5,399 EMOs counted into a 112 year dataset. The EMO founding rate variable reports a mean of 47.75 (standard deviation of 59.01) with a minimum range of 1 EMO founded each year and a maximum range of 200 EMOs founded in 1990. Figure 5 represents this variable:



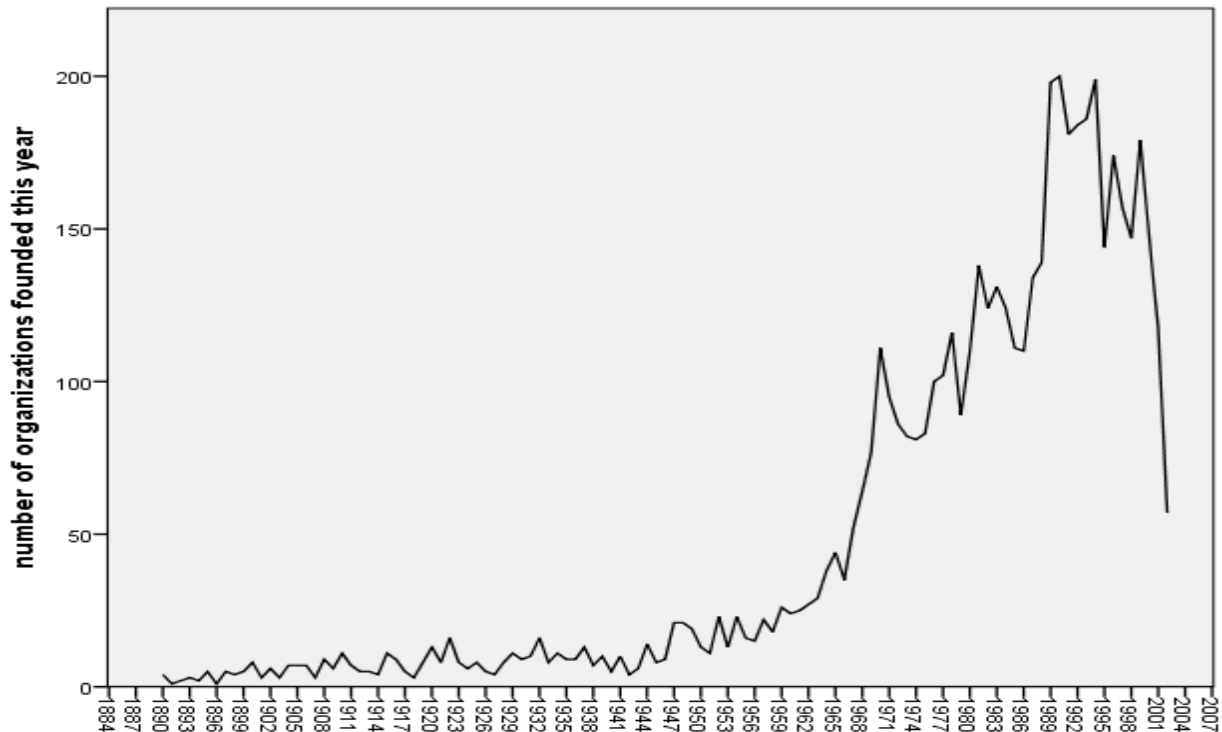


Figure 5: Number of EMOs Founded, 1890-2002

The second dependent variable is the proportion of EMOs founded each year with different discursive frames. In the original data compiled by Brulle and colleagues, all EMOs were coded into 11 major discursive frames based on analysis of public documents, internet references, and descriptions of organizations in directories. To ensure intercoder reliability, Brulle et al. (2007a: 201), “At any given time there were up to four people coding, two student coders and two supervisory coders. All student coding was confirmed by one of the supervisory coders.” Intercoder reliability was high based on Cohen’s Kappa Test (.93) and Perreault and Leigh’s reliability index (.96). The 11 discursive frames in the U.S. environmental movement industry include: Wildlife management, conservation, preservation, reform environmentalism, environmental health, deep ecology, environmental justice, ecofeminism, ecospiritualism,

greens, and animal rights. These discursive frames are aggregated as proportion of EMOs founded each year with the specific discursive frame.

For this research, each of the 11 discursive frames is reduced into three categories based on where they fit in relation to their desired level of change (Hopwood, Mellor, and O'Brien 2005). One assumption of this study is that EMOs with different discursive frames have different founding rates based on exogenous factors. EMOs that desire the least amount of change represent a "status quo" discursive frame. Wildlife management is the only "status quo" discursive frame. The proportion of organizations with a status quo discursive frame reports a mean of .07 (standard deviation of .10) with a minimum range of 0 status quo EMOs founded each year and a maximum range of .57 status quo EMOs founded in the year 1911.

The next level would be change that is equivalent with reforms to the current system, a "reform" discursive frame. Conservation, preservation, and reform environmentalism represent the "reform" category. The proportion of organizations with a reform discursive frame reports a mean of .81 (standard deviation of .13) with a minimum range of .29 reform EMOs founded each year and a maximum range of 1.00 reform EMO, which suggests that some years had 100% of all EMOs founded as reform organizations. Reform and status quo discursive frames typically employ more moderate institutional tactics for change, reform being the most attractive to environmentalists (Olzak and Soule 2009).

The third level requires the most change and is characterized by a "transformative" discursive frame. Animal rights, deep ecology, ecofeminism, ecotheology, environmental health, environmental justice, and greens represent the "transformative" category (Hopwood, Mellor, and O'Brien 2005). The proportion of organizations with a transformative discursive frame

reports a mean of .12 (standard deviation of .11) with a minimum range of .00 transformative EMOs founded each year and a maximum range of .50 transformative EMOs founded (in both 1942 and 1943). Transformative discursive frames typically employ more radical extra-institutional tactics for change and attract a smaller constituency (Olzak and Soule 2009). In my dataset, I calculate the proportion of EMOs with each of the three discursive frames founded in each year; however, I also look at the rates of each discursive frame individually. The status quo discursive frame has too few cases. Since I am interested in the difference between radical and moderate movements, the status quo discursive frame is collapsed with the reform discursive frame when looking at founding rates for each individually (transformative mean, 7.99 and reform/status quo mean, 39.76). Figure 6 represents the number of EMOs founded that have a radical or moderate discursive frame by year:

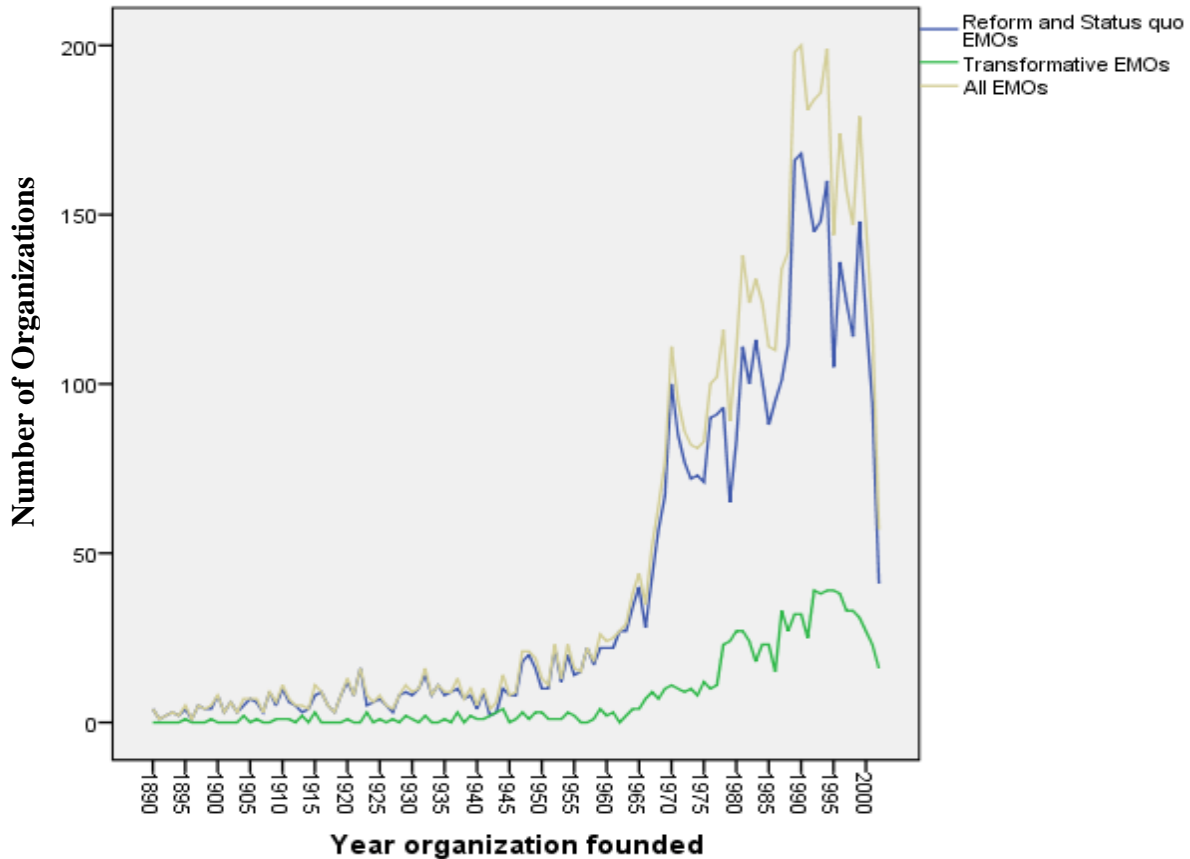


Figure 6: Number of EMOs Founded by Discursive Frame, 1890-2002

Measures: Independent Variables

I suggest that a predictor of EMO emergence and discourse differences is environmental crisis events. I create the indicator for environmental crisis as a count of articles in the *New York Times* using the keywords environment, environmental, forest, wilderness, pollution, or sanitation between the years 1890 and 2002. The purpose of this variable is to measure perception of environmental crisis through the media’s representations. I recognize that terms for the environment have changed over time. For instance, a search for “environment” or

“environmental” in 1990 would capture the context of the measure, however, the broad term “environment” would not capture media’s attention to environmental issues in 1890 or 1950; terms used during that period were different. A pilot study was conducted prior to the choice of the keywords to identify what terms were being used throughout the study to describe what is generally described today as “environmental issues.” My conclusion from the pilot study helped inform my approach for extracting useful keywords that capture media attention to environmental issues. The pilot study of the ten year period between 1890 and 1899 revealed the terms “wilderness” and “forest” and the terms “sanitation” and “pollution” during the years 1945-1955 suggest the terms. These terms are also recognized in the Encyclopedia of Associations as important environmental keywords (Brulle et al. 2007b).

The *New York Times* is a complete source providing historical documents for all the years represented in this study. Consistent access to the *New York Times*’ archives and the credibility of the news source among the public are the main determining factors for choosing this source. Earl et al. (2004) advise researchers using media reports to recognize that like other sources of data, it does have flaws; however, it remains a useful data source. The *New York Times* is not only an important source for directing the national news agenda, since many local, regional and national news sources in the U.S. draw their materials from the *New York Times*, it also influences major news sources throughout the world (Mazur 2009).

Utilizing a national newspaper source like the *New York Times* takes into consideration not only if environmental issues were newsworthy but also public perception of environmental issues. Maxwell Boykoff (2011, 28) suggests that, “the media community serves a vital role in communication processes between science, policy, and the public.” Examples of environmental

crisis events that garnered increased national media attention include extensive forest fires in the 1890's, the Santa Barbara and Exxon Valdez oil spills, and political factors, like a Presidential administration sympathetic to environmental issues (discussed earlier). The number of environmental articles reported has a mean of 2,891 articles (standard deviation of 1,690) with a minimum range of 700 articles and a maximum range of 6,384 articles in 1977. The number of environmental articles published in the *New York Times* by year is represented in Figure 7:

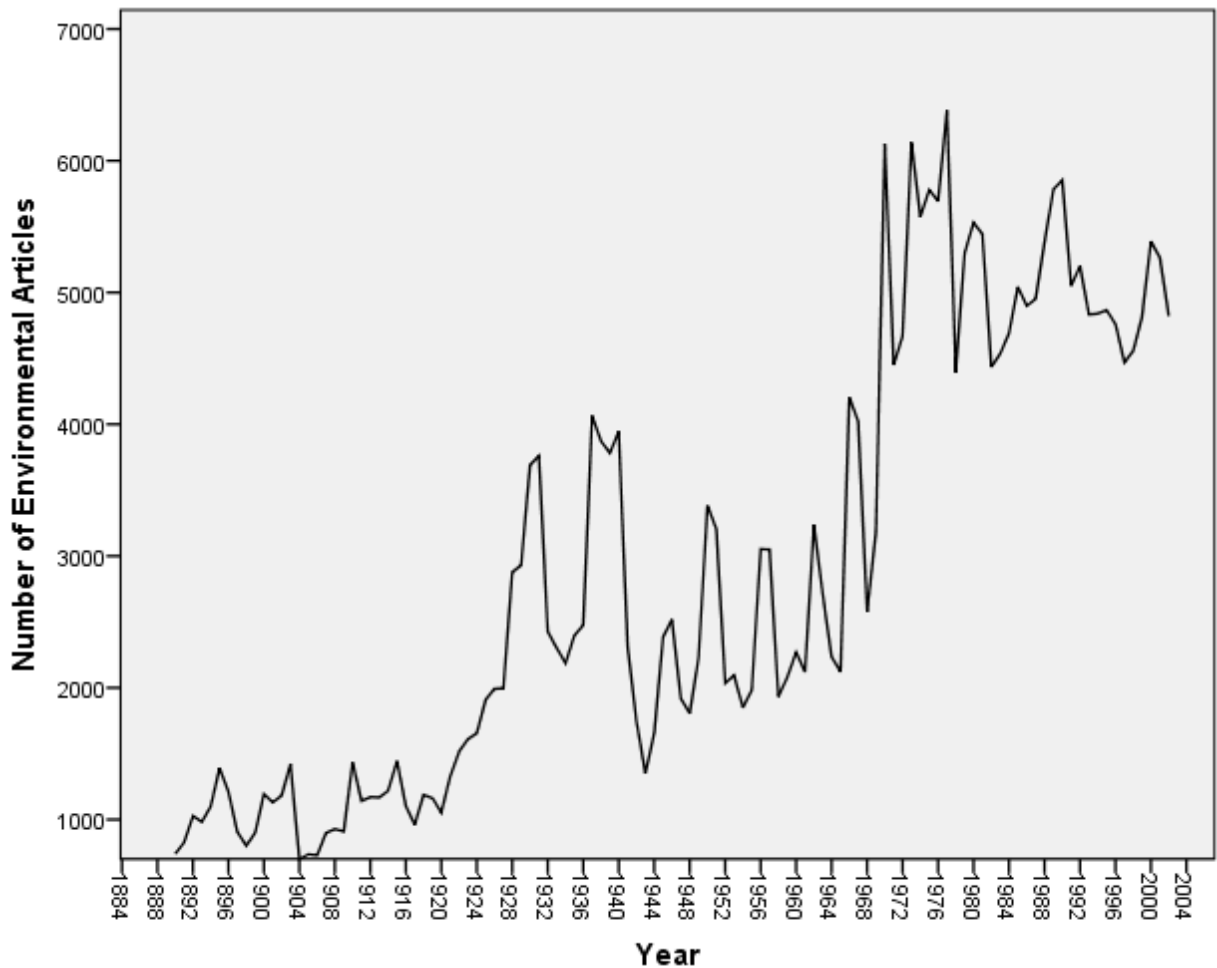


Figure 7: Environmental Crisis as Represented by Number of Environmental Articles Published in the *New York Times*, 1890-2002

Another independent variable tested as a predictor of EMO founding rates is federal environmental policy. The literature is mixed on the relationship between policy and social movement organizations; specifically, is policy the outcome of environmental movement action and does policy contribute to movement demobilization? Do increased EMO founding rates lead to positive policy outcomes or does positive policy outcomes lead to movement demobilization? Thus, federal environmental policy is an independent and dependent variable in this study. I create the indicator for environmental policy; moreover, if a year coincides with the passing of major federal environmental policy enacted to protect the environment, it is represented by a yes (1) for that year. Included in the “yes” category are amendments to change and improve prior federal environmental policies. Examples of years with major federal environmental policy include the 1897 Forest Management Act, the 1947 Insecticide, Fungicide, and Rodenticide Act (amended in 1972, 1988, and 1996), and the 1970 Clean Air Act (amended in 1977 and 1990). I created this variable using information compiled in multiple sources, including the EPA and Forest Service (see appendix for complete list).

Standard practice for researchers of policy outcomes is to lag the variable one year since the outcomes of passing policy will likely take affect the following year. For the purpose of this study, I lag the policy variable when it is an independent variable. When the policy variable is a dependent variable, I am looking at the outcomes of other predictors on the passing of policy and am not concerned with policy outcomes, so it is not lagged. Federal Environmental Policy years (when used as an independent and dependent variable) report a mean of .27 (standard deviation of .44) in comparison to years without.

For the purpose of this study, I also lag the crisis variable when it is an independent predictor of policy outcomes. When the policy variable is a dependent variable, I am looking at the outcomes of other predictors on the passing of policy. I assume that crisis events, while they would lead to immediate media attention and increased public perception of the issue sparking interest and movement mobilization, would not lead to immediate policy changes within the same year. The number of environmental articles in the lagged variable reports a mean of 2,874 articles (standard deviation of 1,688) with a minimum range of 700 articles and a maximum range of 6,384 articles (in 1977).

In addition to the mentioned independent variables, tests control for political opportunity structures, resource mobilization, and new social movement theories as predictors of EMO emergence and discourse differences.

*Political opportunity:* Political opportunity is coded with a yes (1) if the year represents a Republican administration in the Whitehouse; moreover, election years are coded with the incumbent president. This variable is not lagged assuming that political administration has a direct effect on all outcomes. Republican administration years report a mean of .54 (standard deviation of .50) in comparison to Democratic administration years.

*Resource Mobilization:* A strong economic climate is defined by the National Bureau of Economic Research (NBER) as a U.S. business cycle expansion. A weak economic climate is a U.S. business cycle contraction. NBER (2012) states, "a recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales." NBER records economic contractions—recessions—starting at the peak of the business cycle and



ending at the trough. For the purpose of this research, any peak that begins in November or December or any trough that ends in January or February is not counted to include that year. The resource mobilization variable is coded as a yes (1) if the year represented has a strong economic climate. A strong economic climate suggests that the economy is ripe with the resources necessary to mobilize for change. This variable is not lagged assuming that a strong economic climate has a direct effect on all outcomes. Years with a strong economic climate report a mean of .57 (standard deviation of .50) in comparison to years with a weak economic climate.

*New Social Movement Theory:* New social movement theory also suggests that increased population over time would initiate a “movement society” characterized by increased organizational emergence. It can also be assumed that population increase over time would contribute to the ability of greater numbers of people to organize. This study controls for rates of population change over the years 1890-2002. The population variable reports a mean of 158 million people (standard deviation of 65 million people) with a minimum range of 63 million people and a maximum range of 288 million people in 2002. Table 3 represents the descriptive statistics provided above.

Table 3: Descriptive Statistics of Variables used in the Analysis of yearly EMO founding rates (N=112 years from 1890-2002)

	Mean	St. Deviation	Minimum	Maximum
<i>Dependent variables</i>				
Number of EMOs founded	47.75	59.01	1	200
Discourses:				
% of transformative EMOs	.12	.11	.00	.50
% of reform EMOs	.81	.13	.29	1.00
% of status-quo EMOs	.07	.10	.00	.57
<i>Independent variables</i>				
Number of articles about environmental crisis	2891	1690	700	6384
Federal environmental policy passed (1)	.27			
<i>Control Variables</i>				
Strong Economic Climate (1)	.57			
Republican Administration (1)	.54			
Population (in millions)	158	65	63	288

EMO, Environmental Movement Organization.

Source of data: “Comprehensive Census of U.S. Environmental Movement Organizations” (Brulle et al. 2007) aggregated to Dataset created by author.

Notes: Range is not given for dichotomous variables and the mean for dichotomous variables represents the proportion in the category.

## Methods

All analyses are estimated using SPSS. Descriptive statistics, correlation, bivariate analyses, and linear and logistic regressions are performed to estimate significant differences. I present linear regression with OLS estimators and logistic regression with maximum likelihood estimators to determine the relationships between crisis events, policy, and EMO founding rates. The linear regression's dependent variable is EMO founding rates, in addition to the founding rates of the EMOs by their discursive frame. The logistic regression's dependent variable is federal environmental policy outcomes.

Regression diagnostics are performed on the regression model with the original untransformed dependent variable and the transformed dependent variable. The original continuous dependent variable has close to normal skewness (1.23) and kurtosis (.23). The transformed dependent variable is even closer to normal skewness and kurtosis; however, the residual plots and scatter plots confirm a more linear relationship with the original dependent variable. Other model form assumptions are met. Tests were performed for normality, multicollinearity, heteroscedasticity, residuals, leverage, and outliers. The population and crisis variables have small multicollinearity issues.

Based on the regression diagnostics performed, the violated assumptions are not serious enough to warrant the use of an alternative regression. Linear and logistic regressions provide the best interpretation of the models for the reader. Nested modeling is used to first introduce the control variables in model 1, then introduce the predictor variables independently in model 2 and 3. I use nested modeling so that I am confident that the change in model fit is a result of introducing new variables.

## CHAPTER VI: RESULTS

### EMO Foundings

Table 4 presents the correlations between EMO founding rates and discursive frames and the continuous independent variables used in this study. Results suggest that EMO founding rate is significantly correlated to all variables except the proportion of reform EMOs. There are also patterns with respect to individual frames.

The proportion of EMOs with a status quo discursive frame is negatively correlated with all other EMO founding rates. When the proportion of EMOs with reform ( $r = -.59, p < .001$ ) and transformative ( $r = -.19, p < .05$ ) discursive frames are high, the proportion of EMOs with a status quo discursive frame is low. Wildlife management is the only status quo discursive frame; moreover, this finding makes sense in context with the changing face of environmental movements toward more reform and transformative tactics for change.

The proportion of EMOs with a reform discursive frame also has a significant negative correlation to the proportion of EMOs with a transformative discursive frame ( $r = -.68, p < .001$ ). When the proportion of EMOs with a transformative discursive frame is high, the proportion of EMOs with a reform discursive frame is low.

In addition, as population increases, there is not a significant effect on the proportion of organizations founded that have a reform discursive frame. There is a positive correlation between population and EMO founding rate ( $r = .89, p < .001$ ). As population increases, the EMO founding rate increases. As population increases, so does the proportion of EMOs with a transformative discursive frame ( $r = .35, p < .001$ ). The correlation is opposite for status quo

discursive frames. As population increases, EMOs with a status quo discursive frame significantly decrease ( $r=-.24$ ,  $p<.01$ ). This suggests that over time as population increases status quo discursive frames are rarer and transformative discursive frames are more frequent. Crisis is also positively correlated to population. As population increases crisis events increase ( $r=.88$ ,  $p<.001$ ). Table 4 represents these findings.

Table 4: Correlation Matrix of Variables used in the Analysis of yearly EMO founding rates (N=113)

	1	2	3	4	5	6
1 EMO founding rate	-					
2 % Transformative	.35***	-				
3 % Reform	-.09	-.68***	-			
4 % Status quo	-.26**	-.19*	-.59***	-		
5 Env. Crisis	.82***	.33***	-.15	-.17	-	
6 Population	.89***	.39***	-.14	-.24**	.88***	-

\* $p<.05$ , \*\* $p<.01$ , \*\*\* $p<.001$

In addition to the population correlations, crisis events are significantly correlated to EMO founding rates and the proportion of EMOs founded that have transformative discursive frames. As crisis events increase in the media, EMO founding rates increase ( $r=.82$ ,  $p<.001$ ). The proportion of EMOs with transformative discursive frames also has a positive relationship to crisis events ( $r=.33$ ,  $p<.001$ ).

### Linear Regression

Linear regression is performed with ordinary least squares estimators. In Table 5, I estimate a nested model to explain EMO founding rates, first introducing only the control

variables (M1): population, strong economic climate, and Republican administration. I then introduce my predictor variables: environmental policy (M2) and environmental crisis (M3). The results for the control variables in Model 1 support previous research suggesting the effects of the control variables. The model explains 77.6 percent of the variance in the dependent variable. EMO founding rates are significantly affected by population rate increase (.82,  $p < .001$ ). As population increases, EMO founding rates increase by .82. This effect may result from increases in population rates over time. Neither economic climate nor presidential administration is an especially strong predictor of EMO founding rates. The control hypothesis: In comparison to years with weak economic climates, there are increases in EMO organizing during strong economic climates, is not supported. Thus, the model does not find support for resource mobilization theory which suggests that a strong economic climate leads to movement mobilization.

Previous research has found support for and against political opportunity theory which suggests that a presidential administration sympathetic to a movement's issues provides an environment ripe for mobilization. This research finds that presidential administration is not a significant predictor of EMO founding rates. The control hypothesis: In comparison to a Republican administration, a Democratic administration increases the EMO founding rate, is not supported with these data. Thus, the model does not find support for political opportunity theory which suggests that a Democratic administration more sympathetic to environmental issues would provide a favorable environment for organizing.

Model 1 in Table 5 is the results from a nested model with only the control variables. In Model 2, I add the environmental policy variable (lagged) to test the hypothesis 3: Years

following major federal environmental policy legislation, in comparison to years without, witness decreased EMO founding rates. The hypothesis is based on research that suggests policy legislation results in movement demobilization. Model 2 explains 77.8 percent of the variance in the dependent variable, whereas the model with control variables explains 77.7 percent of the variance. When the policy variable is added to the model (M2), the model does improve but the change in model fit is not significant (change in F statistic is .48,  $p < .50$ ). The results in Table 5, model 2 does not support the hypothesis that policy changes lead to movement demobilization.

Model 3 adds in the main predictor variable, environmental crisis events. When the crisis variable is added to the model (M3), the model does improve and the change in model fit is significant (change in F statistic is 4.20,  $p < .05$ ). This model explains 78.6 percent of the variance in the dependent variable, whereas the model with the policy variable explains 77.8 percent of the variance. The results in Table 5, model 3, supports the hypothesis that increased environmental crisis does have a significant positive effect on EMO founding rates (.007,  $p < .05$ ). As the number of articles about environment crisis increases, EMO founding rates increase by .007. To see if the effect of an environmental crisis remains significant the next year, I also ran a model with the lagged crisis variable. This finding remains significant when crisis is lagged one year ( $p < .05$ ) providing evidence that perception of crisis is prolonged. Table 5 represents these findings:

Table 5: Unstandardized Coefficients from Linear Regression with OLS Estimators of Effects of Environmental Crisis on EMO founding rates (N=112).

<i>Independent Variables</i>	<i>M1</i>	<i>M2</i>	<i>M3</i>
Number of articles about Environmental Crisis			.007 (.003)*
Federal Environmental policy passed		4.53 (6.57)	2.44 (6.55)
<i>Control Variables</i>			
Population (in millions)	.817 (.04)***	.81 (.05)***	.65 (.09)***
Strong economic climate	-3.60 (5.97)	-4.25 (6.07)	-1.62 (6.11)
Republican president	8.34 (5.63)	7.62 (5.74)	7.16 (5.66)
<i>Constant</i>	-84.26 (8.10) ***	-83.27 (8.25)***	-78.61 (8.44)***
<i>F statistic (d.f.)</i>	125.32 (3)***	93.65 (4)***	78.00 (5)***
<i>Change in F (d.f.)</i>		.48 (1)	4.20 (1)*
<i>R-squared</i>	.777	.778	.786

Source of data: “Comprehensive Census of U.S. Environmental Movement Organizations” (Brulle et al. 2007) aggregated to Dataset created by author.

Standard Error in parentheses.

\*p<.05, \*\*p<.01, \*\*\*p<.001

In addition to the EMO founding rates variable in Table 5, I also present a nested model for EMO founding rates among the different discursive frames. Hypothesis 2 states: The founding rates of EMOs with reform or status quo discursive frames increases more during environmental crisis than the founding rates of EMOs with transformative discursive frames. I argue that organizations with different discursive frames mobilize at different rates based on



exogenous factors that appeal to their level of change. Organizations with a reform and status quo discursive frame are more likely to respond to environmental crisis, viewing crisis as an opportunity for moderate mobilizing, whereas EMOs with transformative discursive frames and a more radical vision of change, focus less on mobilizing around public perception of environmental crisis. The number of transformative organizations founded differs from the number of reform and status quo organizations founded. A regression was performed for both EMOs with transformative discursive frames and EMOs with reform/status quo discursive frames. Results for transformative discursive frames did not find any significant effects among predictors. The results for reform/status quo discursive frames are presented.

In Table 6, I estimate a nested model to explain the number of organizations founded with a reform/status quo discourse, first introducing only the control variables: population, strong economic climate, and Republican administration (M1) and then introducing my predictor variables: federal environmental policy (M2) and environmental crisis (M3). The results for the control variables support previous research. The number of reform/status quo organizations are significantly affected by population rate increase ( $p < .001$ ). As population increases the number of EMOs with a reform and status quo discursive frame increases by .66. This finding is in line with New Social Movement Theory.

Neither economic climate nor presidential administration is especially strong predictors of increases or decreases in the number of reform/status quo organizations founded. The model does not find support for resource mobilization theory which suggests that a strong economic climate leads to movement mobilization, even among EMOs considered to be more moderate. Previous research has found support for and against political opportunity theory which suggests

that a presidential administration sympathetic to a movement's issues provides an environment ripe for mobilization (Meyer and Minkoff 2004). This research finds that presidential administration is not a significant predictor of increases or decreases in the number of reform/status quo organizations.

Model 1 in Table 6 is the results from a nested model with only the control variables. When the policy variable is added to the model (M2), the model does improve but the change in model fit is not significant (change in F statistic is .61,  $p < .45$ ). This model explains 77.8 percent of the variance in the dependent variable, whereas the model with control variables explains 77.6 percent of the variance. Table 6, model 2 suggests that the results of environmental policy does not have a significant effect on founding rates among EMOs with reform/status quo discursive frames.

Model 3 adds in the main predictor variable, environmental crisis events. When the crisis variable is added to the model (M3), the model does improve and the change in model fit is significant (change in F statistic is 5.36,  $p < .05$ ). This model explains 78.8 percent of the variance in the dependent variable, whereas the model with the policy variable explains 77.8 percent of the variance. The results in Table 6, model 3 supports the hypothesis that founding rates increase for EMOs with reform/status quo discursive frames as a result of crisis ( $p < .05$ ). This finding remains significant when crisis is lagged one year ( $p < .05$ ) providing evidence that perception of crisis is prolonged. As the number of articles about environmental crisis increases, the number of organizations with reform/status quo discursive frames increases by .006. The same results are not supported for EMOs with transformative discursive frames suggesting that the results of Table 3—the significant positive effect of crisis on EMO founding rates—has a different effect

based on discursive frame. This supports the hypothesis that patterns of organizing are different based on the EMOs discursive frame; specifically, the number of organizations with reform/status quo discursive frames significantly increases during and after an environmental crisis. Table 6 represents these findings:

Table 6: Unstandardized Coefficients from Linear Regression with OLS Estimators – Effects of Predictors on the Founding Rate of Organizations with Reform/Status quo Discourses (N=112)

<i>Independent Variables</i>	<i>M1</i>	<i>M2</i>	<i>M3</i>
			.006 (.003)*
Number of articles about environmental crisis			
Federal environmental policy passed		4.15 (5.33)	2.25 (5.29)
<i>Control Variables</i>			
Population (in millions)	.66 (.04)***	.65 (.04)***	.51 (.07)***
Strong economic climate	-3.06 (4.85)	-3.65 (4.92)	-1.25 (4.94)
Republican president	8.27 (4.57)	7.61 (4.66)	7.18 (4.57)
<i>Constant</i>	-67.96 (6.58)***	-67.05 (6.69)***	-62.80 (6.81)***
<i>F statistic (d.f)</i>	125.00 (3)***	93.56 (4)***	78.96 (5)***
<i>Change in F (d.f.)</i>		.61 (1)	5.36 (1)*
<i>R-squared</i>	.776	.778	.788

Source of data: “Comprehensive Census of U.S. Environmental Movement Organizations” (Brulle et al. 2007) aggregated to Dataset created by author.

Standard Errors in parentheses.

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Logistic Regression

Table 7, models 1 and 2, reports the results of Binary Logistic Regression with maximum likelihood estimators. The regression estimates the effects of the proportion of EMOs with differing discursive frames on the passing of major environmental policy. The environmental policy variable is dichotomous with the category of interest being any year that major federal environmental policy was passed. Years without major environmental policy are the reference group. The nested model first reports the control variables, in Model 1, that may have an effect on the dependent variables. Model 1 does not find any significant effects of presidential administration, environmental crisis, or population change on the passing of environmental policy.

Model 2 introduces the proportion of transformative organizations founded. The crisis variable and the proportion of transformative organizations founded in model 2 are lagged to show the effects on environmental policy outcomes. Model 2 is a better fit (L.R. chi-square 22.77,  $p < .001$ ). The model significantly improves with the addition of the predictor variables (change in Wald Chi-square is 22.20,  $p < .001$ ).

One significant finding is the proportion of transformative organizations founded the year before environmental policy is passed. This supports the hypothesis that transformative organizations have an effect on environmental policy. Specifically, each additional unit of increase in proportion of transformative organizations increases the log odds of passing environmental policy by 6.86 ( $p < .001$ ). Stated in terms of odd ratios: as the proportion of EMOs with a transformative discursive frame increases, the odds of passing environmental policy is 955 times greater.

The results in Table 7, Model 2, also support the hypothesis that presidential administration is a significant predictor of the passing of environmental policy; however, not only is it not in the direction that research suggests it should be, it is only significant once the proportion of transformative organizations is included in the model. Years with a Republican administration have a 1.18 greater log odds of passing environmental policy in comparison to a Democratic administration ( $p < .05$ ) only after the proportion of transformative organizations increases. Stated in terms of odds ratio; the odds of passing environmental policy for a Republican administration is 3.26 times greater than the odds of a Democratic administration passing environmental policy and this result is only significant when there is an increase in the proportion of transformative organizations the year before policy is passed. What this suggests is that the proportion of movement organizations with radical visions of change increases the year before major environmental policy is passed and this policy is passed by Republican presidential administrations.

Population size and environmental crisis have no effect on policy outcomes. The effects of crisis do not have an immediate effect on the passing of environmental policy. This is represented in Table 7:

Table 7: ML Estimates of Binary Nested Regression Models of Effects of the Proportion of EMO foundings on Environmental Policy (N = 112).

<i>Independent Variables</i>	<i>M1</i>	<i>M2</i>
		6.86 (955.6) **
Proportion of transformative orgs		
Environmental articles	.00 (1.00)	.00 (1.00)
<i>Control Variables</i>		
Population (in millions)	.01 (1.01)	.01 (1.01)
Republican president	.85(2.33)	1.18 (3.26)*
-Constant	-3.42***	-4.05***
<i>L.R. Chi sq (d.f.)</i>	14.51(3)**	22.77(4)***
<i>Change in Wald chi sq (d.f.)</i>	.	22.20 (1)***

Source of data: “Comprehensive Census of U.S. Environmental Movement Organizations” (Brulle et al. 2007) aggregated to Dataset created by author.

Odds ratios in parentheses

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Discussion of Findings

The research presented shows that movement organizations with a reform or status quo discursive frame organize at different rates, effect policy, and are affected by contextual events differently than organizations with transformative discursive frames. Based on the results of the models above, environmental crisis is a significant predictor of EMO founding rates among organizations with a reform or status quo discursive frame. My results suggest that moderate EMOs are more likely to form in response to environmental crisis, potentially viewing environmental crisis events as an opportunity for moderate mobilizing. In contrast, EMOs with transformative discursive frames and a more radical vision of change focus less on mobilizing

around environmental crisis. Radical EMOs view environmental crisis events as an ongoing issue, a manifestation of contradiction, based on the underlying antagonistic conflict (Melucci 1996). The difference in motivations for mobilizing creates divisions in the environmental movement industry. The crisis often raises the acceleration to action among moderate EMOs but it only results in moderate social criticism, and falls short of the revolutionary transformation that is necessary for serious change (Foster 2000; Wilde 1991). The result is limited change and movement ebbs and flows until the next crisis.

In addition to limited change and movement ebbs and flows, EMOs reacting to crisis events and aligning public discourse based on these events, divert attention from the underlying antagonistic conflict. Moderate EMOs shift attention to the crisis of the moment and in doing so garner the movement vulnerable to concessions from the countermovement. Crisis events provide an opportunity for the countermovement to focus on solutions to the crisis event instead of the underlying antagonistic conflict. When the countermovement reacts to the crisis it is a strategy used to shift attention from the contradiction of use value and exchange value that would cause sympathizers to raise questions about the legitimacy of the current system and how it distributes resources (Melucci 1996). The countermovement utilizes “strategic concessions,” most notably, policy measures, to address the crisis and silence critics. The strategic concessions made by the countermovement do little to address the antagonistic conflict; however, the strategic concessions serve the purpose of pacifying movement actors and deceiving sympathizers; ultimately, moderating the movement as a whole.

One finding that supports my “strategic concession” claim is when the proportion of transformative organizations founded increases. The proportion of movement organizations with

radical visions of change increases the year before major environmental policy is passed. Piven and Cloward (1977, xii) posit that when political elites are threatened with indignation and defiance from the politically hostile, and the situation seems uncontrollable, political elites respond quickly to draw “insurgent masses into normal politics.” What is even more salient in providing evidence of “strategic concessions” is that the political opportunity measure only becomes significant when the proportion of transformative organizations founded increases. Republican presidential administration is a significant predictor of passing environmental policy when radical environmentalists increase in numbers. The application of this idea to the environmental movement is supported by the actions of radical environmentalists in the 1960s—the new left and counterculture—that culminated in Earth Day and the environmental policies of the early 1970s (Gottlieb 2005). This suggests that environmental policy legislation is a strategic concession made by political elites based on the increased proportion of EMOs with a transformative discursive frame. Further research could measure other “strategic concessions,” for instance local policies, environmental impact violations and fines, or litigation.

Besides the finding that environmental policy appears to be a strategic concession to silence transformative organizations since it is significantly more likely to pass during Republican presidential administrations, the Political Opportunity Theory is not supported by this research. A Democratic presidential administration does not affect founding rates of EMOs with reform or transformative discursive frames. Past research suggests that a president sympathetic to environmental issue’s provides a platform for positive change in that area. According to the research presented in this study, EMOs may not consider it easier to enact their agendas during periods of political favor (Meyer 2004). There is no significant difference in



EMO founding rates during Republican or Democratic administrations. Further research may want to consider other measures of political opportunity, for instance the interaction of presidential administration and congress or, on a local level, local government influence on local organizations.

Resource Mobilization Theory is also not supported by this research. There is no significant difference in EMO founding rates for reform or transformative organizations during strong or weak economic climates. A strong economic climate suggests that resources are abundant in society and constituents are more likely to make “check-book” donations or have disposable income to contribute to organization building. This variable does not influence EMO founding rates. Other measures of resource mobilization should be considered in further research, for instance money available from federal grants, number of paid staff in an organization, or external support networks in a community.

I did not find support for the hypotheses that suggest foundings among either moderate or transformative organizations would increase or decline after the passing of environmental policy. EMO founding rates after environmental policy is passed remains similar to non-policy years. This finding suggests that organizations are not demobilizing as a result of policy wins. However, this may be the result Piven and Cloward (1977) stated when they noted that the passing of a concession is not necessarily a factor in the demise of a movement since the concession could be viewed as a modest gain or a big win, both easily likely to pacify or energize the movement. The political concession, symbolically viewed as a “win” for the movement and as an achieved goal, garners high aspirations among movement actors (Edelman 1964). It is much more likely that (instead of demobilizing) movement organizations will

become more moderate and less confrontational, focused on internal organization building instead of new issue mobilizing. The application of this finding to the environmental movement is the professionalization and moderation of the movement in the late 1970s and early 1980s, after the policy wins of the early 1970s.

## CHAPTER VII: CONCLUSION

Why has environmental movement action (and its apparent success) failed to stop environmental degradation? In an attempt to address this paradox, I focus attention on the weaknesses of the environmental movement industry; specifically, the discourse divisions between EMOs that constitute a fundamental obstacle to progressive change. Variations exist between the founding rates of organizations with reform/status quo and transformative discourses as the result of environmental crisis events. EMOs with transformative discourses are not influenced by environmental crisis events. EMOs with reform/status quo discourses are significantly more likely to mobilize when environmental crisis is high. Since EMOs with reform/status quo discourses are more moderate in their desired level of change necessary for environmental transformation, they view environmental crisis events as a way to mobilize sympathizers. They recognize ripe opportunities to push their own agendas into the spotlight when external events propel the environment into the news (Mazur and Lee 1993). However, in reacting to environmental crisis events and building their platform for change around “solving the crisis,” they garner the movement as a whole vulnerable to strategic concessions from political elites and the countermovement.

The environmental crisis event illuminates contradictions in the economic system; moreover, the crisis is a symptom of the fundamental adversarial relationship to resources under structural conditions. While the environmental crisis event raises the acceleration to action among moderate EMOs, for transformative EMOs it only highlights the underlying struggle over scarce resources that are endemic of the current structure (Melucci 1996). An environmental crisis event should be taken seriously, as a warning or a critique of current practices, but the

platform for change should be based on addressing the underlying antagonistic conflict (Melucci 1996). The underlying antagonistic conflict is a rejection of capitalist expansion and concentration of capital that results in social criticism and manifests as environmental movement action. Yet, the environmental movement industry fails to address the antagonistic conflict, raise consciousness, and unite under one vision for change. Instead, the moderate EMOs focus on the crisis of the moment creating vulnerabilities that the countermovement and political elites can exploit.

The countermovement and political elites respond to increased pressure from EMOs by reigning in the oppositional politics and working within the political system. They do this on the local and federal level through proposing bills and policies that may or may not get passed. The passing of federal environmental policies is influenced by EMOs with transformative visions of change. A Democrat or Republican presidential administration does not influence federal environmental policy until you add in the moderating factor of increased EMOs with transformative discourses; then the Republican presidential administration is significantly more likely to pass environmental policy. Evidence from this research suggests that when the proportion of transformative EMOs increases and there is a Republican presidential administration, there is a higher likelihood that policies will be used as strategic concessions to silence critics. This strategy seems to be working.

What can research and theory do to help the environmental movement industry? Theorists and researchers working from a conflict and critical perspective, including: Marxist Theory, Political Economy of the World System, Risk Theory, and Treadmill of Production Theory, are anticipating an environmental crisis that at this point may be too late to mitigate.

Expanding pro-growth markets worldwide are exacerbating current environmental degradation. With this future outlook, conflict theories are shifting to visions of changed economic systems. Wallerstein (2004) states that dysfunctions in the system, or contradictions, lead to a “system in crisis.” For the crisis to be solved, a new system must be constructed. He (Wallerstein 2000) challenges social scientists to consider what is possible. He calls this “utopistics” and defines it as the analysis, exploration, and discussion “of possible utopias, their limitations, and the constraints on achieving them” (Wallerstein 2000, 201). He posits that it is the responsibility of social scientists to embrace the task of utopistics realizing that the possibility of knowing more and doing better will lead to transition and change in the system (Wallerstein 2000). In the air of public sociology, Wallerstein challenges social scientists to consider what is possible.

Wallerstein’s challenge to social scientists is influenced by the revolutionary praxis of Karl Marx. Marx’s Theses on Feuerbach XI states, “The philosophers have only interpreted the world, in various ways; the point, however, is to change it” (Tucker 1978, 145). An example of his attempt to make research assessable to the masses, Marx, in the preface of volume one of *Capital*, the French Edition, comments that he is writing for the working party (Tucker 1978). A focus on praxis; specifically, the ability for humans to make change collectively, is a guiding theme throughout the conflict and critical perspectives.

Marx’s revolutionary ideas are the inspiration for many conflict and critical theorists from the classic period until today. Antonio Gramsci (1971/1987) predicted that a true intellectual class will emerge—the intelligentsia—partially from the ranks of the civil servants and partially from the ranks of the lower class. The intellectuals from the ranks of the civil servants will have an understanding of the state and politics, while the intellectuals from the

ranks of the lower class will have experienced oppression (Gramsci 1971/1987). This group of thinkers will challenge the dominant ideology, and ultimately the entire economic structure, leading to a mass consciousness that recognizes structured inequality. This movement will introduce a new system of beliefs, values, and attitudes that lifts oppression replacing it with equity (Gramsci 1971/1987). The “dialectical view of history” (Morton 2005, 439) developed by Gramsci set the stage for Herbert Marcuse to defend the dialectic and the revolution, providing the theoretical base for the New Left Movement (McLaughlin 1999).

Like Gramsci, Marcuse believes in the revolutionary power of an intellectual class. For human freedom, realization of imagination, creativity, and reason, intellectuals must mobilize in protest against the status quo using communication as a tool for change. He believes in fighting for a free society; ultimately, consciousness-raising of the possibilities of a different system. Marcuse (2001, 116) states,

The vision is that of the historical movement when man calls a halt to the rat race that has been his existence, when man takes stock of what he has and what he can do with it, and decides that instead of going on with the rat race, instead of producing ever more and ever bigger for those who can and must buy it, to subvert the very mode and direction of production, and thereby of their entire life. This means to abolish poverty, and then to devote all resources to the elimination of the spiritual and material garbage with which the established societies have covered not figuratively but literally, our mental and physical space, and to construct a peaceful and beautiful universe.

Marcuse remained optimistic in a cultural revolution focusing on the New Left—middle class groups, the service industry, youth, students, and minorities—replacing Marx’s working class as the oppressed group in modern society.

Like Marcuse, Jurgen Habermas (1987a) also believes that communication is a tool for change. He believes that critical knowledge is positive; ultimately it opens the lines of discourse resulting in a rational consensus. Change in the crisis requires a break from the iron cage—another path entirely from the current system—embracing critical knowledge and re-establishing undistorted consensus between groups (Habermas 1987a). Habermas (1987b) is optimistic about the future; moreover, he joins Marx in revolutionary thinking, even suggesting that new conflicts will arise along the seams between the system and lifeworld (i.e., institutions and culture). The new conflicts will not be ignited by distribution problems but by questions having to do with the grammar of forms of life; furthermore, it will be supported by the new middle class, the younger generation, and the educated. Habermas (1987b) suggests that this revolution has already begun to take shape among the human rights, equal rights, and the environmental movements. He expands this thinking to include “the community of nations” and the need for international politics in human rights policy. (Habermas 2003a, 290). He advocates a world citizenship where all have a voice and are involved in solutions (Fraser 2001).

Ulrich Beck (2010) calls this an alternative modernity made possible through world citizenship and cosmopolitanism. An alternative modernity will have to include a new vision of prosperity which will not be the economic growth held by those worshipping at the altar of the market. It will define wealth not in gross economic terms but as overall ‘wellbeing’” (Beck 2010, 262). Cosmopolitanism happens at the grassroots level with global citizens mobilizing as a

“party.” Global dialogues about climate change and increased risks will lead to a global public more conscious about industrial modernization’s paradoxes. Risk conflicts throughout the world have an “enlightenment function” that exposes the existing system of organized irresponsibility and opens up the arena for political action (Beck 2010, 260). It will become more pressing in the future because even the rich will not be able to avoid the effects of increased risks and climate change. Beck (2010, 259) states,

To the extent that a world public becomes aware of the fact that the nation-state system is undermined by global risks (climate change, global economic crises, terrorism), which bind underdeveloped and developed nations to one another, then something historically new can emerge, namely a cosmopolitan vision in which people see themselves both as part of an endangered world and as part of their local histories and survival situations.

Feminist theorists suggest that change in the system will come from recognizing that environmental problems are the result of a system that places women, minorities, the young, gays, and nature in the oppressed role (Plumwood 1993). It is the job of utopistics to develop a plan for the future that considers quality of life over quantity and value of possessions, that considers community over individuality, that allows all to shape the political debate instead of a powerful elite minority, and includes an “ecological ethic” to protect the earth in which humans are dependent (Nash 1990; Plumwood 1993).

The arguments of all the theorists reviewed represent the challenge that environmental sociology faces in the future: What is the place of public sociology in assisting social change and



how can sociology inform the environmental movement? While many believe it is the job of sociology to interpret and understand society, others believe it is the job of sociology to change society. For environmental sociologists, a public sociology seems more relevant than ever. Environmental attitudes in America show concern for environmental issues, there are more environmental movement organizations than any other single issue, and regulatory changes throughout the last 40 years highlight wins for environmental activists, yet environmental degradation throughout the world increases, CO<sub>2</sub> in the atmosphere is at dangerously high concentration levels, and fragile ecosystems are at risk of extinction. Radical change is necessary; moreover, if the transition to a different energy future is to be civil and less politically explosive, it is the job of public sociologists to move beyond describing and begin developing real possible “utopias” for the future. What does a green modernity look like? How does it function and what institutional changes are necessary to move in that direction? To what extent are all groups included in this future? These are the important questions for future research in the coming years for environmental sociologists.

APPENDIX: MAJOR FEDERAL ENVIRONMENTAL POLICY

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1891: The Forest Reserve Act  
1897: Forest Management Act  
1905: Forest Services move from Department of Interior to U.S. Department of Agriculture  
1911: Weeks Act  
1924: Clarke-McNary Act  
1928: McSweeney-McNary Act  
1938: Food, Drug, and Cosmetic Act  
1944: Sustained Yield Management Act  
1947: Insecticide, fungicide, and rodenticide Act (amended 1972, 1988, and 1996)  
1954: Atomic Energy Act  
1960: Multiple Use, Sustained Yield Act  
1964: Wilderness Act  
1969: National Environmental Policy Act  
1970: Clean Air Act (amended 1990)  
1972: Clean Water Act (amended 1977)  
1973: Endangered Species Act  
1974: Forest and Rangeland Renewable Resource Act  
    Safe Drinking Water Planning Act  
1976: Toxic Substance Control Act  
    Resource Conservation and Recovery Act  
    National Forest Management Act  
1977: Surface Mining Control and Reclamation Act  
1980: Superfund  
1982: Nuclear Waste Policy Act  
1986: Right to Know Act  
1988: Marine Protection, Research, and Sanctuaries Act  
1990: Oil Pollution Prevention Act  
1994: Executive Order 12898: Environmental Justice  
1996: National Technology Transfer and Advancement Act  
    Food Quality Protection Act  
1997: Executive Order 13045: Protection of Children from Risks  
1999: Chemical Safety Information  
    Site Security and Fuels Regulatory Relief  
2001: Executive Order 13211: Energy Supply Distribution or Use

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