

**Romancing the Market, Rationalizing Nature: Transformations in
Environmentalists' Economic Thought, 1960-2014**

A Dissertation
SUBMITTED TO THE FACULTY OF THE
UNIVERSITY OF MINNESOTA
BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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May 2019

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Acknowledgements

This dissertation project was completed with the support and feedback of many colleagues and friends. Thanks especially to David Pellow and Doug Hartmann, who provided invaluable feedback on earlier chapter drafts and the shape of the project. Also, to Michael Goldman, Lisa Park, and Karen Ho for their advice on the theoretical and thematic direction of this research in its earlier stages. I have been lucky to know many fellow graduate students who have been immeasurably generous with their intellectual feedback and emotional support through this process: Suzy McElrath, Jack Delehanty, Yagmur Karakaya, Tanja Andic, Erin Hoekstra, Lisa Gulya, and Alex Manning in particular. Finally, thank you to my husband Josef and daughter Letty, who have provided wonderful incentive to put my work down at the end of each day.

Abstract

The purported stagnation of the mainstream American environmental movement has coincided with what many consider the rise of the neoliberal era. My project attempts to track the relationship between the two. Building from the cultural turn in economic sociology, this dissertation examines the American environmental movement: specifically, how environmentalists' understanding of the relationship between environmental concerns and economic markets has changed between the 1960s and today. Through a mixed-methods combination of content and discourse analysis, I examine how voices presented in the member-directed newsletters of three major American environmental organizations have articulated the ecological advantages and disadvantages of various elements of a free, self-regulating market economy. I concentrate on moments of perceived crisis, including the Reagan administration's explicitly pro-market and anti-environmental agenda and the specter of global climate change. While environmentalists' faith in the market increases over time, I argue that perceived crises, both legislative and environmental, shape environmental actors' acceptance or rejection of the importance of free-market principles.

Table of Contents

List of Tables	iv
List of Figures	vi
Chapter 1: Introduction: A Brief History of Market Fundamentalism	1
Chapter 2: Methodology: Measuring Market Faith and Doubt	29
Chapter 3: Market Fundamentalism and Environmental Thought Over Time	53
Chapter 4: “The Magic of the Marketplace:” Environmental Interpretations of the Market in the Reagan Era	101
Chapter 5: Markets and Morality: The Economic Arguments Surrounding Climate Change	129
Chapter 6: Conclusion: Romancing the Market, Rationalizing Nature	168
Bibliography	179
Appendix	198

List of Tables

Table 1:	Contextual variables arising from open coding.	49
Table 2:	Proportion of all passages expressing faith and doubt in the market, 1960-2014	69
Table 3:	Binary logistic regression for effect ($\exp(B)$) of year on likelihood overall market faith and doubt.	70
Table 4:	Binary logistic regression for effect ($\exp(B)$) of year on likelihood overall market faith during each decade.	70
Table 5:	Binary logistic regression for effect ($\exp(B)$) of year on likelihood of individual indicators of market faith.	70
Table 6:	Binary logistic regression for effect ($\exp(B)$) of presidential administration on likelihood of market faith.	72
Table 7:	Binary logistic regression for effect ($\exp(B)$) of presidential administration on likelihood of specific market faith indicators.	72
Table 8:	Chi-square test of faith by organization.	74
Table 9:	Binary logistic regression for effect ($\exp(B)$) of presidential administration on likelihood of market faith, separated by publishing organization.	76
Table 10:	Binary logistic regression for effect ($\exp(B)$) of economic and political climate on likelihood of market faith.	78
Table 11:	Binary logistic regression for effect ($\exp(B)$) of economic and political climate on likelihood of specific market faith indicators.	78
Table 12:	Binary logistic regression for effect ($\exp(B)$) of economic concern on likelihood of market faith. 79	80
Table 13:	Binary logistic regression for effect ($\exp(B)$) of economic concern on likelihood of specific market faith indicators.	80
Table 14:	Binary logistic regression for effect ($\exp(B)$) of environmental concern on likelihood of market faith.	81
Table 15:	Binary logistic regression for effect ($\exp(B)$) of environmental concern on likelihood of specific market faith indicators.	82

Table 16:	Binary logistic regression for effect (exp(B)) of proposed environmental solution on likelihood of market faith.	83
Table 17:	Binary logistic regression for effect (exp(B)) of environmental solution on likelihood of specific market faith indicators.	84
Table 18:	Binary logistic regression for effect (exp(B)) of referenced relevant actor on likelihood of market faith.	86
Table 19:	Binary logistic regression for effect (exp(B)) of referenced relevant actor on likelihood of specific market faith indicators.	87
Table 20:	Binary logistic regression for effect (exp(B)) of valuation system on likelihood of market faith.	88
Table 21:	Binary logistic regression for effect (exp(B)) of valuation system on likelihood of specific market faith indicators.	88
Table 22:	Binary logistic regression for effect (exp(B)) of year and mention of climate change, consumption, energy efficiency, and the renewable energy industry on likelihood of market faith.	89
Table 23:	Crosstabulation of doubt or no-doubt expressed in the free market By mention of the Reagan administration, 1980-1989.	110
Table 24:	Crosstabulation of faith or no-faith expressed in the free market by mention of the Reagan administration, 1980-1989.	111
Table 25:	Cross-tabulation of faith or doubt referencing Reagan administration, 1980-1989.	111
Table 26:	Cross-tabulation of faith, doubt, or both referencing Reagan administration, 1980-1989.	111
Table 27:	Cross-tabulation of faith or doubt in the market by publishing organization, all references to climate change.	140
Table 28:	Cross-tabulation of faith, doubt, or both by publishing organization, all references to climate change.	141

List of Figures

Figure 1:	Dataset sampling method.	44
Figure 1:	Number of faith/doubt paragraphs per page, by five-year period.	52
Figure 2:	Proportion of passages expressing market faith by Presidential Administration.	71
Figure 3:	Market faith by organization over time (by Presidential administration).	75
Figure 4:	Frequency of specific market faith and doubt indicators for passages referencing the Reagan administration.	112
Figure 5:	Raw count of references to climate change by year within the dataset.	139
Figure 6:	Frequency of specific market faith and doubt indicators for passages referencing climate change.	141

Chapter One:

Introduction: A Brief History of Market Fundamentalism

After its heyday in the 1960s and 1970s, the American environmental movement has struggled to effect meaningful environmental policy changes, leading to dissatisfaction from both its radical fringes and its mainstream core. This is somewhat surprising given the size and financial resources of some of the movement's juggernauts, such as the Sierra Club and Natural Resources Defense Council. While environmental group membership increased and numerous grassroots organizations emerged after the 1970s, most scholars view the 1980s, in retrospect, as the beginning of a long stagnation in the mainstream, policy-oriented environmental movement. More recently, those within the mainstream movement have displayed a fair amount of self-doubt and concern over what political strategies are most effective, especially as grassroots activism has given way to professional advocacy (Bomberg and Schlosberg 2008; Brulle and Jenkins 2008; Shellenberger and Nordhaus 2007). A major source of concern has been an inability to garner public support for legislation (Bryner 2008; Meyer 2008), particularly in light of increasing concern about the effects of human-caused climate change over the last 25 years.

Both environmental sociologists and environmentalists have had difficulty in explaining the continued idling of the movement's policy priorities through the present day. Sociologists have argued that the disparate voices of the environmental movement have avoided a broader conversation with one another, restricting possible progress (Brulle 2000a; Ellis 1996; Feenberg 1996). They have also posited that a lag may have

been inevitable after taking care of the “low-hanging fruit” of the environmental issues of the 1960s and 1970s, due to the moderation of the social movement as its members have aged and its actors have become more institutionalized, or due to the great economic costs of contemporary environmental initiatives (Brulle and Jenkins 2008). Others point to a broader political climate, driven by powerful actors with entrenched interests in the “dirty” energy economy, that has been unfriendly to green legislation (McCright and Dunlap 2003, 2011).

Due to environmentalism’s implicit concern with mediating the environmental degradation caused by social and economic activity, I suggest that there are better clues to this stagnation in shifting environmentalist understandings of what economic markets actually are and how they relate to environmental concerns. The growing popularity of sustainable development (economic growth that takes environmental concerns into account) in both mainstream economics *and* environmentalist circles in the late 20th century is cited by some as evidence of a co-optation of environmentalism by economic interests (Bernstein 2001; Torgerson 1994), leading environmentalists to assume that the free market is the best organizing principle for natural resource use and soften their stance towards private business and powerful economic interests, once their prime target. Rather than assuming that the movement has been co-opted, I find it necessary to explore *how and why* environmentalism’s market assumptions have changed. As a recent example, the contested role of the market can be seen in controversy over cap-and-trade carbon markets, where the ability of private firms to pollute becomes a tradable commodity. Whether an environmental organization supports or fights the creation of

these markets depends heavily on how they understand markets to function and whether they accept the idea of carbon pollution as a commodity.

The confluence of cultural and economic sociology has provided fertile ground for an understanding of markets and market activity as inherently social and cultural phenomena (Fourcade and Healy 2007; Krippner 2001; Krippner and Alvarez 2007). This project begins with environmental sociology's work on human relationships with nature, its most salient contribution the theorization of the economy as a primary mediator of those human-nature relationships in the last half-century (Foster 2005; Jorgenson and Clark 2012; Schnaiberg 1980). In this study, I treat both nature and the economy as inherently social entities that are shaped by cultural, political, and social processes. I also take seriously the premise that markets are shaped by beliefs. Michel Callon has argued that markets themselves are formatted by the discourse surrounding them—that, just as an instruction manual is instrumental to the function of a DVD player, statements about the economy materially affect that which they discursively describe (Callon 2008). Little is understood about how the civil societal actors most clearly and actively concerned with influencing state-market relationships understand and contest market function, regulation, and meaning. This highlights a need for sociology to better understand how critical mediators between ecological interests and economic growth understand what the economy is and how it works.

The goal of this project is to describe how environmentalist discourse accepts or rejects the specific assumptions of a free, self-regulating market, and how and why this ideological landscape shifts over time. I treat this discourse as a description of material realities that cannot be separated from the social world of environmental activism. An

understanding of where and why environmentalists define the borders between market, nature, and human society is key to understanding the current state of American environmentalism. Additionally, I explore what factors shape (or do not shape) particular understandings of nature and market over time, and what leads these various environmental voices to renegotiate the conceptual borders that they have drawn around the market and the environment. What environmental issues, political or economic climates, or changes in the structure of the environmental movement lead to different understandings of the function and power of the economy in the interest of environmental goals?

Despite the tenor of anticapitalist criticism of the mainstream environmental movement and popular considerations of neoliberal thought's ideological hegemony since the 1970s, my objective is not to indict American environmentalism for climbing into bed with private business interests. What interests me is how, given the movement's evolution and the historical trajectory of economics and politics since 1960, has the way environmentalists "think" the market changed? Much has been made in the political sociological literature of the growing ideological and policy influence of neoliberalism since the 1970s, particularly in the United States. This ideological force, prioritizing the values and mechanisms of the free market, is often invoked in the social science literature to better understand contemporary and late-20th century developments in politics, governance, and social inequalities. But what has been its impact on the politics of social movements? Has it come to fully inform mainstream environmental politics? Or have other, competing understandings of nature's relationship to the market challenged and shaped neoliberalism's ideological spread?

This dissertation explores this discursive relationship between economy and environmental concerns through a content and discourse analysis of three influential environmental organizations during the 55 years between 1960 and 2014, focusing on the monthly or quarterly newsmagazines distributed to these organizations' members. These publications constitute a rich historical archive and offer an opportunity to examine the ways these organizations imagined, constructed, and pursued environmental problems, solutions, and strategies—and particularly how this was articulated to their membership in the interest of political and financial support. The three organizations utilized here—Friends of the Earth, The Sierra Club, and the Natural Resources Defense Council—are employed as analytic sites of environmental discussion and articulation. Within these publications, I have employed a measure of what Margaret Somers and Fred Block call “market fundamentalism,” or a belief that the mechanisms of a free, self-regulating market can and should be used to achieve socially desirable outcomes—in this case, positive environmental ones.

Before providing an overview of this dissertation's core findings, argument, and contributions, I will first briefly review the social science literature surrounding the importance of culture and ideas in shaping and informing economic action, as well as the rise of neoliberalism as an ideology and political-economic practice.

Social Science and Economic Thought

In 1944, Hungarian sociologist Karl Polanyi published *The Great Transformation* ([1944]2001), part of a wave of anti-market sentiment following the Great Depression that would inform the popularity of Keynesian principles in public policy. Polanyi's

central argument is that the existence of a self-regulating market, a naturally expanding institution with a logic all its own, is a myth. Critiquing liberal economists' arguments about humans' innate self-interest, he argues that this has never been the organizing principle for markets. Those preceding the market of the 19th century were based on a combination of reciprocity, redistribution, or householding, and the 'self-regulating' market of Polanyi's time and today is similarly dependent on social and political institutions. "Instead of economy being embedded in social relations, social relations are embedded in the economic system" (Polanyi [1944]2001:60). This embedded relationship is central to Polanyi's argument, as it is this site of tension between market and societal interests and their imperfect reconciliation through regulation and defensive social action, which in turn offers an explanation of the development of fascism in the early 20th century.

According to Polanyi, the danger that the market economy poses to society lies in the appropriation of land, labor, and money, or what he terms 'fictitious commodities,' as items that can be bought and sold on the market, as opposed to true commodities that were intended for sale when produced. The subjection of land and labor to the fluctuations that come with unregulated forces of supply and demand would destroy both humans and their environment, and money is dependent on state regulation to resist inflation and deflation. In short, treating labor, land, and money as commodities to be sold on the market is essential to the market economy, but threatens each fictitious commodity, and thus society and the market itself. Therefore, the classical liberal ideal of the self-regulating market is impossible—without social intervention in its own defense, such a market would destroy its very own conditions. The evolution of the market,

therefore, was dependent on regulation. Polanyi calls this a “double movement,” where market expansion was accompanied from the beginning by growing protective regulations. Both liberal economists and Marxists have obscured the role of regulation, the former as the reason for market failures such as unemployment, the latter as serving economic class interests.

It is important to note, however, that while regulation is necessary for the continued functioning of the market, it is not sufficient to protect society from even major harms. The attempt to unify the market in a single global economy, self-regulated by the gold standard, caused massive deflation on various national scales, leading to national economic protectionism through the use of tariffs (discouraging international trade) and imperialist expansion of national boundaries, followed by the collapse of the gold standard and the first World War. Following the war, Polanyi argues, the reestablishment of the gold standard led to building national tensions between economic systems and societal protection, threatening paralysis of the entire system. This threat, under certain conditions, allowed for the rise of fascism, “a reform of market economy achieved at the price of extirpation of all democratic institutions” (Polanyi [1944]2001:245).

Polanyi wrote alongside the rise of embedded liberalism—an expansion of explicit government interference in the market in order to boost employment, provide basic needs, and avoid over-speculation and another disastrous market crash. These policies would enjoy a great deal of support in American politics in the middle of the 20th century, but as liberal economic philosophies scrambled their way back into the popular American imagination in the 1980s, so too did an antagonism to the state interventions of the New Deal era. At the same time came a new period of activity in economic sociology,

which (aside from Polanyi's midcentury work) had been largely stagnant since the classical contributions of Marx and Weber. This work made a particular understanding of "embeddedness" popular in network analyses, mapping social relations onto an otherwise asocial market (Bian 1997; Boxman, De Graaf, and Flap 1991; Granovetter 1985, 1992; March 1991; Marsden and Campbell 1990; Powell 1990; Powell, Koput, and Smith-Doerr 1996; Uzzi 1996, 1997). This asocial view would come to be criticized in both economics as well as economic sociology.

Feminist economics was the first area of social science inquiry to begin to question the normative assumptions of mainstream economics in a broader, systematic way. Feminist scholars claimed that the discipline fails to acknowledge women as subjects of economic study, conceiving of the family as a private, non-economic sphere and ignoring the economic value of household work. Furthermore, even when it does consider women, "models of free individual choice are not adequate to analyze behavior fraught with issues of dependence, interdependence, tradition, and power" (Ferber and Nelson 1993:6). Diana Strassman also outlines some of the fundamental problems with American economics' "core ideas of self-interested individualism and contractual exchange" (1993:54) as ideas that inform problematic economic models. Strassman critiques *homo economicus* as a particularly masculinist understanding of economic agency and action.

The feminist critique of mainstream economics' separation of public (economic) and private (noneconomic) has been a fruitful jumping-off point for many other scholars who contest assumptions about the economy. Drawing from this body of work, Timothy Mitchell traces the development of "the economy" as a relatively recent discursive object.

Borrowing many concepts and terms from physics, economics as a scientific field developed beginning in the 1870s, mapping “individual utility” onto the variable of energy. The mathematical modeling ultimately led to an outright mechanistic modeling of “the economy” in the 1930s.

To conceive, however, of the kinds of ‘external’ forces that would produce a dynamic impulse affecting the entire economic machinery requires two related conceptual shifts. First, a clear distinction has to be elaborated between what Frisch calls ‘the intrinsic structure’ of the mechanism and its exterior. Second, this intrinsic structure can no longer be imagined as a single market, with a limited number of buyers, sellers and commodities (Mitchell 1998:87).

Mitchell treats this move as fundamental to the development of the economy as discursively rendered today, but it co-occurred with three other important developments: the Great Depression, the end of the gold standard, and decolonization. Between the 1930s and the 1950s, “the economy” came to serve three primary functions: (1) a new way for the nation-state to represent itself as a national economy bounded by geopolitical lines); (2) a new way for actors to understand the international order that was codified by the World Bank and International Monetary Fund; and (3) a new way to understand national growth, not in terms of material or geographic expansion, but “as the internal intensification of the totality of relations defining the economy as an object” (1998:90). With these changes, “the economy” became a powerful new field of operation, a representation that had real material consequences.

Since this time, many other economic and political sociologists have criticized Granovetterian embeddedness and argued for analyses of markets as themselves social, political, and cultural phenomena (Beckert 1996, 2003; Zukin and DiMaggio 1990). Particularly, Greta Krippner argues that an endemic ahistorical understanding of

Polanyi's concept of embeddedness, largely due to the legacy of Parsonian sociology, has caused a problematic separation of social from economic within economic sociology. "Quite paradoxically, the basic intuition that markets are socially embedded—while containing an important insight—has led economic sociologists to take the market itself for granted" (Krippner 2001:776).

Economic theory, while purporting to describe an extra-social entity, is itself a socially contingent and culturally constructed discourse. This understanding is critical because economics (and economic sociology) do not only describe the economy, they also perform it, materially affecting that which is discursively described. This point has been most prolifically and comprehensively articulated by the sociologist Michel Callon, who is also known for his work on actor-network theory with Bruno Latour. Callon is critical of economic sociologies which either attempt to further theorize the economic agent or denounce economic theory in favor of sociological explanations of economic phenomena (1998). Instead, in the spirit of actor-network theory, he argues for an understanding of economic agents as immanently nothing at all save the dynamic network of relationships they are engaged in, and, critically, the ways that these networks are framed. Framing defines agents as well as objects, giving them particular properties and roles. Importantly for Callon, economic theory is the frame for a great deal of economic action—it exists as an attempt to explain economic phenomena by conceptually disentangling agents from their networks, yet also frames and informs, or performs, economic behaviors.

Writing against social science's tendency to position itself outside of materiality looking in, Latour and Callon instead argue for a description of the world that takes both

human and non-human agency seriously. Latour describes social-material phenomena as assemblages or entanglements, the ways in which the connections between actors—human, institutional, biological, technoscientific, or otherwise—hang together. Callon extends this exercise, using the French word *agencements* to refer to these assemblages, but explicitly argues that discourse *about* the *agencement* is a part of the assemblage as well (Callon 2008). Statements, such as economic laws or theories, thus have the potential to actualize the world they describe. Importantly, this is only to a point—as with any frame (which by definition delimits relationships between human and non-human actors), the entanglements of these relationships “overflows” the frame—in economic theory, these overflows are understood as externalities. Any attempt to do away with externalities simply produces different overflows or externalities. For Callon, economics “formats” economic agencies (1998, 2008), just as discourse describing any other sociotechnical *agencement* acts as an instruction manual for the *agencement* itself.

Economic Ideology in American Politics: Neoliberalism Ascendant?

Like any history, the history of capitalism is one of competing ideas. In 1977’s *The Passions and the Interests*, the economist Albert O. Hirschman set out to examine why the rational “interests” of capitalism came to be not only acceptable, but celebrated in the modern era, when they were so reviled before and during the Renaissance (1997). In the 17th and 18th centuries, political philosophy became concerned with questions of governance, specifically what motivated human action. Theories of how to control men’s turbulent passions included repression, harnessing, or most importantly, pitting some (“taming” passions) against the others. By the late 18th century, taming passions were

discussed as distinctly economic interests, culminating with the idea's near-codification in Adam Smith's *The Wealth of Nations* (Smith 1776[2012]). Later, Hirschman would identify other capitalist ideologies that have since found favor (1982). Smith's "doux commerce" thesis, which presented capitalism as a civilizing power over the pre-capitalist nature of human beings, dominated in the 18th century. Due to the ravages of the industrial revolution, the 19th century saw the rise of the "self-destruction" thesis that argued that capitalism undermined the very pre-capitalist moral (particularly religious) values that supported it. In the late 19th and 20th centuries, however, the doux-commerce thesis reemerged as its logical obverse, criticizing capitalism for its failure to fully penetrate pre-capitalist society in the form of the "feudal shackles" thesis. "Things would have worked out famously, so the feudal-shackles thesis asserts implicitly, *if only* commerce, the market, capitalism had been able to unfold freely, if only they had not been reined in by pre-capitalist institutions and attitudes" (Hirschman 1982:1475).

Many histories and sociologies of recent economic thought have emphasized the shift in broader economic ideology and practice from the embedded liberalism or Keynesianism of the mid-20th century to what is commonly known as the neoliberalism of the late 20th century and today (Centeno and Cohen 2012; Hall 1989; Hall and Lamont 2013). This period has been marked by the financialization of markets, the privatization of previously publicly owned goods and services (Megginson and Netter 2001), and a re-regulation of trade privileging market over state authority (Centeno and Cohen 2012; Harvey 2007a). Practically, neoliberal economic policy is a collection of contradictory strategies that mobilize the state to create, support, and expand markets (Castree 2008; Peck 2010). These strategies, while often messy and far from the laissez-faire model

envisioned by classical liberalism, are underpinned by neoliberalism's ideational hegemony (Amable 2011; Brown 2003; Mirowski and Plehwe 2009), a trend that has been noted across the globe (Bourdieu 1999; Fourcade-Gourinchas and Babb 2002) though particularly in the United States (Prasad 2006).

Neoliberalism has become an often invoked and less commonly defined concept within scholarship on both the left and the right. It arose in response to perceived problems with embedded liberalism, the dominant economic logic following the second World War, in an attempt to revive elements of classical liberalism. Embedded liberalism wed free market principles with state interventionism, marked by regulated national and global markets. In general, neoliberalism refers to an ideology that has come to dominate human and economic governance since the early 1970s, privileging the mechanics of a self-regulating free market to govern every aspect of human life. Neoliberalism's practical manifestation is distinguished from classical liberalism, which sees human freedoms as only made possible by a free market untouched by problematic government intervention. Rather than letting the market do its work, neoliberalism mobilizes the state to construct and expand markets and to ensure particular kinds of rational capitalist subjects to function within them (Amable 2011; Brown 2003). It is important to differentiate neoliberalism as an ideology from "actually existing neoliberalism" in practice (Castree 2010), or, as Jamie Peck terms it, neoliberalization (2010).

While some claim that neoliberalism is clearly distinct from classical liberalism, neoclassical economics, or market fundamentalism (the way Somers and Block (2014) use this term adheres closely to neoliberal ideologies), each of these terms is hotly contested. The ideology of neoliberalism shares a great deal with these belief systems,

holding that pure, self-governing markets will order human activity positively and efficiently. Yet where neoliberal ideology seems to depart from classical liberalism is in its belief that pure markets have been spoiled by particular kinds of state regulation and must be “fixed” or reinstated. While in practice neoliberalization is distinguished by its attempts to actively govern arenas of human life previously thought to be “outside” capitalist markets, ideologically its only difference from classical liberalism is the scope of what should be governed by market principles. This is, I argue, its most important ideological feature and is what drives it to “subject all of social life and the public sphere to market mechanisms” (Somers 2008:2). Neoliberalism, then, is in part an ideological project, not separate from but certainly conceptually distinguishable from its praxis. This ideological project, however, must again be differentiated—into the ideology of its proponents and the ideological effects of its practices.

Neoliberalism is often associated in the United States with the Chicago school of economics, with Milton Friedman and Friedrich von Hayek as its intellectual shepherds, each warning of dire consequences resulting from state control of the market. But neoliberalism’s ideological origins are actually quite complex, involving many competing and contested philosophies before its Chicago school manifestation coalesced. The Mont Pelerin Society, an international group most often cited as neoliberalism’s philosophical incubator, hosted many conflicting points of view, including neoclassical economists, Austrian economics, German ordoliberalism, and other strands of thought (Plehwe 2009). The term “neoliberalism” first appeared in 1925 in a work by Swiss economist Hans Honnegger, and described ideology that “propagated doctrines of competition and entrepreneurship, ...posited the rejection of advancing socialist ideas and bolshevism in

particular...”, and understood state functions in a negative light, still drawing a great deal from classical liberalism (Plehwe 2009:11). In Vienna between the wars, Ludwig von Mises’ *Privatseminars* (also attended by Friedrich Hayek and Fritz Machlup) served to develop an economic philosophy against socialist theory, but still did not articulate a critique of classical liberalism—such a critique, according to Plehwe a key one for neoliberalism, would not come until after the Great Depression.

At the University of Chicago, Hayek had hoped to bring a distinctly American *Road to Serfdom* project to fruition with a law professor named Henry Simons, whose views aligned best with German ordoliberalism, a school of thought that embraces the state’s role in managing markets to ensure optimal outcomes. Instead, Hayek’s financier, the business-oriented Volker fund, took a deliberately hands-on approach, “supervising doctrine as well as organization” in the intellectual project that would culminate in the Chicago school of economics (Van Horn and Mirowski 2009:157). There was a distinct difference between neoliberal ideology espoused by its purported father, Hayek, and the ultimate doctrine of the Chicago school influenced by the Volker fund. Shortly following World War II, Aaron Director, Milton Friedman, and Edward Levi all shared the position of the German ordoliberal school (a result, Van Horn claims, of the centrality of Henry Simon’s thought to Chicago economics), “despite their explicit commitments to reformulate and recast liberalism in new, more robust directions” (2009:207), that, following classical liberalism, corporate and other monopolies posed a political and social danger. Four years later, each had significantly changed his tune, advocating “the idea that monopoly, in all its forms, was almost always undone by the forces of competition” (2009:208). This reformulation of classical liberalism was largely due to the

Volker Fund's intervention, involving a threat to remove Director, who tolerated Simon's adherence to "certain tenets of classical liberalism," from power (2009:208).

For David Harvey, neoliberalism ascended not out of inevitability, but out of a fumbling but persistent effort by elites to maintain (and sometimes create) particular class hierarchies, finding its foothold in the economic crises of the 1970s and the perceived failures of embedded liberalism. Jamie Peck also argues that neoliberalism was able to seize on periods of crisis—most notably the global economic crises of the 1970s, but Peck includes New York City's own financial crisis as well as Hurricane Katrina as examples of neoliberalism's opportunism—in order to provide coherence of a particular sort during moments of upheaval and rupture. Political actors did not simply turn to neoliberalism at these times because it was the best available option: neoliberal academics and ideologues placed themselves very consciously, often in business-funded think tanks, waiting for their chance to persuade the world (Jones 2012). While the origins of the Chicago School were ideologically quite disparate (consisting of Hayek's "latitudinal" networks connecting Chicago to European forms of neoliberalism), under the leadership of Milton Friedman the School not only "purified" this ideology but also constructed "longitudinal" networks with state powers, whose ears Milton had at the beginning of the 1970s crises (Peck 2010).

The deliberateness with which advocates of neoliberal policies seized on fiscal crises has been demonstrated by Marion Fourcade and Sarah Babb in a comparative analysis of the particular course of neoliberal transitions in Chile, Britain, Mexico, and France—in particular, what factors and processes are involved in the acceptance of market rule (2002). While they find that poorer countries (Mexico and Chile) were more

susceptible to external policy influence, Mexico and France experienced a faster and far less revolutionary shift to neoliberalism which was imposed deliberately by technocrats as a pragmatic transition (the best route to take given available options), whereas Chile and Britain transitioned later, far more radically, and at the hand of monetarists, “true believers” in the power of the free market. Fourcade and Babb explain this difference by the fact that France and Mexico (1) had much more successful regimes of embedded liberalism prior to their crises; and (2) were more effective at controlling social unrest. In Britain and Chile, “failed economic policies, ongoing social conflict, and inflation turned large fractions of capital and labor against the state and strengthened political groups that proposed alternative economic ideas” (Fourcade-Gourinchas and Babb 2002:539).

Many histories of neoliberalism in the United States tell a story of business-funded neoliberal think-tanks waiting in the wings for their opportunity to influence policy (Jones 2012; Ricci 1994; Smith 1993). This opportunity came in the form of the economic crises of the 1970s. Inheriting the stagflation crisis from the Nixon and Ford administrations, Carter turned to deregulation of the transportation and banking industries while his Federal Reserve Chair, Paul Volcker, pursued rigid fiscal discipline. These practices were finally accepted and embraced in mainstream policy circles with the triumph of Ronald Reagan’s election in 1980 and 1984 alongside the coterminous election of Margaret Thatcher to Prime Minister in Britain (Jones 2012; Phillips-Fein 2010).

In practice, neoliberalization is recognized as a variety of contradictory policies regarding economic management. As a response to embedded liberalism, the neoliberal ideal is a disembedding of the market from the state. Ultimately, neoliberalism would like

self-regulating markets to organize all aspects of society, but first these markets must be instituted, then supported, by state intervention. As the ideal of the pure market is a utopian one, its practical project is one of contradiction. Peck identifies neoliberalization's logic as "one of repeated, prosaic, and often botched efforts to *fix* markets, to build quasi-markets, and to repair market failures. Neoliberalization, in this sense, is not the antithesis of regulation, it is a self-contradictory form of regulation-in-denial" (Peck 2010:xii). In its stumble towards its utopian ideal, however, it has come a long way. It has expanded the reach of capitalism to new geographical areas, "opening up" global markets through the development tactics agreed upon through the Washington Consensus: "fiscal austerity, market-determined interest and exchange rates, free trade, inward investment deregulation, privatization, market deregulation, and a commitment to protecting private property" (Centeno and Cohen 2012:319). Between 1980 and 2008, these policies allowed the financial sector to grow in size, complexity, and political power, despite its recurrent instabilities, which were displaced by deficit spending. Neoliberalization has radically restructured the regulatory relationships between state and market in many countries.

While neoliberal ideals presuppose a rational *homo economicus*, and criticism of neoliberalism depicts neoliberalism as an amoral prioritization of rational action, Bruce Amable has argued that morality is central to neoliberal thought (2011). While neoliberalism does not take the market order as natural, it does identify certain moral imperatives, such as "the ethos of individual responsibility, i.e. the responsibility to be competitive in a world where the economic conditions are permanently changing. The individual must become a self-entrepreneur, responsible for his or her own existence and

integration into the market” (2011:13). This moral imperative of neoliberalism has worked to shape politics in the late 20th and early 21st centuries, influencing the local practices of welfare policy (Soss, Fording, and Schram 2011), individualizing responsibility in education (Hursh 2007). For the left, democratic equality of outcome has been replaced by equality of opportunity. This development has clear social and political implications outside of a bounded market.

Wendy Brown’s project is also to trace not the economic policies of neoliberalism (deregulation, economic restructuring, etc.) and their unintended consequences, but instead the very active political rationality that goes beyond the market in a project that “involves *extending and disseminating market values to all institutions and social action*, even as the market itself remains a distinctive player.” The political rationality of neoliberalism supplants what Brown sees as the pre-existent system of differentiated moral, economic, and political rationality, with a singular political rationality which configures rational action as moral responsibility (Brown 2003:6). The neoliberal project thus involves not only particular political interventions, but also the construction of neoliberal subjects: economic humans whose moral worth is measured by their entrepreneurial success (Brown 2003). Similarly, Wendy Larner claims that neoliberalism plays out, in Foucauldian terms, as a series of governance projects of subject creation. Such projects are not top-down, they involve attempts at the sites of production of rational, economic entities, an identity which must compete and be synthesized with others (Larner 2000).

Economic Logics and Civil Society

Many attempts to “rescue” Polanyian embeddedness in political and economic sociology have theorized the interaction between state, civil society, and market to influence political and economic outcomes. Within institutional approaches, introducing a political understanding of firm behavior is a popular method. One example is Tim Bartley’s work on the emergence of transnational private regulation systems that certify certain standards of environmental or social corporate performance in the apparel industry (2007). Bartley finds that while some market actors were early adopters of the new standards, trade associations were slow to adopt, showing that market actors did not mobilize *en masse*. Instead, the actions of social movements and the state engaged in “institutional entrepreneurship” in a political context where options for regulatory mechanisms were limited in a neoliberal climate. In Bartley’s account, private regulation is not a market solution, but a settlement of the competing claims made by market, state, and civil societal actors within a given political climate (2007).

Neil Fligstein also holds that economic sociology is in need of a theoretical understanding of social institutions in order to explain how markets are produced and reproduced (1996). Instead of assuming actors to be profit-maximizers, Fligstein sees actors as motivated by survival, meaning that markets do not tend towards efficiency, but instead towards stability. Fligstein’s theoretical formulation here, which he terms the “political-cultural approach,” draws from Bourdieu in its conceptualization of markets as fields with firms as either incumbent or challenger actors who struggle over power in the field within the confines of accepted local ‘rules,’ both informal (“conceptions of control”) and formal (property rights, governance structures, and rules of exchange),

which ensure the field's stability. While these fields are sites of struggle, each individual firm's interest in not only dominance but in reproducing itself leads to "a search for stable interactions with competitors, suppliers, and workers," (Fligstein 2002:18) as well as a reproduction of the dominance of incumbents who exert more power over defining control. It is actors' need for stability that leads to firms' gravitation towards the state—trending from instability to stability, market building and state building are rarely successfully separable in the modern world.

One of the more nuanced considerations of state, market, and civil societal relationships comes from Margaret Somers and Fred Block, particularly in *Genealogies of Citizenship* (Somers 2008) and *The Power of Market Fundamentalism* (Block and Somers 2014), where they draw explicitly on the work of Polanyi. Their central argument is that a balance of power between the state, the market, and civil society is necessary for ensuring socially inclusive democratic citizenship. Tracing epistemologies of citizenship throughout the late 20th century, Somers argues that the United States has moved from a citizenship model marked by relationships of rights and obligations "to the principles and practices of a quid pro quo market exchange" (Somers 2008:2). She explores this shift, which she terms the "contractualization of citizenship," through several case studies including the disaster response to hurricane Katrina, the "epistemic spell" of social capital since the late 1990s, and the implementation of welfare-to-work policies. This contractualization, which generally refers to a shifting understanding of rights not as given or shared but dependent upon value exchange of a certain type of productivity, has been facilitated primarily through what Somers and Block call "conversion narratives" of market fundamentalism (2005), "fear-inducing predictions intended to convert a culture's

dominant narratives from social to market precepts by foretelling the dire moral and economic implications of continuing on the present social policy course” (Somers 2008:3).

Somers in particular adopts a triadic model (or “assemblage”) to consider the role that the state and civil society play in protecting civil society from the effects of the market. Civil society is presented as a third sphere between market and state, “constantly engaged in resisting the imperial designs of the market no less than that of the state” (Somers 2008:30). Somers and Block are particularly concerned with the forces enacted by the market on civil society (both directly and through the state). Their conceptualization of Polanyi’s embeddedness takes markets into the ideal realm as “socially, culturally, politically, and ideationally constructed artificial institutions” (Somers 2008:56). Their project is to examine not just material but “ideational embeddedness,” or the ways ideological regimes inform market, political, and social relationships. In the last half of the 20th century, market liberals have pursued the pyrrhic goal of disembedding the market not only through regulatory mechanisms but through a rhetorical project, changing the logic of state and civil society evermore to that of an ideal-typical free market. The effects of this are the transference of market power into civil hierarchies, increasing economic inequality that leads civil society to become “more exclusionary on traditional ascriptive grounds” (Somers 2008:41) such as race, increasing valuation of individuals along lines of economic utility, destabilization and isolation of a civil sphere ever more vulnerable to assaults by the market, and the survival of civil society’s institutions only as apparatuses of market and state (Block and Somers 2014).

Also drawing heavily from Polanyi, Michael Burawoy (2003) highlights the importance of focusing attention on the role of civil society when examining market effects and contestation. Burawoy argues that Marx neglected to consider the role society plays in mediating between the economy and the state under capitalism, and points to Polanyi and Antonio Gramsci as key contributors to this undertheorized space. Gramsci envisioned social movements and interest groups as constituting civil society, which could work with the state to contain class struggle and other negative societal impacts of capitalism, or separate from the state to promote class struggle—the extent of civil society’s autonomy from the state depends on, as touched on above, which period of hegemony is present. Polanyi similarly described an active society of trade unions and other cooperative institutions that developed in response to the market, protecting the conditions of production (land, labor, money) again from the impacts of the capitalist economy. Society for Polanyi is active, resisting the destructive effects of its own commodification with regulatory self-protection.

Somers and Block’s concept of market fundamentalism, defined as a belief “in the moral superiority of organizing all dimensions of social life according to market principles” (Block and Somers 2014; Somers 2008; Somers and Block 2005:261) shares quite a bit with Brown’s neoliberal political rationality. Importantly for Block and Somers, market fundamentalism is not new, but its increasing legibility and deployment in attempts to disembed, or retract, state and civil societal attempts to protect society from the market under the assumption that markets are self-regulating, have proliferated in the late 20th and early 21st centuries.

The above insights suggest that it is critical to understand not only how market ideologues and politicians view the market economy, but how civil societal actors view it as well. Positioned as the defender of society against the ecological destruction of the market, the environmental movement's economic assumptions are of particular importance. If mainstream environmentalism in the United States accepts and employs neoliberal ideology through faith in the power of the free market, then it is undermining its own aims. And if many mainstream environmental organizations have indeed been co-opted by the interests of capital and subscribe fully to this hegemonic ideology, as many critiques from the left assert, then there is little hope for abating ecological degradation aside from alternative social movements outside the heavily-resourced mainstream movement actors. Yet, despite extensive theoretical and editorial critique from leftist scholarship and thought on the dangers of environmentalism's perceived embrace of economic growth and market mechanisms (Beder 2001; Bernstein 2001; Corson 2010; MacDonald 2008; MacNeil and Paterson 2012; Smith 2007; Torgerson 1999; Wanner 2015), limited work has been done to empirically investigate how pervasive such ideology really is, and how it operates within American environmental thought and its attempts at regulatory intervention.

While neoliberal ideology and its praxis are not separable from one another, it is critical to separate them conceptually. The manner in which the ideology of the pure, all-governing market has been used to convert popular understandings of nature-society relationships has been integral to civil and state 'consent' to the uneven developments and redistributions of power and wealth that have characterized neoliberalization. The fact that neoliberalism-in-practice contradicts the impossible market fundamentalist

ideals of the self-regulating market does not render those ideals moot, outdated, or unimportant in understanding the neoliberal era. They have been crucial in making both the ideological and material power of the market in state and civil society thinkable to actors, in this case to those actors whom we might term environmental subjects.

Additionally, this point calls attention to the ways in which, at least in the case of environmental politics and action, ideology and praxis mutually constitute one another—structure not only informs ideology but is itself performed as each actor practices understandings of their relationship to the world around them. Civil society plays an important role, not only as its own protector against the market, but as an active participant in constructing and contesting popular ideas about what the economy, and the free market, actually is. These ideas have real material consequences on economic policies and processes.

Romancing the Market, Rationalizing Nature

In this dissertation project, I use the discourse of American mainstream environmentalism to better understand the ways market fundamentalist ideas become more or less legible to environmentalist actors over time. Environmentalism has long engaged issues of economic activity and growth, but scholarly understandings of how environmentalists understand and encounter economic ideas has been lacking, even as scholarship on neoliberalism has ballooned. Often, the role of civil societal actors is ignored in favor of analyses of increasingly neoliberalized environmental management tactics by the state, and when environmentalists' economics are considered the picture painted is rather one-dimensional. Studies of American environmental movements' orientation to the market

have either presented a complicit and co-opted environmental politics (Buscher, Dressler, and Fletcher 2014; MacDonald 2008; Torgerson 1999; Wanner 2015), a typology of either mainstream/pro-market or alternative/anti-market organizations (Brulle 2000a, 2014), or positioned neoliberalism as a political movement outside and exempting environmentalism itself (Powell 2007). Following the rich tradition of cultural sociology, I argue that a far more nuanced account of how economic thought operates for major environmental organizations is necessary to better understand the contemporary trajectory of environmental politics. An appreciation of the extent to which these groups actually practice pro- or anti-free market logics—and the cultural and political context of such assumptions—is surely in order, given environmentalism’s active role in shaping politics and policy as well as production and consumption patterns all over the world.

My dissertation project is the first to apply a systematic, quantitative analytical approach to tracking change in free-market ideology over time. It also employs a more nuanced method of measuring market fundamentalist thought, specifically looking for discrete assumptions that underlie such attitudes. Here, I tell a story that thus far has only been considered piece-meal: the evolution of economic thought within mainstream environmentalism over time. Coding environmental discourse for faith or doubt in various elements of free, self-regulating markets, I find that while faith in the free market has indeed increased between 1960 and 2014, this increase in faith has been both uneven and contingent. Importantly, throughout the dataset environmentalists are more likely to express doubt in the free market than faith. But the faith they do express and in what context they do so offers a helpful perspective on the nature of environmental regulation that mainstream activists push for today.

In the next chapter, I take a closer look at the history of environmental activism in the United States as I detail the organizations whose publications are included in my dataset, as well as my research methodology. In Chapter 3, I quantitatively examine trends in expressed faith or doubt in the free-market between 1960 and 2014. In addition to describing how overall faith and doubt in the free market has changed over time, I describe trends in faith and doubt in particular elements of the market, such as rational, profit-driven actors; forces of supply and demand; or a lack of discriminatory taxes or subsidies. I also compare these indicators across historical contexts, testing change in market fundamentalism during various moments of potential discursive shift—presidential administrations, major environmental problems, and other major historic events.

In the remaining chapters, I focus my qualitative analyses on two evocative moments of crisis for American environmentalism: the Presidential administration of Ronald Reagan, and the threat of climate change. In each of these historical moments, environmentalist voices in the dataset articulate concern with a potentially untenable situation. Chapter 4 examines environmentalist discourse concerned with the Reagan administration, the first emphatically anti-environmental and pro-free market presidential administration confronted in the modern environmental era. Chapter 5 covers discourse related to the most concerning ecological crisis since the 1990s, global climate change. The case of climate change also offers fertile ground for examining environmentalists' market-related rhetoric. In each chapter, I examine how each specific crisis shapes the discourse surrounding free markets, and what types of faith and doubt they evoke.

Faith in the free market indeed increases over the study period, but it neither overtakes expressions of market doubt, nor does it increase evenly over time. Especially important in these pages is the role of a romanticized free market. In the context of the Reagan administration, environmentalists here are more likely to accept ideas about a free-market imaginary having the potential to liberate energy markets' true efficiency, but reject more technical free-market ideas as well as the value of rational self-interest. In the case of climate change, however, these voices reject the free market generally while embracing technical elements of the market. These technical elements—namely the price mechanism—become a fulcrum for value of the profit motive, which in the case of climate change, with the right market signals, becomes a heroic impulse. As environmentalists' embrace of a rationalized nature grows tighter, the narrative role of morality becomes more complex. At base, in this project I seek to underscore the conceptual inseparability of rationality and romance.

Chapter Two:

Methodology: Measuring Market Faith and Doubt

The way we talk about the world is important. Not only does it reflect socio-material realities, but it also serves to shape those arrangements, enforcing or contesting existing social and material orders (Berger and Luckmann 1967; Fairclough 2003; Latour 2005; Sayer 2000). In building an account of the role of neoliberal ideology in environmental discourse, I have described a particular ideology of note in the preceding chapter—“neoliberal political rationality” (Brown 2003) or “market fundamentalism” (Block and Somers 2014; Somers and Block 2005). This assumption of free market principles as preferable logics in all areas of social and political life, according to these scholars, fundamentally threatens democratic principles. I argue that it also increasingly informs the logic of social activism—an active civil sphere that has long existed to defend itself against the effects of the market (Polanyi 2001). Here, I am primarily interested in evidence of this ideology in mainstream American environmentalism.

This project has two primary aims: first, to establish whether and to what extent market fundamentalist logic has increased its ideological currency within mainstream environmentalist thought in the United States; and second, to better understand the conditions under which such logic is legible to a movement largely rooted in stopping or mediating market expansion. To do this, I have examined environmentalist discourse within three of the major American environmental organizations from 1960 to 2014, a time period encompassing the modern movement’s heyday and institutionalization (Brulle 2000b; R. Brulle and Jenkins 2008; Gottlieb 2005) as well as the triumph, as

identified by scholarship on neoliberalism (Centeno and Cohen 2012), of such logic and its related policies over post-war embedded liberalism. For these three organizations (the Sierra Club, Friends of the Earth, and the Natural Resources Defense Council), I have used the newsmagazines targeted towards membership to trace acceptance of and resistance to market fundamentalism, operationalized as faith or doubt expressed in six tenets of free markets, as well as explicit faith or doubt in the free market generally. I then employ a mixed-methods analysis of these national-level environmentalist discussions of the interaction between environment and market economy, using quantitative methods to establish trends in faith and doubt over time and the environmental or historical context that informs such ideology, then in-depth qualitative discursive analysis of two “moments of crisis” for the movement that elicited a great deal of discussion about how/whether the free market mattered for environmental concerns, as well as coincided with an increased environmentalist market fundamentalism.

In this chapter, I outline a brief history of these three organizations and their political and historical context. I then detail the data that this dissertation utilizes for analysis and my coding and analytic methodology.

Defining the Case: Three Major Environmental Organizations

The early American environmental movement arose out of a discomfort with the rapid changes of industrialism in the late 19th century. The American frontier, longtime an aesthetic symbol of the country’s grandeur and limitless possibilities, was increasingly encroached upon by development, hunting, and resource harvesting to fuel industrial growth in the east. Themes and agendas of wildlife management, conservation, and

preservation were the earliest to emerge—conservation and wildlife management recognizing the ‘natural’ (non-human) world as a supply of resources to be scientifically managed to ensure that it lasts as long as human society needs it, and preservation conceptualizing nature as having intrinsic aesthetic and spiritual value to humans, prioritizing the protection of wild species and spaces from human intervention (Brulle 2000b). Throughout the early 20th century, the major ideological struggle within American environmentalism was between conservation and preservation, most famously manifest in the public, decade-long struggle over the damming of the Tuolumne river in California’s Hetch Hetchy Valley, which was completed in 1913 (Gottlieb 2005).

A post-World War II resurgence in interest in the outdoors also paved the way for the modern environmental movement, which coalesced following the publication of Rachel Carson’s *Silent Spring* in 1962. This new movement, also arising in response to a series of environmental “shocks” during that decade such as the burning of the Cuyahoga river in 1969, has been concerned with the public health and quality-of-life effects of environmental degradation. This discursive frame, known as “reform” environmentalism, emphasizes the role of science-informed ecological and pollution management in maintaining human health, has remained the environmental paradigm since the 1960s (Brulle 2000b). The 1960s and 1970s saw the creation of numerous “new” environmentalist organizations, joining the ranks of the few legacy conservation groups such as the Sierra Club and the Isaak Walton League. Mainstream environmental advocacy during this period included direct action, lobbying the federal governments to help shape the emerging framework of environmental regulations, and suing to enforce those regulations.

In the 1980s, American environmental politics experienced a significant structural shift. Largely in response to the severely anti-environmental policies of the Reagan administration, environmentalism became highly institutionalized (Dunlap and Mertig 1992; Gottlieb 2005). The formation of the “Group of Ten” in 1981 sought to strengthen environmental lobbying clout and to articulate a common environmental agenda through regular meetings, modeled after quarterly CEO gatherings, of leaders of the Sierra Club, the National Wildlife Federation, the National Audubon Society, the National Resources Defense Council, Friends of the Earth, and others (Gottlieb 2005). Since this time, common national-level strategies have involved attempts to directly influence business practices and federal lobbying. Moving away from direct action at a national level, Robert Gottlieb has described the institutionalization of the 1980s as redefining American environmentalism less as a social movement, and “more directly as an adjunct to the policy process” (2005:175). As national and international institutions, foundations, and research projects have emerged, environmental social movement organizations now function as part of a broad “environmental establishment” (Brulle 2000b:6) While the various advocacy issues have changed over time, especially dominated by climate change in recent years, this basic structure of organizational orientation has remained the same since the 1980s and 1990s, with a shift in focus from foundation funding and elite donations to mass mailing and membership dues (Bosso 2005).

As mainstream environmentalism in the United States has been highly institutionalized since the 1980s (Gottlieb 2005), rather than targeting a variety of individual environmentalist voices speaking through various public venues, I use publications of these major organizations in order to capture them, so to speak, in a

natural habitat, largely in conversation with one another. The three organizations utilized here—Friends of the Earth U.S. (FOE), the Sierra Club, and the Natural Resources Defense Council (NRDC)—were chosen from the ten largest and most influential environmental organizations in the United States, according to experts and leaders in the field (Bagley and Inside Climate News 2015), and range from more politically conservative (NRDC), to moderate (Sierra Club), to progressive (FOE). All three organizations participate in environmental advocacy at the national legislative level.

The Sierra Club, by far the oldest, was founded in 1892, and today boasts 2.4 million dues-paying members with 64 local chapters and a national headquarters in Oakland, California and a legislative office in Washington, DC (Anon 2014). FOE was founded in 1969 by former Sierra Club Executive Director David Brower with other anti-nuclear activists, and today is part of the 74-member network Friends of the Earth International. Within the United States, it is based in Washington, DC and represents around 400,000 members, donors, and activists. The NRDC was founded by several law students and attorneys in 1970 and now also claims 2.4 million members and online activists (NRDC 2015). Based in New York, today it has five other U.S. offices (including one in Washington, DC) and another in Beijing (NRDC 2016). FOE is the smallest organization included here, both in membership and in operating budget—approximately \$7 million in 2015 in comparison to Sierra Club and the NRDC’s budgets of over \$100 million (Bagley and Inside Climate News 2015).

The Sierra Club: Conservationist and Preservationist Roots

John Muir, founder of the Sierra Club, was an archetypical naturalist of the time, passionately concerned with the preservation of nature for its aesthetic and transcendental value. At its founding in 1892, the Sierra Club comprised a white, affluent, and almost exclusively male constituency and focused most of its efforts on organizing social outings into the California wilderness to promote a constituency that was “close” to nature (Cronon 1996; Rothman 2001). Throughout the early 20th century, the Sierra Club experienced internal consonance between ideas of preservation and development as either necessarily mutually exclusive priorities or as unproblematic bedfellows. But by the Great Depression, the preservationist leanings of the Sierra Club had been confronted by both the scientific resource management championed by those such as naturalist Theodore Roosevelt and the New-Deal conservation projects of Franklin Delano Roosevelt.

While the Sierra Club remained primarily concerned with its wilderness outings through the first World War, it repeatedly engaged in high-profile political fights to preserve wild spaces in the early 20th century, most publicly in a failed involvement in the Hetch Hetchy controversy. In part due to its focus on affluent recreation, the Sierra Club survived the American disinterest in conservation that accompanied the Great Depression and World War II and grew from a regional organization to a high-profile national one. The surge in popularity of outdoor recreation, especially among the middle class, that followed the War led to substantial member growth in the 1950s (Gottlieb 2005; Hays 1989). This was also a result of the growing visibility of the organization in public struggles for the preservation of wild places, including a successful fight during

the same decade alongside the Wilderness Society against the construction of a hydroelectric dam within Dinosaur National Park (Gottlieb 2005).

David Brower, executive director of the Club from 1952 until 1969, was excited by Carson's work and the new "environmentalist" reformist focus on national policy and pollution control (Turner 2015). In just one of many conflicts between Brower and the board of directors, many others within the organization opposed this direction in favor of continuing the fight for preserving beautiful western landscapes. Still, the Sierra Club engaged in many publicized national fights during the 1960s, challenging new nuclear power plants in northern California and hydroelectric dams in the Grand Canyon and on the Hudson River, and invested in environmental publications. From 1960 to 1970, the Club's membership grew from 16,500 to 124,000 (Bosso 2005). In part due to new environmental policy frameworks and the emergence of new, expert-led groups, the Sierra Club ultimately embraced the new environmental agenda throughout the 1970s under the leadership of Michael McCloskey following Brower's departure, focusing less on recreation and more on regulation (Gottlieb 2005). The Club also formed a legal arm similar to the NRDC and Environmental Defense Fund in 1971.

Along with other groups, the Sierra Club saw another spike in membership in the wake of public outcry over the actions of the Reagan administration, reaching 615,000 members by 1991. Joining other organizations as the "Group of Ten," the Club became even more oriented to policy processes, actively advocating for environment-friendly politicians and clean air, water, and wilderness policies. In the last two decades of the 20th century, the Club buttressed its administrative activities by doubling its staff, and

focused on maintaining a sound managerial, rather than visionary, leadership model, especially in the wake of the conflict between Brower and the board.

Carl Pope took over as Executive Director in 1992 with McCloskey still serving as Chairman. Emerging from the legislative struggles with the Reagan and Bush administrations, Club leadership began to directly engage private business. Addressing the board in 1989, McCloskey advised that

Businesses are acting edgy about consumer reactions; we should develop strategies to exploit this feeling and the public's longing to be asked to do something concrete. Through publicity campaigns, education, boycotts, picketing, shareholder campaigns, corporate campaigns, and positive recognition for models of good practice, we can bypass government mechanisms which simply are not working and take the case directly to those who unleash the forces which shape our environment (Sierra Club 1989).

This philosophy would inform the national Club's actions through the early 2000s, including a collaboration with Chesapeake Energy (later revealed to include millions of donation dollars from the energy company) and marketing deal for a "green" Clorox product that angered many local chapters and other environmentalists (Klein 2015).

Michael Brune replaced Carl Pope in 2010, and made a point of engaging in very public direct action against the Keystone XL pipeline, ending the Chesapeake and Clorox arrangements, and joining the movement among many established environmental organizations to divest any financial holdings with oil and gas companies (Klein 2015). While many local Sierra Club chapters do still participate in direct action, the national organization today engages primarily in lobbying. The Sierra Club's current national objectives include various policy priorities such as removing existing coal plants in favor of "green" energy technology, reducing oil dependence with stricter regulations on automotive gas efficiency and investment in public transportation, regulation of the

natural gas industry's hydraulic fracturing practices, protection of natural habitats from the effects of climate change, and other priorities (Sierra Club 2012c).

Friends of the Earth: The Anti-Nuclear Movement and International Social Justice

While the Sierra Club and a few other major players in the environmental movement have a longer history and deeper roots in conservationism, many come out of the modern movement in the 1960s and 1970s, as environmental political activism swelled. Two of the more radical groups to come out of this period were Greenpeace, which has long been primarily a direct-action organization, and Friends of the Earth.

David Brower served as Executive Director of the Sierra Club from 1952 until 1969. Despite his long tenure, his final years with the Club were considerably tumultuous. In addition to increasing tension over what some saw as financial mismanagement, Brower's ultimate ousting from the Executive Directorship, alongside a number of staff loyal to him (Turner 2015), came after he publicly denounced the Club's endorsement (backed by both a board vote and a membership referendum) of a nuclear power plant site, favoring instead a hard-line antinuclear stance. Brower would eventually be welcomed back to the Club, serving as a board member in the 1980s and 1990s, but not before he helped found several other environmental organizations, including the John Muir Institute, the League of Conservation Voters, and FOE.

Accounts of FOE's founding vary, with some suggesting that Brower's plans for the organization (not to pursue tax-exempt status, an international network of members) were rooted in antipathy toward his former organization (Bosso 2005), and others arguing that Brower intended FOE to serve a complimentary—not competing—role with the

Sierra Club (Turner 2015). Even though it was initially funded by Muir Institute chairman and oil magnate Robert O. Anderson, FOE immediately took a far more radical position than had the Sierra Club, strongly against all nuclear power, the trans-Alaska oil pipeline, supersonic transport, and the fur industry. Financially dependent on foundation grants, publishing income, and membership dues, FOE engaged in aggressive public awareness, lobbying, and scientific activity and was known as an uncompromising arm of the organized environmental movement (Bosso 2005; Mitchell, Mertig, and Dunlap, Riley E. 1992; Salzman n.d.). Within just a few years, FOE had established affiliate groups in France, the United Kingdom, and Sweden.

David Brower transitioned from President to Chairman (a newly created position) in 1979, when FOE had grown to over 30,000 members (Salzman n.d.). Though the organization had spent the 1970s climbing out of debt, continuing financial issues and philosophical differences between Brower and the new president, Rafe Pomerance, led to internal conflict over the importance of FOE's lobbying activities over its publishing ones, particularly in the face of the anti-environmental stance of the Reagan administration. Under Pomerance, FOE focused its energy on more explicitly political activity, ultimately shutting its San Francisco office to center resources in Washington, DC. The plan to restructure FOE around lobbying and downsize the west coast staff was deeply opposed by Brower, who ran an advertisement in *Not Man Apart* in 1984 for member donations to help prevent downsizing, privately funded by Brower and in direct opposition to the Board, resulting once again in Brower's ultimate dismissal in 1986 (Turner 2015).

Even though some at FOE considered Pomerance's triumph over Brower a bellwether for the organization's decline as an engine of radical environmental politics (Salzman n.d.), FOE continued to pursue a more progressive agenda than other legislatively-oriented mainstream groups. Throughout the 1980s, FOE challenged the actions of the World Bank and the Reagan administration. In the last 30 years, FOE has joined many other mainstream organizations in fighting offshore oil drilling and pushing for private liability for companies involved in oil spills as well as better regulation of auto emissions and other measures to fight climate change. It has, however, taken a more hard-line approach than many other major organizations—opposing NAFTA, refusing to support cap-and-trade legislation over its perceived benefits to polluting industries, sharply critiquing biotechnology, and explicitly calling for systemic economic and political change. FOE International plainly counts climate justice and resisting neoliberalism as central campaign priorities (Friends of the Earth International n.d.).

Natural Resources Defense Council: A Legal Force for the Environment

In 1970, in the midst of a rapidly growing environmental regulatory apparatus, a group of lawyers formed an organization with the purpose of mobilizing resources to hold polluters legally accountable in the tradition of the NAACP Legal Defense Fund. Initially funded by the Ford Foundation, throughout the 1970s the NRDC successfully brought suit against corporations and government bodies such as the Tennessee Valley Authority and the Bureau of Land Management, enforcing parts of the National Environmental Policy Act and Clean Air and Water Acts, focusing on issues such as a hydroelectric dam project on the Hudson River, the effects of mining and grazing on public lands, and

logging practices. The NRDC also pursued mass membership beginning in the mid-1970s and expanded to scientific expertise as well as legal. By 1980 it had 40,000 members (Bosso 2005).

Though the NRDC had repeatedly sued the federal government, the group was partially funded by government contracts in the late 1970s and even participated in shaping the Clean Air and Clean Water Acts (Adams and Adams 2010; Bosso 2005). In the face of unprecedented opposition from the Reagan administration, however, the NRDC diversified its tactics. Legal work was still the core of its mission, with lawyers working on nuclear energy and pesticide and other synthetic chemical usage throughout the 1980s. But it also focused on messaging and membership, developing a carefully crafted, journalism-based newsmagazine for members and actively engaging in public relations campaigns and utilizing elite celebrity networks for private donations and visibility.

One of NRDC's highest profile campaigns was against the agricultural pesticide Alar in the late 1980s, a massive public opinion effort culminating in its voluntary removal from the market. The fight contributed to its already ballooning membership, which had more than quadrupled to 170,000 by 1990 (Bosso 2005), and also introduced the NRDC to expanding their activist toolkit to changing market and consumer demand (Adams and Adams 2010). The NRDC still worked closely with the federal government, with executive director John Adams serving on the Clinton administration's Council on Sustainable Development alongside leaders from the Sierra Club, Environmental Defense Fund, and the energy, chemical, and automotive industries. Also alongside the Sierra Club, the NRDC put its weight behind NAFTA. Shortly thereafter, the fight against Newt

Gingrich's contract with America began, causing the expanded Group of Ten (now known as the disparate "Green Group" of 27) to better coordinate efforts (Adams and Adams 2010). In the late 1990s, Frances Beinecke took over as executive director, and she remains in that position today.

Over the last 20 years, the NRDC has much more intentionally engaged market actors and the creation of environmental markets. In 1999, the organization lobbied hundreds of companies to phase out the use of old-growth wood, and in 2000 partnered with Dow Chemical to reduce emissions at a Michigan plant. They have collaborated and accepted donations from many large companies (BP, Shell Oil, and General Motors included) (MacDonald 2008), often seeing private business as necessary collaborators in protecting the environment (Adams and Adams 2010). While seeking informal agreements from industry to practice ecologically friendlier production methods and repeatedly fighting to block oil drilling in the Alaskan National Wildlife Refuge, they also helped to create several regional cap-and-trade markets. The NRDC still engages in litigation, legislative advocacy, and scientific research and recommendations. Since 2007, they also run a Center for Market Innovation, exploring business partnerships and models for environmentally-friendly investment and economic growth.

The Dataset

In order to observe discussions of nature and market by environmentalists in a historical context, this project utilizes an analysis of these three organizations' primary member-directed newsletters or newsmagazines. I treat these newsletters and magazines as editorially-refereed sites of environmentalist articulation. While each organization went

through multiple titles and publication formats over the study period, each of these documents cover both organization-specific news and commentary as well as broader environmental news and issues. Official mouthpieces of each organization appear in these documents, but so do many external contributions from journalists and other prominent environmentalists. Each newsletter or magazine is constructed with the goal of speaking to the interests of organizational members.

As the Sierra Club was already in existence in 1960, the newsletters of this organization span the entire study period. *The Sierra Club Bulletin* ran until 1977, when it changed its name to *Sierra* and adopted a format more akin to a commercial magazine. Until 1978, the *Bulletin* and *Sierra* ran between 8 and 12 issues each year, then from 1979 to 2014 ran every two months. A total of 402 issues were published between 1960 and 2014. In 1972, the *Bulletin* began accepting commercial advertising in its pages. Until 1970, *The Sierra Club Bulletin* is the only document available for analysis.

FOE began publishing *Not Man Apart* in 1970. While the newsletter was published regularly, the number of issues published per year varied widely, from only four issues in 1989 to 24 issues in 1975. The name was changed to *Friends of the Earth* in late 1990, again briefly to *Earth Focus* from 2000 to 2001, then was known as *Friends of the Earth Newsmagazine* from 2002 until the end of the study period. As *Friends of the Earth* it was issued between 4 and 10 times a year, as *Earth Focus* and as the *Newsmagazine* it was published between 3 and 4 times each year. Between 1970 and 2014, 350 total issues were published. None of these publications included commercial advertising in their layouts.

The NRDC began publishing *Amicus* in 1979, changing the title to *OnEarth* in 2001. In 2014, coinciding with the end of the study period, the NRDC stopped publishing a paper copy (with discernible issues and volumes) of *OnEarth*, opting only for an online format. From its inception, *Amicus* and *OnEarth* were published quarterly. At the end of 2007, *OnEarth* began to accept commercial advertising in its pages. Between 1979 and 2014, the NRDC published 162 issues of *Amicus* and *OnEarth*.

While the Sierra Club documents span the full study period and the NRDC and FOE documents are only introduced in the 1970s, the overrepresentation of the Sierra Club in this dataset (or of any organization in any given year) does not present an analytical problem. The goal of this project is not to compare the publications of these three organizations, but to use all three to build a picture of the breadth of discourse within the mainstream institutionalized environmental movement over time. Throughout the study period, new organizations emerge in the mainstream movement, representing a growing diversity of politics and tactics within the movement. The emergence of FOE and NRDC are evidence of developments in environmentalist thought that became institutionalized at particular points in time.

Sampling

In order to keep the manual coding necessary for this project to a manageable amount while also maintaining historical continuity in the dataset, the newsletters and magazines were selected systematically for sampling. Beginning with the first publication of each year, every third publication was selected. Of the 402 Sierra Club newsletters published between 1960 and 2014, 140 issues were included for analysis. Of the 350 FOE

publications, 128 were included, and of the 162 NRDC publications, 69 were included. A total of 914 issues were published during the study period between the three organizations, and 337 are included here for analysis.

Data Coding

The text in sampled documents was coded in three phases. The first identified paragraphs that made reference to economic phenomena, the second coded any eligible paragraphs for an expression of faith or doubt in the free market system, and the third coded for context.

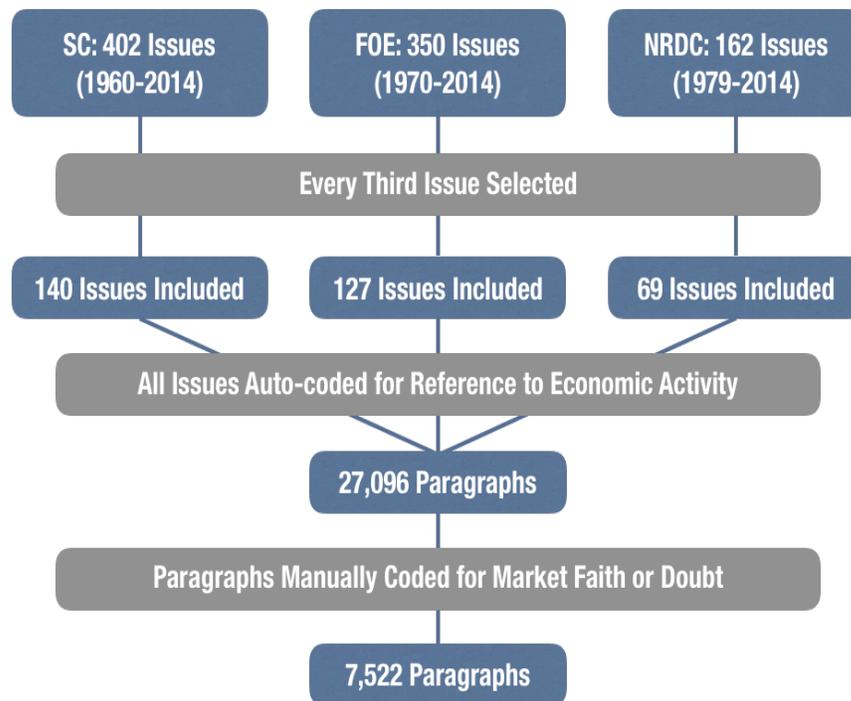


Figure 7: Dataset sampling method.

Phase One: Identifying Economic Discourse

Even when selecting only one-third of the documents in the dataset for coding, this left over 13,000 pages of text to code. In order to identify potential discussions of economic activity or economic markets, the following keyword roots were used to auto-code all newsletters within Atlas.TI, highlighting the entire paragraph where the relevant word was found.

- trad
- market
- capital
- profit
- privat
- industr
- business
- competit
- commerc
- sell
- sale
- sold
- exchang
- valu
- suppl
- econom
- pric
- pay
- tax
- Invest
- finan
- corporat
- subsid
- consum
- bank
- share
- stock
- cost
- compan
- Wall street
- money
-

Once potential paragraphs were highlighted, I examined each of them to (1) consolidate single quotes that had been auto-coded as discrete quotes, and (2) to remove any auto-coded quotes that were not relevant to economic activity (e.g., “this ecosystem **produces** clean water”, “available nutrient **supply**”). Also excluded were quotes that arose within tables of contents and in photograph captions, titles and subtitles, author biographies, infographics such as tables and figures, and commercial advertisements. Advertisements not paid for by outside parties, such as for organizational membership, calls for action, or organizational publications, were included in coding. For bulleted lists, if the bullet contained at least one complete sentence, it was coded as its own paragraph. If not, the entire bulleted list and its introductory text were coded as one paragraph. Among the sampled documents in the dataset, 27,095 paragraphs were identified as making reference to economic phenomena.

Phase Two: Measuring Market Fundamentalism

While neoliberal, market fundamentalist, and free-market ideology have been critically discussed at length in the scholarly literature, far less work has attempted to empirically measure such ideology. Yuko Heath and Robert Gifford developed the most popular survey measure in 2006. Since then it has been used repeatedly in attempts to predict support of climate change mitigation (Chassot, Hampl, and Wüstenhagen 2014; Dreyer et al. 2015; Lewandowsky, Oberauer, and Gignac 2013; Rossen, Dunlop, and Lawrence 2015). While this measure asks specifically about attitudes surrounding the market and environmental issues, indicators of support in the Heath-Gifford questionnaire do not ask about specific free-market principles, nor do they identify what the free market is (2006). A 2007 survey of economists used more specific questions, asking about support of economic interventions (tariffs to protect U.S. industries; minimum wage; and occupational safety, pharmaceutical, and air and water regulation), personal choice, and role of government (Klein and Stern 2007).

In conducting a text analysis, my goal is to trace the importance of neoliberal ideology—specifically, market fundamentalist assumptions—for mainstream American environmentalism. In this project, I systematically code the data for what I term “market faith” and “market doubt,” which describe faith or doubt expressed in the environmental or social benefits of free, “unregulated” market competition. In the creation of a deductive coding scheme for free-market faith, existing indicators proved unsuitable, particularly for coding already-existing text, rather than surveying individuals. Heath and Gifford’s measures are insufficiently precise, and Klein and Stern’s are too specific

without measuring any assumptions about how the market works. Therefore, my deductive coding evaluated each quote for any reference to agreement or disagreement with the free market or one of its elements, using the following summary of the ideal function of a free, self-regulating market:

Given perfect information, established property rights, and an absence of discriminatory government taxes or subsidies, rational and self-interested actors will respond to prices set by forces of supply and demand in a manner that leads to an optimal allocation of resources.

This summary was compiled from basic economic definitions of market structure and perfect competition (Mankiw 2015; Miller 2015). In the context of the data set, “an optimal allocation of resources” is taken to mean a favorable environmental or social outcome. In all, 14 codes were created for agreement or disagreement with the following statements, interpreted as faith or doubt in each element of the free market:

- The free, unregulated market generally leads to an optimal allocation of resources.
- More information available to market actors leads to an optimal allocation of resources.
- Better-established property rights lead to an optimal allocation of resources.
- Fewer discriminatory government taxes or subsidies lead to an optimal allocation of resources.
- Rational and self-interested actors lead to an optimal allocation of resources.
- Better-established prices lead to an optimal allocation of resources.
- Forces of supply and demand lead to an optimal allocation of resources.

Of the 27,095 paragraphs referring to economic phenomena, 7,522 expressed faith and/or doubt in at least one of these free-market elements. Any references to economic activity that did not employ faith or doubt in any of the above free market assumptions (e.g., the Coast Alliance “raised some money,” or “From corporate security to Afghan relief, the nation is making weight changes in the wake of the terrorist attacks”) were excluded from analysis. As an example of how one paragraph included in the faith/doubt

dataset would be coded, here a paragraph from the January/February 1993 issue of

Sierra:

Already, environmental and taxpayer groups in many nations single out egregious subsidies and tax shelters as targets for reform. But they commonly lose the big battles, overwhelmed by the political clout of the billion-dollar industries that doggedly defend the status quo. Every battle lost demonstrates the difficulty and the urgency of mobilizing more members of the consumer class in support of prices that tell the ecological truth.

This paragraph was coded for “faith in fewer discriminatory taxes and subsidies,” as it highlights environmentalists’ battles against taxes and subsidies; for “doubt in rational, self-interested actors,” as it posits powerful industries’ interest in the ‘status quo’ as antagonistic to environmental groups’ interests; and for “faith in better-established prices,” as it asserts the importance of real (“truth”ful) prices to guide consumer behavior in an ecologically-friendlier direction.

Phase Three: Coding for Context

The third phase of coding examined each of the 7,522 faith/doubt paragraphs for the credited author. Codes were also created for particular expressions of economic concern, particular environmental concerns invoked, environmental solutions or strategies for change, the actors involved, and invocation of a type of value of natural resources. A list of these contextual codes, which were formed using open coding, is below.

Economic Concern	Proposed Solutions	Relevant Actors
Advertising	Cap-and-Trade	Nixon Administration
Financial/Economic Crisis	Carbon Capture and Storage	Ford Administration
Inequality	Carbon Credits	Carter Administration
International Development	Carbon Tax	Reagan Administration
International Trade	Clean Air Act	Bush I Administration
Labor Concerns	Clean Water Act	Clinton Administration
Monopolies	Consumption	Bush II Administration
	Energy Efficiency	Obama Administration
Environmental Concerns	Kyoto Protocol	U.S. Congress

Climate Change	Lieberman-Warner Bill	Army Corps of Engineers
Ozone Layer	Mitigation	EPA
National Parks	Recycling	Agriculture and Food Industry
Oil Spills	Science and Technology	Automobile Industry
Air Quality	Consumption	Chemical Industry
Pollution (General)	Energy Efficiency	Financial Industry
Population Growth	Kyoto Protocol	Fossil fuel Industry
National Security	Shareholder Activism	Insurance Industry
Public Safety	Sustainability	Lumber Industry
Public Health		Manufacturing Industry
Public Lands	Valuation Frames	Mining Industry
Trans-Alaskan Pipeline	Aesthetic/Spiritual Value	Nuclear Industry
National Security	American Heritage	Pharmaceutical Industry
	Ecological Value	Ranching Industry
	Economic Value	Real estate Industry
	Recreational Value	Renewable Energy Industry
		Retail Industry
		Utility Industry
		Waste Management Industry
		Development Banks
		Indigenous People

Table 29: Contextual variables arising from open coding.

Data Analysis

This project utilizes qualitative coding and a concurrent mixed-methods data analysis (Creswell and Clark 2006). Almost all published research on neoliberal ideology and market fundamentalism employs historical, theoretical, or ethnographic methods, with an exception being survey research on economists' views on the free market (Klein and Stern 2006, 2007). This work has provided important insights into how changes in economic thought of the late 20th and 21st centuries shapes national and international policy (Fourcade-Gourinchas and Babb 2002; Johanna Bockman 2007; Jones 2012; Mirowski and Plehwe 2009; Peck 2010; Plehwe, Walpen, and Neunhoffer 2006) and daily, lived experiences (Amable 2011; Brown 2003, 2006; Larner 2000; Somers 2008). Yet, while the actual economic and policy changes of neoliberalization have been well documented (Blanchard, Branson, and Currie 1987; Davis 2009; Harvey 2007a; Krippner

2012; Williamson 1990), discussions of neoliberalism as a popular ideology generally begin with the presumption—not establishment—of its hegemony. Besides building their case on empirically unsupported ground, such assumptions come with the risk, as described by J.K. Gibson-Graham (2006), of imbuing neoliberalism or capitalism with greater epistemic power.

I use a mixed-methods analytical design here to answer my two, intertwined research questions: has neoliberal or market fundamentalist ideology increased within mainstream American environmental thought, and under what conditions do those principles of free market competition become more or less relevant to activists' politics? First, a quantitative analysis is the only way to establish whether market fundamentalism—here defined as expressions of faith in any of the above-described tenets of the free market—has indeed increased in relation to doubt in the market over time. This is a simple, yet important question. It also allows me to establish whether the moments of crisis that I explore in the qualitative component of the analysis, as well as other economic, political, and environmental contexts, come with any increased or decreased likelihood of market faith. Next, the qualitative analysis used here starts from the same coded data, focusing on two moments of crisis for the environmental movement to examine how the urgency of either major political crisis (the presidency of Ronald Reagan) or major environmental crisis (climate change) informs the ways that environmentalists think about the free market. The quantitative component establishes the scope of the phenomenon, the qualitative offers explanation as to how particular crises, for the environmental movement, evoke faith or doubt in market mechanisms' utility for environmental concerns.

Discourse—here recorded as the text published in environmentalist organization’s newsletters and magazines—reflects the social world in complicated ways. This project utilizes a critical discourse analysis approach, encountering text as both an artifact and tool of meaning-making for social actors (Fairclough 2001, 2003). I also come from a “moderate” perspective on social constructionism, assuming that discourse can certainly create and format social realities, but that it also is shaped by social realities, social ideals, and what social actors consider to be legible to their audience (Sayer 2000). All of these influences are important for an understanding of how market fundamentalism as an ideology has been employed, maintained, and challenged for mainstream environmentalism in the last six decades. Rather than using a more automated and efficient method of keyword count and proximity content analysis, I manually examined each “economic” paragraph to determine explicit and implicit assumptions about the free market with the intention to employ “a careful account of meaning and context” (Fairclough 2003:13).

By including only paragraphs that employ assumptions about the utility of the free market in the dataset, my key outcome is not how much faith environmentalists express in the market, but rather the balance of faith and doubt over time and under various conditions. The raw number of paragraphs expressing faith or doubt has limited use for analysis, as publication size and issue focus change over time. It is still helpful to examine how the discussion of free market ideas changed in prevalence over time.

Figure 2 below shows the amount of faith/doubt paragraphs per page of the dataset over time. Assumptions about elements of the free market were rare in the 1960s, and jumped

at the beginning of the 1970s, 1980s, and the 1990s.

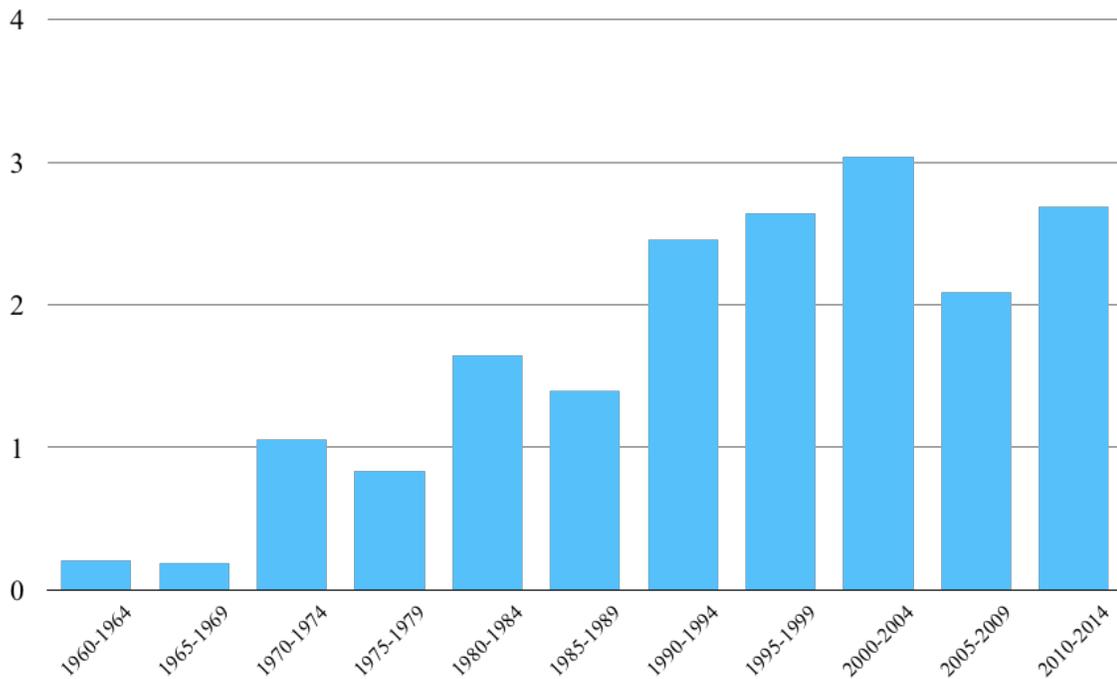


Figure 8: Number of faith/doubt paragraphs per page, by five-year period

In the chapters that follow, I will first describe overall trends in market fundamentalism within the dataset. Chapter 3 uses statistical analysis to largely examine whether and how faith in the free market has increased, as well as the contextual conditions under which it is more likely to be expressed. In Chapters 4 and 5, I utilize a careful examination of market-related discourse under specific conditions—the Reagan presidency and the threat of climate change—to describe how faith and doubt in the free market operate for environmentalists.

Chapter Three:

Market Fundamentalism and Environmental Thought Over Time

Despite long-standing concern over the material relationships between the economy and the natural environment within environmental sociology, scholars have only recently explored the role of economic ideology within environmental governance. While some have seen a “greening” of capitalism as a potentially positive development, as businesses begin to prioritize environmental accounting practices as part of a broader orientation toward social accountability, others have been far less optimistic about an increased use of market mechanisms to manage human-nature relationships. In particular, work that documents and analyzes practices of neoliberal environmental governance (primarily conducted by critical geographers) find efforts to privatize and commodify natural resources increasingly problematic.

Still, the majority of this work examines changing material state and market arrangements. When the role of market fundamentalist ideologies do enter the discussion, the role of the civil sphere, specifically environmental activism, is often ignored. There does exist a small body of literature that considers changing environmentalist attitudes toward the free market, offering a variety of explanations for an ideological shift, that focus on the discursive changes between major international environmental agreements, the market faith that accompanies supporters of ecological modernization, or sustainability’s growing popularity since the 1970s. But this literature largely assumes neoliberalism’s hegemonic power rather than establishes it. The absence of an empirical

account of neoliberalism's ascendance within environmentalist thought is felt deeply when reviewing relevant literature in environmental sociology. When asked "has free market ideology shaped mainstream environmentalism," the subfield is as likely to respond "of course" as it is to answer, "of course not."

The fundamental focus of this chapter, then, is to establish whether market fundamentalism within institutionalized American environmental thought has actually increased over time, as well as how—and why—it may have done so. While the findings discussed below do support the frequent assumption that neoliberal ideology has increased for environmentalists, it challenges existing narratives of environmental neoliberalism as well, including its supposed hegemony, its critical relationship with ideas of sustainability, and the period when such ideology was accepted. It also brings into question other existing assumptions about the professionalization of the movement and connection to political and market power centers as important factors in its adoption. Most importantly, in this chapter I demonstrate that different indicators of market faith, such as the profit motive, fewer taxes and subsidies, and the price mechanism, become important and legible to environmentalists at different times and under different conditions.

How do the Economy and the Environment Matter to One Another?

Environmental sociology has theorized economic growth either as a fundamental cause of ecological degradation or as a mechanism for companies to pursue ecological good in their own self-interest. In the early days of the modern environmental movement, several engineers attempted to model environmental degradation based on its commonly

understood causes: population, level of affluence, and technological development. IPAT, or environmental impact (I) as the product of population (P), affluence, understood as production per capita (A), and technology or environmental damage per production unit (T), was influenced by the work of Paul Ehrlich and John Holdren in conversation with Barry Commoner in 1972. Since that time, IPAT (and its regression-friendly variation, STIRPAT), have been favorite statistical models of environmentalists and environmental sociologists to explain environmental degradation. Particularly in the 1970s and 1980s, concerns about population and consumption levels' impact on the environment found a conceptual framework in these models (Catton 1982; Meadows et al. 1974). Since that time, it has found a place in quantitative nation- or region-level analyses (Liddle and Lung 2010; Nasrollahi et al. 2018; Shahbaz, Chaudhary, and Ozturk 2017; Singh and Mukherjee 2018; York, Rosa, and Dietz 2003).

By the 1990s the factor of technology in STIRPAT/IPAT was cause for a great deal of optimism for environmentalists, the reasoning being that ecologically-friendly technological developments would allow population and especially affluence to increase without harming the environment. This perspective, rather than seeing environmental degradation as endemic to capitalist systems, instead views the market as a place for changing consumer preferences and scientific discoveries about economic and ecological efficiency to push technology to be more environmentally-friendly. While economic development causes ecological degradation at first, ecological modernization argues that eventually a reflexive “ecological rationality” will drive consumer preferences towards “green” technology and products (Mol 1996). Ecological modernization theory is one of environmental reform, reflecting on the ways that institutions such as government,

private individuals, and companies integrate environmental concerns into their regular function. Ecological modernization theorists credit the publication of the Brundtland Report with instigating an exploration of economy and ecology-friendly practices by private firms as well as causing many major environmental organizations to “become closer to centres of economic and political decision making” (Mol, Spaargaren, and Sonnenfeld 2009:5). Such research also explores the role of environmental consumerism in promoting ecological rationality in industrial practices, and maintains a positive outlook toward the power of human innovation (Pacala and Socolow 2004) and economic resources (Stern 2008) to solve environmental problems such as climate change.

Other theoretical traditions of environmental sociology have argued that ecological degradation inheres in capitalist expansion and exploitation. Alan Schnaiberg’s *The Environment: From Surplus to Scarcity* (1980) was the first major work in sociology to move beyond IPAT to theorize environmental degradation in relation to capital, labor, and the state. For Schnaiberg, post-War technological development intensified demands on natural resources, increased consumption, and weakened the labor force in the interest of increased capital accumulation. Termed the “treadmill of production” theory, this formulation posited both labor and natural resources as flying off a treadmill while society ran in place to increase profit while simultaneously decreasing “social efficiency” (Gould, Pellow, and Schnaiberg 2004). Drawing from world-systems theory (Goldfrank, Goodman, and Szasz 1999), particularly Immanuel Wallerstein’s work on unequal exchange (Wallerstein 1974), and treadmill of production theories, many scholars have begun to theorize “ecologically unequal exchange” (Bunker 1990; Gould, Pellow, and Schnaiberg 2008; Jorgenson and Clark 2009a; Rice 2009). This

research emphasizes industrialized nations' extraction of natural resources from poorer countries, as well as the use of poorer countries as ecological sinks for environmental externalities.

Other sociologists and geographers have revived Marx's ecological insights to further theorize capitalism's role in environmental degradation, arguing that capital's expansionary logic and short-run accounting practices put it in fundamental opposition to ecology (Foster 2002), or, drawing from Karl Polanyi, that capitalism necessarily destroys its own conditions of production, including non-human nature (O'Connor 1998). Still others have questioned the changing consumption patterns that ecological modernization theorists celebrate. Andrew Szasz, for instance, argues that since the mid-20th century economically privileged Americans have withdrawn from perceived environmental risks in what he terms an "inverted quarantine" (2009). Rather than engage in collective behavior to challenge the source of these problems, wealthier Americans form "commodity bubbles" to protect themselves from toxins in the water, food, and air.

At a fundamental level, these two political economic schools of sociological thought contradict one another. At one end, ecological modernization sees hope for amelioration of environmental degradation in the free market (Mol 1996, 2003; Mol, Sonnenfeld, and Spaargaren 2009). At the other, ecological Marxists (Clark and York 2005; Foster 2002; Henderson 2009; O'Connor 1994, 1998), ecologically unequal exchange theorists (Bunker 1990; Gould et al. 2008; Jorgenson and Clark 2009a; Rice 2009), and treadmill of production theorists (Gould et al. 2004; Schnaiberg 1980) see capitalism's fundamental drive for expansion and consolidation as the root of these

problems. In nations experiencing economic growth, scholars have observed a phenomenon known as the Jevons paradox: technological developments that make production more efficient decrease the cost of natural resource inputs; therefore, increasing consumption of these resources (Jevons 1865; York, Rosa, and Dietz 2004). Additionally, attempts to empirically test ecological modernization and treadmill of production theories have often concluded that economic development has ultimately increased ecological problems (Jorgenson and Clark 2009b) such as invasive species (Besek and McGee 2014) or greenhouse gases (York et al. 2003).

American environmental activism has always, necessarily, engaged economic activity. From its origins in conservation and preservation concerns during the industrial age to the contemporary politics of climate change, environmentalism's views of the free market and economic growth have ranged from dangerous, to symbiotic, to emancipatory for ecological well-being. Still, even as political economists largely find the expansion of free markets to be harmful to non-human nature, environmental governance has mostly come to embrace them over the last 40 years.

Neoliberal Environmental Governance

Scholars have explicitly examined the role of neoliberalization in changing patterns of environmental management. Noel Castree argues that, despite the delayed engagement with the ways neoliberalism interacts with non-human nature by its critics, such an engagement was inevitable due to neoliberalism's harkening back to classical liberalism, which relied on primitive accumulation or the enclosure of common land into private property. Additionally, Castree argues that the neoliberal project "is at some level

dependent upon the non-human world for its ‘success’, even as it cannot entirely control or reproduce that world’s physical characteristics. This means that the biophysical world represents a set of challenges, opportunities, *and* potential threats to neoliberalism” (Castree 2010:1731).

The rise of “non-state market driven governance systems” has marked environmental management in the last few decades (Cashore, Auld, and Newsom 2004). Such systems involve an industrial regulatory system in response to demand down the supply chain for more environmentally-friendly products, with no direct regulatory action by the state (2004). While some claim that the emergence of such apparatuses, such as carbon markets, over the last 20 years are proof of a “greening” of capitalism, others claim that this recent development is only an extension of capitalist processes of commodification and expropriation of nature which will continue to be prone to crisis (Böhm, Misoczky, and Moog 2012; Smith 2007). But what many consider a roll-back of the state’s role in environmental (and other) regulation in favor of market-governance (that is governance *by*, not of, the self-regulating market), might through a Polanyian lens be better understood as regulatory restructuring than deregulation. This regulatory restructuring of state-market relations has been one of the biggest projects of neoliberalization. While neoliberal ideology eschews state intervention, the practical reality of deregulatory ideals requires states for the creation of new markets, the enforcement of newly acquired or created property rights, and to function through quasi-market or parastatal institutions. The increasingly overlapping fields of state and market have led to the regulation of previously considered public goods to private interests (or state institutions designed to function like competitive private interests) has functioned to

obfuscate the long-run environmental costs of development through the use of short-term contractual models (Castree 2011; Harvey 2007a).

The effects of these changing state-market arrangements on non-human nature have been explored in many contexts by critical geographers. Work on the privatization of water in England and Wales (Bakker 2004), water demand-management through shut-offs and outsourcing of certain state functions in South Africa (Smith 2004), and the pollution that resulted from shifting regulatory responsibilities from the state to private business in Ontario, Canada (Prudham 2004) shows the ways that these changes have disadvantaged the public, particularly already marginalized populations. However, much of this work also highlights the difficulties met by neoliberal arrangements given preexisting biophysical ecologies and sociocultural contexts in these sites of governance, as well as the fundamental contradiction of neoliberal projects of disembedding through reregulation. Becky Mansfield's study (2004) of legal changes surrounding the Alaskan pollock fishery shows the intensive amount of state regulation, at both a macro- and micro-level, necessary to privatize the fishery without destroying competition between companies or destruction of the ocean ecosystem.

By prioritizing market models, neoliberalization has also sought to privatize and commodify commons and other resources previously thought out of bounds for capital accumulation. The 2000 Cochabamba water war is one of the most emblematic examples of deeply contested neoliberal privatization. The public water utility in Cochabamba, Bolivia was privatized in 1999 as part of a World Bank loan stipulation. Following rate hikes due to the private utility's investment in dam construction, a series of large protests that involved violent clashes with police led to a reversal of the utility's privatization.

Privatization is of course not peculiar to a neoliberal era, as evidenced by the 16th century enclosure of the English commons and Marx's writing on primitive accumulation practices 150 years ago (Marx 1992). However, scholars of neoliberalization continually point to capitalism's co-optation of public or communal natural resources, or aspects of these resources previously unthinkable as commodities, as distinctly neoliberal (Bakker 2004; Bridge 2002; Castree 2011).

Importantly, this relationship is not only material, but necessarily one about the symbolic meaning of the biophysical environment: "At its core, neoliberalism seeks to transform human relations to nature so that the latter becomes a commodity to be bought and sold..." (Castree 2010:1731). Scholars have used Foucault's ideas of productive power and governmentality to understand the production of what they term "environmental subjects," who function within fields of knowledge, thinkable practice, and particular self-identities to manage environmental resources. Arun Agrawal, in his study of a Kuamon village in the Himalayas throughout the 20th century, demonstrates how such subjects, whom he defines as "those for whom the environment constitutes a critical domain of thought and action," (Agrawal 2005:16), were produced through 19th century centralized state monitoring and regulation of forests that was then institutionally passed off to decentralized village monitoring. While Agrawal's concept of "environmentality" here refers to an eco-governmentality of a time when classical, not neo-, liberalism reigned, this idea is applicable to recent observations regarding the way the environment is constructed by environmental management discourses.

Timothy Luke has written extensively on these discourses, examining how the field of environmental studies has shaped environmental knowledge, prioritizing

economic performativity over ecological preservation in current economic and policy practice (1998a). The very indeterminacy of the term “environment,” he argues, has been utilized by managerial environmentalists (here he points to the WorldWatch Institute) to reinterpret an imaginary Nature as “a cybernetic system of biophysical systems” (Luke 1995:72). This imaginary easily allows non-human nature to be conceptually incorporated into traditional industrial production within economic models (Luke 1995, 1998b). Michael Goldman has also explored the role of knowledge production in the activities and influence of the World Bank. This knowledge is produced in the context of external pressures to “reform or die” and its neoliberal orientation to development, disseminating environmental knowledge among global development professionals that assumes privatization of natural resources as key to their correct valuation and rational use (Goldman 2006).

The Neoliberalization of Environmentalism?

In 1970, Americans celebrated the first Earth Day. It came tinged with many of the intellectual currents that had led up to it, including public health concerns, anticapitalist politics, and much of the counterculture strain of the retreating New Left. Yet, Earth Day also heralded the future of mainstream environmentalism. With growing popular concern over the environment, industry as well as the Nixon administration attempted to position themselves around pollution and waste concerns. Media framing of Earth Day also lumped a variety of environmental concerns together, and many with a prior interest in environmental politics were threatened by this new conglomeration. New Left activists saw in this a deflection of radical environmentalism, while preservationists and

conservationists worried that the protection of wild lands would be sidelined. With the growing involvement of government and industry as well as intense media attention, Earth Day's significance, argues Gottlieb, was largely shaped by its symbolic media representation. Media interpretations of environmental concerns centered on technological solutions to pollution and assumed structural problems of industry, class, and race could be sidestepped. "Environmentalism became a movement without a history, with an amorphous social base, and with a clean slate on how best to proceed" (Gottlieb 2005:157).

Still, the environmental movement remained a highly disparate amalgamation of different environmental politics. The most visible split of the late 1960s and 1970s was over the question of world population, following Garret Hardin's famous argument that environmental scarcity is an inevitability of common ownership of resources (Hardin 1968). The ecologist Paul Ehrlich and his (uncredited) wife Anne came to the same conclusion in the alarmist and very popular *The Population Bomb* (1971[1968]), arguing that population is rapidly exceeding the carrying capacity of the earth as evidenced by growing pollution and hunger. Only government coercion through tax incentives could have effectively reduced global birth rates, and the United States, whose growing population, they contended, was consuming more and more, should lead the world to this end. The most prominent response to these arguments came from Barry Commoner (1971), who held that technological change was to blame for the perceived environmental crisis. Commoner argued for an ecological viewpoint, accusing much environmental science of being too reductionist. He also considered the relationship between the

environment and the economy at length, concluding that private interests must be made to bear the social costs of increased productivity.

Yet, an embrace of capitalist growth has informed mainstream environmental politics since the 1970s and 1980s. In 1972, a team of researchers from MIT commissioned by a recently-formed think-tank known as The Club of Rome published “The Limits to Growth,” an exercise in computer modeling that forecast global trends in industrial production and population growth. Assuming natural limits, the team found that present trends (and the pollution, food production, and resource depletion they entailed) would lead to “a rather sudden and uncontrollable decline in both population and industrial capacity” (Meadows et al. 1974:24) in the next century. They did find, however, that it would be possible “to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future” (Meadows et al. 1974:24)—such a future would entail stable levels of both population and capital. While sustainability, rooted in environmental and economic principles (including the forestry philosophy of sustained yield), was not a new concept, *The Limits to Growth* reintroduced the terminology into contemporary environmentalism.

The 1987 Brundtland Report, “Our Common Future,” also used the concept of sustainable development and is still an oft-referenced source for the term’s definition. “Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” is the most commonly invoked expression of sustainable development, but this passage continues:

The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be both managed and improved to make way for a new era of economic growth” (World Commission on Environment and Development 1987).

While sustainability has no single agreed-upon definition, Carlo Castro has argued that it is “...still largely defined within the mainstream paradigm of development, which gives primacy to the market in allocating resources and theoretically takes account of the environment only as a subsidiary concern when pursuing its main object of promoting economic growth” (2004:220). The term quickly attracted industry as well, as it is predicated on the necessity of economic growth. Essentially an industrial co-optation of environmental criticism, it calls for incremental tweaks through state regulation of capitalist production (Torgerson 1994, 1995:15, 1999).

The question remains—how did we get here? How did the momentum of the 1960s and 1970s toward wide-ranging regulatory limitations on business activities evolve to the stagnation of today? One possible answer, if we view neoliberalization as a long-game class project to consolidate elite power (Harvey 2007a), is that private business simply enjoys more power today than the civil sphere—here the environmental movement—can overcome. But the ubiquity of sustainability as a frame for understanding environmental governance, alongside Margaret Somers’ insights into the importance of market fundamentalist *ideas* in eroding the civil sphere (2008), suggest that the adoption of market fundamentalist ideas by institutionalized American environmentalism has a great deal to do with the movement’s current predicament. While some argue that environmentalism fell prey to the same sort of ideological think-tank

opportunism as state actors did, especially in the 1990s, the question remains why environmentalists would accept and employ such ideas “without scrutiny” (Beder 2001:131).

One explanation, rooted in analyses of reflexive modernity (Beck 1992; Giddens 1991) and the postpolitical condition (Zizek 2011), explains the environmental movement’s ideological acceptance of sustainability as a result of hegemonic neoliberal capitalism. As there is no alternative, only environmental action that does not challenge the primacy of the market becomes thinkable. Specifically, Eric Swyngedouw argues that sustainability “evacuates the ‘political’ from debates over what to do with natures” (2007:23). This is why sustainability is so universally supported (if seldom practiced). Frederick Buell contends that the imagined limitless expansion of ecological modernization has waged an ideological war on the environmental apocalypticism of the 1960s and 1970s, creating a sense of complacency with growing environmental catastrophe (2004). For Buell, sustainable development is this complacency’s Trojan horse. Similarly, Andrew Szasz sees environmentalism’s shift away from collective action and toward individualized risk aversion through personal consumption patterns as an apolitical and insufficient response to a growing global catastrophe (2009).

For Steven Bernstein, the popularity of sustainable development was only truly made possible due to the growing popularity of free-market economic development ideas in the international policy community. Bernstein specifically presents two United Nations conferences as beginning and end points: the 1972 Conference on the Human Environment in Stockholm, where environmental concerns and development were considered opposing interests, and the 1992 Conference on Environment and

Development in Rio de Janeiro, where ecology and market growth were assumed to be completely compatible (Bernstein 2001). Sara Holiday Nelson instead sees sustainability itself as key to the rise of neoliberal environmentalism, finding its power not in its ambiguity but in the concrete, technical practices of ecological accounting that were promoted by *The Limits to Growth*. Developed as a response to the ecological and economic crises of the 1960s and 1970s, assigning economic value to nature provided a means through which to manage it (Nelson 2015).

Commentators and professionals in the movement that have critiqued neoliberal environmentalism have drawn on multiple strands of thought, including the material power of business interests in the neoliberal era, the ideological power of market fundamentalism during that era, and the professionalization of the environmental movement itself. Christine MacDonald, a journalist and former Conservation International employee, makes an argument not about ideological change but a complicity between environmental non-profits and big business stemming from environmentalism's elitist roots (2008). Somewhat similarly, journalist Naomi Klein argues that in the 1980s a combination of the movement's professionalization and the Reagan administration's market fundamentalist ascendance led to an adoption of the "discourse of power" (2015:205) for most groups seeking to avoid marginalization and continue influencing national policy. While Klein and MacDonald single out many groups in their accounts, the NRDC is the most frequently named out of the three organizational sites of discourse examined here.

How Has Neoliberalism Impacted Mainstream American Environmentalist

Ideology?

It is well-established that environmental governance (both in the United States and internationally) has become increasingly neoliberal in character since the 1970s and 1980s (Bernstein 2001; Castree 2011; Driesen 2010), with market fundamentalism informing state and corporate logic and practice. What is less established, however, is to what extent American environmentalism has “bought-in,” so to speak, to the embrace of free-market environmental solutions. Some of the movement’s critics, coming from an ecological modernization perspective, have found fault with its continued fight for limits to economic activity rather than embracing a need for economic growth and investment in alternative energies (McKibben 2008; Shellenberger and Nordhaus 2004, 2007). McCarthy and Prudham, while conceding that some environmentalists have begun to incorporate neoliberal ideals, argue that environmentalism offers the most promising resistance to neoliberal governance (2004). Still others claim that the mainstream movement has largely adopted market fundamentalist logic (Bernstein 2001; Klein 2015; Steinberg 2010).

Using the dataset described in Chapter 2, I explore some unanswered questions about neoliberal ideology and American mainstream environmentalism below.

Has market fundamentalist logic in mainstream environmentalist thought actually increased over time?

One explanation of increasing neoliberal environmental governmentality understands the movement’s evolution as practical or organizational and not ideological, pointing to the

professionalization of the mainstream movement in the 1980s and 1990s and the adoption of a more corporate model to adapt to changing political and economic conditions (Bosso 2005; Gottlieb 2005). As the state becomes oriented more to corporate power, so does civil society, out of functional necessity. On the other hand, many others argue that environmentalism has adopted not only neoliberalism’s practical policy and economic approaches but its market fundamentalist ideology as well (Bernstein 2001; Klein 2015; Steinberg 2010).

Market Doubt	Both Doubt and Faith	Market Faith
4216 (56.0%)	604 (8.0%)	2702 (35.9%)
4820 (64.1%)		3306 (44.0%)

Table 30: Proportion of all passages expressing faith and doubt in the market, 1960-2014

In the 7,522 paragraphs analyzed, the overall breakdown of faith and doubt expressed in the market from 1960 to 2014 can be seen in **Table 2** above. While doubt in the market dominates faith in the dataset overall, these trends of course look different over time. A simple binary logistic regression shows that with each passing year, the likelihood of a paragraph expressing faith in the free market increases by 1.011 times ($p=0.000$) and the likelihood of expressing doubt in the market decreases by 0.990 times ($p=0.000$) (See **Table 3** below). Overall, faith in the free market *has* increased between 1960 and 2014, and this trend is small but statistically significant. To explore whether this small increase in faith might be due to changing economic conditions rather than time alone, another binary logistic regression was run with year, annual change in GDP, unemployment rate, and the presence of a recession according to the National Bureau of Economic Research. The effect of time on overall faith and doubt maintained its significance and did not change substantially.

	Model 1	Model 2
Overall Market Faith	1.011***	1.013***
Overall Market Doubt	0.990***	0.989***

Table 31: Binary logistic regression for effect (exp(B)) of year on likelihood overall market faith and doubt. Model 1 shows year alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession). *=significant at the 0.05 level, **=0.01, *=0.001.**

The effect of time (year) was then tested for each decade included in the dataset, first alone, then controlling for economic climate (see **Table 4** below).

	Model 1	Model 2
1960s	1.010	1.103
1970s	1.011	1.031
1980s	0.993	1.024
1990s	1.063***	1.015
2000s	1.147***	1.145***
2010s	0.895*	0.044***

Table 32: Binary logistic regression for effect (exp(B)) of year on likelihood overall market faith during each decade. Model 1 shows year alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession). *=significant at the 0.05 level, **=0.01, *=0.001.**

Faith increased slightly during the 1960s and 1970s, but this change was not statistically significant—nor was the slight decrease in faith over the 1980s. The 1990s and 2000s, however, saw statistically significant increases in faith over time, especially the 2000s. The 2010s (only up until 2014) saw a statistically significant decline in faith over time, the effect of which became quite large when controlling for economic climate.

	Model 1	Model 2
Established Prices	1.013***	1.012***
Established Property Rights	0.990	1.004
Fewer Discriminatory Subsidies	0.976***	0.977***
Forces of Supply and Demand	1.019**	1.025**
Rational, Self-Interested Actors	1.051***	1.053***
Access to Perfect Information	1.010	1.010
Free Market (General)	0.986**	0.989*

Table 33: Binary logistic regression for effect (exp(B)) of year on likelihood of individual indicators of market faith. Model 1 shows year alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession). *=significant at the 0.05 level, **=0.01, *=0.001.**

While we can see that there is an increase in overall market faith over the study period, it is helpful to examine changes in individual market faith indicators over time.

Table 5 above shows the increase or decrease in faith over time, showing the effect for

year only in Model 1 and for year controlled for economic climate in Model 2. Two indicators actually show a small decrease over time—faith in fewer discriminatory subsidies and faith in the free market generally both decline over time in both models. Faith in established property rights and access to perfect information show no statistically significant change over time. The overall increase in faith appears to be driven by three factors that show an increase over time in both models—established prices; forces of supply and demand; and rational, self-interested actors, which has the largest increase by 1.051 to 1.053 times per year.

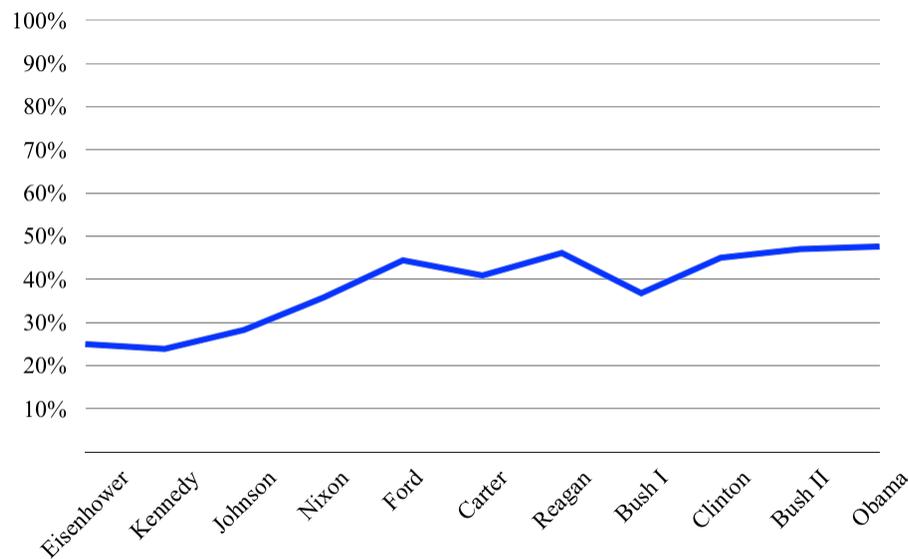


Figure 9: Proportion of passages expressing market faith by presidential administration.

As this project is interested in changes in environmentalists’ economic ideology as it relates to the types of national policy that are advocated, a useful way to periodize this dataset is by presidential administration. A graphic representation of the prevalence of market faith can be found in **Figure 3**. From this graph, faith seems to rise from Eisenhower on, peak with the Ford and Reagan administrations, and dip during the first Bush administration before increasing through the Clinton, Bush II, and Obama

	Model 1	Model 2	Model 3	Model 4
Eisenhower	0.425	0.608	0.413	0.415
Kennedy	0.339**	0.550	0.435*	0.401**
Johnson	0.498**	0.660	0.589*	0.551*
Nixon	0.694***	0.866	0.698**	0.712**
Ford	1.016	1.273	0.951	0.979
Carter	0.877	1.047	0.867	0.788*
Reagan	1.107	1.296***	1.233**	1.385***
Bush I	0.719***	0.747***	0.671***	0.680***
Clinton	1.057	1.023	1.221**	1.223*
Bush II	1.169**	1.021	1.125	1.332***
Obama	1.183*	0.936	1.151	1.091

Table 34: Binary logistic regression for effect (exp(B)) of presidential administration on likelihood of market faith. Model 1 shows presidential administration alone, Model 2 controls for year, Model 3 for economic climate (GDP growth, unemployment rate, and presence of a recession), Model 4 controls for economic climate and presidential party. *=significant at the 0.05 level, **=0.01, ***=0.001.

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Eisenhower	0.000	0.000	0.959	0.000	0.000	0.000	2.924
Kennedy	0.694	0.000	0.467	0.747	0.432	0.825	0.000
Johnson	0.615	0.000	1.007	0.000	0.210*	1.257	0.222
Nixon	0.987	1.250	1.354*	0.647	0.198***	1.347	0.253**
Ford	0.455**	0.000	2.278***	1.016	0.452*	0.152	1.593
Carter	0.627**	1.979*	1.527**	0.717	0.456**	0.428	1.730**
Reagan	0.878	1.405	1.876***	0.629*	0.549***	0.518*	2.074***
Bush I	0.998	1.202	0.383***	0.889	0.742*	2.113***	0.490**
Clinton	1.101	0.610	1.062	1.107	0.832	0.911	1.299*
Bush II	0.995	1.159	0.738**	1.571**	1.836***	1.267	0.834
Obama	1.447***	0.589	0.505***	1.054	2.271***	0.916	0.410***

Table 35: Binary logistic regression for effect (exp(B)) of presidential administration on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, ***=0.001

eras. Binary logistic regression of each administration (see Table 6 above) found that passages published in the Kennedy, Johnson, and Nixon eras were all statistically significantly less likely to express market faith, whether regressed alone, controlled for economic climate, or economic climate and political party of the administration (though not when controlling for year). In the Bush I era, passages were significantly less likely to

express faith for every model. While there is indeed an overall increase in market faith over the study period, it is far from a constant one. There was a significant increase in market faith during the Reagan era (Models 2, 3, and 4) and Clinton era (Models 3 and 4). The Bush II era saw an increase in faith when examined alone and when controlled for both economic climate and party, and the Obama administration only considered alone. Overall, market faith increased slightly during the Reagan administration, fell during the Bush I era, and rose from the Clinton administration on.

Is the increase in market fundamentalist logic equal across different groups?

The landscape of the mainstream environmental movement has been organized in a number of ways. Inside Climate News, for example, organizes the ten largest organizations from politically liberal to conservative (with Greenpeace the farthest left and the National Wildlife Federation as the farthest right, FOE leans liberal, Sierra Club moderate, and NRDC conservative) (2015). It also considers the NRDC to engage primarily in political advocacy, FOE to operate as a grassroots organization, and the Sierra Club as both. In his taxonomy of environmentalist discourses mentioned above, Brulle categorizes the Sierra Club as a preservationist organization (though he often mentions it in the history of reform environmentalism) and FOE and the NRDC as reform environmentalist organizations (Brulle 2000a). Preservationism seeks the protection of nature as an organism of inherent value outside of rational economic valuation, while reform environmentalism champions the rational use of natural sciences to properly guide human-nature relationships.

From these typologies, one might expect significant differences in the use of pro-market logic (expressing market faith), with a left-leaning organization expressing less faith, to a right-leaning organization expressing more. We might also expect a preservationist organization which works to keep the environment “outside” and protected from economic activity to express less market faith than reformist ones. Of course, public support of various policies tells a somewhat more complicated story. FOE has been a longtime champion (and frequent publisher of) Amory Lovins, an economist who argues that energy markets must be subjected to free market competition to allow more efficient options to rise to the top. The NRDC publicly supported NAFTA, while the Sierra Club and FOE opposed it. FOE alone opposed major climate legislation establishing national cap-and-trade markets.

	Faith	No Faith	Total
Sierra Club	1092 (42.1%)	1499 (57.9%)	2591 (100%)
Friends of the Earth	1021 (44.4%)	1277 (55.6%)	2298 (100%)
Natural Resources Defense Council	1194 (45.3%)	1439 (54.7%)	2633 (100%)

Table 36: Chi-square test of faith by organization. $\chi^2=5.725$, $p=0.057$.

Over the study period as a whole, there are only small differences in overall market faith between the three publishing organizations which only approach statistical significance ($p=0.057$) (see **Table 8** above). The NRDC expresses the most faith (45.3 percent of passages), followed by FOE (44.4 percent) and the Sierra Club (42.1 percent). Simple binary logistic regressions, this time run for each organization separately, show a statistically significant increase over time in the likelihood of market faith for the Sierra Club (1.017, $p=0.000$) and FOE (1.013, $p=0.000$), but shows no significant change for the NRDC. When periodized by presidential administration, each publishing organization shows a slightly different pattern for market faith (see **Figure 4** below). Sierra Club

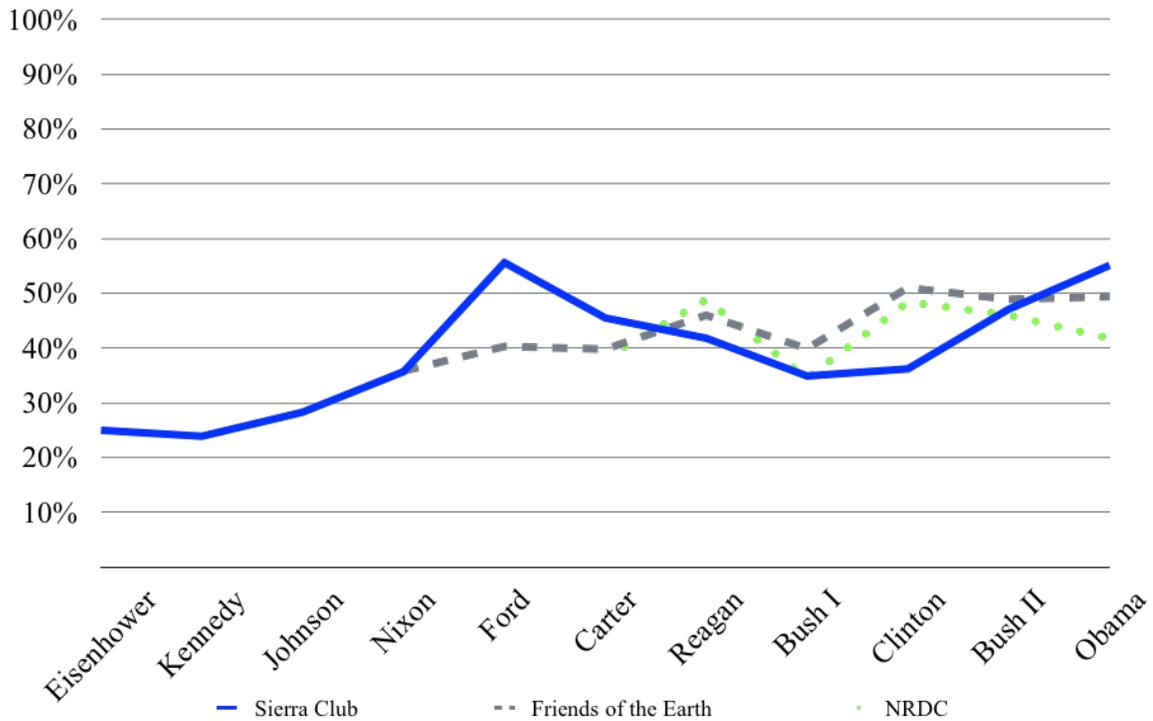


Figure 10: Market Faith by Organization over Time (by Presidential Administration)

publications (the only of the three organizations in existence until the Nixon administration) shows a small increase in faith from Kennedy to Nixon, a peak during the Ford era, then a decline until the first Bush administration, after which faith increases throughout the end of the study period. FOE publications show a relatively steady increase in market faith between Nixon and Obama, with a slight dip in faith during the Bush I era and a small decline after the Clinton administration.

NRDC publications show no overall increase or decrease in faith between the Carter and Obama administrations, but faith was higher during the Reagan and Clinton administrations and lower during the Carter, Bush I, and Obama eras. For the Sierra Club, passages published during the Kennedy (models 1 and 3) and Johnson (model 1) administrations were statistically significantly less likely to express market faith (see **Table 9** below). During the Nixon administration, passages published by both Sierra

	Sierra Club			Friends of the Earth			Natural Resources Defense Council					
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3			
Eisenhower	0.338	0.449	0.453									
Kennedy	0.426*	0.512	0.469*									
Johnson	0.530**	0.872	0.818									
Nixon	0.743*	0.802	0.823							0.671**	0.802	0.638**
Ford	1.740*	1.546	1.627							0.834	0.843	0.869
Carter	1.155	1.028	0.958	0.806	0.831	0.655**	0.740	0.694	0.623			
Reagan	0.984	0.865	0.911	1.087	1.631***	1.912***	1.173	1.045	1.177			
Bush I	0.713*	0.623**	0.631**	0.807	0.729**	0.751*	0.613**	0.567***	0.574**			
Clinton	0.727**	0.937	0.813	1.366**	1.363*	1.333	1.204*	1.349**	1.620**			
Bush II	1.311**	1.259*	1.586***	1.229	1.013	1.131	1.034	1.095	1.390*			
Obama	1.832***	1.747***	1.834***	1.238	1.326	1.236	0.873	0.791	0.692*			

Table 37: Binary logistic regression for effect (exp(B)) of presidential administration on likelihood of market faith, separated by publishing organization. Model 1 shows presidential administration alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession), Model 3 controls for both economic climate and presidential party. *=significant at the 0.05 level, **=0.01, ***=0.001

Club (model 1) and FOE (models 1 and 3) were less likely to express faith. Sierra Club passages expressed more faith during the Ford era (model 1), and FOE ones expressed less faith during the Carter era (model 3). During the Reagan years, NRDC and Sierra Club passages showed no change in faith and FOE passages expressed more, faith being from 1.6 (model 2) to 1.9 (model 3) times more likely during that era. Passages from all organizations showed a decrease in faith in at least two models during the Bush I administration. The Clinton era saw an increase in faith for passages from FOE (models 1 and 2) and NRDC (all models), but a decrease in faith for the Sierra Club (model 1). The Bush II era increased faith for the Sierra Club (all models) and the NRDC (model 3). While the Obama years showed almost twice the likelihood of market faith for Sierra Club passages across all models, for the NRDC it meant less faith (model 3).

What factors are associated with more or less faith in the market?

As discussed in Chapter 1, most accounts of neoliberalism emphasize the importance of economic crisis for neoliberal policies to gain favor, and it is reasonable to assume that market fundamentalist ideas would become more popular during times of crisis as well. The emphasis of ecological modernization orientations on the potential for market-driven smart technology development to solve environmental problems also suggests that a discussion of concepts like science and technology might also increase faith. Relatedly, following accounts such as Andrew Szasz's (2009) of the role of consumption in contemporary environmental practice, we might expect such individualization of risk to also accompany an increase in market faith.

In **Table 10** below, we see that economic climate—specifically GDP growth—does decrease the likelihood of market faith by 0.947 times when controlling for other economic and political factors. The presidential party being Republican decreases the likelihood of market faith, but this difference is not statistically significant. When time (year) is added to the model, GDP growth loses its significance, but the effect of a recession year becomes significant. None of the economic and political climate factors reduce the effect of year. While unemployment showed no effect on market faith overall, a higher rate of unemployment did come with a small increase in faith in fewer taxes and subsidies and the market in general, while decreasing faith in supply and demand and perfect information (See **Table 11** below). The presence of a recession increased the likelihood of faith in property rights, fewer taxes and subsidies, perfect information, and the market in general, whereas a higher GDP reduced faith in rational actors, perfect information, and the market in general. Faith in established prices and rational actors was more likely during democratic presidential administrations, and faith in property rights was more likely during republican ones.

To explore the relationship between market faith and other economic factors, I also examined the effect of specific economic issues invoked within passages expressing faith and doubt. Reference to economic crisis showed no statistically significant change in market faith, while monopolies increased faith when controlled for economic climate. Most other economic concerns reduced the likelihood of market faith, including international development, inequality, labor concerns, international trade, and advertising. The largest reductions in faith were seen for international trade and advertising and controlling for economic climate did not significantly change effect size

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Unemployment Rate	1.023				0.992		0.994	1.021
Recession Era		1.226***		1.026	1.018		1.083	1.375***
GDP Growth			0.940***	0.944***	0.941***		0.947**	1.009
Presidential Party						0.959	0.906	0.933
Year								1.013***

Table 38: Binary logistic regression for effect (exp(B)) of economic and political climate on likelihood of market faith. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, ***=0.001

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Unemployment Rate	1.017	1.066	1.046*	0.868**	1.014	0.910*	1.101**
Recession Era	0.960	1.607*	1.272**	1.123	1.146	1.629**	1.447**
GDP Growth	0.970	0.982	1.007	0.990	0.888***	0.914**	0.939*
Presidential Party	0.861*	1.519*	1.142	1.017	0.843*	1.261	1.029

Table 39: Binary logistic regression for effect (exp(B)) of economic and political climate on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, ***=0.001

	Model 1	Model 2	Model 3	
			Year	Economic Concern
Advertising	0.399***	0.402***	1.011***	0.407***
Economic Crisis	1.545	1.440	1.011***	1.566
Inequality	0.585***	0.588***	1.011***	0.573***
International Development	0.711*	0.715*	1.011***	0.710*
International Trade	0.432***	0.440***	1.012***	0.414***
Labor Concerns	0.500***	0.508***	1.011***	0.483***
Monopolies	1.727	1.825*	1.011***	0.738

Table 40: Binary logistic regression for effect (exp(B)) of economic concern on likelihood of market faith. Model 1 shows economic concern alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession), Model 3 shows effect of year and economic concern regressed together. *=significant at the 0.05 level, **=0.01, *=0.001**

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Advertising	0.216**	0.000	0.682	0.632	0.558	1.826	0.382
Economic Crisis	1.675	0.000	1.195	2.781	0.778	0.000	1.675
Inequality	0.460**	0.330	0.985	0.316	0.725	0.349	1.128
International Development	0.526*	1.326	1.041	0.410	0.819	0.688	0.909
International Trade	0.191***	0.000	0.542**	1.084	0.212***	0.854	2.548***
Labor Concerns	0.520**	0.958	0.440**	0.924	0.830	0.328	0.652
Monopolies	0.677	1.541	1.176	0.000	0.206	2.559	13.312***

Table 41: Binary logistic regression for effect (exp(B)) of economic concern on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, *=0.001**

or significance for any economic concern, with the exception of monopolies, the effect of which changed direction when controlled for year (See **Table 12** above). Faith in established prices, in particular, was substantially less likely for passages discussing advertising, inequality, international development, international trade, and labor issues (See **Table 13** above). Reference to international trade and labor concerns reduced faith in fewer taxes and subsidies, and trade also reduced faith in rational actors. Faith in the market in general, however, increased with reference to international trade and especially with monopolies.

I then examined the effect of specific environmental concerns on the likelihood of market faith. Only two environmental problems increased the likelihood of market faith, climate change and transportation. Many others decreased the likelihood of market faith—the energy crisis, national parks, oil spills, pollution, population growth, public health, public lands, and the Trans-Alaskan pipeline. Controlling for economic climate or year showed no change in significance nor substantial change in effect size. Air quality, national security, the ozone layer, public safety, and water quality showed no statistically significant change in faith. Of all environmental concerns, only climate change reduced the effect of year by more than 10 percent (See **Table 14** below).

	Model 1	Model 2	Model 3	
			Year	Environmental Concern
Air Quality	0.751	0.762	1.011***	0.738
Climate Change	2.083***	2.008***	1.007***	1.918***
Energy Crisis	0.462*	0.471*	1.010***	0.501*
National Parks	0.464***	0.482***	1.010***	0.495***
National Security	1.586	1.570	1.011***	1.547
Oil Spills	0.445**	0.450**	1.011***	0.436**
Ozone Layer	0.917	0.951	1.011***	0.768
Pollution	0.754**	0.770**	1.011***	0.726***
Population Growth	0.423*	0.431*	1.010***	0.465*
Public Health	0.498***	0.498***	1.012***	0.463***
Public Lands	0.674*	0.695*	1.011***	0.691*
Public Safety	0.711	0.719	1.011***	0.701
Trans-Atlantic Pipeline	0.305**	0.302**	1.010***	0.369*
Transportation	2.259***	2.232***	1.011***	2.313***
Water Quality	1.000	1.017	1.011***	0.970

Table 42: Binary logistic regression for effect (exp(B)) of environmental concern on likelihood of market faith. Model 1 shows economic concern alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession), Model 3 shows effect of year and environmental concern regressed together. *=significant at the 0.05 level, **=0.01, *=0.001**

Reference to climate change increased the likelihood of overall faith, and it did so for the individual indicators of established prices, rational actors, perfect information, and the market in general (See **Table 15** below). Transportation came with increased faith in

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Air Quality	1.154	1.954	0.648	0.917	0.532	0.329	1.148
Climate Change	1.545***	1.264	0.916	0.632	2.793***	2.991***	2.134***
Energy Crisis	1.050	0.000	0.311	2.424	0.216	0.000	0.950
National Parks	0.525*	2.677*	0.736	0.237	0.347*	0.000	0.439
National Security	1.397	0.000	2.479**	2.255*	0.000	0.000	2.017
Oil Spills	1.122	0.000	0.387	1.969	0.131*	0.514	0.000
Ozone Layer	0.277	0.000	0.687	1.648	2.547*	1.822	0.997
Pollution	1.332**	0.318	0.659**	0.690	0.538**	0.703	0.475**
Population Growth	0.270	0.000	0.155	0.782	0.697	0.000	2.643*
Public Health	1.028	0.213	0.341***	0.522	0.556*	0.458	0.249**
Public Lands	1.313	2.327	1.064	0.207	0.058**	0.228	1.215
Public Safety	1.128	1.407	0.640	1.010	0.283*	0.734	0.401
Trans-Atlantic Pipeline	0.392	0.000	0.223	0.000	0.317	2.580	0.000
Transportation	2.002***	0.774	3.183***	0.269*	0.600*	0.504	0.998
Water Quality	1.269*	0.537	1.998***	0.570	0.352***	0.571	0.306***

Table 43: Binary logistic regression for effect (exp(B)) of environmental concern on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, ***=0.001

established prices and fewer taxes and subsidies, but decreased faith in supply and demand and rational actors. Other environmental concerns often accompanied a lower likelihood of faith in rational, self-interested actors.

Next, I looked at the effect of identified solutions to environmental problems on market faith. Many showed no effect on the likelihood of market faith (carbon capture and storage, carbon credits, carbon tax, the Kyoto Protocol, mitigation, and science and technology). Only reference to the Clean Air Act and the Clean Water Act reduced the likelihood of market faith. Cap-and-trade, consumption habits, energy efficiency, recycling, and sustainability all showed a relatively large increase in market faith, but the Lieberman-Warner climate legislation and shareholder activism accompanied extremely large effects on the likelihood of market faith. While controlling for economic climate did

not show a substantial effect on the significance or size of most solution effects, Lieberman-Warner’s increase of market faith was reduced by almost 20 percent in the second model, and cap-and-trade’s was reduced by almost 10 percent. Science and technology showed a decreased likelihood of market faith, but only when controlling for year. Of all environmental solutions proposed in the dataset, only consumption choices and energy efficiency reduced the effect of year by more than 10 percent (See **Table 16** below).

	Model 1	Model 2	Model 3	
			Year	Environmental Solution
Cap-and-Trade	4.180***	3.789***	1.010***	3.715***
Carbon Capture and Storage	1.062	0.995	1.011***	0.918
Carbon Credits	2.128	1.872	1.011***	1.825
Carbon Tax	0.849	0.749	1.011***	0.739
Clean Air Act	0.597*	0.597*	1.011***	0.573*
Clean Water Act	0.384**	0.391**	1.011***	0.362**
Consumption	2.619***	2.576***	1.009***	2.428***
Energy Efficiency	6.552***	6.439***	1.009***	6.129***
Kyoto Protocol	1.276	1.314	1.011***	1.182
Lieberman-Warner	16.631**	13.544*	1.010***	14.379***
Mitigation	0.778	0.786	1.011***	0.734
Recycling	4.237***	4.279***	1.010***	4.028***
Science and Technology	0.859	0.843	1.011***	0.792*
Shareholder Activism	15.018***	14.673***	1.010***	14.188***
Sustainability	2.518***	2.422***	1.010***	2.240**

Table 44: Binary logistic regression for effect (exp(B)) of proposed environmental solution on likelihood of market faith. Model 1 shows economic concern alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession), Model 3 shows effect of year and environmental solution regressed together. *=significant at the 0.05 level, **=0.01, *=0.001**

Faith in property rights only increased when passages referenced shareholder value, but they did so markedly (See **Table 17** below). Cap-and-trade, carbon credits, energy efficiency, and recycling all increased the likelihood of faith in established prices. While consumption and energy efficiency came with a decrease in faith in fewer taxes and subsidies, they increased faith in supply and demand, rational actors, and perfect

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Cap-and-Trade	2.877***	1.417	0.570	0.000	1.786	0.742	12.767***
Carbon Capture and Storage	1.267	0.000	1.493	0.000	0.000	0.000	4.560
Carbon Credits	3.432*	0.000	0.447	0.000	3.196*	2.486	0.000
Carbon Tax	1.426	0.000	1.280	0.000	0.397	0.000	2.801
Clean Air Act	0.775	0.000	0.800	1.913	0.535	0.000	0.274
Clean Water Act	0.749	0.000	0.687	0.000	0.226	0.000	0.000
Consumption	1.037	0.266	0.289***	12.107***	1.950***	7.365***	0.899
Energy Efficiency	6.112***	0.000	0.162***	2.751***	2.364***	3.062***	1.997**
Kyoto Protocol	0.379	0.000	0.216	0.000	2.691*	8.819***	2.123
Lieberman-Warner	2.284	0.000	5.061**	0.000	1.593	0.000	3.419
Mitigation	1.188	0.000	1.756	0.000	0.340	0.000	0.000
Recycling	1.856**	0.415	0.371**	3.448***	5.494***	0.440	1.293
Science and Technology	0.908	0.529	0.293***	2.698***	1.591**	1.029	0.849
Shareholder Activism	0.863	203.091***	0.000	1.878	1.450	4.444**	0.551
Sustainability	1.280	1.009	0.294*	1.492	6.432***	2.245	0.590

Table 45: Binary logistic regression for effect (exp(B)) of environmental solution on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, ***=0.001

information. Similarly, recycling and science decreased faith in fewer taxes and subsidies, but increased faith in supply and demand and rational actors.

I also examined reference to various relevant actors within dataset passages. These references were categorized as either government actors, industry actors, or other. Most commonly mentioned government actors showed no statistically significant effect on market faith, though reference to the Ford administration more than doubled the likelihood of market faith when controlled for year. The Bush II administration and the EPA each reduced the likelihood of market faith by about half for each model. The Army Corps of Engineers increased market faith over two-fold. For industrial actors, the automotive, financial, insurance, manufacturing, nuclear, ranching, renewable energy, retail, and utility industries were all associated with an increase in market faith in both models. The chemical, fossil fuel, lumber, mining, and real estate industries decreased the likelihood of faith in the market. Finally, development banks showed no statistically significant effect on market faith, while reference to indigenous people showed a large negative effect on market faith. Of the actors mentioned, only the renewable energy industry substantially reduced the effect of time (see **Table 18** below).

Faith in fewer taxes and subsidies accompanied references to the Obama, Clinton, Reagan, and Carter administrations, and especially the Ford administration (See **Table 19** below). References to the Reagan administration also increased a faith in the market generally, but substantially decreased faith in rational, self-interested actors, as did references to the Clinton administration. Faith in price increased when referencing the automotive, ranching, renewable energy, and utility industries, but decreased for many

		Model 1	Model 2	Model 3	
				Year	Actor
Government Actors	Nixon Administration	0.968	0.939	1.011***	1.179
	Ford Administration	1.975	1.880	1.011***	2.414*
	Carter Administration	1.276	1.243	1.011***	1.421
	Reagan Administration	1.041	1.062	1.011***	1.170
	Bush I Administration	0.718	0.684	1.011***	0.736
	Clinton Administration	0.924	0.981	1.011***	0.895
	Bush II Administration	0.555**	0.533***	1.012***	0.494***
	Obama Administration	1.191	1.066	1.011***	0.997
	U.S. Congress	0.885	0.885	1.011***	0.891
	Army Corps of Engineers	2.286*	2.413**	1.011***	2.460**
	Environmental Protection Agency	0.449***	0.450***	1.011***	0.440***
Industry Actors		Model 1	Model 2	Model 3	
				Year	Actor
	Agriculture and Food	1.125	1.135	1.010***	1.079
	Automotive	1.628***	1.644***	1.010***	1.530***
	Chemical	0.399***	0.394***	1.011***	0.401***
	Financial	1.852***	1.822***	1.010***	1.756***
	Fossil Fuel	0.849**	0.829**	1.011***	0.819**
	Insurance	3.066*	3.225*	1.011***	2.972*
	Lumber	0.704***	0.726***	1.010***	0.724***
	Manufacturing	1.817***	1.845***	1.010***	1.748***
	Mining	0.368***	0.361***	1.012***	0.348***
	Nuclear	1.650***	1.674***	1.012***	1.774***
	Pharmaceutical	0.810	0.800	1.011***	0.806
	Ranching	1.624*	1.659**	1.011***	1.638*
	Real Estate	0.632*	0.639*	1.011***	0.657*
	Renewable Energy	2.401***	2.329***	1.009***	2.289***
Retail	2.677***	2.563***	1.010***	2.406***	
Utility	2.101***	2.162***	1.011***	2.172***	
Waste Management	1.277	1.271	1.011***	1.223	
Other Actors		Model 1	Model 2	Model 3	
				Year	Actor
	Development Banks	0.682	0.685	1.011***	0.647
Indigenous People	0.310***	0.314***	1.011***	0.302***	

Table 46: Binary logistic regression for effect (exp(B)) of referenced relevant actor on likelihood of market faith. Model 1 shows economic concern alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession) , Model 3 shows effect of year and environmental concern regressed together. * = significant at the 0.05 level, ** = 0.01, *** = 0.001

others. References to the renewable energy industry also increased faith in fewer taxes and subsidies and rational actors, while retail accompanied a large increase in faith in supply and demand, rational actors, and perfect information.

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Government Actors							
Nixon Admin	1.469	0.000	1.272	0.782	0.221	1.779	0.000
Ford Admin	0.437	0.000	7.853***	0.000	0.000	0.000	1.575
Carter Admin	0.487	0.000	3.960***	0.000	0.529	1.005	1.136
Reagan Admin	0.935	1.604	2.333***	0.000	0.170***	0.678	2.959***
Bush I Admin	0.611	0.995	0.838	0.961	0.867	0.000	1.204
Clinton Admin	1.209	0.000	2.330***	0.266	0.075*	1.224	0.161
Bush II Admin	0.424**	0.000	1.406	0.212	0.507	0.474	0.259
Obama Admin	0.656	0.000	2.153*	0.589	1.103	0.000	0.728
U.S. Congress	0.606***	0.481	2.822***	0.270**	0.165***	0.567	0.481**
Army Corps of Engineers	0.837	0.000	8.867***	0.000	0.250	0.000	0.000
Environmental Protection Agency	1.003	0.853	0.161***	0.610	0.290**	1.398	0.243*
Industry Actors							
Agriculture and Food	0.590***	0.559	1.630***	2.523***	1.142	1.234	0.444***
Automotive	1.672***	0.205	0.463**	1.755*	2.347***	0.672	1.324
Chemical	0.385***	0.546	0.172***	0.256*	1.026	1.801*	0.651
Financial	0.715	2.916**	0.439**	0.859	4.440***	4.330***	1.378
Fossil Fuel	1.023	0.585	1.523***	0.844	0.446***	0.480**	0.749
Insurance	1.222	0.000	2.071	2.109	2.949	0.000	0.000
Lumber	0.685**	0.981	1.231	1.079	0.552**	0.630	0.519*
Manufacturing	0.983	0.956	0.224***	1.975*	4.482***	1.591	1.162
Mining	0.599*	0.953	0.883	0.108*	0.188***	0.492	0.066**
Nuclear	0.790	0.200	3.461***	0.799	0.550*	0.319	2.305***
Pharmaceutical	1.378	4.216	0.191	0.000	1.195	2.199	1.865
Ranching	1.671*	2.706	3.902***	0.000	0.173*	0.000	0.963
Real Estate	0.560*	0.995	1.352	0.712	0.557	0.256	0.284
Renewable Energy	1.506**	0.144	1.361*	1.215	2.364***	1.074	3.064
Retail	0.393*	0.000	0.087*	5.219***	7.063***	4.451***	0.827
Utility	1.959***	1.706	1.071	1.207	1.596**	0.750	2.669***
Waste Management	0.674	0.000	0.926	1.052	1.715	0.570	2.453*
Other Actors							
Development Banks	0.691	0.860	1.876*	0.000	0.000	0.451	0.502
Indigenous People	0.596	1.901	0.362*	0.000	0.250*	0.000	0.175

Table 47: Binary logistic regression for effect (exp(B)) of referenced relevant actor on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, ***=0.001

Finally, I looked at reference to specific values and market faith. American heritage, ecological value, and economic value each showed no statistically significant effect. Both aesthetic/spiritual value and recreational value, however, showed large negative effects on market faith (see **Table 20** below).

	Model 1	Model 2	Model 3	
			Year	Year
Aesthetic/Spiritual Value	0.199***	0.203***	1.010***	0.217***
American Heritage	0.424	0.443	1.011***	0.450
Ecological Value	0.728	0.743	1.011***	0.716*
Economic Value	1.263	1.265	1.011***	1.280
Recreational Value	0.260**	0.263**	1.010***	0.287**

Table 48: Binary logistic regression for effect (exp(B)) of valuation system on likelihood of market faith. Model 1 shows economic concern alone, Model 2 controls for economic climate (GDP growth, unemployment rate, and presence of a recession), Model 3 shows effect of year and environmental concern regressed together. *=significant at the 0.05 level, **=0.01, *=0.001**

	Price	Property Rights	Taxes and Subsidies	Supply and Demand	Rational Actors	Perfect Information	Market in General
Aesthetic/Spiritual Value	0.184**	3.188*	0.370*	0.000	0.308*	0.392	0.215
American Heritage	1.140	0.000	0.959	0.000	0.000	0.000	0.000
Ecological Value	1.763**	0.420	0.467*	1.040	0.603	0.675	0.368
Economic Value	2.410***	0.974	0.997	0.697	0.545	0.000	1.341
Recreational Value	0.528	0.000	0.456	0.000	0.206	0.000	0.443

Table 49: Binary logistic regression for effect (exp(B)) of valuation system on likelihood of specific market faith indicators. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, *=0.001**

While aesthetic or spiritual value decreased the likelihood of expressing market faith overall, it increased the likelihood of faith in property rights three-fold (see **Table 21** above). Reference to ecological or economic value did not show a significant effect on overall faith, but did show an increase of faith in established prices.

While regressions of individual contextual variables (economic concern, environmental concern, environmental solution, relevant actor, and values) with year did

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Year	1.011***	1.007***	1.005***	1.005**	1.006**	1.007***	1.005**	1.002
Climate Change		1.918***	1.993***	1.921***	1.826***			1.931***
Consumption			2.571***				2.677***	2.837***
Energy Efficiency				6.139***		8.865***	6.190***	9.447***
Renewable Energy Industry					2.190***	2.446***	2.278***	2.411***
Energy efficiency* Renewable Energy Industry						0.097***		0.088***

Table 50: Binary logistic regression for effect (exp(B)) of year and mention of climate change, consumption, energy efficiency, and the renewable energy industry on likelihood of market faith. Odds ratio (exp(B)) is shown for all variables included in each model. *=significant at the 0.05 level, **=0.01, *=0.001**

not significantly change the effect of year for most variables, a few variables did: climate change, consumption, energy efficiency, and the renewable energy industry. As can be seen in **Table 22** above, when these variables are controlled for, the effect of year becomes statistically insignificant. They, however, retain their statistically significant effects. The only statistically significant interaction term was found between the renewable energy industry and energy efficiency, showing that passages referencing both are less likely to express faith, but referencing one or the other dramatically increases faith, particularly for energy efficiency.

Discussion: How and Why does Market Faith Increase?

Most narratives of environmental neoliberalism focus on policy and governance practices without addressing how actual environmentalists—that is, actors within the social movement—have made sense of such governance. The few existing narratives of the rise of neoliberal environmentalism most often point to the 1980s (and sometimes 1990s) as a critical period where environmentalist orientation to the free market changed, whether due to a level of complicity with business-interested private and public actors (Klein 2015; MacDonald 2008); the rise of “sustainability” as an idea either embracing active technical management (Nelson 2015), devoid of critical, political content (Swyngedouw 2007), or rooted in international development norms (Bernstein 2001); or other apolitical embrace of ecological modernist technological development (Buell 2004) or personalized consumptive avoidance of risk (Szasz 2009). When examining the discourse from these three sites of mainstream and institutionalized environmentalist discourse, however, we find several different, and more complicated, stories.

The first is temporal. While the most basic finding of the data above—that faith in the free market did indeed increase for such environmentalists between 1960 and 2014 as many scholars have concluded—is of importance, the pattern of this increase in faith runs contrary to many of these existing narratives. First, the increase in faith over time is quite small, around a one percent increase in likelihood with each passing year. It is certainly tempered by an even more present expression of doubt in the free market throughout the dataset, which outweighs expressions of market faith (64 percent vs. 44 percent) when looking at the study period as a whole, and which presents a vigorous challenge to assumptions of neoliberalism’s ideational hegemony. Next, the critical decades for environmentalist adoption do not reflect the change in market faith that we might otherwise expect them to. The 1980s actually saw a decrease in the likelihood of market faith (through not a statistically significant one), likely due to the significant decrease in market faith of the Bush I years (1989-1993). But the Reagan era only saw an increase in faith when controlling for economic climate and/or presidential party. The 1990s did see an increase in market faith, but this is also largely in response to the almost 30 percent decrease in the likelihood of market faith during the Bush I era. When looking at individual market indicators (which I will do more closely below), this time period becomes more interesting, the biggest increase in faith happens between 2000 and 2009. This is reflected in the increase in market faith during the Bush II and Obama eras, but is likely tempered (2010-2014 show a dramatic decrease in faith) by the Great Recession. As I will argue in Chapter 5 and in this chapter below, the sizable increase in market faith between 2000 and 2009—and between 1960 and 2014 overall—is due to discourse surrounding climate change.

Accounts that center the movement’s professionalization and need (or desire) to remain influential over business and Washington power brokers would lead us to expect the NRDC in particular to express more faith in the free market, particularly during the 1980s. In fact, when examining the three discursive sites separately, a much more complicated picture arises. Publications released by the NRDC—the most conservative of the three with the most active present-day free market-embracing agenda—show no statistically significant increase in market faith over time and are only slightly more likely to express faith than the other two sites. These publications also are the only ones to show a decreased likelihood in faith during the Obama administration (when controlling for party and economic climate). Passages from the more progressive FOE publications, on the other hand, were the only to show an increase in market faith during the Reagan administration, 63 percent more likely when controlling for economic climate and 91 percent more when also controlling for political party. The more moderate site of the three, the Sierra Club, was the only site where faith decreased under the Clinton administration and increased substantially during the Obama era.

As mentioned in Chapter 2, my primary aim in this project is not to compare these three organizations, but instead to use them in an attempt to capture the ideological breadth of mainstream, institutionalized environmental activism in the United States. Any comparison is imperfect, as the nature of these newsletters and magazines allows for many voices, not only official organizational mouthpieces, and are not cleanly separable from one another. Yet, it is notable that FOE—the most grassroots, politically progressive organization included here, which explicitly lists “resisting neoliberalism” as one of its central campaigns today—is the only site of the three to put more faith in the

market during the Reagan administration to a statistically significant degree. FOE is often highlighted in Klein's book (usually alongside Greenpeace) as a lone holdout to the pressures of market fundamentalism, but here it seems to be the only one where environmentalists heed neoliberalism's call in the 1980s.

Publications by the Sierra Club, a moderate group that Klein and MacDonald critique as too cozy with corporate interests between 1980 and 2009, express by a small margin the least faith of any site, and seem to peak in market faith during the Ford and Obama administrations with valleys around the Eisenhower/Kennedy era and again during the Bush II presidency. In this way, Sierra Club-published market faith seems trend alongside periods of more acute economic crisis. This is supported by a regression of market faith on recession year, separated by organization, where for Sierra Club documents the presence of a recession increases the likelihood of faith by 50 percent ($p=0.000$). A recession has no statistically significant effect on faith for the other two organizations. Finally, the NRDC—certainly the most conservative and often accused of corporate complicity—has created publications that are only slightly more likely to express faith in the market than FOE ones, and this difference is not statistically significant. Market faith in these publications seems to fluctuate alongside FOE documents, though it is the only site to show a statistically significant drop in faith in the Obama years (when controlled for economic climate and political party).

The only typology that might predict the NRDC and FOE to be the most closely ideologically related of the three is Robert Brulle's, who considers both to be reformist organizations which embrace scientific, rational management of resources. Newsletters published by the Sierra Club—for Brulle a preservationist organization that often dabbles

in reformism—appear the most susceptible to neoliberalism’s allure during times of crisis but do not show the jump in faith during the Reagan administration that FOE publications, and to a lesser (and not statistically significant) extent, NRDC ones do. These findings challenge the argument that a greater degree of professionalization and connection to power brokers caused an increased adoption of neoliberal ideology, at least during the Reagan administration. Overall, organizational form (grassroots vs. political advocacy) and political orientation (progressive vs. conservative) seem to have none of the predicted effects on neoliberal ideology. The values and concerns often associated with reformist environmentalism, however—ecology, pollution, public health, water and air quality, science and technology—all showed a decreased likelihood in market faith when they demonstrated a relationship at all. Environmental concerns and attitudes associated with preservationism—national parks, public lands, aesthetic/spiritual value, and recreational value—also show no or a negative relationship with market faith. So, if reformist and preservationist organizations encounter market fundamentalism differently, it doesn’t appear to be their reformist/preservationist orientations that lead them in that direction.

The idea of sustainability occupies many posited explanations for neoliberalism’s increasing power within environmentalist thought. If the movement’s shift toward neoliberal ideology was ushered in by a postpolitical idea of sustainability (Swyngedouw 2007), we would expect to see this idea associated with market faith (or even explain a portion of any increase in faith over time). Another use of the term another points to sustainability’s emphasis on scientific and rational management, similar to reform environmentalism’s orientation, as offering an ideal solution to ecological and economic

crisis (Nelson 2015). This explanation points to rising faith in established prices, or science and technology, ecological value, and economic value as possible causes of increased faith. Finally, the norms of international development privileging sustainability's priority of economic growth (Bernstein 2001) would lead us to expect reference to those ideas to positively predict market faith as well. While sustainability itself does accompany an increased likelihood of market faith—especially in rational, self-interested actors—it fails to account for much of the increase in faith we see over time. Reference to international development is negatively associated with market faith. Science and technology also has a negative effect on market faith when controlled for time, though it has a positive effect on faith in rational actors. Economic value has no effect on overall faith, and ecological value only has a negative effect when controlled for year, but both are positively associated with faith in established prices.

Sustainability, then, is associated with market faith, but provides a poor explanation for its increase over time. Interestingly, variables associated with two other “apolitical” environmental ideas of ecological modernization (Buell 2004) and consumption (Szasz 2009) *do* seem to help explain the rise in market faith. Energy efficiency, a more specific variable but perhaps a proxy for science and technology, does have a highly increased likelihood of market faith (and for every individual indicator except property rights and fewer taxes and subsidies), as does consumption (particularly faith in supply and demand, rational actors, and perfect information). These two variables do reduce the effect of time as well, suggesting that they help account for the overall increase in market faith over the study period. Even though Buell and Szasz do not use these ideas to make explicit arguments about neoliberal environmentalism, but rather to

explain a lack of political action against climate change in favor of ineffective market-reliant solutions, they offer the most plausible suggestions in the literature reviewed above.

Energy efficiency and consumption are also important variables, in that they are two of the only four that show a sizeable decrease in the effect of time on market faith. Alongside references to the renewable energy industry and especially to climate change, these factors seem to offer an explanation for the change in time seen in the dataset. Controlling for climate change alone reduces the effect of time by almost one-third, and controlling for all four variables causes time to have no effect at all.

When focusing on contextual variables' effect on market faith, it is important to emphasize that most values, economic concerns, and environmental concerns were associated with a decrease in faith. The only exceptions to this were the increases in faith that accompanied references to monopolies (only controlling for economic climate), climate change, and transportation. Proposed environmental solutions, however, were far more likely to be associated with increased faith. Cap-and-trade, consumption, energy efficiency, the proposed Lieberman-Warner bill, recycling, shareholder activism, and sustainability all came with an increased likelihood in faith, often substantially so.

Another important story, then, is that environmentalists throughout the dataset blame the free market for environmental problems, but they also look to it for solutions. While sustainability is one commonly invoked, many other proposed solutions employ assumptions of market faith, most commonly in rational, self-interested actors (carbon credits, consumption, energy efficiency, the Kyoto protocol, recycling, science and technology, and especially sustainability). These solutions would also often display faith

in established prices (cap-and-trade, carbon credits, energy efficiency, recycling), forces of supply and demand (consumption, energy efficiency, recycling, and science and technology), and perfect information (consumption, energy efficiency, Kyoto, and shareholder activism).

When specific actors are referenced, faith in the free market is mixed. No reference to any presidential administration was associated with an increase in faith overall, though faith in fewer taxes and subsidies came alongside faith in the Ford, Carter, Reagan, Clinton, and Obama administrations, and references to the Reagan presidency accompanied a three-fold increase in the likelihood of faith in the market in general. Interestingly, reference to many industries came with an increase in market faith, sometimes substantially so. Most often, they would also be referenced alongside faith in rational actors (the automotive, financial, manufacturing, renewable energy, retail, and utility industries). Faith in supply and demand was also associated with certain industries (agriculture and food, automotive, manufacturing, and retail), as was faith in established price (automotive, ranching, renewable energy, and utility industries). While many industries elicited less trust in the free market—particularly the chemical, fossil fuel, lumber, mining, and real estate industries—far more were associated with faith. One possible explanation for this is might be that some of these industries are fundamentally rooted in production practices that cause environmental harm (fossil fuel, lumber, mining industries, for example), while others offer the possibility of efficient technological development and better consumer choice (automotive, manufacturing, retail, and renewable energy).

Still another important story these data tell is that not all market fundamentalist ideas are created equal. Two indicators declined in likelihood between 1960 and 2014: faith in fewer discriminatory taxes and subsidies, and faith in the market in general. As will be demonstrated in the following two chapters, faith in fewer subsidies can be a tricky indicator, as environmentalist voices often oppose certain subsidies (for coal or oil, for example) while supporting others (for renewable energy sources). But a small decrease in faith in the market generally over the study period is telling. Even while environmentalists' overall faith in free markets increased, when explicitly referring to free markets generally their attitudes became less sanguine over time. But faith in specific elements of the market grew—established prices, the forces of supply and demand, and especially rational, self-interested actors. This would seem to support narratives of neoliberalism articulated by scholars such as Bruce Amable, Wendy Brown, and Wendy Larner (discussed in Chapter 1), where market fundamentalist values supplant other political and moral rationalities. But it also betrays an important tension, where an acceptance of some of market fundamentalism's essential elements grows alongside a rejection of the whole.

While rational, self-interested actors was the market faith indicator that increased the most over time, it is interesting that this type of faith was less likely between the Johnson and Bush I administrations, between 1963 and 1993. It is most likely during the Bush II and Obama administrations, 2001-2014. Faith in established prices was less likely during the Ford and Carter administrations (1974-1981), and more likely during the Obama administration (2008-2014), whereas faith in supply and demand was only more likely during the Bush II era. As suggested by its overall decline in likelihood over time,

faith in fewer taxes and subsidies was more likely between 1969 and 1989, between the Nixon and Reagan administrations, and less likely during the Bush II and Obama years. Expressed faith in the market in general was most likely during the Carter, Reagan, and Clinton administrations.

In narratives of neoliberalism's rise in the United States, both generally and in environmental thought and governance, the 1980s are often presented as a critical period. For governance generally, neoliberal ideas were incubated in think tanks since the 1930s, inserted themselves into policy as early as the 1970s while taking advantage of economic crises, and ascended to dominance with the election of Ronald Reagan in 1980. Even though faith in the market overall did not spike in the 1980s for the environmental voices examined in this project, this time period does exhibit a different *type* of market faith than that which we see after 2000. In the 1970s and 1980s, market faith is expressed as an affinity for fewer taxes and subsidies and the free market in general, alongside doubt in rational actors and established prices. Post-2000, faith is directed at rational, self-interested actors, forces of supply and demand, and established prices, while faith in fewer taxes and subsidies and the market in general is far less likely. Faith in the 1980s centered on allowing the market to do its work, unsullied by government help or hindrance, and post-2000 it revolved around sending a clear price signal for selfish actors to respond to. This is an important distinction, and one I will elaborate further in Chapter 5.

What, then, of the narrative of neoliberalism's growing ideological power and ultimate hegemony? For the mainstream environmental movement, rumors of the death of its anti-

market orientation seem to have been greatly exaggerated. Over the entire study period, of passages expressing assumptions about the free market, faith in its elements was expressed only 44 percent of the time, certainly eclipsed by the prevalence of doubt (64 percent). Even if in the 1980s market fundamentalism became the language of power for environmental governance, as presented by Klein (2015), environmentalists would not become particularly conversational until the Bush II and Obama administrations.

Still, one of the most important findings of the analysis above is that there are different and distinct ideas employed in market fundamentalism, and the presence of one does not ensure the presence of the others. While the period from 1970 to 1990 does not show the spike in market fundamentalism that is suggested by the literature, it does show a specific pattern of faith and doubt. The Ford, Carter, and Reagan periods lacked faith in established prices or the profit motive, but they did have faith in the market generally, established property rights, and fewer taxes and subsidies—ideas which would be far less likely by the 2000s and 2010s, when established prices and the profit motive would better inform market fundamentalist attitudes among environmentalists.

In the following chapters, I will further explore these two time periods of interest, focusing on mainstream environmentalists' explicit discussions of their defining nemeses for each era: the Reagan administration itself in the 1980s, and the threat of climate change, references to which grow considerably after the 1990s.

Chapter Four:

“The Magic of the Marketplace”: Environmental Interpretations of the Market in the Reagan Era

The election of Ronald Reagan presented American environmental activism with a truly hostile Presidential administration for the first time. The movement responded in a variety of ways, including the institutionalization and professionalization of many organizations as well as a turn towards influencing business directly in the face of a government antagonistic to traditional regulation. But it also was faced for the first time with an explicit embrace of the free market, with which it was forced to contend.

In this chapter, I examine passages in the dataset that refer explicitly to the Reagan administration in the era of his candidacy and two Presidential terms. Environmentalists discuss the environmental benefits and dangers of the free market utilizing a variety of dual logics, particularly surrounding the administration’s attempts to sell or rent public lands to private fossil fuel or mining interests. While these passages primarily express doubt in the market—especially regarding benefits of self-interested actors and established property rights—they also found faith in fewer discriminatory taxes and subsidies, established prices, and the market in general. Preservationist tendencies seem to root the voices below in market doubt, but as environmentalists struggle with challenges to environmental management practices, they seem to find comfort in the promise of some market mechanisms, including explicit faith in the free market itself.

Environmental Regulatory Politics in the United States

Following the publication of Carson's *Silent Spring*, regulations regarding air and water quality became enormously popular among the American electorate, and the federal government has necessarily been in conversation with these interests ever since.

Supporters of environmental policy are commonly thought to align with the Democratic Party or progressive politics, but this association is a relatively recent one, dating back to the presidency of Ronald Reagan. Even following the New Deal-era Republican opposition to an expanding government, environmental regulation found favor with such conservatives as Senator and Presidential hopeful Barry Goldwater as well as Richard Nixon, who championed some of the most significant national-level environmental legislation and executive action of the 20th century.

Conservationism had drifted in and out of national politics since Theodore Roosevelt's presidency, largely absent during the 1910s and 1920s but central to Franklin Roosevelt's New Deal programming. Most notable was FDR's creation of the Tennessee Valley Authority and the Civilian Conservation Corps, making work for unemployed Americans while reforestation and building infrastructure on public lands. Economic recovery in the midst of World War II was followed by a mid-century period of expansion of population, national economy, and the petrochemical industry. In the interest of supporting this growth, the Truman, Eisenhower, and Kennedy administrations paid little attention to environmental concerns until Rachel Carson's *Silent Spring* effectively launched the modern environmental movement in 1962 (Graham 2015).

Despite public doubt in Johnson's intentions and ability to follow through on the progressive promises of the Kennedy administration, the efforts of Johnson's Great

Society resulted in some of the biggest policy achievements regarding social inequality and environmental conservation since FDR. Johnson's environmental accomplishments have received little historical attention, perhaps occluded by his decision to intervene in Vietnam (Graham 2015). Still, Johnson publicly adopted much of the pollution and survival language of the new public health-concerned model of environmental activism, following through with the successful passage (enabled by a heavily democratic congress elected in the wake of Kennedy's assassination) of an impressive environmental agenda (Daynes and Sussman 2010). This included the Wilderness Act, the Solid Waste Disposal Act, the Water Quality Act, revision of the Clean Air Act, and the expansion of funding for conservation programming.

Johnson's achievements were made possible by many legislative allies, but also were informed by a swell in social activism, most notably in the civil rights movement but also increasingly widespread concern for environmental issues. The political currency of environmentalism carried over into Nixon's administration as well—even though the environment had played almost no role in the 1968 presidential election and Nixon had little interest in environmental issues personally, his words and presidential actions were significantly informed by the growing voting and lobbying power of the new environmentalism (Graham 2015). By the 1972 elections, both Nixon and congressional Republicans ran in part on a platform of Nixon's environmental achievements (Daynes and Sussman 2010), which had been spurred on by a number of high-profile incidents in the late 1960s; including the fire on the Cuyahoga river, the Santa Barbara oil spill, and the placement of the Bald Eagle on the Endangered Species list due to the use of DDT (Graham 2015). These achievements included the creation of the Environmental

Protection Agency in 1970 and passage numerous landmark pieces of environmental legislation, including the National Environmental Policy Act, Clean Air Act, and the Safe Water Drinking Act. In general, environmental legislation passed during Nixon's tenure created a vast infrastructure for government oversight of private business and other development activities to avoid a basic threshold of environmental harm.

Gerald Ford, facing growing inflation and an energy crisis, publicly weighed the importance of environmental considerations *vis a vis* economic growth. While he supported some legislative efforts to protect wilderness areas (a small amount compared to previous administrations) and a number of other environmental regulations, he also pushed for increased national coal and oil development and the relaxation of certain regulatory rules desired by business. Many attribute this neglect of environmental concerns to Jimmy Carter's election in 1976 (Daynes and Sussman 2010; Graham 2015). Carter's presidency is considered by most to be problematic due in part to an inherited stagflation crisis and a poor appreciation for Washington conventions. But while in office, his national policy priorities often centered on the environment. His proposed energy policy emphasized conservation and alternative energies, he declared a National Emergency at the toxic Love Canal site, and he challenged dam construction projects, angering southern and western states (Graham 2015). This anger—and a growing national anger at the state of the economy—would shape the next election.

Environmentalism in the Reagan Era

As the environmental movement grew throughout the 1960s and 1970s, both Democratic and Republican administrations had proven receptive to environmental concerns. Yet,

even as environmental management became the basis for environmental politics in the United States, criticism of environmental policy still poured from economic interests in the west, most famously in the form of the Sagebrush Rebellion (Brulle 2000a), a coalition of politicians from the American west. Publicly calling for states' rights over then-federal land, its ultimate goal was to privatize land once in states' hands (Cawley 1993). This countermovement would lose steam in 1983, but was quickly succeeded by the Wise Use movement, which positioned itself as an environmental movement, borrowing a term used by Gifford Pinchot to describe a model for resource conservation in the early 20th century. Wise Use argued outright for private property rights, holding that property owners had a greater incentive than the state to maintain natural resources for interests of productivity (Harvey 1997:383–84).

The rise of the Sagebrush rebellion and Wise Use movement spoke to a larger, growing distrust in the federal government that would inform the 1980 and 1984 presidential elections. The balance of payments and stagflation crises of the 1970s and failures of the Nixon, Ford, and Carter administrations in solving the problem ushered in a mainstream criticism of the Keynesian model of economics that had prevailed in the U.S. and western Europe since World War II. This erosion of trust in central planning was made manifest in the enormously popular presidency of Ronald Reagan, who called for a “supply side” national economy where tax rates would be cut (this happened), government spending would be restrained (this did not), and businesses would be subject to less regulation, allowing them to function freely and fuel the economy. Reagan's policies were not popular with all American interest groups, however.

When the Reagan presidency became a possibility and later a certainty, environmentalists grew especially wary of a candidate who paid little lip service to environmental interests, had declared himself an honorary Sagebrush rebel, and expressed a desire to set industry “free” from regulatory burdens. These growing concerns swelled with the appointment of James Watt as Secretary of the Interior. A long-time oppositional figure to environmental interests, Watt also espoused a strong free-market rhetoric and, at the time of his appointment, worked closely with western business interests as the President of the Mountain States Legal Foundation (MSLF), a Wise Use nonprofit. In his capacity with the MSLF, Watt had come a long way in alienating environmental as well as American Native, disability, and women’s interests while building a Sagebrush rebel following. During his brief tenure at Interior, Watt was an extremely controversial figure, pursuing the sale and lease of federal lands to private ranching, forestry, and mining interests. He would resign in late 1983, shortly after a speech to the U.S. Chamber of Commerce where he openly mocked affirmative action policies.

Environmentalists and others similarly reviled Reagan’s choice for Environmental Protection Agency Administrator. Anne Gorsuch (mother to Supreme Court Justice Neil Gorsuch) was the first female EPA head but enjoyed an even shorter tenure than Watt’s. A former Colorado state legislator, Gorsuch was working as an attorney at the time of her appointment. As EPA Administrator, Gorsuch worked to drastically reduce the EPA’s budget (by almost one-quarter) and its regulatory role, clashing, often quite publicly, with many career EPA staff. Gorsuch refused to release documents to Congress during an

investigation of EPA mismanagement of the Superfund program in 1982 and was cited for contempt, leading her to step down from her post in March of 1983.

Anger and opposition to the Reagan administration was at its most vehement during the Watt-Gorsuch years. Gorsuch was replaced by William Ruckelshaus, the original EPA Administrator under Nixon, though while Watt's successors were less notorious (likely due to more subdued public images), they were largely ideologically similar to Watt. While Reagan's anti-environmental stance endured throughout his presidency, a Democratic Congress elected in 1984 slowed his antiregulatory agenda. Still the American environmental movement, adjusting to these new challenges and a recently institutionalized environmental protection apparatus, had to reorient to a new political climate. In 1981, nine heads of major environmental organizations (The Sierra Club, and Natural Resources Defense Council, and Friends of the Earth included) met at a gathering modeled after those of corporate CEOs to discuss how to deal with the newly sworn-in Reagan administration. An attempt to "rationalize" the field by coordinating efforts and avoiding redundancy or contradiction in political activities, "(t)he groups needed to see themselves and their roles in new ways: as defenders of a system and the heads of multimillion-dollar operations who by coordinating their common interests and goals could forge a mainstream identity" (Gottlieb 2005:171).

While this period saw the successful institutionalization of the mainstream movement alongside a significant increase in membership and funding, national-level environmental initiatives saw little legislative success. Many attribute this to the formidable opposition of the Reagan administration, but others have looked at changes in the movement itself to better understand its stagnation. In the 1980s, funding for many of

these organizations shifted from grassroots-sourced to mass-mailing and a reliance on foundations. Robert Brulle contends that mass-mailing served to transform group membership into a shallow and tentative activity, shifting the issues of the organization to those that will produce ideal mass mailing fundraising goals, and reducing members' ability to participate in the organization (2000a). Sociologists also have posited that a lag may have been inevitable after taking care of the "low-hanging fruit" of the environmental issues of the 1960s and 1970s, due to the moderation of the movement as its members have aged, or due to the great economic costs of more contemporary environmental initiatives (Brulle and Jenkins 2008; Buell 2004). Similarly, Hal Rothman suggests that the economic climate of the 1960s was far more conducive to support of environmental programs in contrast to the 1970s, 1980s, and 1990s, when the real value of American wages continued to fall and environmental spending became more of a frivolity to the average taxpayer (2001).

Whereas environmental lobbying of the newly formed EPA marked the 1970s, the reluctance of federal agencies under Reagan to play ball with the environmental movement also forced a pivot away from regulatory influence. Instead, by the mid 1980s, major environmental players had begun attempts to directly influence major industries (Gottlieb 2005) as a new era of social responsibility began in corporate culture. Following the environmentalists' overtures in the earlier 1980s, the return to environmental enforcement of the 1984 Congress prompted many corporations to adopt a more cooperative stance with environmentalism (Hoffman 1997).

Given the Reagan administration's unprecedented embrace of free market rhetoric and the necessary repositioning of major environmental organizations, this chapter's

focus is on the ways that environmental voices in the dataset articulated faith and doubt in the free market in explicit reference to the Reagan administration. As the Reagan years often mark the beginning of many neoliberal economic policies and more mainstream acceptance of previously marginalized Ordoliberal and neoliberal ideas in the United States (Gottlieb 2005), this seems a particularly instructive time to examine how some environmentalists assumed, struggled with, or challenged the rise of an explicitly pro-free market ethos, no matter how unevenly it may have been applied in practice.

Encountering Reagan, Encountering the Market

Between 1980 and 1989 (the years between Reagan's first campaign for the presidency and the end of his second term), 1,511 paragraphs were coded with expressions of market faith, doubt, or both. There were 270 total passages between 1980 and 1989 that addressed an indicator of market faith or doubt and explicitly referred to Reagan's administration, either to the President directly or to an executive arm of government, including the Environmental Protection Agency and the Department of the Interior. In what follows, I will present a quantitative comparison of Reagan administration-referencing paragraphs to others during this time period, then a qualitative analysis of Reagan-specific paragraphs.

As detailed in Chapter 3, paragraphs published during Reagan's presidency were significantly more likely to express faith in the market than those published at other times in the dataset when controlling for overall economic climate and compared to other Republican administrations. A simple chi-square comparison of overall faith and doubt in the free market between paragraphs appearing between 1980 and 1989 showed no

difference in overall market faith between passages that explicitly referred to the Reagan administration and those that did not. Still, when examined by specific market indicators, some differences can be found.

As can be seen in **Table 23** below, Reagan-specific paragraphs were more likely to express doubt in the market in general and in established property rights than were paragraphs that did not refer to the administration. They were also less likely to express doubt in rational, self-interested actors than other passages. Each of these differences was statistically significant at the 0.001 level.

	Mentions Reagan Administration?	Doubt (%)	No Doubt (%)	Total
Any Free Market Indicator	Yes	158 (62.0)	97 (38.0)	255 (100)
	No	695 (60.0)	463 (40.0)	1158 (100)
Established Prices	Yes	19 (7.5)	236 (92.5)	255 (100)
	No	83 (7.2)	1075 (92.8)	1158 (100)
Established Property Rights*	Yes	57 (22.4)	198 (77.6)	255 (100)
	No	106 (9.2)	1052 (90.8)	1158 (100)
Fewer Discriminatory Taxes and Subsidies	Yes	25 (9.8)	230 (90.2)	255 (100)
	No	97 (8.4)	1061 (91.6)	1158 (100)
Forces of Supply and Demand	Yes	1 (0.4)	254 (99.6)	255 (100)
	No	24 (2.1)	1134 (97.9)	1158 (100)
More Rational, Self-Interested Actors**	Yes	39 (15.3)	216 (84.7)	255 (100)
	No	380 (32.8)	778 (67.2)	1158 (100)
More Perfect Information	Yes	0 (0)	255 (100)	255 (100)
	No	0 (0)	1158 (100)	1158 (100)
Free Market Generally***	Yes	28 (11.0)	227 (89.0)	255 (100)
	No	65 (5.6)	1093 (94.4)	1158 (100)

Table 51: Crosstabulation of doubt or no-doubt expressed in the free market by mention of the Reagan administration, 1980-1989. *Pearson chi-square=35.677, p=0.000, ** Pearson chi-square=30.755, p=0.000, * Pearson chi-square=9.791, p=0.002**

As demonstrated in **Table 24** below, Reagan-referencing passages were also more likely to express faith in the market in general and in fewer discriminatory taxes and subsidies (each difference significant at the 0.01 level), and less likely to express faith in rational, self-interested actors and the forces of supply and demand (both significant at the 0.01 level) than other paragraphs in that time period.

	Mentions Reagan Administration?	Faith (%)	No Faith (%)	Total (%)
Any Free Market Indicator	Yes	120 (47.1)	135 (52.9)	255 (100)
	No	538 (43.4)	620 (53.5)	1158 (100)
Established Prices	Yes	37 (14.5)	218 (85.5)	255 (100)
	No	165 (14.2)	993 (85.8)	1158 (100)
Established Property Rights	Yes	6 (2.4)	249 (98.2)	255 (100)
	No	21 (1.8)	1137 (98.2)	1158 (100)
Fewer Discriminatory Taxes and Subsidies*	Yes	67 (26.3)	188 (73.7)	255 (100)
	No	200 (17.3)	958 (82.7)	1158 (100)
Forces of Supply and Demand**	Yes	0 (0)	255 (100)	255 (100)
	No	34 (2.9)	1124 (97.1)	1158 (100)
More Rational, Self-Interested Actors*****	Yes	4 (1.6)	251 (98.4)	255 (100)
	No	78 (6.7)	1080 (93.3)	1158 (100)
More Perfect Information	Yes	4 (1.6%)	246 (98.4%)	255 (100)
	No	12 (2.8%)	822 (98.6%)	1158 (100)
Free Market Generally****	Yes	33 (12.9)	222 (87.1)	255 (100)
	No	77 (6.6)	1081 (93.4)	1158 (100)

Table 52: Crosstabulation of faith or no-faith expressed in the free market by mention of the Reagan administration, 1980-1989. *Pearson chi-square=36.802, p=0.000, **Pearson chi-square=7.672, p=0.006, ***Pearson chi-square=19.630, p=0.000, ****Pearson chi-square=11.524, p=0.001

Faith Expressed	No Faith Expressed	Total
124 (44.9%)	152 (56.1%)	276 (100%)
Doubt Expressed	No Doubt Expressed	Total
163 (60.4%)	107 (39.6%)	270 (100%)

Table 53: Cross-tabulation of faith or doubt referencing Reagan administration, 1980-1989.

Market Doubt Only	Faith and Doubt	Market Faith Only	Total
139 (51.5%)	24 (8.9%)	107 (39.6%)	170 (100%)

Table 54: Cross-tabulation of faith, doubt, or both referencing Reagan administration, 1980-1989.

By a small majority, passages concerning the Reagan administration expressed doubt (163 times) more frequently than faith (131 times) (See **Tables 25** and **26** above).

Figure 5 below displays the frequency of each specific indicator of faith and doubt.

Overall, the issue of Reagan and Watt's attempts to sell and lease public lands elicited market-doubting sentiments, particularly doubt in the power of private property rights to adequately protect land that should be protected by public ownership and in the profit motive that writers felt motivated Reagan, Watt, and Gorsuch's actions in the best interest of industry. Concern with Reagan's reliance on laissez-faire market principles to solve environmental and social problems informed general doubt in the market, but often

when the administration benefited a polluting industry, such as fossil fuel interests, these voices expressed frustration with Reagan's *failure* to follow through on his free market promises by subsidizing certain industries. The sale of public lands was also associated with faith in the power of an established price, as writers were frustrated with Watt and Reagan's sale of these lands below a fair market value.

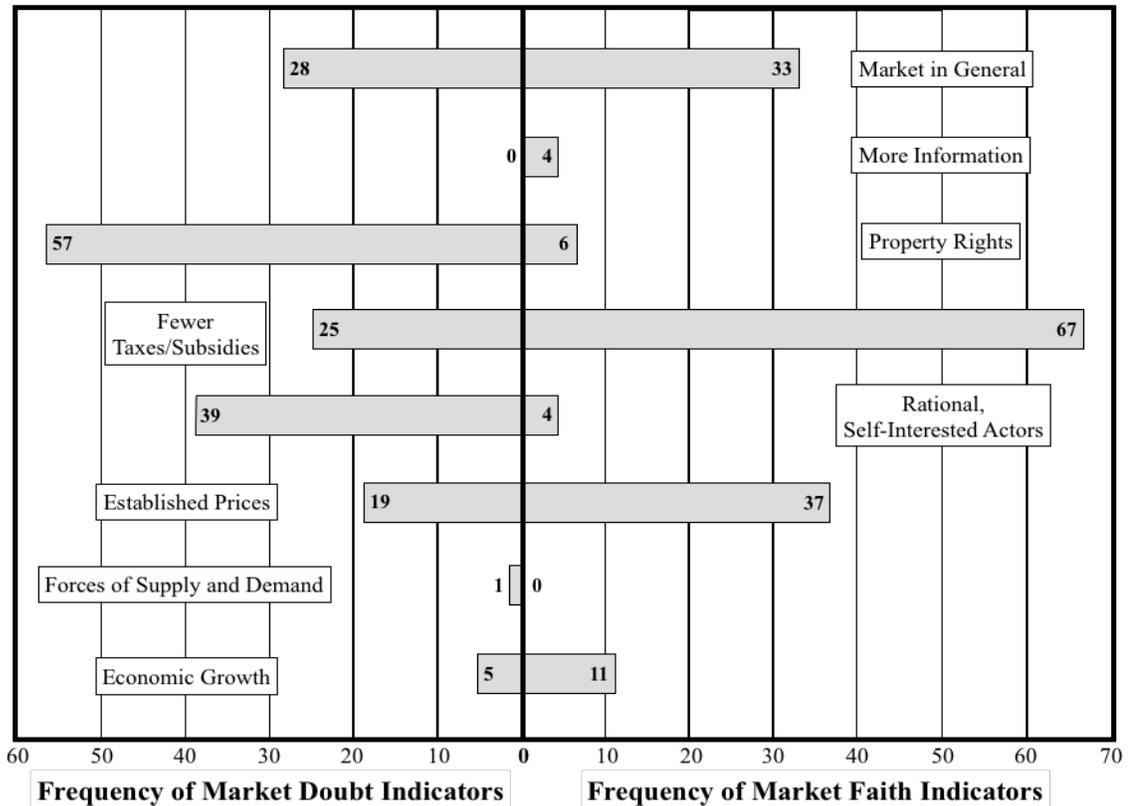


Figure 11: Frequency of specific market faith and doubt indicators for passages referencing the Reagan administration.

Market Doubt in the Reagan Era

The most frequently occurring indicator of market doubt was in the benefit of stronger private property rights (57 out of 163 market-doubt paragraphs), followed by doubt in

rational, self-interested actors (39), then doubt in the free market in general (28) (See **Figure 5** above).

Of the 57 paragraphs doubting private property rights, a majority were concerned with the Reagan administration's sale of public lands to private interests (30 paragraphs) and were specifically concerned with the actions of Interior Secretary Watt (28 paragraphs). A full-page spread in a 1983 issue of *Not Man Apart*, titled "SELLING OFF CHUNKS OF AMERICA" and signed by FOE's President and Executive Director, lambasted Reagan and Watt for leasing and selling federally-owned lands to coal and mineral mining interests: "Reagan and Watt have shown virtually religious devotion to converting public land to private use. They've thereby reversed the policies of prior presidents who worked to preserve the American legacy of wilderness, parks, forests and seashores" (May). Pre-written notes to members of Congress urging them to stop the administration were printed at the top of the page for readers to sign and mail in, one addressed to the Chair of the Interior Appropriations Subcommittee beseeched the reader to not "let them deal away our remaining public lands by selling and leasing them to developers. These lands have been protected for 200 years; they are the heritage of our children's children" (*Not Man Apart*, May 1983).

This criticism appeared regularly throughout Sierra Club, FOE, and NRDC publications throughout the 1980s, but especially during Watt's controversial tenure ending in late 1983. In a "Staff Note" to in *Sierra* regarding legislative challenges in the new Congress, one priority was clear: "Reagan's 'privatization' scheme to sell off our public lands must be stopped" (January/February). NRDC's Charles Callison reflected on Watt's Reagan-era successors at Interior in 1989:

Though Watt was gone, his team of give-away artists remained behind, dedicated to providing easier and cheaper access for industry to public minerals, timber, and grasslands, at the expense of wildlife, wilderness, and archeological treasures. Amiable William Clark, President Reagan's personal friend, succeeded Watt to repair the political damage before the 1984 election. He talked better but did little to change the ideological bent of Watt's privatizers. Next came the debonair Donald Hodel, another policy clone of Watt. (NRDC.1989.1104).

While the primary concern of the texts examined here was the Reagan administration's privatization of wilderness lands that belonged in the public domain, concerns were also registered regarding the prices charged by the federal government for these leases and sales (see below).

Many expressions of doubt in rational, self-interested actors also focused on James Watt (14 of 39). Prior to his post at Interior, Watt served as a lawyer for mining, timber, and oil interests through the Mountain States Legal Foundation, suing Carter's Department of Interior to allow mining leases on public lands (*Amicus*, Fall 1981). Many of these paragraphs expressed clear doubt in Watt's objectivity and argued that his former position posed a clear conflict of interest. The Sierra Club, along with other environmental organizations, opposed Watt's confirmation to his post. As Doug Scott, director of federal affairs for the Club, put it, "Watt was hopelessly enmeshed in a web of conflicting interests rendering him unsuitable to make the balanced judgments required of an Interior secretary" (*Sierra*, January/February 1982). Such concerns were made about the Reagan administration more broadly, specifically that Reagan, Watt and Gorsuch were acting primarily in the interests of industry, and not the American public. A request for donations to FOE's political action committee in 1982 said of the three that "(t)hey filled their top agency posts with business executives interested only in paving the way for their industries to strip, log, drill and pollute" (*Not Man Apart*, May).

The third most frequent market-doubt indicator was doubt in the social and environmental benefits of the free market generally. This doubt was largely expressed in opposition to the president or EPA administrator's recurrent free-market orientation to the energy industry and international development. In 1981, Assistant Editor Angela Gennino reported on Reagan's plans to cut federal funding for solar in *Not Man Apart*, pointing out that the market would not provide needed renewable energy innovation: "historically, new technologies and practices take up 30-40 years to permeate the economy when left up to the marketplace" (April). *Amicus'* Bartle Bull called out Gorsuch's pro-market remarks at a 1982 United Nations Convention on the environment as equivalent to calling for environmental destruction.

...Ms. Gorsuch deplored inadequate recognition of "long-term costs" of environmental protection, recommending instead "natural corrective measures that can work through market forces—if governments allow them to operate." Using the recognized code words for sanctioning environmental degradation from the Sea of Japan to Lake Erie, she argued that environmental policies must be "in harmony with economic prosperity," and that free markets and private initiative should be relied on to conserve resources (Fall 1982).

These concerns persisted beyond the embattled Gorsuch and Watt years. Writers expressed distress with the administration's free-market, antiregulatory position towards the export of hazardous waste (*Amicus*, Winter 1983), increasing energy efficiency (*Amicus*, Winter 1983), preserving arable farmland (*Not Man Apart*, September 1984), and biotechnology industries (*Amicus*, Winter 1987). Considering the environmental impact of various models of economic growth, sociologist David Plotke concluded in a January 1985 *Not Man Apart* that "(a) Reaganite growth model, relying on the market with only minimal intervention to protect the environment, is the most obviously destructive prospect".

Similar criticism was also levied against the Reagan administration's argument that market forces, not international aid, would solve the energy problems of the developing world. FOE Chair David Brower summarized the administration's attitude towards global poverty in a 1982 *Not Man Apart*: "You could simply tell them to lift themselves by their own bootstraps, mind the magic of the market-place, and buy a do-it-yourself covered wagon and go west, as President Reagan has in effect told the Third World" (January). In *Amicus* the next year, energy lawyer Steven Ferrey raised a similar concern regarding Reagan's actions at the 1981 North-South Summit.

In Cancun, President Reagan continued to propound his Dale Carnegie vision of international energy development. His unflinching reliance on international laissez-faire to address every problem of the poor and hungry oversimplifies a very complex and delicate situation. Nepal, or the Sahel, is not an extension of the National Endowment of the Arts; these energy problems will not be solved by cutting budgets or by unleashing the profit motive (Winter 1982).

Market Faith in the Reagan Era

For paragraphs expressing faith in the market, the most frequent sentiment was faith in fewer discriminatory taxes or subsidies (67 of 131 paragraphs), then faith in the benefit of established prices (37), then faith in the free market generally (33 paragraphs) (See **Figure 5** above).

Of the 67 paragraphs expressing faith in fewer subsidies, 19 of them referred specifically to concerns over continued federal investment in the nuclear industry, which many hoped would fade away due to safety concerns, inefficiencies, and decreased

demand. Before Reagan took office, he asked for a report on energy policy from a Task Force comprised of many industry representatives. Ken Davis of Bechtel, the construction and engineering corporation, called in particular for continued work on the Clinch River Breeder nuclear reactor. FOE's Jim Harding criticized Davis' calls for "tax incentives, accelerated depreciation, investment tax credits and the streamlining of environmental controls designed to create a climate in which utilities can afford to build any kind of power plant," noting that "This does not sound like a believer in the free market" (*Not Man Apart*, January 1981). Many writers in *Not Man Apart* during Reagan's first term focused on the administration's continued subsidization of the Clinch River reactor, "in spite of its free market rhetoric" (July 1981). David Brower called this subsidy a "boondoggle" in January 1982 (*Not Man Apart*), a label also applied to Clinch River funding by Sierra Club's Doug Scott the same year (*Sierra*, January/February). In 1984, Gale Warner and David Kreger argued that "(t)he free market is killing nuclear power. In the last six years no new reactors have been ordered and 80 proposed plants have been cancelled. Instead of letting it die, Reagan wants to rescue the industry with increased federal subsidies" (*Not Man Apart*, September).

Nuclear energy was a common topic, but overall, passages expressed faith in fewer subsidies through language similar to that used by the Reagan administration to frame cuts in social entitlement spending. In 1982, NRDC's Alan Miller claimed that, "the public is getting tired of supporting the nuclear welfare industry" (*Amicus*, Winter). An early 1981 issue of *Not Man Apart* featured several pieces by physicist and energy policy consultant Amory Lovins alongside attorney Hunter Lovins, which repeatedly referred to Reagan's approach to energy as "corporate socialism" (January). Referring to

former Federal Energy Administration's Roger Sant's policy recommendations (as solicited by the incoming Reagan administration), the Lovinses argued that "(s)uch a conservative policy, 'removing market imperfections and subsidies so as to minimize consumer costs through competition' (as Sant put it), would be the best thing that ever happened to energy policy" (January). Other instances criticized or called for the end of Reaganite subsidies for flood insurance (*Not Man Apart*, April 1981), highway construction (*Amicus*, Fall 1981; September 1984; *Not Man Apart*, July/August 1986), agricultural irrigation (*Amicus*, Fall 1981; *Not Man Apart*, May 1985), and the fossil fuel industry (*Sierra*, January/February 1982).

In fact, much faith in fewer subsidies occurred alongside faith in the free market more generally. In contrast to the discussion of market-doubt presented above, these paragraphs tended to criticize the Reagan administration for *failing* to practice its free-market rhetoric. The Lovinses in particular saw nuclear and other dirty-energy subsidies as a threat to Reagan's promise of an unregulated energy market:

Whether the Reagan Administration decisively pursues an energy policy of free-market competition, individual choice, and local self-determination, or instead caves in expediently to corporate interests, can go far to determine America's energy future- and to reveal whether our President-elect is truly conservative or merely reactionary. (*Not Man Apart*, January 1981).

Similarly, FOE President Rafe Pomerance was quoted in *Not Man Apart* later that year regarding subsidies to large corporations. "We hope President Reagan will encourage free market economics by cutting the federal development programs that we are opposing today" (April). A 1982 profile of Denis Hays, who had headed the Solar Energy Research Institute until its funding was cut under Reagan, had him lamenting his "naïve hope... that the Reagan administration was really behind the small capitalist. I

have an inordinate amount of sympathy for the principles Ronald Reagan espoused during his campaign, but in the business of energy the Reagan people are being malignantly hypocritical. Worse than that, they are being stupid.” (*Amicus*, Winter).

Much of this discontent with the Reagan administration’s follow-through on its pro-market position also overlapped with the second most frequent expression of market faith: in established prices. This largely centered on James Watt and his attempts to sell and lease public lands to mining and fossil fuel interests at what these writers found to be below-market value, what former Assistant Secretary of the Interior Nathaniel Reed called “false economy” (*Not Man Apart*, July 1981). *Sierra* reported in 1983 that

Interior Secretary James Watt is leasing huge reserves of federal coal to industry at “fire sale” prices, according to a report issued by the House Appropriations Committee. The report charges that Watt is leasing western coal without regard to its fair market value, and despite Interior Department concern over a presale leak of important bidding information (July/August).

While passages concerned with the lease and sale of public lands that invoked doubt in markets referred to the dangers of private land rights over land that would be better protected in the public trust, those that expressed market faith were critical of the Reagan administration’s failure to reap the true economic value of these lands. The NRDC’s Frances Beinecke (who would become the organization’s president in 2006) and Sarah Chassis wrote in 1982 that, “...there is strong evidence that the nation will benefit economically more from holding on to several significant areas of the OCS for future development rather than selling them off cheaply now. The economic benefits would increase and environmental costs decrease, if leasing were delayed for a number of areas” (*Amicus*, Fall). An FOE call to protest the administration’s actions in 1983 described the Reagan-Watt ethos as to “(c)onvert U. S. land to private control. Quickly. And the price

be damned. If these two behaved this way in business, they'd have been fired long ago”
(*Not Man Apart*, May).

Discussion: The Magic of the Marketplace

The anti-environmental Reagan era was an important one for American environmentalism for several reasons. In addition to pushing a professionalization and mainstreaming of environmentalist activism and politics, as evidenced in part by the many smaller grassroots and direct action organizations representing the environmental concerns of women, the working class, and people of color that accompanied this era, the environmental confrontation with Reagan also necessitated a confrontation with a clearly articulated free-market ethos. While the Reagan administration’s laissez faire orientation was in no way new, never before had a presidential administration so clearly drawn a line in the sand when it came to prioritizing private business interests under the banner of the free marketplace.

Discussions of the Reagan administration seem relatively balanced among the paragraphs analyzed here with a slight tendency towards doubt in the free market, and do not differ significantly in overall faith and doubt when compared to passages from this time period that do not explicitly refer to the administration. But the tenure of the Reagan administration is clearly a different discursive time than the administrations preceding it, with significantly more faith expressed in the market. It also is characterized by a very different presidential message regarding the priority of the free market in matters of governance.

The overall similarity in market faith and doubt between passages during this time period that explicitly referenced this administration and those that did not is an important finding, open to different interpretations. One would be that this administration had no bearing on market-related thought among environmentalists in the 1980s. This could potentially challenge popular assumptions about the importance of the Reagan administration in the early iterations of neoliberal hegemony in the United States. This failure to find a significant difference in overall faith and doubt could also be a reflection of a methodological problem, as content and discourse analysis can only work with a text as it is presented and code for context, perhaps missing other cultural currents that may haunt the text without leaving quantifiable traces. However, I find that a more likely explanation, and one that raises a more interesting question about Reagan-specific discourse, is that a similar ideological terrain lies beneath both environmentalists' responses to or against Reagan's presidency and the popular public assumptions about government and the market that helped elect Reagan in 1980 and 1984.

The present analysis is a useful one, despite the overall similarity between Reagan and non-Reagan specific discourse, for two reasons. First, the election and presidency of Ronald Reagan was an evocative moment—one that elicited a great deal of discourse among environmental voices in this dataset regarding the environmental importance of market forces, given the administration's explicit embrace of such mechanisms and outward antagonism towards mainstream environmentalist agendas. This "moment" lasted nine years, from the first presidential campaign until the end of Reagan's second term, but was especially present during Reagan's first term appointments of highly controversial EPA and Interior Department heads. If nothing else, a focus on Reagan-

specific rhetoric brings environmentalist attitudes toward the market at the time into focused relief.

But we also see some interesting differences in the composition of Reagan passages as well, significantly different from other paragraphs from the time period. Reagan-references were more likely to express both doubt and faith in the market overall, which speaks to the administration's particular effect in eliciting strong and explicit opinions regarding the free market. Interestingly, they were also significantly less likely to express doubt or faith in the profit motive of rational actors. In addition, Reagan paragraphs were more likely to show doubt rather than faith in the benefit of private property rights, and less likely to show faith in fewer taxes and subsidies and the forces of supply and demand. Therefore, an examination of the specific ways and contexts in which Reagan passages indicated faith or doubt in the market reveals several different stories told by environmental voices about the value of the market, each employing a different logical frame.

For example, the idea of opening lands held in the public trust, particularly existing national parks, drew out strong doubt in the market principle of private property. Interestingly, this doubt was also closely associated with the idea of these public lands not as natural resources, that is, as capital that should be managed by the federal government, but specifically as a part of America's national heritage. Here the image of wilderness in particular is invoked as a reserve that should not be exploited for profit, one that should remain outside the reach of private industrial interests under communal protection. A doubt in the benefits of private property rights imagines wild lands not as

property but as an aesthetically and spiritually valuable imaginary, laden with American cultural constructs of the frontier.

Still critical of the Reagan administration's attempts to sell off public lands, passages that did so while invoking faith in established prices followed an entirely different line of reasoning, challenging not the lands' eligibility for commodification but the insufficient prices assigned to them. Inherent in these critiques of Reagan and Watt is the idea that these lands themselves have a fair market value, that an open sale and bidding process would allow their value for industrial use to determine a much higher price than that being agreed to by the Department of Interior. While the idea of public lands "belonging" to the American people as a commons is still at work here, the anger expressed is not towards a violation of those commons, but towards but the government's failure to adequately compensate the American people through prices that would in some way stem the tide of Reagan's rapidly growing budget deficit. In one critical frame, land must not be commodified. In the other, land must be commodified according to proper free market principles.

A similar dual logic informs passages that take issue with Reagan's free-market approach and those that take issue with his administration not being free-market enough, usually through subsidization of certain energy industries. The free market was lauded for killing off nuclear power in particular, which environmentalists claimed was too expensive and inefficient to be competitive in energy markets, only to be thwarted by federal subsidization of the Clinch River reactor. Hunter and Amory Lovins were especially critical of these policies in the pages of *Not Man Apart*, accusing Reagan of "corporate socialism" and arguing that a truly free market situation for energy would be

the best thing to happen for the environment. Yet, other environmental and social concerns were unthinkable as targets for the free-market fix. Without the guidance and assistance of development aid, the developing world would continue to suffer through energy crises. Hazardous waste disposal and biotechnology must be guided by regulatory oversight, not left to respond to market signals in order to find the most ecologically and economically efficient outcome.

While the prevalence of expressions of faith and doubt in rational, self-interested actors was significantly less than passages from this era that did not explicitly reference the Reagan administration, when these expressions occurred, they were almost entirely doubtful. This is unsurprising, as the portion of the dataset examined here deals explicitly with the Reagan presidency, the most anti-environmental administration that had yet been seen. Still, it is notable that in a subset of data where some sort of faith in the market is expressed in almost half (48.5 percent) the passages, almost no faith is expressed in the profit motive, one of the central driving forces of a successful free market. In the case of Reagan, Watt, Gorsuch, and the industries they support, a motivation of self-interest leads to corruption and allowing mining, fossil fuel, and chemical industries to corrupt the regulatory process. This could be described as a (sometimes) faith in capitalism without any faith in capitalists.

In September 1981, Reagan addressed the International Monetary Fund and World Bank with a speech that famously attributed the world's most successful nations and people as those that were willing "to believe in the magic of the marketplace." These words were repeated throughout Reagan's presidency, and the sentiment was often derided or mocked in the environmental publications analyzed here:

In keeping with supply-side “Reaganomics,” the bears at Yellowstone National Park are told to take care of themselves. “There will be no more handouts” from tourists’ cars, Secretary Watt declares firmly. A large brown bear declares for bootstrap capitalism, opens his own restaurant (“Pooh’s Place”) specializing in trout and berry dishes (*Not Man Apart*, April 1981).

But throughout passages concerning the Reagan administration in this dataset, the market occupies a magical space of its own, where some elements—the price mechanism, competition free from discriminatory subsidies—have the power to solve, or at least ameliorate, environmental problems, while others—the profit motive, private property rights—will prove to be society’s ecological undoing. It is magical in that it can be invoked, depending on the context, to explain both negative and positive outcomes, like a god in the machine.

Again, my goal here is not to highlight inconsistencies in environmental thought regarding the market as an indictment of environmentalism, as a fully coherent market ideology is an unreasonably high bar to set for any social movement, let alone one with such a wide array of voices. It is especially important to note this, considering that this project purposefully samples several sites of articulation precisely in order to engage that variety within the core of the mainstream movement. Still, the contradictory ideological frames employed when making sense of the Reagan administration and the free market have important implications for how we understand market ideologies, and especially market fundamentalism, to operate in the context of this field of national-level activism.

Broadly, this dissertation project seeks to trace expressions of faith and doubt in a free, self-regulating market from the mid-twentieth century to today, particularly against the backdrop of frequent assertions that neoliberalism gained ideational ascendance through the 1970s and colonized thought and policy from the 1980s on. Many scholars

have demonstrated that the coherence of neoliberal thought is often overstated, both among its early ideologues and champions (Mirowski and Plehwe 2009) and throughout its influence on national governance and international trade policies (Harvey 2007; Peck 2010). This is due not only to divergent schools of thought but also to the Polanyian impossibility of free market goals. But in presentations of market fundamentalism or neoliberalism as an ideology informing public policy (Block and Somers 2014; Somers 2008) or as a political rationality (Brown 2003, 2006; Larner 2000), scholars present such ideological trends as remarkably coherent and increasingly powerful.

Yet, the analysis presented here and the insights of cultural sociologies of the economy show us that the economic rationalities informing environmental discourse, for example, are unsurprisingly complex. This project necessarily categorizes elements of free market thought as either faithful or doubtful in the utility of the free market, in order to measure how and when environmentalist voices find such sentiments resonant or distasteful. The deployment of a variety of narratives about the free market—that the free market should be left unfettered to pick winners and losers in the energy market, where clean and renewable alternatives will rise to the top due to their superior efficiency; that the profit motive is more likely to lead to corruption than the public good; that the commodification of public lands for resource use is anathema to their aesthetic value and role in American national culture; that commodification of those lands is problematic in that they have been underpriced—is evidence of the dependence of market beliefs on the actors and issues involved. It is also evidence of a social movement struggling with a changing political environment and national culture regarding the role of the free market, of national and state government, and the power of private business interests.

Much of the criticism leveled at mainstream environmental activism by more radical environmental voices and the academic left frame the changes in the movement's professionalization, institutionalization, and issue prioritization during the 1980s as evidence of a cooptation of the movement by the politically and economically powerful. But in this Reagan-specific discourse we see environmentalists still hanging on to more familiar narratives, such as the preservationist and romanticist roots of environmental activism and the framing of business interests as antagonistic corporate polluters that marked the advent of Carson-era reformist, public health-minded environmental politics. The environmental voices here show more trust in market forces than in previous decades, but they also tell the old stories, of an idealized nature untouched by commerce and the dangers of capitalist expansion.

We must pay attention to this increased faith as well. The nuances of environmentalist market thought are significant, but overall the tendency to criticize the tremendously adversarial Reagan administration for not embracing the free market more fully marks an important point for the mainstream movement. Here, we see what Antonio Gramsci would call the moment of hegemony, where the very premise of the Reaganite free-market attack on environmental concerns is used by environmentalism as its grounds for contestation. The market-faith, anti-Reagan narratives described above show not a cooptation of environmentalists by business interests, but an acceptance of those free-market narratives—for which business interests had been fighting in policy circles since the period of embedded liberalism had begun—as useful and applicable to the protection of non-human nature.

In this way, the competing logics beneath the narratives explored here are evidence not only of the continuing influence of older environmental narratives throughout the 1980s, but also of the logical inconsistencies that plague free-market rationality itself. The very ideologues often celebrated by self-identified free marketeers, Friedrich von Hayek and Milton Friedman, did not agree about whether monopolies posed a problem for overall market function (Van Horn 2009). It is not surprising, then, that environmentalist embrace of such logic comes with its own set of inconsistencies, still fettered by the magical thinking that Reagan's embrace of the market, the first major political triumph of the market fundamentalist challenge to embedded liberalism of the mid-20th century, itself employed.

This magic operated in a particular way during the legislative crises of the Reagan era, but it would pave the way for the market faith that followed. Concerns that the free market was being contaminated by subsidies for dirty or dangerous energy, and specifically criticism of the Reagan administration that its policies were not free-market *enough*, marked a new era for environmentalists, where they could engage in magical thinking regarding the power of markets to solve environmental problems. The market faith that followed would differ, with a stronger rejection of fewer taxes and subsidies and the market generally, but greater affinity for the promises of well-established prices and their effects on rational, self-interested actors. In effect, from the Reagan era to a time of increasing concern with climate change, market faith shifts from a more generalized faith in a market imaginary to a very specific faith in the power of markets to enable technical resource management, specifically of carbon emissions.

Chapter Five:

Global Crisis and the Case of Climate Change

In the last 25 years, climate change has come to dominate the realm of environmental activism. Concern over the issue grew throughout the 1990s as countries struggled to come to meaningful international agreements and intensified as many nations—especially the United States—continued to resist national policy or participation in binding agreements to reduce carbon and other greenhouse gas emissions. While national and international failures to take meaningful action (by the standards set by increasingly alarmed climate scientists) are notable, the preferred form of climate action is as well—the establishment of a market for carbon emissions. Such systems would limit the allowed carbon emissions for companies and create a market where permits to pollute above the set limit would be bought and sold by private companies, effectively allowing the free market to set the cost for excess greenhouse gas emissions. While other mechanisms, including taxing carbon emissions, have been proposed, carbon markets or cap-and-trade plans have long been at the core of American and international climate agendas. Key to these plans is establishing a clear price on carbon.

Much has been written by environmental sociologists about the undue influence of large fossil fuel companies on the political process, through lobbying, campaign contributions to political actors, and public misinformation tactics. Less attention has been paid, however, to the role of the environmental movement in shaping climate legislation. In this chapter, I examine environmentalists' discourse in reference to climate change as they discuss international agreements, national policy, and individual solutions.

While concern over climate change comes with an increase in faith in the market overall (see Chapter 3), the passages examined below also reflect the changes in *type* of faith that characterized the latter part of the dataset during the Bush II and Obama years—less faith in fewer taxes and subsidies and the free market generally, but more faith in the profit motive and established prices. Here, I find that the idea of an established price on carbon is key to other, sometimes surprising expressions of market faith in the dataset—especially enthusiasm about industry profit and national economic growth.

A Brief History of Climate Change Policy in the United States

Since the 1960s, environmental problems have repeatedly taken on an apocalyptic framing (Buell 2004), from the widespread public exposure to toxic chemicals described in Rachel Carson's *Silent Spring* (2002) to the resurrection of Malthusian concerns about overpopulation leading to mass starvation and chaos (Ehrlich 1971; Osborn 1948; Vogt 1948). But through concerns such as acid rain and ozone depletion the menace of climate change has loomed even larger. Today, climate change is the highest priority of most mainstream environmental organizations. Scientists almost universally agree that average temperatures have been rising at an unprecedented rate since 1950 due to human industrial activity and the associated emissions of carbon dioxide, methane, and nitrous oxide. As the climate warms, multiple adverse effects have been documented and are expected to continue: increased extreme weather events, rising ocean levels and acidification, and eventual species extinction and compromise of the global water supply and food system (Intergovernmental Panel on Climate Change 2014; National Aeronautic Space Agency n.d.).

Awareness of the possibility of anthropogenic climate change dates back to the late 19th century, but as common counterarguments that the world's oceans could absorb excess carbon dioxide were disproven, climate scientists increasingly warned of a worsening problem in the 1960s and 1970s. While the prospect of climate change—then usually called global warming or the problem of greenhouse gas emissions—had been raised in various policy conversations throughout the 1970s and 1980s, climate change was not broadly embraced as a significant issue for the environmental movement until the 1990s (Nulman 2015). Many lobbied around and participated in the first United Nations Earth Summit in Rio de Janeiro in 1992, which, while well attended and important in establishing an international legal framework for confronting climate change, would follow a script echoed in numerous international climate meetings to come. High-income countries such as the United States, then the biggest emitter of greenhouse gases, were reluctant to commit to any reduction of fossil fuel use that might threaten economic competitiveness. The debate was marked by deep disagreement between richer and poorer countries about who was at fault and should bear more of the burden for climate change, and the ultimate agreement would call for carbon goals weaker than the scientific consensus called for and have little power over the future actions of signatory nations.

While Rio put in place the framework for international agreement that would inform numerous future summits in Kyoto, Durban, Paris, and elsewhere, it also institutionalized a distinctive approach to environmental governance that had grown in influence during the 1980s and 1990s. While most articulations of global environmental problems throughout the 1960s and 1970s emphasized shared responsibility and acknowledged an incompatibility between ecological health on one hand and market

economies and economic growth on the other, by 1992 the language of the Rio agreement used the logic of sustainable development (Bernstein 2001). It also, like the agreements that would follow, was heavily informed by the interests of the United States. Under Reagan, amendments to the Clean Air Act had resulted in an American cap-and-trade system for the precursors to acid rain, and this system became the rough model for the trading schemes established in Kyoto.

As public concern over climate change grew throughout the 1990s, the 1997 Kyoto follow-up to the 1992 Summit was far more salient to American environmentalists. Pressure led to Vice President Al Gore's presence at the Kyoto meetings and his urging of the American delegation to be more flexible in the negotiations (Betsill and Corell 2008:53), and the United States did sign the agreement, promising to reduce emissions by seven percent by 2008-2012. Clinton had hoped that the emphasis on trade would win over the Republican congress. Unfortunately for environmentalists, the treaty was never ratified by congress, which had passed a preemptive bill rejecting any treaty that either threatened the American economy or did not require emission reductions by developing countries, especially India and China. In the following years, many other high-income countries developed or joined cap-and-trade markets (Japan, Canada, the United Kingdom, and the European Union), while regional markets within the United States were created. At a national level, George W. Bush made it clear from the beginning of his term that reducing carbon emissions among industrial actors and even voluntary steps toward the goals of Kyoto were completely off the table.

As the Bush II administration neared the end of its second term, national environmental organizations and sympathetic federal legislators geared up to push a

major climate change bill through Congress. Since climate change had become a more publicly and scientifically supported concern in the 1990s, no comprehensive climate change bill had come close to becoming law. Between the 110th and 111th Congresses of 2007-2010, 484 climate change-related bills were introduced, more than double those introduced in the previous two Congresses (2003-2006). Two bills in particular received a great amount of media attention and discussion. S.2191, popularly known as Lieberman-Warner or America's Climate Security Act, passed the Senate Environment and Public Works Committee in December 2007, and then died on the Senate floor in June 2008. HR. 2454, known as Waxman-Markey or the American Clean Energy and Security Act, passed out of the House Energy and Commerce Committee in May 2009 and passed a full House vote in June 2009, but was never brought to a vote in the Senate.

Understanding American Climate Politics

As many lines of inquiry in environmental sociology, considerations of climate change often rely on Ulrich Beck's (1992, 1999) and Anthony Giddens' (1991) ideas of reflexive modernity and risk. For Beck, a "risk society" coexists with and is produced by industrial society but differs in a number of ways. Industrial society is organized according to class antagonisms, whereas risk society, made possible by the reduction of material needs, is organized around the question of "how can the risks and hazards systematically produced as part of modernization be prevented, minimized, dramatized, or channeled" (Beck 1992:19)? While Beck and Giddens see risk as productive of community-based responses to it, many American sociologists have found that rather than transcend existing divisions of power, risk works through them, ultimately corroding, and not creating, communities

(Alario and Freudenburg 2003; Erikson 1976; Freudenburg and Jones 1991; Picou et al. 1992). Gabe Mythen has also critiqued risk society theorists for the distinction between natural and man-made disasters, arguing that the two are not conceptually separable and challenging Beck's contention that modernity has come with a new sociotechnical hybridity—echoing Latour's (1993) argument that this has been the case all along (Mythen 2007).

Whether or not this hybridity is new, alarm has been a hallmark of American environmental activism since the 1960s. As widespread concerns over the impending disasters of the population bomb, nuclear annihilation, the depleted ozone, and climate change have evolved within the vocal mainstream environmental movement, some scholars have problematized such statements, critiquing environmental hazard and risk in the late 20th century as a part of a broader discourse of apocalypticism in the United States (Stewart and Harding 1999). After participating in the 2009 United Nations Copenhagen Summit, Michael Hardt considered the fundamental differences between the political positions of the anticapitalist movement and the climate change movement, finding differing logics in each. For ecologists, the limits of the common mandate a specific and immediate path: "There is no Plan B." "For anticapitalist activists, this too closely echoes the neoliberal mantra popularized 30 years ago by the Margaret Thatcher government: 'There is no alternative' (Hardt 2010:271). How we understand the material reality of—and best strategy for overcoming—climate change is fundamentally informed by prevailing norms and discursive frames of climate scientists, policymakers, and other stakeholders (Pettenger 2007). Discourses of risk, whether we can trace their origins to modernity, the new millennium, or elsewhere, have raised important questions about

humanity's role in environmental accidents and disasters. As Hardt points out, they also have important political implications for what courses of action are necessary and what is allowable collateral damage in the fight to avoid an apocalypse.

Given the high stakes most attribute to the problem of climate change, a great deal of social scientific work on the topic seeks to explain failures on both the American and international stage to achieve sufficient commitment to reducing greenhouse gas emissions as recently as the 2016 Paris agreement. Internationally, Roberts and Parks (2006) argue that the failures of global environment and development conferences to come to a meaningful consensus on climate change policies can be attributed to global inequality. Not only are poorer nations ill-equipped with the infrastructure or resources to limit greenhouse gas emissions, but dynamics between richer Northern and poorer Southern states have led to mistrust, particularly in the wake of the development crisis of the 1980s where poorer countries found themselves at the mercy of development banks after OPEC's price hike in 1979 and American monetary contraction (Najam, Huq, and Sokona 2003). Much of this mistrust comes from the increasing risk-aversion of poorer countries. In Roberts and Parks' analysis, wealthier countries and those that participate more in global trade are greater contributors to the problem of climate change, and poorer countries suffer more of its ill effects. As mentioned above, the United States' hesitation to enter a binding agreement to reduce carbon emissions has especially poisoned the international waters (Agrawala and Andresen 1999).

So why has national American policy been so hostile towards fighting climate change? There is a large body of work in environmental sociology that finds fault with the fossil fuel industry and allied conservative politicians, both by obstructing climate

legislation and fomenting doubt in climate science among the general public. The “climate change counter movement” is incredibly well-funded by conservative foundations (Brulle 2013), elevating the few scientists skeptical of climate change by exploiting media norms of ostensible balance in reporting (Grundmann 2007; Jenkins 2011). The push for climate change denial was especially strong in the 1990s lead-up to the Kyoto talks, with conservative think-tanks in particular arguing that climate science was in dispute (McCright and Dunlap 2000, 2003), but it has certainly continued through to the present day (Falke 2011; Jenkins 2011; McCright and Dunlap 2011; Thomas 2018). This has had the effect of drastically polarizing support for climate change legislation along partisan lines in the United States (McCright and Dunlap 2011). In addition to the pressure exerted by think-tanks, many members of Congress receive sizeable campaign donations from the fossil fuel industry (Fisher 2006), also providing motivation to impede climate change legislation utilizing the United States’ particularly obstruction-prone system (Madden 2014).

Another argument has stressed that the neoliberal era is to blame for the United States’ climate failures. Many have lamented the poor timing of the maturation of climate science alongside the growing hostility among policymakers to limiting business activity (Dreisen 2010a; Klein 2015; Schroeder and Glicksman 2010). Similarly, neoliberalism is blamed for the increasing power of business interests within the policy sphere and political polarization described above (Antonio and Brulle 2011; Brulle 2013). However, neoliberalization is blamed not just for obstruction of climate policy at a national and international scale, but for the shape of environmental policy that has become acceptable for debate since the 1990s. The most popular strategy, cap-and-trade plans, encapsulates

the important criteria for acceptable environmental management: transparency through private emissions disclosure, outcomes determined by market mechanisms, and utilizing private actors' self-interest by establishing a clear price for environmental harm (Ciplet and Roberts 2017). Importantly, support for these strategies has grown not only in business and policy circles, but within mainstream environmental activism as well.

Many find that a great deal of pressure has been put on environmentalists to “sell” climate change legislation to economic and business interests. This has taken the form of framing climate change as an economic opportunity (Fletcher 2009; Janković and Bowman 2014) or focusing efforts more directly on convincing and mobilizing private businesses (Bryner 2008; Pellow 2001). These efforts have certainly not been without impact. Boycotts and media campaigns have served a disruptive and transformational role for capital flows, slowing and sometimes stopping emerging markets for genetically modified foods (Schurman and Munro 2009), helping create new markets for environmentally friendly meat production (Weber, Heinze, and Desoucey 2008), and pressuring industries into implementing internal regulatory systems in response to demand down the supply chain with no direct regulatory action by the state (Cashore et al. 2004). Scholarship has been somewhat less optimistic about the shift towards consumer activism, where environmentalist identities only go so far as individual purchasing choices (Johnston 2008; Shah et al. 2007; Szasz 2009).

Most attention has been paid to the sale of carbon emission permits, specifically as an example of the problematic commodification of nature (Böhm et al. 2012). Economic sociologists have traced the careful work and contestation involved in attributing financial value to phenomena previously thought outside the economy (Radin

2001; Zelizer 1978, 1994, 2007), and carbon emissions are no different. As Larry Lohmann (2006) points out, the creation of pollution markets were not singularly a business invention, but instead a collaboration of industry, policy, and environmental advocacy actors during debate over the 1990 amendment to the Clean Air Act. Critics of cap-and-trade argue that its logic runs counter to ecological principles (Klein 2015), that it is ultimately less effective than enforced performance standards (Dreisen 2010b), puts non-human nature at greater risk in the inevitable event of financial crisis (Bond 2012), and at its core serves only to expand horizons of capital accumulation while exacerbating inequalities (Ciplet and Roberts 2017; MacNeil and Paterson 2012; Parr 2013).

Neil Smith, in particular, argues that the application of market logic to nature has fundamentally changed the relationship between nature and society (2007). Talking specifically about the vertical integration of nature into capital as a recent intensification of the circulation of capital through nature, Smith points to financialization strategies such as carbon sequestration, wetlands mitigation banking, and emissions trading as sources of potential danger to ecosystems. Not only does this process increase capitalism's dependence on nature, but also holds nature subject to crises of capital. Specifically, in his discussion of "cap-and-trade" practices, Smith points out that tying nature to such accumulation strategies heightens potential (or immanent) environmental degradation by linking nature to the cycles of crisis inherent in capitalism (see Harvey 2007b). While some critics of emissions trading have called for a carbon tax as a more reliable and equitable way of forcing industry to "account" for their pollutive externalities (Andrew, Kaidonis, and Andrew 2010), Smith argues that our present ecological crisis is tied to economic crisis not through a lack of accounting, but through an almost complete

or over-accounting of nature through the excessive abstraction of commodification, financialization, or marketization of natural resources.

Below, I will outline the shape and context of environmentalists’ faith and doubt in the free market in reference to climate change. While these passages express a fair amount of doubt over the benefits of a free market, they also express quite a bit of faith, particularly in the promising power of an established price on carbon emissions.

Faith and Doubt: The Case of Climate Change

Within the dataset, references to climate change (then global warming) appeared as early as 1979. It was mentioned sporadically throughout the 1980s, then regularly in the 1990s and beyond (see **Figure 6** below).

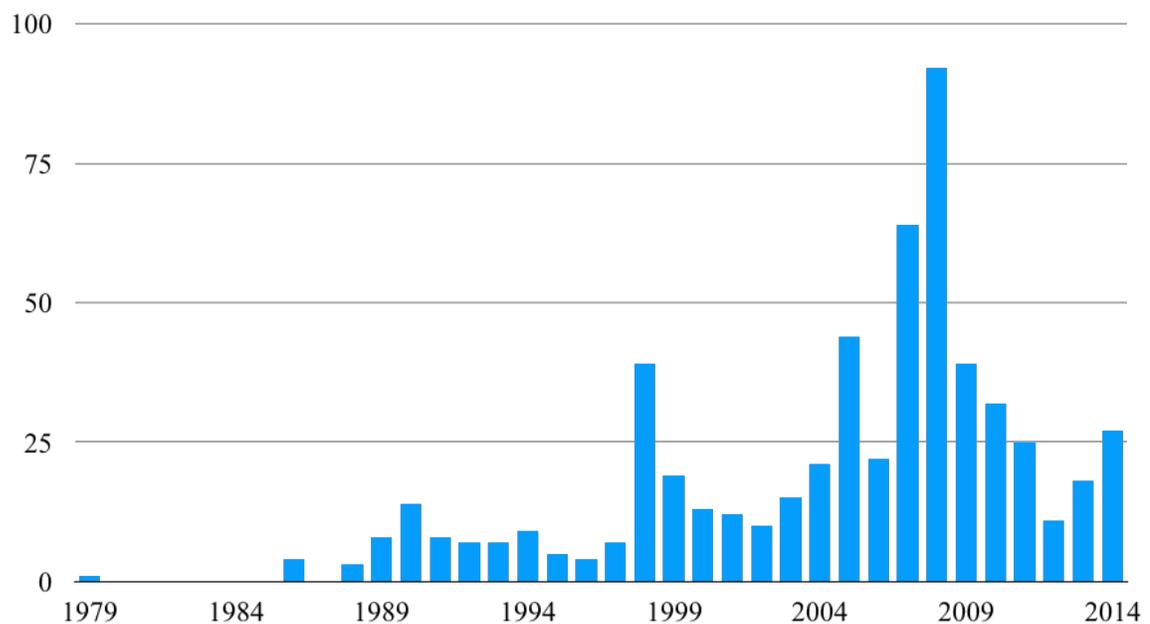


Figure 12: Raw count of references to climate change by year within the dataset.

“Market Doubt” was applied to 228 climate-change quotes, “Market Faith” was applied to 271, and both “Faith” and “Doubt” were applied to 81 passages for a total of

580. As seen in **Table 27**, among the data that references climate change, quotes from NRDC newsletters were more likely to express faith in some element of the market, followed by those from the Sierra Club, while those from FOE were less likely. This difference was neither large nor statistically significant. Paragraphs from FOE were more likely to express doubt in some element of the market, followed by those from the NRDC, while those from the Sierra Club were less likely. This difference was also not statistically significant (see **Table 27**).

	Faith Expressed	No Faith Expressed	Total
FOE	72 (58.5%)	51 (41.5%)	123 (100%)
Sierra Club	118 (58.1%)	85 (41.9%)	203 (100%)
NRDC	162 (63.8%)	92 (36.2%)	254 (100%)
Total	352 (60.7%)	228 (39.3%)	580 (100%)
	Doubt Expressed	No Doubt Expressed	Total
FOE	75 (61.0%)	48 (39.0%)	123 (100%)
Sierra Club	100 (49.3%)	103 (50.7%)	203 (100%)
NRDC	134 (52.8%)	120 (47.2%)	254 (100%)
Total	309 (53.3%)	271 (46.7%)	580 (100%)

Table 55: Cross-tabulation of faith or doubt in the market by publishing organization, all references to climate change. Faith: Pearson $\chi^2=1.814$, $p=0.404$. Doubt: Pearson $\chi^2=4.271$, $p=0.118$.

The above comparisons are helpful in suggesting possible skews towards faith or doubt in the market between the three sites, but the data tell a more nuanced story when sorted by quotes that expressed faith only, doubt only, or both faith and doubt. Those taken from Sierra Club sources were least likely to express both faith and doubt in the market, while those from FOE were most likely to express both faith and doubt within the same block of text. These differences were statistically significant, suggesting that quotes from Sierra Club documents tend to be more polarized when it comes to market faith and doubt (see **Table 28**). While differences between organizational document sources are worth noting, comparison between these discursive sites is not this chapter’s goal. More

telling are the specific market assumptions that are accepted or rejected throughout the dataset.

Data Source	Market Doubt Only	Faith and Doubt	Market Faith Only	Total
FOE	51 (41.5%)	24 (19.5%)	48 (39.0%)	123 (100%)
Sierra Club	85 (41.9%)	15 (7.4%)	103 (50.7%)	203 (100%)
NRDC	92 (36.2%)	42 (16.5%)	120 (47.2%)	254 (100%)
Total	228 (39.3%)	81 (14.0%)	271 (46.7%)	580 (100%)

Table 56: Cross-tabulation of faith, doubt, or both by publishing organization, all references to climate change. Pearson $\chi^2=13.692$, $p=0.008$.

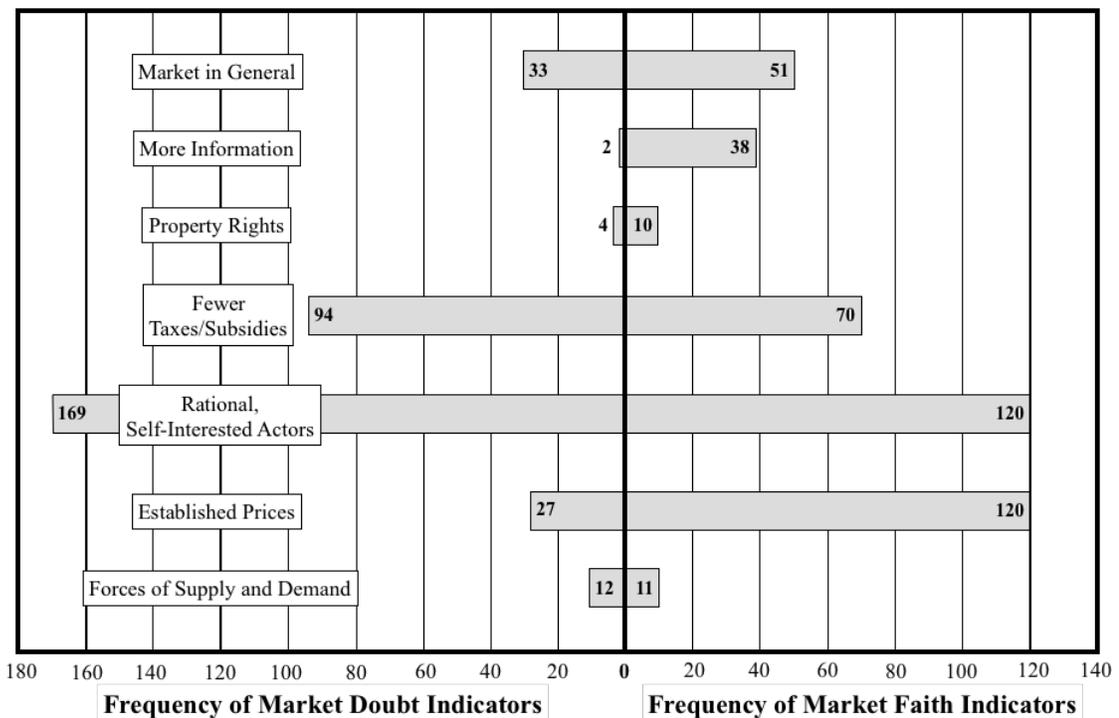


Figure 13: Frequency of specific market faith and doubt indicators for passages referencing climate change.

As seen in **Figure 7** above, the most common market-doubting sentiment concerned the optimal effect of rational, self-interested actors on market outcomes (169 of 305 or around 55 percent), followed by doubt in the positive effects of fewer discriminatory government taxes or subsidies (94 or 30 percent). Rational, self-interested actors (120 of 352 or 34 percent) and established prices (also 34 percent) were the most

common expressions of market faith, followed by faith in the positive effect of fewer discriminatory taxes and subsidies (70 or 20 percent), then faith in the market in general (51 or around 15 percent).

Market Doubt

Of the 169 expressions of doubt in rational, self-interested actors, almost half (75) appeared in the context of a discussion of the fossil fuel industry. The self-interested profit motive of the industry was often placed at odds with the steps needed to slow or stop climate change along several lines of thought. Most generally, it was argued that coal and oil companies (often referred to as “Big Oil” and “Big Coal”) could not be relied upon to transition away from heavy carbon pollution due to the continued (sometimes short-term) profitability of their existing practices. More specifically, doubt in the value of the fossil fuel industry’s self-interest centered on its active efforts to combat national and international carbon emission regulations, both through direct lobbying of governments and in public relations campaigns, funding fringe science to challenge climate science consensus.

The profits of fossil fuel companies were often placed at direct odds with environmental interests. Writer Ross Gelbspan, hoping for a meaningful Kyoto treaty, argued that the impending dangers indicated by climate science, and not “the short-term balance sheets of energy companies,” should inform the negotiations (*The Amicus Journal*, Winter 1998). In that same *Amicus* issue, Colum Lynch identified fossil fuel industries’ insistence “that it cannot profitably meet increased energy demands without burning more fossil fuels” as one of the primary barriers to the Kyoto talks (Winter

1998). In the next decade, this sentiment was stated even more plainly. In the wake of the Deepwater Horizon accident, John A. Adams wrote that “I’m just angry, because it seems to me that this has happened for the sake of profits and because of a failure to be cautious...” (*OnEarth* Fall 2010). In describing its legislative agenda in 2007, Friends of the Earth defined the scope of the problem as such:

The quality of any nation’s land and water resources are a barometer of its health. However, in the U.S., public lands and waters are under siege by extractive industries seeking profit from oil, gas and timber; by corporate polluters without any accountability to local, state and federal departments responsible for enforcing pollution regulations; and by industries that seek to open national park lands to off road vehicles that destroy habitats and pollute (*Friends of the Earth Newsmagazine*, Annual Report).

Critique of the industry’s profit motive was also juxtaposed with an explicit morality. The NRDC exhorted readers in 2005 to participate in a boycott of ExxonMobil with the goal of the company “taking global warming seriously and to face up to its moral responsibilities” (*OnEarth*, Fall 2005). An interview in *Sierra* with Lucy Lawless about her environmental activism followed a similar theme: “Drilling for oil in the Arctic is climate-change profiteering. It’s morally wrong, environmentally wrong- it’s wrong all around” (January/February 2013).

Environmental voices also emphasized that ecological harm was deeply ingrained in the fossil fuel industry’s daily business. Responding to a question about choosing the best place to purchase gasoline, *Sierra*’s “Mr. Green” column warned that the decision was a tricky one: “Different oil companies are responsible to varying degrees for different woes. (To name a few: polluting air and water, destroying wilderness, poisoning indigenous people’s land, promoting denial of global warming, exploiting workers, and even collaborating with oppressive governments that don’t give a dipstick about human

rights or environmental protections)” (January/February 2007). Elsewhere, writers emphasized the ongoing carbon emissions of such companies, such as methane extraction (*Not Man Apart*, February/March 1990; *Sierra*, January/February 2013) and the burning of coal (*On Earth*, Fall 2005, Winter 2007; *Friends of the Earth Newsmagazine*, Spring 2013). In 2010, activist Bill McKibben warned that saving outrage for events such as the Deepwater Horizon spill missed a fundamental point: “What stalks our future is the invisible damage done when the structure of the CO₂ molecule traps heat that would otherwise radiate out to space. It’s not when BP makes an outlandish mistake; it’s when BP and Exxon and the rest of the fossil fuel industry carry out their daily business” (*OnEarth*, Fall).

A great deal of doubt in the positive impact of the fossil fuel industry’s profit motive focused on corporate campaigns against a growing body of climate science. In 1990, a *Friends of the Earth* column on corporate accountability by Jack Doyle reported on record U.S. coal production, “ despite the dark cloud of global warming—which the coal industry denies is occurring...” (*Friends of the Earth*, October 1990). Profiling “disinformation” campaigns by a variety of corporate actors the next year, the Dartmouth College’s Donella Meadows criticized an advertisement by a coal and utility coalition (the Information Council for the Environment) that challenged the idea of a warming climate given falling temperatures in Minneapolis, Minnesota. “The ad tells you how to get the “facts,” as interpreted by the companies that produce (with our help as we burn their fuels) greenhouse gases that are warming the earth” (*The Amicus Journal*, Fall 1991). Later that decade, leading up to the Kyoto negotiations, the NRDC ran an advertisement in partnership with the Sierra Club “to reveal the motives behind the

misleading industry rhetoric” used in a more than \$13 million campaign aimed at “derailing” the negotiations (*The Amicus Journal*, Winter 1998).

Environmentalists highlighted not only the industry’s denial that climate change was happening, but also its active funding of science that challenged the general consensus about global temperature changes and their impacts. NRDC’s editorial board complained in 1993 that “[a] minority of skeptics, some of them associated with fossil-fuel industries that have a great deal to gain from such revisionism, are trying to put into question the validity of anthropogenic climate change” (*The Amicus Journal*, Fall 1993). In *Sierra*, journalist and activist David Helvarg called out the use of front groups by industry to challenge environmentalist claims since the publication of *Silent Spring*, including the Climate Coalition, “an oil-industry-funded group created to combat “the myth of global warming” (January/February 1997). “[T]he fossil fuel industry is a group with more than a little at stake when it comes to climate change,” argued contributor Margie Rynn about an advertisement placed by a similar group, the Greening Earth Society (*Sierra*, Winter 2000).

Doubt in the value of the profit motive was also expressed in the context of frustration with the public acceptance of industry claims on equal footing with academic consensus. John. A. Adams, founder and then-Executive Director of NRDC, highlighted well-funded public relations campaigns by fossil fuel and other industries causing some Americans to think that “‘scientists don’t agree’ on global warming” (*The Amicus Journal*, Winter 1998). Carl Pope, also then-Executive Director of the Sierra Club, similarly lamented industry’s persuasion of the public that “any action to reduce use of fossil fuels would devastate the economy” (*Sierra*, July/August 2000). Media coverage of

these issues was often blamed for the efficacy of industry's claims. *Greenwire* reporter Phil Shabecoff criticized the credence many major news outlets had given to industry-funded science:

I have seen a number of stories where its conclusions are given equal or less weight than those of a single scientist who has done little or no significant peer-review research in the field, is rarely, if ever, cited on those issues in the scientific literature, and whose publication is funded by a fossil fuel industry group with an obvious ax to grind (*The Amicus Journal*, Winter 1994).

For lawyer and journalist Curtis Moore, the reporting of ABC's John Stossel was emblematic of this type of work, by whom a scientist "on personal retainer from the Western Fuels Association" was presented as sound, neutral science. "Indeed, if the voices denying the existence of global warming or decrying tighter fuel-economy standards were obviously those of the oil, coal, auto, and similar industries, the messages would be seen for what they are—half-truths at best, and outright lies at worst—and ignored" (*Sierra*, July/August 2002).

Environmentalists were also critical of the influence the fossil fuel industry exercised on elected officials through campaign contributions and well-funded lobbying, weakening climate legislation in the interest of industry profits. The NRDC's Dan Lashof was skeptical of a meaningful outcome at the Kyoto negotiations, as "[t]he coal, oil, and auto industries are lobbying hard in an effort to scuttle any agreement, and many members of Congress are either uninformed about global warming, or hostile to taking action, or both" (*The Amicus Journal*, Winter 1998). A summary of a 2000 NRDC report titled "Kingpins of Carbon" highlighted the "enormous political and economic clout" of large fossil fuel corporations in blocking climate regulations (*The Amicus Journal*, Winter 2000). The sway these industries held over the George W. Bush administration

was especially criticized by *Sierra*'s senior editor, Reed McManus, who charged that "the administration's backtracking on campaign promises to reduce global warming as well as the oilman's plan to offer billions of dollars in tax credits and subsidies to energy corporations... just hint at what happens when Washington becomes a real company town" (July/August 2002). As climate change bills began to gain more legislative traction in the 2000s and 2010s, the industry's lobbying efforts against desired bills was criticized repeatedly for undermining the will of the American public and environmental interests (*Sierra*, January/February 2007, January/February 2008, July/August 2010, January/February 2011; *Friends of the Earth Newsmagazine*, Spring 2007, Spring 2014; *OnEarth*, Winter 2007, Winter 2012/2013).

Many expressions of doubt in the profit motive also pointed to the automotive industry (26, or around 15 percent). In this context, the industry was often presented as an active participant in the fossil fuel industry's lobbying and public relations campaign, primarily concerned with avoiding federal regulations of vehicle emissions. During the Kyoto talks, *Sierra*'s senior editor Paul Rauber presented a warning by the American Automobile Manufacturers Association's president that Kyoto would cause "soaring production costs and significantly higher driving costs" with a roll of the eye: "Some things never change" (July/August, 1998). Automobile manufacturers were repeatedly implicated alongside energy industry efforts to scuttle the Kyoto agreement (*The Amicus Journal*, Winter 1998), and after voluntary goals of the treaty were set, writer Jim Motavalli charged that the industry was doing whatever it could to avoid fuel economy standards, exempting sport utility vehicles from such standards and switching from "producing fuel-efficient cars to more profitable (and gas-wasting) light trucks and sport

utilities” (*Sierra*, July/August 1999). The industry was also called out for its complaints over California’s establishment of its own climate laws (*OnEarth*, Fall 2002) and as put by the Sierra Club’s Ann Mesnikoff, attempts to “scare people into thinking that fuel economy will mean that folks can’t buy the vehicle they want, and that the cars they can buy will be unsafe” (*Sierra*, July/August 2002).

In Winter 2005, *Friends of the Earth Newsmagazine*’s feature article focused on Toyota’s lobbying and legal efforts against numerous federal and state attempts to adopt the California standards. Despite the company’s successful hybrid Prius model and stated environmental mission, FOE’s Danielle Fugere and Bluewater Network’s Marsha Mather-Thrift argued that Toyota was joining other automakers’ antiregulatory fights because they did not want to be restricted in their “higher profit margin on the sales of larger, fuel-hungry vehicles.” *OnEarth* editor Douglas Barasach similarly lamented that in the face of climate science, “Detroit executives still seem hooked on cars that are profitable in the short term but get fewer miles per gallon than Henry Ford’s Model T” (Winter 2005).

Many expressions of market doubt referenced a doubt in fewer taxes and subsidies (91 of 305, or around 30 percent)—that is, a belief that taxes and subsidies would lead to more optimal outcomes. Like doubt in rational actors, many (38, or 42 percent) of these passages also referenced the fossil fuel industry. They supported a tax on the use of fossil fuels (*Not Man Apart*, July/August 1986; *Sierra*, July/August 1994, January/February 2007, January/February 2010; *Friends of the Earth Newsmagazine*, Spring 2007; *On Earth*, Fall 2008) and carbon emissions (*Friends of the Earth*, April 1992; *Sierra*, July/August 1994, January/February 1999, July/August 2003,

January/February 2007, July/August 2010; *The Amicus Journal*, Winter 1999; *OnEarth*, Fall 2005). These taxes would discourage greenhouse gases and promote energy efficiency, while sometimes funding other programs such as job training for displaced fossil fuel workers (*Sierra*, January/February 1999, July/August 2003).

Of passages supporting taxes and subsidies, 29 (32 percent) referenced the renewable energy industry. But the majority of these (19 of 29, or around 66 percent), and half of those discussing fossil fuels, talked about both industries. As early as 1979, FOE's Ronald Rudolph argued that "[t]he vast sums of money now allocated for coal research and development should be largely redirected towards programs that will conserve energy, increase the efficiency with which we use energy, increase the efficiency with which we use energy, and develop the fuels and infrastructure necessary to make the switch" (*Not Man Apart*, June). The editorial board of *The Amicus Journal* celebrated the initial position (if not the follow-through) of Secretary of State James Baker after his appointment by George H.W. Bush that the federal government should tax fossil fuels and subsidize "the accelerated development of alternative sources of energy" (Winter 1991). These passages all argued that subsidies for the fossil fuel industry should be replaced by taxes, and federal investment should shift to funding renewable energy (*Friends of the Earth*, April 1992; *The Amicus Journal*, Winter 1993, Winter 1998, Fall 2000, Winter 2001; *Sierra*, July/August 2003, January/February 2007; *Friends of the Earth Newsmagazine*, Spring 2007, Annual Report 2007, Annual Report 2008; *OnEarth*, Winter 2012/2013, Winter 2013/2014).

The third most frequent expression of doubt was in the free market generally. These passages often argued for the need to regulate trade (especially international trade) to

protect people and environments (*Friends of the Earth* Spring 1998; *Friends of the Earth Newsmagazine* Spring 2014). While he would express other types of market faith elsewhere in reference to climate change, Carl Pope himself often explicitly called out the failure of markets to adequately solve the climate problem (*Sierra* January/February 1994, July/August 1995, July/August 1998, January/February 2002, January/February 2003, January/February 2007).

Market Faith

Climate change passages that expressed faith in rational, self-interested actors frequently also discussed the fossil fuel industry (27 of 120 or around 22 percent), the financial industry (24 or 20 percent), the renewable energy industry (20 or 16.7 percent), and/or the automobile industry (15 or 13 percent). In the context of the fossil fuel industry, some passages lauded companies for voluntarily pursuing carbon capture or a reduction in carbon emissions in the context of overwhelming evidence of and public opinion surrounding climate change. In 1990, FOE's Jack Doyle reported on Exxon's corporate accountability in the capture and marketing of carbon emissions:

For the U.S. energy industry, and particularly Exxon, the CO₂ issue provides an opportunity to set an example for the rest of the Fortune 500 by doing something positive for the greenhouse problem in the short term. Exxon and other energy giants could initiate immediate programs to reduce or eliminate venting of CO₂ and other greenhouse gases throughout their operations worldwide. In fact, multinational firms can act more quickly in this regard than can most individual nations, providing a powerful impetus to prod national governments to set specific CO₂ reduction goals (*Not Man Apart*, February/March 1990).

Reporting on private industry moves away from coal, *OnEarth* contributing editor Craig Canine cited General Electric, Kennecott, ConocoPhillips, and Shell as examples of

voluntary action responding to “groundswell of public and political pressure” (Fall 2005). The Sierra Club’s Carl Pope also highlighted members of the private sector pitching in to fight the good fight: “It took Hurricane Katrina, An Inconvenient Truth, the 2006 elections, and increasingly terrifying scientific evidence on global warming to unleash a wave of action in every sphere of society. Businesses that used to sit on the sidelines are now calling for national action” (*Sierra*, July/August 2007).

Elsewhere, this corporate morality was praised alongside the benefits such eco-friendly changes would have to the industries’ bottom line. In an interview for *OnEarth*, climate investor Mindy Lubber drew a direct line between these two goals.

Take General Electric, for example, and their “ecoimagination” project. What they’ve said is, we’re going to do what’s right. We’re going to mitigate our carbon footprint, and at the same time we’re going to make a lot of money. That’s the kind of American ingenuity we’re looking for, and we need to see far more of it” (Winter 2006).

While a short brief in *The Amicus Journal* called British Petroleum’s plan to cut emissions precedent-setting, it also noted that BP planned to do so without sacrificing growth or profits” (Winter 1999). In an interview with *Sierra* five years later, Stanford ecologist Gretchen Daily pointed out that the company had done so “to lessen the cost of doing so once it’s legally required” (July/August 2004). Largely, these passages argued that it was in the long-term best interest of fossil fuel companies to invest in efficiency measures and to support national emissions standards that would reduce business uncertainties.

Passages discussing profit faith and the financial industry presented the threat of climate change more starkly as a financial opportunity for clean energy investment. This appeared earliest in *Not Man Apart* in the context of a proposed “Greenhouse Capital

Bank” that would sell mortgages for energy-efficient residential construction (July/August 1986), but most of this discussion of the financial industry occurred between 2004 and 2009. Environmentalists touted green investments by Citigroup, Bank of America, and Wachovia (*Sierra*, July/August 2004, July/August 2006, January/February 2008). While sometimes these changes were the result of pressure by activists such as the Rainforest Action Network (“It’s easy to profit by plundering, but... protecting the earth is a better investment” (*Sierra*, July/August 2004) or the NRDC’s own Center for Market Innovation (*OnEarth*, Winter 2009), at other points this investment behavior was framed as a response to the realities of climate change effects and energy inefficiencies, which investors could no longer afford to ignore, as put by *Sierra* senior editor Reed McManus:

Back then it pretty much took a mountaintop epiphany for a CEO to see the benefits of going green. No more. Now, with energy costs soaring, supplies of raw materials becoming more tenuous, and regulations—particularly in regard to climate change—transforming business, companies are finding ingenious ways to reduce their risks and costs and increase their profits. A sequel to the 1987 movie *Wall Street* might find bare-knuckle trader Gordon Gekko imploring, “Green is good.” (January/February 2008).*

Environmental voices emphasized that profit and cutting carbon emissions were not at odds (“Too many people see a false dichotomy between economic and environmental goals,” argued a profile of the NRDC’s Harry Henderson (*OnEarth*, Winter 2009)), and celebrated venture capitalists that sought to make money off of the new energy future (*OnEarth*, Fall 2007, Fall 2008, Winter 2009, Fall 2009; *Sierra*, January/February 2008).

* In a likely coincidence (and much to my amusement), this exact movie was released in 2010 by 20th Century Fox, with investment in clean nuclear fusion energy as a minor plot point. McManus received no story credit and his proposed line was not used in the film, though it has been used often in the context of environmentally-oriented business.

Expressions of faith in rational self-interest and the renewable energy industry followed a similar line of logic. In some cases, environmentalists cited some industry actors' wise decisions to transition some of their activities to renewables, like British Petroleum's investment in carbon offsets (*Sierra*, July/August 2004), California utility companies' move away from a coal to a solar energy grid (*Sierra*, January/February 2010), and a variety of other profit-friendly technological breakthroughs: "Toyota's exploding advantage over Detroit automakers as a result of the Prius; the nanoengineering of thin-film solar panels that promise to generate electricity more cheaply than burning coal; Duke Energy's Save-a-Watt program, wherein the utility is making money by pushing energy efficiency" (*OnEarth*, Fall 2008). Passages pushed for federal investment in a renewable industry that would spur national economic growth (*Sierra*, January/February 2008), as it had in Japan and some European countries (*The Amicus Journal*, Fall 1991; *OnEarth*, Winter 2009), and save money on energy expenditures at the household level (*The Amicus Journal*, Fall 2000). According to NRDC president Frances Beinecke, that federal investment would take the form of a cap-and-trade climate change bill: "not just an effort to curb carbon emissions; it's an investment plan" (*OnEarth*, Winter 2009).

Faith in established prices also made up over 34 percent of all market faith in the climate change dataset. These passages were most likely to reference the fossil fuel industry (35 of 120, or 29 percent), followed by renewable energy (21, or around 18 percent). They generally were premised on the argument that consumption and production patterns of energy use will respond to a clearly set price on either clean or dirty energy, and often argued that these goods have a "true" price that is—or would be—

set by a market that took long-term, complete accounting into consideration.

Furthermore, they argued that the “true” price of dirty fossil fuels and clean, renewable energy are often obscured by human or market-external factors, such as misinformation, wishful thinking, or counterproductive subsidies.

Throughout the last 25 years of the dataset, environmentalists emphasized that an established price on carbon—reflected in more expensive fossil fuels and less expensive alternative energy sources such as solar and wind—would lead energy companies and consumers to transition away from burning coal and oil. In 1991, the editorial board of *The Amicus Journal* pointed out that “[t]he United States could immediately change its energy policy and energy pricing to encourage conservation and renewables” (Fall). Leading up to the Kyoto talks, *The Amicus Journal*’s Colum Lynch cited Undersecretary of State Tim Wirth’s explanation for climbing carbon emissions throughout the 1990s as due in part to low oil prices worldwide (Winter, 1998). A similar logic was cited by ecological economists in the pursuit of a carbon tax to better balance cost-benefit decisions regarding energy (*The Amicus Journal*, Winter 1999). In 2007, the Sierra Club published a plan to drastically cut carbon emissions by 2050: “We get prices right: The high cost of pollution is reflected in how much consumers pay for their energy. Suddenly getting your power from a coal-fired plant costs a lot more than using wind or even solar power. As renewable energy becomes cheaper than fossil fuels, change happens fast” (*Sierra*, January/February 2007).

This point was key in these passages—that renewable energy’s true price was far lower than that of fossil fuels. Cutting carbon emissions would save money at a national and household level (*Sierra*, January/February 1990, July/August 1994, July/August

2002, July/August 2012; *The Amicus Journal*, Fall 1991; *OnEarth*, Fall 2005, Winter 2011, Winter 2013/2014), but it would also benefit business' bottom line. In an interview with *OnEarth* in 2005, the head of Excelsior Energy laid out the superior economics of integrated gasification combined cycle (IGCC), or coal gasification:

“If you consider only the up-front cost of putting the plant in the ground,” Micheletti says, “then yeah, IGCC probably costs between 10 and 20 percent more than pulverized coal. But if you do a life-cycle cost analysis, my view is that IGCC is the best bet from a purely economic point of view, because you’re never going to have to worry about putting on additional pollution-control equipment. Anyone who takes a look at where the country’s going knows that we’re going to end up with more stringent control requirements for mercury, particulate matter, CO₂, you name it. If you figure all that in, IGCC is a better deal” (Fall).

Reporting on a regional cap-and-trade program created in nine northeastern states that same year, *OnEarth* similarly argued that by being presented with a financial incentive, those companies that responded to a market-set carbon price would put themselves at a competitive advantage: “...companies that devise the most economical ways to reduce their emissions will benefit most financially—a built-in incentive to invest in newer, cleaner technologies” (Fall 2005). FOE even created a solar fuel station cost-benefit calculator to show municipalities and businesses how renewable efforts could improve their bottom line (*Friends of the Earth Newsmagazine*, Annual Report 2009). But these benefits were contingent on a clearly set price signal (*OnEarth*, Fall 2007, Fall 2008, Winter 2009, Fall 2009; *Sierra*, July/August 2010, January/February 2011; *Friends of the Earth Newsmagazine*, Spring 2011). As summed up by columnist Thomas Friedman in an interview with *OnEarth*, “[t]o me the only really big strategic change would be if we got a price signal on carbon—cap and trade or a carbon tax” (Winter 2009).

Placing a price on carbon was necessary due to a litany of factors obscuring its true, long-term price. One was substantial federal subsidies for the fossil fuel industry, making those resources seem less expensive than they truly were (*The Amicus Journal*, Fall 1991; *Sierra*, July/August 1994; *Friends of the Earth Newsmagazine*, Spring 2011). Another was deliberate obfuscation of fossil fuel's true cost by those with a vested interest in its continued market dominance, such as the American Coalition for Clean Coal Electricity (ACCCE)'s "shoddy apples-and-oranges comparison in weighing the costs and benefits of carbon emission reductions... ignoring the economic benefits of limiting pollution in terms of improving human and environmental health and reducing climate change." (*OnEarth*, Spring 2014). Encouraging (or suing) government agencies to consider such factors in cost-benefit analyses was a common solution to this incomplete accounting (*Sierra*, January/February 2004; *Friends of the Earth Newsmagazine*, Spring 2005). At other times, carbon costs were hidden by cultural factors, like conventional (and not ecological) economic wisdom (*Sierra*, January/February 1990; *The Amicus Journal*, Winter 1999), advertisement-driven ignorance of the true costs of driving (*Sierra*, July/August 1994), or political ideology (*Sierra*, January/February 2008). Congressional attempts to pass a cap-and-trade climate change bill were often criticized for failing to sufficiently make carbon costs plain by initially giving and not selling carbon credits to businesses (*OnEarth*, Fall 2005; *Friends of the Earth Newsmagazine*, Spring 2008), but the bills' ultimate failures were also framed as "the Senate's failure to put a price on carbon" (*Sierra*, January 2011).

The third most frequent expression of market faith was in fewer discriminatory taxes and subsidies. The majority of these passages (43 of 70, or 61.4 percent) discussed

the fossil fuel industry, and many (22, or 31.4 percent) concerned renewable energy. Seventeen passages discussed both renewable energy and fossil fuel. These passages generally criticized government subsidization of the fossil fuel industry, arguing that dirty fuels enjoyed an unfair (and environmentally dangerous) advantage in the market. This was the root of many criticisms of the \$1 trillion carbon credit “giveaway” to industry in the Lieberman-Warner climate bill (*Friends of the Earth Newsmagazine*, Spring 2008, Annual Report 2008), but also of many explanations of the problematic and continued use of coal, oil, and gas (*Not Man Apart*, June 1979; *The Amicus Journal*, Winter 1993, Winter 1998, Fall 2000; *Sierra*, July/August 1994, January/February 2007; *Friends of the Earth*, Spring 1998, Winter 2001; *Friends of the Earth Newsmagazine*, Spring 2004, Spring 2007, Annual Report 2007, Spring 2009, Spring 2011, Spring 2014; *OnEarth*, Fall 2005). Environmentalists were also critical of subsidies going toward the development of faux-clean technologies, such as “clean coal” (*OnEarth*, Fall 2005), corn ethanol (*OnEarth*, Fall 2009), or carbon capture and sequestration (*Sierra*, July/August 2010). In some cases, these passages called not for an absence of taxes or subsidies but a shift in these benefits from fossil fuel to the renewable energy industry. In others, however, the end of fossil fuel subsidies would allow the renewable energy industry to compete more fairly. In 1993, *The Amicus Journal*’s editorial board called a roll back of dirty energy subsidies a chance to “create a ‘level playing field’ for more environmentally benign energy” (Winter 1993).

This idea was echoed in the fourth most common market faith sentiment, a faith in the free market generally. Of the 51 expressions of general market faith, many (13, or 25.5 percent) also addressed renewable energy. Coming out of the Reagan and Bush

years, some were concerned that a lack of federal investment in clean energy would put America at a competitive disadvantage on the world stage (*Not Man Apart*, December/January 1989/1990; *The Amicus Journal*, Fall 1994). As put by *The Amicus Journal*'s editorial board, environmentalists argued that "With the Japanese, West Germans, Swedes, and others making bold strides, ...U.S. economic competitiveness will suffer if America does not quickly do the same" (Fall 1991). Not only would a clean energy economy make the United States more competitive internationally, but businesses that saw the potential in this industrial transition would be rewarded in the marketplace as well (*The Amicus Journal*, Winter 2001).

What was the best way to unleash this competitive potential and growth? As the NRDC's Frances Beineke argued, the passage of a cap-and-trade climate bill (*OnEarth*, Winter 2009). Eighteen (35.3 percent) of general expressions of market faith mentioned a cap-and-trade plan. As early as 1998, economist Everett Ehrlich argued that emissions targets from a strong Kyoto agreement might themselves encourage a market for carbon offset trading, "affording every corner of the world economy the right signals about—and the right to participate in—the process of efficient carbon reductions and offsets" (*The Amicus Journal*, Winter). Before a national cap-and-trade bill was on the horizon, environmentalists celebrated the regional system created in the Northeastern United states for creating an incentive for power plants to reduce pollution at the lowest possible cost (*Sierra*, January 2004; *OnEarth*, Winter 2005, Fall 2005). Throughout the late 2000s, as environmental groups prioritized bills such as Lieberman-Warner and Waxman-Markey, passages argued for the benefits of a carbon market on a national stage (*OnEarth*, Winter 2007, Winter 2008, Fall 2008, Winter 2009; *Sierra*, January/February 2008). Even one of

the more controversial components of these bills—distribution of carbon credits to companies rather than an auction, a policy officially opposed by FOE and the Sierra Club—was criticized on the grounds of interfering in a open carbon market. As put by FOE’s Nick Berning, “[a]uctions allow the market, rather than government, to determine the winners and losers among polluters” (*Friends of the Earth Newsmagazine*, Spring 2008).

Discussion: The Power of Price

In the case of climate change, environmentalists’ overall understanding of the market is unsurprisingly complicated. Some rational actors cannot be trusted because their drive for profit is a corrupting influence, but when faced with climate science and a clear price signal, that self-interest is a force for good. Very few would argue that perfect market conditions exist for energy, and it is in no way a claim of this project that the environmental movement holds this position. However, elements of free market ideals are pervasive throughout these discussions of climate change. The belief that rational self-interest and better-established prices will lead to better outcomes when applied to carbon emissions assumes that, given the right signals and conditions, the market can and should be used to manage our carbon pollution. This assumption is a distinctly market fundamentalist one.

Looking back to Chapter 3, in the larger dataset reference to the automotive, financial, and especially renewable energy industries predict more faith in the market overall, while reference to the fossil fuel industry does not. In Chapter 4, we also saw the fossil fuel industry in particular as a problem, often in reference to its complicity with

James Watt and the erosion of federal limits on mining and the EPA's regulatory oversight. But in the climate era, the business of fossil fuel takes on a more complicated role in environmental narratives. The invocation of "Big Coal" and "Big Oil" in this context is an important framing tool, discursively positioning the industry as a villainous figure for which profit is too strong and problematic a drive to expect them to behave better. In fact, it is this very drive that leads the industry to actively misinform the public, lobby against binding international climate agreements, and therefore put the public at risk. This is especially a problem when coupled, just like in the Reagan era, with a complicit presidential administration, here that of George W. Bush. Doubt in the self-interest of this particular industry is a theme that runs from 1980 to 2014.

However, the climate era is also marked by an increased faith in the self-interest of industry overall. Even though this faith was mostly directed at renewable energy and finance, it buoyed even the most notorious boogeyman of modern environmentalism. In this case, of course, the industry was not referred to as "Big" anything, but rather specific companies were called out by name—Exxon, ConocoPhillips, Shell, British Petroleum—and lauded for doing their part to reduce carbon emissions in the face of public pressure. This same logic lifted the automobile industry at times, a business interest that was often accused alongside fossil fuel for obstructing climate legislation or of being unwilling to give up the profit margin it enjoyed on the sale of sport utility vehicles.

The most reliable faith in self-interest, of course, came in reference to the renewable energy and financial industries. As banks invested money into clean energy, they were celebrated for their appreciation of either the obvious signals sent by the market (rising energy costs and scarcity of raw materials) or long-term vision to see the

value of energy efficiency or coming regulatory changes. But these passages express more than support of the self-interest motive in leading industry down an environmentally-friendly path: they often explicitly celebrate how profitable these industries' strategies are or could be. "Ingenious ways to...increase their profits," climate change legislation as an "investment plan," climate vs. economic growth as a "false dichotomy"—fighting climate change will make money! And it will do so for the nation, for the household, and for private business interests.

That faith in profit is so much more likely to be expressed alongside climate change (and during the Bush II and Obama administrations) is important. But it does not occur in a vacuum, and I argue that this pivot from doubt to faith in the profit motive hinges on one assumption—that these actors participate in an economy that acknowledges the price of carbon emissions. The logic that underlies faith in established prices sometimes employs support for a carbon tax, dissuading carbon-intensive practices and encouraging the use of energy efficient ones. Market doubt regarding the importance of taxes and subsidies especially expressed the need for government to intervene with taxes on fossil fuels and carbon emissions and subsidies for clean energy—though these subsidies were often discussed as investments. And almost as frequently as environmentalists expressed doubt in fewer taxes and subsidies, they also expressed faith—that policies making fossil fuels cheaper were impeding a market where the true price of carbon emissions could shape the industry in a positive manner.

In her history of the formation of credit markets, Marieke de Goeda posits that the functioning of the financial system, and limited political criticism of it, is predicated on a "forgetting" of the political contestations of money and finance that have characterized

financial developments in the last 200 years (2005). Finance's attempts to differentiate itself from gambling in the 18th and 19th centuries purposefully separated licit finance from illicit gambling and, by the early 20th century, established a rational, professional, and gendered speculator in contrast to a feminized and irresponsible gambler. The idea that risk was calculable was critical to this triumph. As de Goeda focuses on the development of the Dow Jones Industrial Average, she argues that stock exchanges in the late 19th century were actually seen to distort prices set by the free market, and controversy surrounding the origin of prices was resolved by "a political move" (de Goeda 2005:96) to posit the stock exchange as the free market manifest, where true prices made themselves visible. "...(T)he resolution of this debate did not depend on the discovery of the true and natural origins of stock prices, but on the construction of a discourse of "true prices" as being independent of human influence and control" (2005:97), particularly through statistical metrics like the Dow, which claimed to measure a naturally occurring price index. Along with other scholars (MacKenzie and Millo 2003), de Goeda shows that politically and culturally contested financial developments have been discursively resolved by contemporary assumptions that markets function as natural, non-social entities—and that this assumption has been normalized further by regulatory tools that support such logic (2005).

Since 1990, the idea of a price on carbon has remained popular among environmentalists, premised on the idea that more expensive carbon-emitting fuel sources and less expensive renewable energy sources would lead consumers and industry to shift behavior. But environmentalists' ideational investment in this idea has led to places likely not anticipated by earlier debates over command-and-control carbon plans. If a price

mechanism, whether implemented by the institution of ecologically-friendly taxes and subsidies or their absence (allowing energy's "true" price to speak for itself), *could* shift the market away from climate change due to individual actors' self-interest, by the 2000s that self-interest *should* be exercised so that a clean energy economy can finally thrive. Rational, self-interested actors, once seen as a potential tool in the environmental regulatory toolbox, later becomes celebrated as the reason for action against climate change: your household, your business, your country will be rolling in clean energy money, "doing well by doing good."

There is a clear demarcation here between self-interested good business and self-interested bad business. While the rhetoric used in these magazines about big or "dirty" coal and oil (as well as their "dirty" political tactics) is certainly a framing tactic (McAdam, Tarrow, and Tilly 2001), it also clearly reflects a moral valence between those for whom greed is good—well-meaning clean and alternative tech heroes—and dirty energy villains for whom self-interest is a dangerous and damnable quality. A clear market signal, the "true" price of carbon, is critical to the idea of the profit motive as a heroic impulse.

That environmentalists are somewhat split as to whether the free market, when considered explicitly in the case of climate change, is a positive or negative thing, is also quite interesting here. Faith in the free market generally decreased over time in the dataset as a whole, as seen in Chapter 3. Carl Pope, a Sierra Club leader singled out by Naomi Klein as particularly friendly to business and greenwashing (and who expresses the need to work directly with business rather than through regulation in this dataset), often expressed fundamental problems with free market systems, specifically that climate

change was a clear market failure. In this way, as a whole, more contemporary environmentalist voices reject the market faith of the Ford, Carter, and Reagan era—in fewer taxes and subsidies and the free market in general—while embracing elements of faith after 2000 that they in the 1970s and 1980s had eschewed—established prices and rational actors.

Nature as a commodity is not a new concept, nor is it particular to the neoliberal era. What has distinguished this time period, however, is a changing relationship between the state and the market alongside significant ideological changes in the civil sphere. Many of the authors discussed in Chapter 1 contend that neoliberalization has been highly uneven, and that as a practice neoliberalization is an imperfect, contested, and contradictory realization of the neoliberal ideals of an all-encompassing yet unregulated market. The effects of neoliberalism on society-environment relationships have been similarly uneven.

Many academics who consider the material effects of neoliberalism on the environment point to privatization, commodification, and regulatory reform as its salient features. However, most of this literature does a poor job of distinguishing how these processes differ from earlier forms of capitalism aside from the speed at which they are happening. The conversion of public land to private property has continued for centuries. What is new, I argue, is the realm of what is considered “thinkable” as a commodity, and crucially how the market should or should not apply to that commodity. As Smith protests the creation of markets trading carbon emissions and wetland mitigation banking, he points to a new level of abstraction in the market. We have seen the effects of such abstraction of the money form in the financial crisis of recent years (Ferguson and

Johnson 2009). But the abstraction of nature in the market, which is (at this stage) far more legible to the average onlooker, has had critical effects on the very way we understand nature as well. Increasing rates of environmental degradation worldwide are certainly a serious concern, but I find that the more interesting (and perhaps more important) question addresses why these processes have been allowed to accelerate in the first place, despite a growing cacophony of environmentalist dissent.

The data presented above provide further evidence that neoliberalism's ideological project has been as uneven as its material one. But it also helps us understand just how market ideology has been legible to mainstream environmentalism over time. In Chapter 4, I describe how environmentalists responded to the Reagan administration with both increased faith and doubt in the free market, presenting as a series of dual logics surrounding energy markets and the commodification of public land. But importantly, environmental challenges to the Reagan administration also criticized the administration for not fully embracing the free market—accepting certain broad narratives about the benefits of the free market that, prior to Reagan, had not enjoyed mainstream acceptance in policy circles, and certainly not environmental activist ones. While in the climate era these explicitly romantic ideas of a free market fix are more likely to be challenged, market faith that is expressed relies on more technical ideas of a correct carbon price.

Following Foucault, many scholars argue that the most important impact of neoliberal ideology, functioning through state apparatuses (or civil society), has been the production of neoliberal subjects (Brown 2003, 2006; Foucault 1991; Larner 2000). In the case of environmentalism, this takes the form of producing environmental subjects who conceive of natural resources as well as their degradation in monetary equivalents.

Critically, although neoliberalization has far from resulted in pure, unfettered markets that rule all human institutions, neoliberalism has worked hard to produce environmental subjects who understand their fields of action as though these markets do exist, and act accordingly. This has been integral to the consent of civil society to the acceleration of environmental degradation due to processes like privatization, commodification, and regulatory reform, because in the short run, environmental accounting makes sense as a way to manage nature as a resource. Whether the accounting happens through the free will of enlightened businesses or through state regulation ensuring that the externalities of environmental degradation are internalized, the abstract monetization of nature has come to dominate environmental politics in the political field as well as powerful, mainstream environmental organizations which today largely function by lobbying for said regulation or suing businesses who do not comply with it, thereby enforcing internalization of cost.

We can see this process at work in the pages of these three organization's newsletters and magazines, as environmentalists push for a cost internalization that relies not on the imposition of taxes, but the unleashing of market forces following the unveiling of carbon's true price, previously shrouded by short-term vision or an artificial market advantage given to fossil fuels. This price is presented as a truth, a revelation that could restore the Anthropocene to a more natural order. But it is also a tool, a way to manage a critical resource more reliably than the state could, while creating an opportunity for private profit and economic growth.

Environmental accounting is not new to the climate era. Economic analyses of "ecosystem services" grew throughout the 1960s and 1970s (Nelson 2015), and these

themes can be seen in the previous chapter, where environmentalists were concerned with the accurate pricing of public lands in the face of Reaganite attempts to privatize them. But the romanticist, preservationist challenges to established prices that we saw in the 1980s are absent from discussion of climate change. And it is perhaps this fact that helps explain increased environmentalist faith in the market over time, particularly when passages reference climate change: this environmental problem, while well-established by science, is abstract. Its abstraction has in part enabled conservative and business challenges to its existence at all, but it also appears to obviate avenues toward environmentalism's previous resistance to market logic as it grapples with solutions to this particular problem. And while explicit faith in the free market is less likely, the idea of a true carbon price seems to usher in a romance with economy over ecology.

Chapter 6:

Conclusion: Romancing the Market, Rationalizing Nature

I see four generations. The first was stories that were so clear in their moral valence that they were close to parables. You had villains, you had heroes, you had victims. The second generation was a transition to stories about legal solutions in legislatures and Congress. The third generation was reactive to the first two, like the Sagebrush Rebellion, corporations starting to do things (many of them cosmetic), and community-based environmentalism.

Today the categories are scrambled. The villains of the first generation are in the rough-and-tumble political debate over climate change. You've got DuPont, Duke Energy, General Electric—companies that were on the wrong end and are now side by side, more or less, with environmental groups on cap-and-trade proposals. The problems are going to be fixed by all sorts of entities and alliances. The characters have all changed. And that requires, for a journalist, not being too wedded to the old storytelling devices.

-Felicity Barringer in *Sierra*, September/October 2008

In this reflection on the trajectory of environmental reporting, former *New York Times* reporter Felicity Barringer highlights the clear moral lines drawn in the environmental fights of the 1960s in comparison to a far more complex mix of interests on the 21st century battleground. Whether due to changing business priorities among energy companies or environmentalism's embrace of market rationality as an activist tool, Barringer sees the contemporary terrain as free of the hard-line morality that defined reporting on the early movement. I argue, however, that in the case of climate legislation, environmentalists' articulation of market forces and market actors are still informed by a deep moral valence, one that impacts whether the free market is portrayed as a force for good or for harm.

The specter of conservation haunts each iteration of managerial environmentalism. Its base assumption is that natural resources are themselves

commodities that must be used, yet managed to ensure continued economic growth, and that it is the job of environmental interests to ensure that the market does not overexploit those resources as it seeks its short-term interests. What has changed over time, at least in the American context, has been the strategy that environmentalism sees best fit to regulate capitalist development through internalization of the costs of environmental degradation. The temporality of ecological modernization and sustainable development discourse might be neoliberal, but as systems of state- or market-regulated conservation they are not distinct from resource management politics of the 20th century. What has changed during the period of America's neoliberalization, however, is both the increasingly porous relationship between the state and the market and ideological understandings of nature's value. Just as Margaret Somers argues that market fundamentalism is changing social understandings of citizenship, neoliberal ideology is distinct in its transformation, however incomplete, of the *ways* that non-human nature is valued. Following Erich Zimmerman's famous maxim that "resources are not, they become" (1933), it is important to examine the ways in which nature has become valued as a resource for capital above, instead of, or alongside its cultural, communal, or life-supporting modes of valuation.

A struggle between nature-as-wilderness and nature-as-commodity is particularly American, due to the critical role wilderness, in opposition to modernity, has played in the American cultural imaginary (Cronon 1996). This struggle has also played out to a large extent in the realm of the state due to the United States government's early and somewhat unprecedented role as land owner, real estate broker, and developer (Fourcade 2011; Wolf 1981). Fights over federal land use policy persisted throughout the early 20th

century as the federal government added large swaths of land to national forests and forest preserves, particularly in the form of western rancher protests over grazing fees between the 1920s and 1940s, which won cattlemen seats on a National Advisory Committee that would give them a great deal of control over grazing fees until the 1960s (Brulle 2000b). As the modern environmental movement coalesced and management of environmental resources and pollution became the basis for environmental politics in the United States, criticism of environmental policy still poured from economic interests in the west (Brulle 2000b).

Those western concerns, described in more detail in Chapter 4, were able to position themselves as a grassroots environmental movement by drawing on the elitist, preservationist roots of modern American environmentalism, which served to alienate large numbers of the American working class whose jobs relied on resource use, particularly in the logging, ranching, and mining industries. Richard White examines this process in the town of Forks, Washington, where environmentalism's privileged focus on nature as a site for recreation and aesthetic appreciation as opposed to a site for work and livelihood allowed Wise Use ideology to construct a zero-sum game for jobs and environmental activism: "Are You an Environmentalist, or Do You Work for a Living?" (1996).

While the romantic and aesthetic tropes of preservationism have largely disappeared from environmental policy and management, they clearly still play an important role for the ways that the environment is valued by more privileged segments of society. William Cronon has identified the peculiar sacred nature of the wilderness in the American cultural imagination as one stemming from romanticism and the

possibilities (and dangers) of the American frontier, and traces these constructs through to the contemporary environmental movement (Cronon 1996). While White sees the pervasion of wilderness romanticism as alienating to the working class, and Cronon sees it as potentially “insidious” given the way that a sanctified nature necessarily undermines other environmental priorities or uses (1996:73), romantic preservationism is also a trope that is incorporated in, and sometimes competes with, an economic valuing of nature. While not a dominant mode of environmental understanding in post-war environmental politics, preservationism remains for many in competition with a state and environmental movement-sanctioned commodification of nature.

Importantly, we see the effect of these romantic roots in the case of resistance to the market in reference to the Reagan administration, where voices seek to protect and not conserve ecosystems and visually attractive American landscapes. But doubt takes other shapes as well. In the case of climate change, resistance to the market is not romanticized, but rather echoes the concern of Neil Smith and other scholars that tying nature to market volatility only puts non-human nature at greater risk. In both Chapter 4 and 5, we also saw strong doubt in the benefit of rational self-interest, though in the case of climate change this doubt is conditional upon whose profit motive is in question.

The market doubt displayed here by environmentalists—in the 1980s, in the benefit of the profit motive, or in the climate era, the need for fewer taxes and subsidies—belies three important assumptions. The first, often employed by scholarship and commentary on the left, is that neoliberal ideology or market fundamentalism is hegemonic and informs the understanding of all elements of our social world, including environmental regulation. Here, we see that these assumptions, while present, do not

overwhelm environmentalist articulations of the free market's utility for fighting environmental harm. The second, employed by environmentalists in an attempt to save the planet from climate crisis, is that market mechanisms of supply and demand are the answer to environmental woes. If faith can only be put in the profit motivation of business that means well and does not intend to "game the system," can environmentalism truly use the free market to regulate natural resource use and pollution? The contradictory logics we see here suggest that environmentalists need to approach the use of market tools more carefully, rather than often assuming that the market they are mobilizing is a free one.

And importantly, that the distrust of market mechanisms described above is commonly practiced in the discourse of three "big green" environmental organizations challenges a third assumption, one often employed by both environmental sociology and more radical environmental organizations: that the major, national-level environmental groups have abandoned their former progressivism in favor of complicity with the economically and politically powerful, and the only hope for anti-capitalist climate activism lies with radical and marginalized groups. Yet here, even the most conservative site utilizes market doubt over half the time, while the moderate Sierra Club does so even more often than Friends of the Earth, the most progressive of the three. This suggests that even these mainstream, professionalized institutions exercise politics that are critical of free-market capitalism, and that possibilities exist for a stronger embrace of that critique from groups that bring the resources, membership, and lobbying networks that more marginalized groups cannot.

Even so, the primary question of this project is whether market faith increased for environmentalists during the study period, how, and why. The increasing prevalence of market fundamentalist assumptions in this discourse, and the uneven advance and recession of particular ideas over time, challenge assumptions of neoliberal ideological *hegemony*. But they also support a complicated, but certainly present, conceptual creep, where market fundamentalist ideas become more legible over time. Faith in a market devoid of contaminating taxes and subsidies, or perhaps able to more accurately reflect value than the government, was ushered in to combat Reaganite attacks on the environment, though on Reaganite pro-market terms. That era's distrust of the profit motive carried through to more contemporary concerns about climate change but gave way to a coinciding faith in that profit, given that an actor was the right "type" to let its self-interest to be trustworthy. And finally, the importance of placing a price on carbon led to faith that might have otherwise been unthinkable in environmental circles—in the profit motive of even fossil fuel industries, in capital accumulation and economic growth, as long as a taming carbon price was established.

Neoliberalization has utilized many coercive tactics in its suppression of labor unions and practice of accumulation by dispossession (Harvey 2007a), but it has also made use of the disciplinary practice of governmentality (Foucault 1991). Part of the "project" of neoliberalization, if we can consider it coordinated and coherent enough to be a project, has been the dissemination of neoliberal ideologies, expending a great deal of effort toward creating particular kinds of self-interested, rational actors that its ideal market models assume. For example, scholars have recently demonstrated the ways in which state actors attempt to discipline welfare recipients (Korteweg 2003; Soss et al.

2011) and incarcerated women (Haney 2010) into actors who will not only function as ideal neoliberal subjects but will do so within normative understandings of race, class, gender, and sexuality. While these attempts are demonstrably contested by these subjects along multiple points of subject production, the production of self-regulating *homines economicus* by the apparatuses of the market and the state has become a widespread practice. The production of neoliberal subjectivity involves not only the discipline of individual, atomized subjects, but the discipline of social relationships (Somers 2008).

The relationship between ideology and praxis is not a simple one, and the uneven manifestations of both neoliberalism and neoliberalization complicate this further. Neoliberalism as defined above is not necessarily an ideology that can be mapped onto state and market actors who have driven neoliberalization, those who many on the left would call “neoliberals.” Rather, neoliberal ideology is better understood as it is used by Althusser to describe “the imaginary relationship of individuals to their real conditions of existence”: ideology functions through state apparatuses (culture, education, family, etc.) to produce neoliberal subjects (Althusser 1971). As Althusser also points out, this ideology has a material reality—subjects live out this ideology in practice. Neoliberalization, then, in addition to its purgatorial project of market governance, is also the practice of neoliberal subjectivities. In this way neoliberal ideology, though dissonant with the realities of neoliberal practice, remains materially important even if it is unable to realize its pure market ideals.

Like labor, the natural environment needs to be reproduced for capitalism to continue its cycles of accumulation. Hence, the work of neoliberal ideology on nature functions primarily through a discipline of the social relationships that humans have with

the natural world through the production of environmental subjects (Agrawal 2005; Luke 1995, 1998a). Nature as a commodity is not a new concept, nor is it particular to the neoliberal era. What is, however, is a changing relationship between the state and the market, along with significant ideological changes in the civil sphere. Many of the authors discussed above contend that neoliberalization has been highly uneven, and that as a practice neoliberalization is an imperfect, contested, and contradictory realization of the neoliberal ideals of an all-encompassing yet unregulated market. The effects of neoliberalism on society-environment relationships have been similarly uneven. Below, I will reconsider the particular effects of neoliberalization and neoliberal ideology on environmental politics, then synthesize the ways in which neoliberalism matters to environmental politics.

The first impact of neoliberal ideology, functioning through state apparatuses (or civil society), has been to produce specific types of environmental subjects who conceive of natural resources as well as their degradation in monetary equivalents. Critically, although neoliberalization has far from resulted in pure, unfettered markets that rule all human institutions, neoliberalism has worked hard to produce environmental subjects who understand their fields of action as though these markets do exist, and act accordingly. This has been integral to the consent of civil society to the acceleration of environmental degradation due to the factors discussed above (privatization, commodification, and regulatory reform), because even though the long term outcome is negative, in the short run, environmental accounting makes sense as a way to manage nature as a resource. Whether the accounting happens through the free will of enlightened businesses or through state regulation ensuring that the externalities of environmental

degradation are internalized, the abstract monetization of nature has come to dominate environmental politics in the political field as well as powerful, mainstream environmental organizations which today largely function by lobbying for said regulation or suing businesses who do not comply with it, thereby enforcing internalization of cost.

This project brings a cultural and economic sociological approach to better understand the context of contemporary American environmental politics and its orientation to economic markets. While the discourse included here only represents three environmental organizations out of a broad discursive field which itself contains a host of environmental concerns and advocacy approaches, it offers an important window into the logics employed by environmentalists plugged into major, national-level environmental policy conversations. By examining how environmentalists understand the importance of the market, we can better understand the ways different market fundamentalist assumptions do and do not inform environmental advocacy, beyond a general agreement with or rejection of corporate partnerships or *laissez-faire* economics. Using a novel coding scheme to systematically measure these free market assumptions, I hope here to offer a mixed-methods approach to evaluating patterns in how the free market is imagined, while appreciating the contradictions and nuance that “ideology”—something we often assume to be more stable and coherent than it truly is—often entails.

In bringing the tools of cultural sociologies of capitalism to bear on environmental discourse, this project makes several contributions. First, cultural economic sociology can enrich our understanding of the content of environmental politics, which in environmental sociology has centered primarily on support of and opposition to the

environmental movement, by accounting for how values shape the ways in which the relationship between nature and the free market is understood. Similarly, this paper complicates existing typologies of environmental activism, exploring the faith *and* doubt in the free market demonstrated in the discourse of these major, mainstream national organizations.

Additionally, this line of inquiry offers insight into the continued idling of the movement's policy priorities through the present day, which both environmental sociologists and environmentalists have had difficulty explaining. Sociologists have argued that the disparate voices of the environmental movement have avoided a broader conversation with one another, restricting possible progress (Ellis, 1996; Brulle, 2000). They have also posited that a lag may have been inevitable after taking care of the "low-hanging fruit" of the environmental issues of the 1960s and 1970s, due to the moderation of the social movement as its members have aged and its actors have become more institutionalized, or due to the great economic costs of contemporary environmental initiatives (Brulle and Jenkins, 2008). Others point to a broader political climate, driven by powerful actors with entrenched interests in the "dirty" energy economy, that has been unfriendly to green legislation (McCright and Dunlap, 2003, 2011). Due to environmentalism's implicit concern with mediating the environmental degradation caused by social and economic activity, I suggest that there are better clues to the movement's state in environmentalist understandings of what economic markets actually are and how they relate to environmental concerns.

These findings challenge common narratives about the overwhelming power of neoliberal ideology and typologies of environmental organizations as either reformist and

pro-capitalist or radical and anti-capitalist. In doing so, this dissertation allows room for political possibility within a critique of mainstream environmentalism's economic assumptions. Significant logics of market doubt exist for environmentalist voices here, which could, in theory, be mobilized, along with these organizations' considerable resources, for a more coherent environmental politics. Critiques of free market capitalism do not exist solely on environmentalism's radical margins.

Finally, in my focus on the environmental movement, I hope to urge a growing body of sociological work on market thought towards the civil sphere as an important site of inquiry. Social movements and institutions like environmentalism occupy an important role, whether understood as a defense of civil society against market expansion or as an active, mediating influence on state regulation and the market itself. Analysis of how civil societal actors themselves formulate and articulate an understanding of the market, especially informed by the context and history of their specific social concerns, should play an important role in cultural economic sociology.

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Appendix

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Year	.011	.002	32.476	1	.000	1.011
	Constant	-.616	.070	78.088	1	.000	.540

a. Variable(s) entered on step 1: Year.

Table 57: Binary logistic regression of market faith by year

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Year	-.010	.002	24.610	1	.000	.990
	Constant	.918	.073	159.890	1	.000	2.505

a. Variable(s) entered on step 1: Year.

Table 58: Binary logistic regression of market doubt by year

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Year	.017	.003	34.335	1	.000	1.017
	Constant	-.912	.110	68.615	1	.000	.402

a. Variable(s) entered on step 1: Year.

Table 59: Binary logistic regression of market faith by year, Sierra Club

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Year	.013	.004	13.433	1	.000	1.013
	Constant	-.614	.115	28.602	1	.000	.541

a. Variable(s) entered on step 1: Year.

Table 60: Binary logistic regression of market faith by year, Friends of the Earth

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Year	-.003	.004	.476	1	.490	.997
	Constant	-.071	.172	.171	1	.679	.931

a. Variable(s) entered on step 1: Year.

Table 61: Binary logistic regression of market faith by year, Natural Resources Defense Council